Organisation Mondiale de la Santé Animale
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REPORT OF THE MEETING
OF THE OIE SCIENTIFIC COMMISSION FOR ANIMAL DISEASES

Paris, 7 – 10 September 2010

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A meeting of the OIE Scientific Commission for Animal Diseases was held at the OIE Headquarters in Paris, France from 7 to 10 September 2010. The Commission was welcomed by Dr Kazuaki Miyagishima, Deputy Director General and Head of the OIE Scientific and Technical Department. During the second day of the meeting, Dr Bernard Vallat, Director General of the OIE, in a combined session with the Terrestrial Animal Health Standards Commission (Code Commission), welcomed the members of both Commissions and outlined the importance of good coordination between the Scientific Commission and the other OIE Specialist Commissions. He confirmed the commitment of the OIE for the joint OIE/FAO global FMD control programme adopted during the OIE/FAO Global conference on FMD in Paraguay in June 2009. He indicated that the Scientific Commission should play an important role by providing the scientific rationale and supporting text for the *Terrestrial Animal Health Code* (*Terrestrial Code*) for consideration by the Code Commission to give further impetus to the global control strategy through official endorsement by the OIE of national strategic plans for FMD control. Dr Vallat reiterated that the Council of the OIE took note of the proposal of the Scientific Commission of the need for declarations of confidentiality and impartiality by members of Specialist Commissions, Working Groups and *ad hoc* groups and indicated that the OIE was currently considering the legal aspects related to such a declaration.

The Commission was also briefed on the WTO trade dispute between two Members which necessitated intensive and time consuming input by the OIE. The Commission acknowledged that the process was still *sub judice* and would not be discussed in detail at this stage. The Commission nevertheless committed itself to again review the procedures for the evaluation of official disease status recognition to ensure that it was done in accordance with the prescripts of the *Terrestrial Code*.

The meeting was chaired by Dr Gideon Brückner, President of the Scientific Commission with Dr Kris De Clercq as rapporteur.

The agenda and the list of participants are attached as Appendices I and II.

1. Report of the meeting of the Scientific Commission for Animal Diseases of 2 to 5 March 2010 and report of the President of the Commission to the 78th General Session

The Commission reviewed salient points from the report of the meeting of the Scientific Commission of 2 to 5 March 2010 and took note of the report of the President to the 78th General Session.

The President of the Commission, in reviewing the report and the agenda for the present meeting, expressed his gratitude to the staff of the Scientific and Technical Department of the OIE for their hard work during the year and in preparing detailed working documents for the meeting. The Commission acknowledged that due to urgent matters requiring the attention of the limited staff available in the Scientific and Technical Department, the meetings of two *ad hoc* Groups had to be postponed and the meeting schedule had to be revised. The Commission re-iterated that different to the working procedures of other Specialist Commissions, the Scientific Commission is very much dependent on the inputs of designated *ad hoc* Groups and requested that consideration be given to this need with personnel allocations to the Scientific and Technical Department to enable the Commission to fulfil its mandate. The following issues emanating from the March report of the Commission were briefly discussed:

1.1. Feedback from the meeting of the Council of the OIE

The Commission took note of the decision that the name of the Commission would remain unchanged due to the need to avoid possible confusion with that of the Code Commission. The Commission also noted with appreciation that progress was made with the request of the Commission for the introduction of a declaration of interest and confidentiality for members of Specialist Commissions, *ad hoc* and working groups.

The Commission took note and supported the proposals to create more time during the General Session for discussion on the presentation of Specialist Commissions.

1.2. OIE/FAO global FMD control strategy

Discussed under Agenda Item 3.4.

1.3. BSE surveillance: Recommendations on the use and revision of the BSurvE model

The Commission noted that this issue was still outstanding and requested a final answer from the *ad hoc* Group on BSE during its forthcoming meeting for consideration by the Commission at its meeting in February 2011.

1.4. Peste des petits ruminants (PPR)

The Commission noted that the scheduled meeting of this ad hoc Group had to be postponed due to unforseen circumstances. A new date would be identified within the working programme of the Commission. The Commission also recommended that a member of the Working Group on Wildlife Diseases be invited to attend the meeting of the ad hoc Group.

1.5. Brucellosis

The Commission noted that the scheduled meeting of this *ad hoc* Group also had to be postponed due to unforeseen circumstances. A new date would be identified within the working programme of the Commission. It was also recommended that a member of the Working Group on Wildlife Diseases be invited to attend the meeting of the *ad hoc* Group.

1.6. Information for Members on Crimean Congo haemorrhagic fever (CCHF)

The Commission noted with appreciation that information on this disease following the meeting of the *ad hoc* Group was published in the OIE *Bulletin* as requested.

1.7. Draft policy paper on the wildlife-livestock interface

The inputs received from the Working Group on Wildlife Diseases and the *ad hoc* Group on Epidemiology were collated by the Commission into one document and would now be forwarded to the Code Commission for comments. After receiving the comments of the Code Commission, The Scientific Commission would decide if further consultation of the policy document would be necessary. The draft document is attached as Appendix III.

2. Scheduled OIE scientific conferences

Information was provided by the Scientific and Technical Department on the progress made with the planning of OIE scientific conferences scheduled for 2011 and 2012 - notably the global conference on wildlife (February 2011), the global conference on rabies (September 2011) and the global pledging conference on FMD (scheduled for June 2012). The Commission will be involved in all these conferences and the progress already made was acknowledged with appreciation. Information for interested participants for the conferences on wildlife and rabies was already available on the OIE website.

3. Review of reports of a*d hoc* Group meetings

3.1. Report of the *ad hoc* Group on Epidemiology: 16 – 18 March 2010

On request of the Commission, the *ad hoc* Group developed a set of generic guidelines in the format of a user-friendly checklist for the implementation of compartments based on the standards already contained in chapter 4.4 of the *Terrestrial Code*. The checklist provided a handy tool to evaluate an existing or intended compartment against the requirements of the *Terrestrial Code*. A need was identified by the Group to have the checklist validated against more examples of compartments as the two examples provided to the *ad hoc* Group from a Member did not fit into the *Terrestrial Code* requirements of a compartment *per se*. The Commission regarded the checklist as a valuable tool to assist Members and recommended that it should be considered to make this document available on the OIE website for wider use by Members. It was therefore concluded that the *ad hoc* Group should further refine the document to be suitable as an information document on the OIE website. The document will also be forwarded to the Code Commission for comments.

The Commission reviewed and considered the comments of the Group on the proposed explanatory text to further complement article 4.3.3 of the *Terrestrial Code* on the application of a *protection zone*. Minor changes were made to the original text which would be submitted to the Code Commission for consideration. Following discussions between the Director General and the Presidents of both Commissions, it was decided to allow Members sufficient time to familiarise themselves with the application of the concept of a *protection zone* before any proposals for changes or amendments to the current definition would be considered.

The Commission reviewed and adopted the report of the ad hoc Group after detailed discussions. The report is attached as Appendix IV.

The draft agenda of the next meeting of the *ad hoc* Group was discussed and approved by the Commission.

3.2. Report of the *ad hoc* Group on the Editing of a Guide on Terrestrial Animal Health Surveillance: 14 – 15 April 2010

The Commission took with appreciation note of the progress with the development of the Guide on Terrestrial Animal Health Surveillance. The Commission observed that the current procedure of continuously circulating the text developed by the different authors for comments, resulted in unnecessary delay in producing the final product. The Commission therefore concluded that the designated coordinator of the project should be requested to collate all the inputs into a consolidated draft document for evaluation by the Commission at its next meeting in February 2011.

The report of the a*d hoc* Group was adopted and is attached as Appendix V.

3.3. Report of the *ad hoc* Group on the Interaction between climate and environmental changes and animal diseases and production: 27 – 28 April 2010

Note was taken of the report of ad hoc Group as well as the press release by the Director-General on 2 September 2010 to reflect on the conclusions and recommendations of the *ad hoc* Group. It was concluded that the *ad hoc* Group addressed the most important concerns and uncertainties on climate changes as they relate to animal health and production and that there was no urgent need to ask the Director General to reconvene the *ad hoc* Group (e.g. to provide a detailed list of climate sensitive disease as well as having a look at the criteria used by WHO to classify these diseases). The Commission and its *ad hoc* Groups should nevertheless remain sensitised on the issue and when necessary, the Director General could be requested to re-convene the Group.

The report of the a*d hoc* Group was adopted and is attached as Appendix VI.

3.4. Report of the *ad hoc* Group on evaluation of FMD status of Members: 16 – 18 June 2010

Following the previous meeting of the *ad hoc* Group in December 2009, the Group met again in June 2010 to finalise the draft proposals for a global approach to FMD control. The focus of the discussions were on identifying and describing the key components of regional and national FMD control programmes. The Group also assessed the proposed FAO Progressive Control Pathway (PCP) for global FMD control with the view on how to harmonise the roles of both FAO and OIE in the implementation of this process. To enable Members to better negotiate for the support of policy makers for a national approach for FMD control, the Group developed a draft article for the *Terrestrial Code* to enable endorsement of the national FMD control programme of a Member wishing to enter the OIE pathway to eventually obtain an officially recognised FMD free status. To further facilitate the application of a Member to the OIE for the endorsement of their national FMD control programme, the Group also developed a questionnaire based on the existing questionnaires for the recognition of official disease status.

The proposed text and questionnaire for the *Terrestrial Code* chapter were discussed and approved by the Commission and submitted to the Code Commission with the request that it should be circulated to Members for comments with the September 2010 report of the Code Commission to enable the presentation of the text for possible adoption during the 79th OIE General Session.

Following discussions with the Director General, the Commission proposed that a Resolution be presented by the Scientific Commission for adoption during the 79th General Session, to further articulate and secure Member support for the global control of FMD. This Resolution as well as the Recommendations already adopted at the OIE/FAO Global Conference on FMD held in Asuncion, Paraguay in June 2009 and the guidelines for a global strategy for FMD control proposed by the *ad hoc* Group, could also be presented at the next global FMD pledging conference scheduled for 2012 to boost further support for the implementation of the global FMD control strategy.

The Commission adopted the report and commended the *ad hoc* Group for their excellent work and progress achieved with this important task.

The report is attached as Appendix VII.

3.5. Report of the *ad hoc* Group on the Notification of Animal Diseases and Pathogens: 29 June – 1 July 2010

The Commission reviewed in detail the report of the *ad hoc* Group and also held discussions with the Head of the OIE Animal Health Information Department on the recommendations of the *ad hoc* Group.

Dr Karim Ben Jebara explained that the a*d hoc* Group discussed WAHIS-WAHID disease occurrence codes, following their differentiation in 2009 allowing if relevant, separate reporting of disease occurrence/absence in domestic and/or wild species. Dr Ben Jebara explained that the “never reported” occurrence code means that the disease has never been reported in the country regardless the species involved.

The Commission took note of the proposed amended procedure for the listing of diseases and concluded that the title could also be changed to reflect the possibility that the criteria could be used for both the listing and the notification of diseases – especially in the case of new and emerging diseases not yet listed by the OIE. It was acknowledged that one of the reasons for reviewing the criteria for listing was to exclude some diseases rather than to include more diseases. The Commission, after testing some disease examples against the new proposed criteria (such as for example H1N1 influenza in pigs) concluded that the new proposed criteria seems to rather encourage than restrict the listing of potential diseases. The proposed change of the criterion from previously "proven international spread of a disease" to "potential international spread of a disease" could, in the view of the Commission, also result in the increase and unsubstantiated listing of diseases and was not supported.

The need for clear case definitions of listed diseases identified by the *ad hoc* Group was strongly supported by the Commission. The Commission recommended that this need should be treated as a priority rather than to wait for a case definition to be developed if and when current chapters in the *Terrestrial Code* are revised or amended.

The Commission supported the delisting of Teschen disease but questioned the need to maintain CCHF on the list even though the *ad hoc* Group acknowledged that the disease was seldom reported due to the absence of clinical symptoms in animals.

The Commission took note of the information provided on bovine neonatal pancytopenia (BNP) and concluded that while the observed new syndrome appeared to be mainly restricted to a few countries in Europe with a possible vaccine linkage, the Commission would remain sensitised on the issue; no immediate action from the OIE however was justified at this stage.

The Commission supported the request that the Working Group on Wildlife Diseases consider providing a list of susceptible wildlife species for chronic wasting disease which was now being proposed for listing as an OIE listed disease.

In discussion of the report, the Commission also considered the need and feasibility to have OIE diseases in the *Terrestrial Code* listed by pathogen rather than by animal species as the involvement and recognition of wildlife in the epidemiology of several currently listed diseases would make such an approach inevitable. The Commission agreed to request that the Code Commission consider this as a matter of priority – at least at this stage for Volume II of the *Terrestrial Code*.

The report of the a*d hoc* Group is attached as Appendix VIII.

3.6. Report of the *ad hoc* Group on evaluation of rinderpest disease status of Members : 8 – 9 July 2010

The Commission considered and supported the recommendations for rinderpest free status for the following OIE Members: Azerbaijan, Gambia, Laos, Saudi Arabia, Sierra Leone and United Arab Emirates.

The recommendations for rinderpest free status on historical considerations for the following non-OIE Members were also supported: Antigua and Barbuda, The Bahamas, Grenada, Kiribati, Kosovo, Saint Kitts and Nevis, Saint Lucia and Tuvalu

The Commission noted with appreciation that as at the end of July 2010, there only remained 8 countries or territories that need to achieve rinderpest free status of which especially 2 countries needed direct and urgent intervention at a higher level to obtain the necessary documentation and guarantees to enable evaluation of a rinderpest free status.

The Commission noted and supported the concerns and recommendations of the *ad hoc* Group on issues that need to be addressed not only to enable a declaration of global rinderpest freedom by May 2011, but also to ensure dedicated attention to important issues in the post eradication period. The most important of these are amendment of the current chapter in the *Terrestrial Code* to reflect the post eradication policy for rinderpest, providing within the *Terrestrial Code's* glossary a definition of global disease freedom, the development of a roadmap for the post eradication period, procedures to be followed in the event of an outbreak of rinderpest in the post eradication period and application of concepts such as containment zones to contain outbreaks.

The Commission agreed to recommend to the Director General that a meeting of the *ad hoc* Group be convened within the current 2010/2011 working programme of the Commission, to consider and propose amendments to the current chapter of the *Code* rather than to wait for a roadmap or contingency plan to be formulated; the draft changes to the chapter could still be adjusted once the contingency plan or roadmap became available but the process should not be unnecessarily delayed.

The Commission recommended that the procedure for the annual confirmation of official disease free status for rinderpest be terminated after the global declaration of freedom and that an alternative process within the roadmap be identified to monitor global freedom of the disease. It was also agreed to request the Code Commission to propose a definition for the glossary of the *Code* for global disease freedom.

The Commission took note of the work of the Joint OIE/FAO Committee on rinderpest and the process that would be followed by both the OIE and the FAO to announce the achievement of global freedom from rinderpest.

Note was taken of the draft Resolution that would be proposed for adoption during the 79th General Session for the declaration of global rinderpest freedom and the follow-up measures that would be proposed in the Resolution to maintain the status of global freedom. The Commission decided to wait until its meeting in February 2011 for final comments on the proposed Resolution as several changes or amendments might still be proposed in the interim period.

The report of the *ad hoc* Group was adopted and is attached as Appendix IX.

3.7. Report of the *ad hoc* Group on rabies: 4 – 6 August 2010

The report of the a*d hoc* Group was reviewed by the Commission, together with the draft Chapter for the *Terrestrial Code*. The Commission took note of the new classification of rabies virus by the International Commission for Taxonomy of Viruses (ICTV), which was supportive of the new focus of the chapter on dog mediated rabies. The Commission also reviewed and approved the proposed changes to chapter 7.7 on the guidelines for stray dog control and the model veterinary certificate for the international movement of dogs, cats and ferrets chapter 5.11 of the *Terrestrial Code*. Note was also taken that the *ad hoc* Group already incorporated the new proposed definitions for wildlife proposed by the Working Group on Wildlife Diseases into the proposed revision to the rabies chapter.

As the review of the rabies chapter in the *Terrestrial Code* was long due, the Commission forwarded the amended chapters to the Code Commission with the request that it be circulated for Member comments to facilitate possible adoption of the new text during the 79th OIE General Session.

The Commission strongly supported the recommendation of the ad hoc Group that there was urgent need for more detailed guidelines on dog rabies control, especially if the human mortality was in excess of 50 000 annually. An information document or brochure similar to an excellent blueprint produced by the *Partners for Rabies Prevention* could be developed for publication on the OIE website. The Commission recommended that the Director General be requested to re-convene the *ad hoc* Group for this purpose.

Recommendations for consideration by reviewers of the chapter in the *Terrestrial Manual* were also provided by the Group to reflect on the new adopted taxonomy of the rabies virus and the enhancements in the rabies diagnostics and vaccine production. These recommendations would be submitted to the Biological Standards Commission for consideration and review as appropriate.

The report of the *ad hoc* Group was adopted and is attached as Appendix X.

3.8. *Ad hoc* Group on antimicrobial resistance

The Commission noted that the *ad hoc* Group scheduled would meet from 2 to 4 November 2010 to review the relevant chapters in the *Terrestrial Code* on issues related to surveillance and monitoring of antimicrobial resistance, the responsible and prudent use of antimicrobials, quality management and risk assessment.

The Commission considered the request by CAMEVET[1] to the OIE to develop text for the *Terrestrial Code* for the labelling of veterinary medicinal products. After some discussion, the Commission recommended that the request be rather considered in the framework of legislative guidelines for the labelling of medicinal products and to include such text within the current OIE guidelines for legislation.

4. Pre-ISVEE workshop recommendations for epidemiological glossary

The Commission received documentation on the outcome and recommendations of a workshop on surveillance held prior to the International Society of Veterinary Epidemiology and Economics (ISVEE) conference in Durban, South Africa in August 2009. In the recommendations it was proposed that the current approaches to define and apply surveillance should be reviewed – not only by the OIE but also by governments and other research and academic institutions. The Commission considered that such a step would have a major impact on the approach currently applied and described in the *Terrestrial Code*. The Commission agreed that the document should be referred to the *ad hoc* Group on Epidemiology for an opinion, but nevertheless cautioned against the possible danger of unpacking practical concepts into subsets of theoretical concepts that cannot be implemented by Members.

5. Q-fever

The Commission took note of a study conducted by the European Food Safety Authority (EFSA) on the possible human and animal risks associated with the outbreaks of Q-fever in Europe. The Commission recalled that during its previous meeting in March 2010, it had been requested to consider the development of a chapter for the *Terrestrial Code* for Q-fever following outbreaks of this disease and also subsequent human cases of Q-fever in a Member country. After discussion of the information provided by EFSA, the Commission reiterated its decision that available information and risk analysis confirm that there is not an immediate need and justification to develop a chapter on Q-fever for the *Terrestrial Code*.

6. Pilot projects on compartmentalisation

A letter had been received from a Member informing the OIE of their intention to establish a pilot project on compartmentalisation for Newcastle disease, seeking assistance from the OIE. The Commission noted that a checklist for specifically Newcastle disease was already available on the OIE website whilst the generic checklist developed by the *ad hoc* Group on Epidemiology could also be helpful. The Commission considered important to have regular feedback from this and similar projects.

7. Orbiviruses of wild ruminants and bluetongue virus versus epizootic haemorrhagic disease (EHD)

The Commission discussed the suggestion of the *ad hoc* Group on the Notification of Animal Diseases and Pathogens as well as the Working Group on wildlife diseases to develop either a separate chapter for the *Terrestrial Code* on EHD or to amalgamate information on this disease within the existing chapter on bluetongue. After discussion with the Code Commission, it was concluded that a separate chapter should be developed under the auspices of the Scientific Commission. The Director General would be requested to convene an *ad hoc* Group for this purpose within the current working programme of the Commission. A member of the Working Group on Wildlife Diseases would be invited to the meeting of the *ad hoc* Group.

8. Outbreak of glanders in the Middle East

The Commission was briefed on the situation of glanders in the Middle East and the preliminary findings of an expert mission that visited the region. The Commission was requested to consider reviewing the current chapter on glanders in the *Terrestrial Code*. A second mission to the region was planned by the OIE with the possibility of having a workshop/discussion forum on the disease organised by the OIE in early 2011. The Commission concluded that there were unresolved issues and uncertainties and that it would be advisable to postpone a definite decision on the way forward after the completion of the second mission to the region and pending the outcome and recommendations of the workshop/discussion forum planned by the OIE.

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[1] Comité de las Américas de los Medicamentos Veterinarios/ American Veterinary Drugs Committee

9. International agreement on sharing and using animal genetic resources for food and agriculture

The Commission took note of FAO's intention to establish an international agreement and network to safeguard animal genetic resources for food and agriculture similar to the international treaty already in operation for plant genetic resources and managed by the FAO. Whilst the Commission supported the initiative, it was acknowledged that such an international network and agreement on animal genetic resources could directly and indirectly have an effect on various aspects related to the standard setting by the OIE such as the scientific rationale for particular standards, international trade concerns and risk mitigation measures. It was noted that the process for the establishment of such an international agreement and network was only in its preliminary phase but should be closely monitored by the OIE with participation in policy discussions when required or deemed necessary.

10. Official disease status recognition and self-declaration for disease freedom

The Commission discussed the possible policy implications for both the self-declaration of disease freedom by Members and the official recognition of disease status by the OIE in view of new diseases such as classical swine fever and African horse sickness that might be added to the list of diseases having an official recognition procedure by the OIE. For the current diseases officially recognised by the OIE (FMD, CBPP, BSE and rinderpest), self-declarations did not apply. The Commission acknowledged that for vector-borne diseases where a disease status of seasonal freedom from disease might apply or for diseases where the *Terrestrial Code* specified requirements for a free status as absence of disease in the domestic population but not in the wildlife population, different criteria might be considered for recognition of disease status. The Commission considered that for future policy purposes it was necessary to clearly differentiate between official disease status and the endorsement of a disease control programme (as currently under consideration for FMD).

The Commission concluded that each disease should be evaluated in accordance with the specific disease characteristics, trade, risk and other concerns in respect of compatibility with the policy and need for either official recognition of disease status or self-declaration of freedom. It would therefore not be advisable to formulate a generic policy that would apply to all circumstances.

11. Procedures for evaluation of applications for disease status recognition

Following letters to the Director General in which Members expressed their concerns on the apparent lack of transparency in the procedures applied for the evaluation of Member applications for the recognition of official disease status, the Commission held an in-depth discussion on the matter with the staff of the Scientific and Technical Department. The focus of the discussions were to identify the areas of concern, the need for changes or amendments in the current procedures and practice, and to find ways to improve the communication with applicant Members.

Several proposals were made and agreed on, in order to improve participation, timeliness, effective administration and transparency and to best utilise available communication tools such as telephone-conferencing to liaise and communicate with Members when needed.

The Commission also reviewed the process for the annual reconfirmation of disease status by Members in an effort to lessen the administrative burden on both Members and the Scientific and Technical Department. Whilst the current format for the reconfirmation of status for FMD, CBPP and rinderpest was found to be user-friendly and was providing the information requested, the Commission agreed to shorten the form for reconfirmation of the BSE risk status of Members. The revised form would be given to the *ad hoc* Group on BSE for their comments and inputs.

Following the discussions, the Commission agreed to request the Director General to inform Members in a general circular on the procedures that would apply for the evaluation of applications for the recognition of disease status, as soon as the document was finalised.

12. Foot and mouth disease (FMD)

12.1. OIE/FAO FMD Reference Laboratories network

The Commission invited Dr Jef Hammond from the OIE Reference Laboratory at Pirbright, who was managing the OIE/FAO FMD Reference Laboratories network, to provide an overview on the current global status of FMD and activities of the network.

The Commission noted with appreciation that initiatives were taken by the network to establish a network of vaccine banks which was in support of the recommendations taken at a workshop at Pirbright in 2006 where this need was identified.

While the increase of samples submitted from across the globe to the OIE reference laboratory at Pirbright was welcomed, a substantial number of these samples, submitted mainly for diagnostic purposes, originated from countries or areas where other OIE FMD reference laboratories were operational and geographically closer to or even adjoining the submitting country. The Commission expressed concern that the uncoordinated submission of samples for diagnosis, not only placed an additional burden on the bigger laboratories but also defeated the purpose of having OIE reference laboratories geographically distributed.

12.2. Application of zoning and protection zone

Discussed under Agenda Item 3.4 above.

12.3. Request for the re-instatement of the high surveillance zone (HSZ): Brazil, Argentina, Paraguay

Applications had been received from Brazil, Argentina and Paraguay to re-instate the HSZ bordering the three countries as a zone free from FMD where vaccination is practiced. The Commission recalled that the HSZ had been implemented following an agreement in 2007 between the OIE and the CVP (*Comité Veterinario Permanente del Cono Sur*). Countries party to the agreement were Argentina, Brazil Paraguay and Bolivia. The thrust of the agreement was to implement a regional approach for FMD control in the southern cone region following outbreaks of FMD prior to the establishment of the agreement. The application of the agreement was monitored by expert missions of the OIE in 2007, 2008 and 2009. The conclusion of these missions was that there was full commitment by the participating countries and that excellent progress was made with the implementation of the agreement and the regional approach for the control of the disease.

The application of the participating countries to re-instate the FMD status in the HSZ was considered as signalling the final stage of a successful project in the region. To enable an informed decision to finally terminate the agreement and to re-instate the HSZ as areas free of FMD with vaccination, the Commission decided that it would be in the interest of both the OIE and the participating countries, who were all party to the agreement, to first have the surveillance data and accompanying control measures evaluated by the *ad hoc* Group on evaluation of FMD status of Members. Following the recommendations of the *ad hoc* Group and if appropriate, the Commission would use the fast track decision-making option to consider re-instating the FMD status of the HSZ of the countries that were party to the agreement, to its status prior to the agreement.

After discussion with the Director General, the Commission recommended to conduct a final evaluation expert mission to the region in the first quarter of 2011.

12.4 Feedback from the OIE expert mission to the Thrace region of Turkey: May 2010

The Commission recalled that following the evaluation of an application by Turkey by the *ad hoc* Group on Evaluation of FMD status of Members and the Scientific Commission for the allocation of FMD free status where vaccination is practised for the Thrace region, an expert mission had been conducted prior to the 78th General Session by a team of experts appointed by the Director General. The expert team, based on the outcome of the inspections to verify the control measures that were implemented to mitigate the risk of FMD virus introduction, recommended that the status of a zone free of FMD where vaccination is practised be approved for the Thrace region of Turkey. The World Assembly of OIE Delegates subsequently adopted this recommendation during the 78th General Session as reflected in Resolution 15 of the 78th OIE General Session.

The Commission adopted the report of the expert mission attached as Appendix XI. The Commission requested that the *ad hoc* Group on FMD consider the request of the expert mission on the need to conduct probang tests for viral detection following two negative NSP tests in cattle intended for slaughter.

12.5 Request for the re-instatement of the Republic of Korea as a country free from FMD where vaccination is not practised

Following the successful containment of an outbreak of FMD, the Commission was requested to consider the re-instatement of the FMD free status of the Republic of Korea in accordance with article 8.5.9. of the *Terrestrial Code*. The Commission evaluated the information provided by the Republic of Korea in its submission and had face-to-face discussions with a delegation from Korea on the data provided on the control of the outbreak. Whilst the Commission was generally satisfied and expressed its appreciation for the way in which Korea controlled and contained the outbreak of FMD, additional information was requested from the applicant Member on the post-outbreak surveillance to ensure the absence of circulating FMD virus as required in article 8.5.9 (1a) of the *Terrestrial Code*. A letter to this effect would be sent by the Director General to the Delegate of the Republic of Korea with the understanding that as soon as the information was received and subject to compliance with the request of the Commission, the Commission would decide, by correspondence, on the re-instatement of the FMD free status of Korea.

13. Issues referred to the Scientific Commission by the Code Commission

The Scientific Commission reviewed several Chapters of the *Terrestrial Code* following Member comments. The comments of the Scientific Commission were added to the following Chapters for further consideration by the Code Commission:

1. Chapter 8.3 Bluetongue (defining BTV free country or zone, importation from BTV infected countries)

2. Chapter 8.5 Foot and mouth disease (importation from FMD free countries with vaccination, the use and interpretation of serological tests)

3. Chapter 11.5 BSE (safe commodities)

4. Chapter 14.9 Scrapie (scrapie resistant genotype selection)

5. Chapter 11.6 Bovine Tuberculosis (inclusion of camelids as susceptible species)

6. Definition of an *infected zone*: The Commission reviewed the amended definition for the glossary of the *Terrestrial Code* and concluded that it did not give recognition to the obligation to prove absence of infection in accordance with the requirements of the *Terrestrial Code* as was the case with the previous wording. The Scientific Commission did not support the addition of a definition to define *unknown* or *undetermined* status due to the possible negative trade implications.

7. Explanatory text was developed for describing a *protection zone* (chapter 4.3) and forwarded to the Code Commission for consideration. During discussions with the Code Commission it was indicated that certain aspects contained in the proposed text were already captured in the existing text. This explanation was accepted by the Scientific Commission but it was nevertheless requested that the essence of the application of a *protection zone* as described in the proposed explanatory text be captured albeit in other appropriate chapters of the *Terrestrial Code*.

8. A draft article and an accompanying questionnaire for applications for endorsement of national FMD control programmes were submitted to the Code Commission for urgent consideration in view of the need for the official recognition or endorsement by the OIE of national FMD control programmes.

9. Chapter 8.10 on rabies was reviewed, amended and submitted to the Code Commission for further processing and circulation for Member comments together with minor amendments to the model veterinary certificate for the international movement of dogs, cats and ferrets and chapter 7.7 (Guidelines for stray dog control).

10. Following the request of the *ad hoc* Group on evaluation of rinderpest status of Members, the report of the *ad hoc* Group would be forwarded to the Code Commission to consider the addition of a definition of global disease freedom for the glossary of the *Terrestrial Code*.

The Scientific and Code Commissions also held a combined meeting where the issues described above were discussed.

14. Issues for further consideration by the Biological Standards Commission

Rabies – Following the revision of the *Terrestrial Code* chapter, review of vaccines and diagnostic tests – see section 3.7 above

15. Update of the work programme of the Scientific Commission for 2010 and 2011

The Commission reviewed the progress and updated its work programme adopted during the meeting of the Commission in September 2009. Dates for *ad hoc* Group meetings following the 78th General Session in May 2010, were identified and recorded in the internal programme of the Commission. Priorities for the next twelve months were also identified and adopted by the Commission.

16. Expert missions to Members to assess the maintenance of disease status

The Commission reiterated the need to conduct expert missions to Members - not only to verify compliance with the conditions of the *Terrestrial Code* for a particular disease status, but also to enhance communication and transparency by assisting Members in the application of the requirements of the *Terrestrial Code* where Members might have encountered difficulties. It was concluded that as for the MERCOSUR region, a follow-up visit would be required and possibly scheduled for the first quarter of 2011 to conclude the final stages of the Agreement between the OIE and the CVP. The Commission also identified the need for visits to other regions – in particular Africa for those Members with areas free from disease.

17. Other matters

The Commission discussed and finalised the draft agendas for the scheduled meetings of the *ad hoc* Group on Epidemiology and the *ad hoc* Group on Classical Swine Fever.

18. Next meetings of the Scientific Commission for Animal Diseases

The Commission noted that the next meetings of the Scientific Commission were scheduled to take place at the OIE Headquarters from 1 to 4 February 2011 and 30 August to 2 September 2011, pending confirmation.

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…/Appendices

Appendix I

MEETING OF THE OIE SCIENTIFIC COMMISSION FOR ANIMAL DISEASES

Paris, 7 - 10 September 2010

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Agenda

1. Report of the meeting of the Scientific Commission for Animal Diseases of 2 to 5 March 2010 and report of the President of the Commission to the 78th General Session

1.1. Feedback from the meeting of the Council of the OIE

1.2. OIE/FAO global FMD control strategy

1.3. BSE surveillance: Recommendations on the use and revision of the BSurvE model

1.4. Peste des petits ruminants (PPR)

1.5. Brucellosis

1.6. Information for Members on Crimean Congo haemorrhagic fever (CCHF)

1.7. Draft policy paper on the wildlife-livestock interface

2. Scheduled OIE scientific conferences

3. Review of reports of a*d hoc* Group meetings

3.1. Report of the *ad hoc* Group on Epidemiology: 16 – 18 March 2010

3.2. Report of the *ad hoc* Group on the Editing of a Guide on Terrestrial Animal Health Surveillance: 14 – 15 April 2010

3.3. Report of the *ad hoc* Group on the Interaction between climate and environmental changes and animal diseases and production: 27 – 28 April 2010

3.4. Report of the *ad hoc* Group on evaluation of FMD status of Members: 16 – 18 June 2010

3.5. Report of the *ad hoc* Group on the Notification of Animal Diseases and Pathogens: 29 June – 1 July 2010

3.6. Report of the *ad hoc* Group on evaluation of rinderpest disease status of Members : 8 – 9 July 2010

3.7. Report of the *ad hoc* Group on rabies: 4 – 6 August 2010

3.8. *Ad hoc* Group on antimicrobial resistance

4. Pre-ISVEE workshop recommendations for epidemiological glossary

5. Q-fever

6. Pilot projects on compartmentalisation

7. Orbiviruses of wild ruminants and bluetongue virus versus epizootic haemorrhagic disease (EHD)

8. Outbreak of glanders in the Middle East

9. International agreement on sharing and using animal genetic resources for food and agriculture

10. Official disease status recognition and self-declaration for disease freedom

11. Procedures for evaluation of applications for disease status recognition

12. Foot and mouth disease (FMD)

12.1. OIE/FAO FMD Reference Laboratories network

12.2. Application of zoning and protection zone

12.3. Request for the re-instatement of the high surveillance zone (HSZ): Brazil, Argentina, Paraguay

12.4 Feedback from the OIE expert mission to the Thrace region of Turkey: May 2010

12.5 Request for the re-instatement of the Republic of Korea as a country free from FMD where vaccination is not practised

13. Issues referred to the Scientific Commission by the Code Commission

14. Issues for further consideration by the Biological Standards Commission

15. Update of the work programme of the Scientific Commission for 2010 and 2011

16. Expert missions to Members to assess the maintenance of disease status

17. Other matters

18. Next meetings of the Scientific Commission for Animal Diseases

MEETING OF THE OIE SCIENTIFIC COMMISSION FOR ANIMAL DISEASES

Paris, 7 – 10 September 2010

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PROPOSED DRAFT POLICY ON THE WILDLIFE-DOMESTIC ANIMAL INTERFACE AS A GUIDELINE FOR FUTURE STANDARD SETTING BY THE OIE

Proposal submitted by the OIE Scientific Commission for Animal Diseases September 2010

Introduction

Both the Working Group on Wildlife Diseases and the *ad hoc* Group on Epidemiology were tasked by the Scientific Commission for Animal Diseases to discuss and propose a draft policy for consideration by both the Scientific Commission and the Terrestrial Animal Health Standards Commission as a guideline for future approaches in international animal disease standard setting. The rationale for giving the task to both Groups was that the *ad hoc* Group on Epidemiology should approach the task from an animal disease surveillance perspective and the Working Group on Wildlife Diseases from the perspective of the wildlife industry and the wildlife-domestic animal interface. Excellent inputs were received from both groups which were collated for further discussion and consideration by both Specialist Commissions.

The terms of reference drafted by the Scientific Commission and given to both experts Groups were identical and comprised the following:

- Develop and propose a definition for *wildlife* for the purpose of the *Terrestrial Code*
- Assess the advantages and disadvantages of different approaches in the *Terrestrial Code* for recognition of disease status for those diseases where wildlife plays a role in the epidemiology of the disease
- Assess the trade facilitation issues such as zoning and compartmentalisation in the *Terrestrial Code* in relation to the wildlife/domestic animal interface and how this should/could be amalgamated or harmonised
- Assess current disease specific surveillance guidelines for those diseases where wildlife is implicated in terms of cost, need, implementation and impact
- Trade issues related to wildlife – trade in wildlife *per se* and commodities of wildlife species origin
- Review of the policy for reporting of disease occurrences in wildlife taking into consideration trade concerns
- The need to alter the focus on wildlife diseases to a pathogen approach versus a species approach and how this would impact on the current policy for developing international standards
- The implications in the development of OIE standards of the role of wildlife in the *One-World-One- Health* concept and the recommended approach the OIE should consider.

1. Develop and propose a definition for *wildlife* for the purpose of the *Terrestrial Code*

Definitions of wild, captive wild, domestic, and feral animals

It was recognized that ‘wildlife’ is defined in many different ways in jurisdictions around the world. It was concluded that four categories of animals be defined as they originally were in the 1999 OIE Wildlife Disease Working Group Report and more recently revised by the OIE *Ad hoc* Group on Epidemiology.

		PHENOTYPE SELECTED BY HUMANS	
ANIMALS LIVE UNDER HUMAN SUPERVISION OR CONTROL		YES	NO
	YES	**Domestic Animals** (a)	**Captive Wild Animals** (c)
	NO	**Feral Domestic Animals** (b)	**Wild Animals** (d)

a) **Domestic Animals**: Animals with a phenotype selected by humans and that live under supervision or control by humans.

b) **Feral Domestic Animals**: Previously domestic animals that now live without supervision, control by or dependence on humans.

c) **Captive Wild Animals**: Animals that have a phenotype not significantly affected by human selection but that are captive or otherwise live under supervision or control by humans.

d) **Wild Animals**: Animals that have a phenotype unaffected by human selection and live independent of direct human supervision or control.

The WGWD recognized that the WGWD most frequently uses the term "wildlife" to include c) Captive Wild Animals and d) Wild Animals.

Feral Domestic Animals are sometimes considered "wildlife" by management authorities and epidemiologically, this group of animals can play a similar role as wildlife, or as alien invasive species.

The Working Group conducted a quick electronic search of the *Terrestrial Animal Health Code* and found the word "wild" used 90 times, and recognized that the word may need further clarification within the *Terrestrial Animal Health Code* to be consistently applied to specify which of the four defined animal groups above are being described.

The WGWD also noted that the above definitions should be considered for use with reptiles and amphibians.

2. Assess the advantages and disadvantages of different approaches in the *Terrestrial Code* for recognition of disease status for those diseases where wildlife plays a role in the epidemiology of the disease

Currently, the *Terrestrial Code* considers, for the purpose of country or zone freedom, different approaches for diseases that have a wildlife component. The specific question is how does the status of wildlife affect the disease status of a country or zone?

The analysis identified two approaches followed in the *Terrestrial Code*:

1. The status of infection in feral domestic animals, captive wild animals and wild animals does not affect the status of domestic animals because:
    a) Little or no control in feral domestic animals, captive wild animals and wild animals is possible and every country essentially shares the same risk.
    b) Control of transmission is feasible and a effective separation and reduction of transmission is achievable between wild and domestic populations

2. The status of infection in domestic animals, feral domestic animals, captive wild animals or wild animals affects the status of the other group because:
    a) The disease is vector-borne and therefore an effective separation and reduction of transmission is difficult to implement
    b) The disease is highly infectious and spreads readily from wild to domestic populations

It was concluded that having these two separate approaches is useful and can be further refined or developed if needed in the future. For the purposes of chapters in the *Terrestrial Animal Health Code* and the *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, it was concluded* to support an approach that diseases which may involve or affect captive wild animals and wild animals should be considered at a chapter by chapter, or specific disease approach based on best available science

3. Assess the trade facilitation issues such as zoning and compartmentalisation in the *Terrestrial Code* in relation to the wildlife/domestic animal interface and how this should/could be amalgamated or harmonised

It was acknowledged that these issues are disease-dependent, and could include in addition to zoning and compartmentalization, specific commodities from both domestic and wild animal populations.

As recommended above, these approaches can be evaluated in terms of risk, integration of factors related to feral domestic animals, captive wild animals or wild animals into individual *Terrestrial Code* and *Terrestrial Manual* chapters.

4. Assess current disease specific surveillance guidelines for those diseases where wildlife is implicated in terms of cost, need, implementation and impact

Currently, the *Terrestrial Code* does not require specific surveillance for all diseases where captive wild animals or wild animals are implicated and there is also a variation in recommendations for surveillance. Guidelines focused on the goal of ensuring safe trade in domestic animals and domestic animal products could be significantly different from guidelines that include protection of wild animals from diseases as a part of the goal. Depending of the goal of the surveillance, costs of surveillance of wildlife that may complement information on disease control efforts of domestic animals may be vary from relatively low to high if compared to the costs of not conducting that surveillance and may also contribute to determining the effectiveness of and improving bio-security methods of disease transmission in both directions – wild to domestic and domestic to wild.

Vaccination of wild animals to prevent disease transmission to domestic animals or people is not widely applicable for most diseases, but where it is, wild animal surveillance is an important component of control strategy monitoring and evaluation. Where vaccination is in rare cases used for wild animals and more commonly in captive wild animals, surveillance of some form is obviously needed for monitoring effectiveness. Testing of vaccination and surveillance techniques in captive wild animals provides unique opportunities to contribute to future disease control efforts, examples of which include rabies and canine distemper.

As the economic or societal value of wild animals increase, the benefits of surveillance of wildlife may exceed costs. The epidemiology of many infectious diseases in many wild animal species in many countries is poorly understood. Surveillance of wild species could also contribute to this understanding, which is needed, but not always necessary to meet conditions for trade. Information systems for diseases of wild animals such as OIE's WAHIS – Wild, will also contribute significantly to this source of knowledge over time.

Due to the spectrum of variables and the temporal nature of the cost - benefit ratios, it is recommended that OIE continues to consider surveillance of wild animals in terms of cost, benefits, practicality and impact on domestic animals, feral domestic animals, captive wild animals or wild animals at the individual code and manual chapter level.

It may be beneficial for OIE if the WGWD was to develop a clear rationale for wildlife disease surveillance, when it is needed and why it is useful, etc.

5. Trade issues related to wildlife – trade in wildlife *per se* and commodities of wildlife species origin

As the economic or societal value of wild animals increase, the benefits of surveillance of wildlife may exceed costs. The epidemiology of many infectious diseases in many wild animal species in many countries is poorly understood. Surveillance of wild species could also contribute to this understanding, which is needed, but not always necessary to meet conditions for trade. As for domestic animals, surveillance of wild animals or products in trade will depend on disease status of source and destination, and in many cases, control methods such as quarantine or long-term surveillance of populations can provide risk reduction methods similar to those used in domestic animals.

As diagnostic test methods improve, code and manual chapters should be updated to reflect new knowledge of diagnostic capabilities for wild animals. Traditional validation of diagnostic tests for most species will be rare for certain types of testing, while science-based decisions can be made about others. In many cases, work with captive wild animals may serve to further understanding in these areas.

6. Review of the policy for reporting of disease occurrences in wildlife taking into consideration trade concerns

The rapid development of *WAHIS-Wild* capabilities confirms the need to ensure that Members have a clear understanding of when disease occurrences in wild animals affect trade and when they do not. Members should continuously be sensitised on the importance of this concept. Where disease in wild or domestic animals does indeed threaten the movement of the disease via either the trade of wild animals or domestic animals or products, the need for reporting should be further emphasized.

7. The need to alter the focus on wildlife diseases to a pathogen approach versus a species approach and how this would impact on the current policy for developing international standards

It was generally accepted and recommended that the *Terrestrial Code* and the *Terrestrial Manual* should adopt an approach based on the causative pathogen and not by host species. Such an approach is valid both for domestic and wild animals for the purposes of reporting to the OIE (please refer to the OIE list of notifiable diseases).

It was especially noted that the *Terrestrial Code* follows a pathogen approach for all diseases with the exception of bovine tuberculosis and bovine tuberculosis of farmed cervidae, which is the same agent in a different species. In the case of the brucellosis chapters the approach is originally species based, however several species may be susceptible to the same pathogen. In addition there is an inconsistency between the list of notifiable diseases and the titles of the chapters in the *Terrestrial Code*.

8. The implications in the development of OIE standards of the role of wildlife in the *One World - One Health* concept and the recommended approach the OIE should consider

The basic tenet of the One World – One Health approach as first described in 2005, maintains that human, domestic animal, and wild animal health are inextricably linked and the expertise from people working in these fields can achieve more by working together than they can working independently.

Related to impacts on OIE standards, as the interest in the value of wild animals increases, the growing need for OIE guidance on guidance and standards for trade, best practices, related to the wildlife-domestic animal interface is anticipated. This could increasingly include *Terrestrial Code* chapters written for diseases that affect mainly wildlife and that may not be significant for domestic animals.

Suggested review of approaches to wildlife in the *Terrestrial Code*

Currently, the *Terrestrial Code* considers, for the purpose of country or zone freedom, different approaches for diseases that have a wildlife component. The specific question is how does the status of wildlife affect the disease status of a country or zone? The most prominent diseases that have a wildlife component were analysed in light of the *Terrestrial Code* chapter recommendations in an attempt to define the logic and the consistency behind the approaches adopted (Table 1).

The analysis identified two approaches followed in the *Terrestrial Code*:

1. The status of infection in wildlife does not affect the status of domestic species because:

    a) No control in wildlife is possible and every country essentially shares the same risk e.g. avian influenza

    b) Control is feasible and a effective separation and reduction of transmission is achievable between wild and domestic populations

2. The status of infection in wildlife affects the status of domestic species because:

    a) The disease is vector-borne and therefore an effective separation and reduction of transmission is difficult to implement

    b) The disease is highly infectious and spreads readily from wild to domestic animals

A simple list of questions to rank the importance of the risk of transmission from wildlife for some selected diseases was designed and tested and found that the approaches followed in the *Terrestrial Code* are generally consistent from a perspective of risk (Table 2). Table 3 groups the selected diseases by the approach adopted in the *Terrestrial Code* and compares the score given to each disease. In general, for diseases that have a low score, the status in wildlife should not affect the disease status in domestic animals. For diseases that rank high, infection in wildlife affects the status of domestic species. In the case of avian influenza and Newcastle disease, which had high scores, the status of domestic poultry is not affected as no control in wildlife is possible and every country essentially shares the same risk.

In general, a risk based approach should be followed for each disease based on the four criteria outlined above. The only disease found to be inconsistent was rabies, which had a low score, but country freedom requires freedom in all susceptible species. However, the importance of this is limited, as the status of a country does not have a significant impact on trade.

a) Application of zoning and compartmentalisation in relation to the wildlife/domestic animal interface

Both zoning and compartmentalisation are applicable to diseases that have a wildlife component. In situations where the interface between domestic and wild populations can be defined on a geographical basis, such as on the borders of national parks or game reserves, zoning is more easily applied.

For vector borne diseases, zoning is applicable based on vector distribution, climate and other relevant factors, while compartmentalization, although possible, is considerably more difficult to implement.

b) Specific surveillance guidelines for diseases where wildlife is implicated

The *Terrestrial Code* does not require specific surveillance for all diseases where wildlife is implicated (Table 1). For some diseases, like classical and African swine fever, there are detailed recommendations for surveillance in wild pigs. For other diseases, wildlife is recommended to be considered as a risk factor in the design of surveillance programs. For rabies, surveillance in wild animals is implied for freedom.

Surveillance implies that if a case is detected it will be followed by an action to control or eradicate the disease. In most cases, findings of infection in wild animals do not trigger an action. The objectives of surveillance or monitoring in wildlife should be to ascertain the presence or absence of infections, all or most actions are applied to domestic animal populations rather than wildlife.

An example where measures might be applied to wildlife is classical swine fever where surveillance in wild pigs is useful to target vaccination efforts and monitor the impact of the control program.

c) Trade issues related to wildlife – trade in wildlife per se and commodities of wildlife species origin

Traded live wild animals should be free from infection. However, there is little information on the reliability of tests which have been validated for domestic animals. Data on the use of tests in wild animals should be collected to aid in interpretation of test results.

There should be a more systematic approach to addressing the trade of wild animals and wildlife derived commodities throughout the chapters of the *Terrestrial Code*. For some diseases that have wildlife component, specific guidance on how to trade live wild animals and commodities is needed.

d) Reporting of disease occurrences in wildlife

Currently, the OIE's WAHIS has the capability to handle reports of disease occurrence in wildlife, which will be integrated as WAHIS-WILD in the future. A new reporting format has been developed covering listed as well as non-listed diseases affecting wildlife. The system allows to include family, species and test results which can be useful for trade purposes.

In practice, many countries hesitate to report the occurrence of listed diseases in wildlife due to the potential trade implications. However, there have been an increasing number of reports submitted in the past year. Members should be further encouraged to report diseases in wildlife. For those diseases where occurrence in wildlife does not affect the status of domestic animals, specific statements should be added to the relevant chapters and the WAHIS-WILD system.

e) Focus on wildlife diseases: a pathogen approach versus a host species approach

For some diseases, infection in wildlife does not affect the disease status of domestic animals, while in others it does. The criteria outlined above seem to support a pathogen by pathogen approach based on risk. This is valid both for domestic and wild animals for the purposes of reporting to the OIE. To ensure a consistent approach in reporting wildlife diseases a clear definition of feral, wild and wild captive animals is essential.

The *Terrestrial Code* follows a pathogen approach for all diseases with the exception of bovine tuberculosis and bovine tuberculosis of farmed cervidae, which is the same agent in a different species. In the case of the brucellosis chapters the approach is originally species based, however several species may be susceptible to the same pathogen. In addition there is an inconsistency between the list of notifiable diseases and the titles of the chapters in the *Terrestrial Code*.

For the purpose of trade in wild animals, disease lists grouped by species would aid in the development of import protocols. However, there may be difficulties in assessing the infection status in a certain species of wildlife due to the lack of validated tests.

f) Role of wildlife in the One-World-One-Health concept and implications on OIE standards

Considering the role of wildlife in the *One-World-One-Health* (OWOH), the *Terrestrial Code* should be revised in such a way that it addresses the issues considered in this document. The OWOH concept includes health of humans, animals and the environment, including conservation. The implication being that healthy environments are essential to healthy populations. Wildlife health is considered a significant indicator of environmental health, reinforcing the need to monitor and report disease occurrence in wildlife.

The current partnership for OWOH does not include environmental health partners. The OIE and its partners need to reflect on how to include this third dimension in the framework for OWOH. The partners should consider whether additional institutions with an environmental mandate should be invited to participate and/or to expand the mandate of the institutions already involved.

Table 1 - Disease freedom approaches for selected diseases in the *Terrestrial Code*

Disease	**Does infection in wild species affect the status of domestic species?**	**Are arthropod vectors involved?**	**Specific surveillance in wildlife required?**	**Comments**
Avian influenza	No	No	No	There is a recognition that nothing can be done to control infection in or the movement of wild birds, and that all countries share the same risk
Aujeszky's disease	No	No	No	For country freedom the *Code* requires that *infection* is not known to be established in wild swine, or measures have been implemented to prevent any transmission of the AD virus from wild swine to domestic pigs.
African swine fever	Yes	Yes	Yes	Specific surveillance is required: Based on *surveillance*, ASF infection has been demonstrated not to be present in any wild pig population in the country or *zone.*
African horse sickness	Yes	Yes	Yes	The provisions of the chapter apply to all *equidae.* Susceptible wild equid populations should be included in the *surveillance* programme.
Bluetongue	Yes	Yes	Yes	The *Code* is not clear but does refer to the ruminant population in the country or zone, which would include wild ruminants. In other section it refers to susceptible herbivores. Susceptible wild ruminant populations should be included in *surveillance* when these animals are intended for trade.
Bovine brucellosis	No	No	No	The *Code* chapter talks about cattle and herds
Caprine and ovine brucellosis	No	No	No	The *Code* chapter is specific for sheep and goats only.

Porcine brucellosis	Not applicable	No	No	The *Code* chapter talks about pig herds and also makes reference to cattle present in the same establishment. It is not clear if pig herd would also mean herds of wild or feral pigs.
Classical swine fever	No	No	Yes	Infection in wild or feral pigs is allowed as long as there is an effective separation between both populations. Surveillance in wild pigs is required.
Newcastle disease	No	No	Yes Not compulsory	The *Code* follows the same principles as avian influenza. Freedom refers to poultry only. *surveillance* of wild birds may be of value in alerting *Veterinary Services* to the possible exposure of *poultry*, and in particular, of free ranging *poultry*.
Foot-and-mouth disease	Yes	No	Yes	The *Code* refers to freedom in all susceptible animals. Surveillance is required for all susceptible populations, based on the prevailing epidemiological situation.
Rabies	Yes	No	Yes	No cases in man or any animal species.
Tuberculosis	No	No		The recommendations in this chapter are intended to manage the human and animal health risks associated with *Mycobacterium bovis* (*M. bovis*) infection in domestic (permanently captive and owned free-range) bovines including cattle (*Bos taurus*, *B. indicus* and *B. grunniens*), water buffaloes (*Bubalus bubalis*) and wood bisons (*Bison bison* and *B. bonasus*).

Table 2 – Scoring system to rank the importance of the risk of transmission from wildlife for some selected diseases

Questions	FMD	AI	ND	CSF	AD	BRU	TB	RAB	ASF	AHS	BT	RVF
Is there more than one species susceptible?	1	1	1	0	0	1	1	1	1	1	1	1
Do all affected species transmit equally?	1	0	0	0	0	0	0	0	1	1	1	1
Is there a susceptible feral population?	1	1	1	1	1	0	0	1	1	1	1	1
Are there susceptible wild populations?	1	1	1	1	1	1	1	1	1	1	1	1
Is there transmission between domestic and wild or feral populations?	1	1	1	1	0	1	1	1	1	1	1	1
Is there rapid spread?	1	1	1	1	0	0	0	0	1	1	1	1
Direct contact (nose to nose, biting, etc.)	1	1	1	1	1	1	1	1	1	0	0	1
Fomites	1	1	1	1	0	1	0	0	1	0	0	0
Herd to herd aerosol transmission?	1	0	0	0	0	0	0	0	0	0	0	0
Ingestion of contaminated feed and water	1	1	1	1	0	1	1	0	1	0	0	0
Are there vectors involved?	0	0	0	0	0	0	0	1	1	1	1	1
Preventive measures cannot be applied in domestic animals?	0	1	0	0	0	0	1	0	1	0	0	0
Preventive measures cannot be applied in wildlife?	1	1	1	0	1	1	1	0	1	1	1	1
The populations cannot be separated?	0	1	1	0	0	0	0	0	0	1	1	1
Public health implications?	0	1	0	0	0	1	1	1	0	0	0	1
TOTAL (Y)	**11**	**12**	**10**	**7**	**4**	**8**	**8**	**7**	**12**	**9**	**9**	**11**

0 – means “No”

1 – means “Yes”

AI - vaccination cannot be applied in advance

ND - vaccination can be applied in advance

CSF - limited herd to herd aerosol transmission has occurred in high density areas, but is not common

AD - Several species are susceptible but most are not important in transmission. Wild and domestic strains are different

BRU - Bovine brucellosis (*B. abortus*)

RAB - Bats were regarded as vectors

Table 3 – Comparison between the disease scores and the approach followed in the *Terrestrial Code*

Approach in the *Terrestrial Code*	**Reasoning**	**Disease (score)**
The status of infection in wildlife does not affect the status of domestic species	No control in wildlife is possible and every country essentially shares the same risk	Avian influenza (12) Newcastle disease (10)
	Control is feasible and a effective separation and reduction of transmission is achievable between wild and domestic populations	Classical swine fever (7) Aujeszky's disease (4) Brucellosis (8) Tuberculosis (8)
The status of infection in wildlife affects the status of domestic species	The disease is vector-borne and therefore an effective separation and reduction of transmission is difficult to implement	African horse sickness (9) Bluetongue (9) Rift valley fever (11) African swine fever (12)
	The disease is highly infectious and spreads readily from wild to domestic animals	Foot and mouth disease (11) Rabies (7) African swine fever (also vector borne) (12)

Appendix IV

Original: English
March 2010

MEETING OF THE OIE *AD HOC* GROUP ON EPIDEMIOLOGY

Paris, 16 – 18 March 2010

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The OIE *ad hoc* Group on Epidemiology was welcomed by Dr Yong Joo Kim from the Scientific and Technical Department, who gave an overview on the main topics and priorities on the agenda. Dr Lea Knopf of the Scientific and Technical Department joined the meeting later and provided information on the topic-specific discussions on the work of the *ad hoc* Group on Epidemiology at the last meeting of the Scientific Commission held early March 2010.

1. Adoption of the agenda and appointment of a rapporteur

The meeting was chaired by Dr Cristóbal Zepeda and Dr Jeffrey Mariner was designated as rapporteur. The adopted agenda and list of participants are attached as Appendices I and II, respectively.

2. Concept paper on the approach to animal health management at the wildlife and domestic animal interface

The Group reviewed and supported the comments and additional proposals made by the Working Group on Wildlife Diseases on the definition of "*wildlife*" in the document on "Draft policy for the OIE on the wildlife-domestic animal interface" which had been endorsed by the Scientific Commission. The Group decided to accept the changes suggested by the Working Group on Wildlife Diseases.

3. Compartmentalisation

The Group reviewed the documentation provided on existing examples in the application of compartmentalization. The Group noted that the Scientific Commission would request additional information on the OIE pilot studies on compartmentalisation (in Thailand and Brazil).

In order to assess the provided documentation, the Group developed a draft for a generic checklist to assess compartments. The Group felt that the information provided was difficult to assess as it did not follow the format recommended in Chapter 4.4. of the *Terrestrial Code* and did not contain information on all aspects required. Further, it was not always clear what the proposed objective was. The documentation on African swine fever was a general policy document and was not very specific to compartmentalization. The documentation on ostriches was not disease-specific and did not refer to compartments.

The only documents clearly referring to the establishment of a compartment were those related to classical swine fever and the biosecurity measures checklist. It was not a specific compartmentalization request, but rather standard operating procedures to establish compartments. The level of agreement with the newly developed checklist was assessed. The Group found that the proposed procedure was on the right lines but needed to be further developed as there was not enough detail in some areas and other areas were not covered at all.

In order to be able to assess a compartmentalization proposal, the Group agreed that it would require a specific document on the proposed strategy. Such a document preferably should address all the conditions listed in the checklist mentioned above, rather than present a general policy for the control of the disease, which included amongst other descriptive measures some measures for compartments.

4. Re-discussion on concepts of protection zone and case definition

4.1. Protection zone

Following the new revisions added by the Scientific Commission in March, the Group decided to re-discuss the revised proposal for the establishment of protection zones. The Group considered that the main incentive for establishing protection zones was the preservation of status of the rest of the country or zones within the country in the event of an outbreak within the protection zone. The Group noted the following points:

- It is unclear why a country would wish to establish a protection zone between two free areas, for example, between free areas with and without vaccination. The key point was to have an effective separation between the zones and their relevant animal populations.
- With respect to article 4.3.4.5 of the *Terrestrial Code*, the Group did not agree with the addition of the words "depending on the epidemiological situation". Firstly, it was not clear who would determine the epidemiological situation; and secondly, a free zone should not lose its status unless it had an outbreak. The inclusion of the proposed wording would create a disincentive for the establishment of protection zones.
- Regarding article 4.3.4.2., the addition of the wording "or unknown" seemed superfluous since unknown was a subset of "different".
- The addition of article 4.3.4.6. removed the principal incentive for the establishment of a protection zone as any outbreak would imply the loss of status until a containment zone is established. If article 4.3.4.6. was adopted there was no need to notify the OIE on the establishment of a protection zone as it would not provide any advantage in regards to trade.
- Article 4.3.4.12, as presently worded, contradicted the additional wording introduced by the Scientific Commission in article 4.3.4.6. as the new wording implied the loss of status of the country or zone in the event of an outbreak within the protection zone.

Considering the above and the requirements for a protection zone, in particular those described in article 4.3.4.8., the Group agreed to propose that article 4.3.4.6 be deleted and a requirement be introduced to notify the OIE on the establishment of a protection zone. In article 4.3.4.12, "and zones" should be added after the word "country".

4.2. Case definition

The Group reviewed also the comments on chapter 1.4 on surveillance in the Terrestrial Code and believed that the term "case description" as proposed by the Scientific Commission should be avoided. Case definition was the accepted term in epidemiology, and changing it would lead to confusion.

A case definition might have different levels of accuracy depending on whether it was based on syndromes, disease specific clinical signs or laboratory confirmed cases. Additionally, a case definition might change depending on the epidemiological situation. For example, confirmation of an initial outbreak in a previously free country or zone might require identification of the agent, while subsequent outbreaks could be defined on the basis of clinical signs to the extent that they were epidemiologically linked. Similarly, a case definition used within a control and eradication programme might need to be modified when approaching the final stages of eradication.

The Group agreed to propose the following wording:

> "*Case definition* – means a set of criteria used to classify an animal as having the characteristics relevant to the surveillance objective. A case definition may also refer to a herd or other relevant epidemiological units."

5. Follow up on the future 'Guide for Terrestrial Animal Health Surveillance'

The Group reviewed the proposed chapter 2 of the future Guide and made comments for the *ad hoc* Group on Editing of a Guide for Terrestrial Animal Health Surveillance, to which the revised chapter containing the Group's comments would be transferred for their consideration.

6. Development of Generic Approaches for Disease Control

The Group decided to discuss this topic in a subsequent meeting. The Group agreed to seek clarification from the Scientific Commission on the scope of this document, namely whether it referred to disease control and eradication procedures exclusively or should cover emergency response in case of a disease incursion. The Group believed that they might be similarities with the global control strategy for foot and mouth disease.

7. Next meetings of the *ad hoc* Group on Epidemiology

The Group agreed on the dates for its next meetings: 21 - 23 September and 2 - 4 November 2010.

8. Adoption of the draft report

The *ad hoc* Group reviewed and amended the preliminary draft report provided by the rapporteur. The Group agreed that the report captured the discussions and therefore could be adopted without additional circulation to the Group for comments.

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…/Appendices

Appendix I

MEETING OF THE OIE *AD HOC* GROUP ON EPIDEMIOLOGY

Paris, 16 – 18 March 2010

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Agenda

1. Adoption of the agenda and appointment of a rapporteur
2. Feed-back on the draft concept paper on the approach to animal health management at the wildlife-domestic animal interface, including additional contributions from the Working Group on Wildlife Diseases
3. Assessment of implementation and functioning of compartmentalisation based on existing, documented compartments and the current OIE standards
4. Re-discussion on concepts of protection zone and case definition
5. Follow up on the future 'Guide for Terrestrial Animal Health Surveillance'
6. Development of generic approaches for disease control
7. Next meetings of the *ad hoc* Group on Epidemiology
8. Finalisation and adoption of the draft report

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Appendix II

MEETING OF THE OIE *AD HOC* GROUP ON EPIDEMIOLOGY

Paris, 16 – 18 March 2010

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Appendix V

Original: English
April 2010

REPORT OF MEETING OF THE OIE *AD HOC* GROUP ON THE EDITING OF A GUIDE ON TERRESTRIAL ANIMAL HEALTH SURVEILLANCE

Paris, 14–15 April 2010

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A meeting of the OIE *ad hoc* Group on the Editing of a Guide on Terrestrial Animal Health Surveillance was held at the OIE Headquarters in Paris from 14 to 15 April 2010. Dr Lea Knopf of the Scientific and Technical Department welcomed the *ad hoc* Group participants and explained the proposed agenda. Four representatives of four institutions associated with the project, namely Dr Aaron Scott, Dr Armando Giovannini, Dr Jeffrey Mariner and Dr Renaud Lancelot, could not travel but participated in key sessions of the meeting by conference call to comment and provide their guidance on the project. On the second day, Dr Bernard Vallat, the Director General of OIE, welcomed the Group and clarified several pending questions.

1. Adoption of the agenda and appointment of a rapporteur

Prof. Coetzer was designated as chair of the meeting, and Dr Jane Parmley volunteered to act as rapporteur. The agenda agreed upon and list of participants are attached as Appendices I and II, respectively.

2. Review of comments received by other *ad hoc* Groups and the Scientific Commission

The Group took note of the comments received by the Scientific Commission for Animal Diseases and the *ad hoc* Group on Epidemiology, which are the initiators of this project to produce a *Guide on Terrestrial Animal Health Surveillance* (the *Guide*). As the *Handbook on Import Risk Analysis for Animals and Animal Products* is being revised there was no need to deliberate on this topic in detail in the proposed guide, but to add cross-references where applicable.

3. Review and comparison of collected publications on animal health surveillance

The Group revisited or reviewed a few additional documents on animal health surveillance. The intention to use existing material, where possible, led to questions regarding copyright issues when using the original text of such publications.

Essentials of Animal Disease Management: Series 1-Surveillance, 2-Zoning, 3-Risk Assessment had been prepared under the auspices of the Australian Government and through a regional development project in collaboration with OIE. Therefore it should not be a problem to use some of the text of these documents for the *Guide*.

A training course and manual on risk-based surveillance had been produced based on documents (published by FAO and others). The training course manual should be published soon and it was decided to ask the FAO whether the Group could include some extracts in the *Guide*.

Pre-ISVEE[1] workshop report: there was a useful list of terminology in use in animal health surveillance that was developed and used in the workshop. As the glossary in the OIE *Terrestrial Animal Health Code* was not considered adequate for the purpose of the *Guide*, the Group discussed whether to add an explanatory glossary to the *Guide*. It was agreed that there was a need within chapter 1 for a kind of glossary or a list of the best

1 ISVEE: International Symposia on Veterinary Epidemiology and Economics

interpretation of terms. Dr Cameron volunteered to take the lead in addressing key definitions or explanations of particular importance to the *Guide*, such as the consistent use of the terms "health" and "disease" or when and how to use "monitoring" in contrast to "surveillance". The question was also debated of whether an explanatory glossary should remain grouped in one chapter or whether some of the terms used should be shifted to the relevant chapter where the topic related to the term was addressed. The Group concluded that the addition of explanatory terminology could potentially result in inconsistencies in terminology used in the *Guide* and in the *Terrestrial Code* and therefore would need a broader discussion within the appropriate bodies of the OIE (e.g. Scientific Commission).

It was suggested to favour distribution of the additional documentation above to all contributing authors of this *Guide* to support the better framing of the chapters and sections.

Dr Vallat, Director General of the OIE, addressed questions of the Group on the future use and the foreseen publication format of the *Guide*. Dr Vallat confirmed that the OIE intended to provide both a printed version (sold at the production price) and a downloadable, electronic version of the *Guide*. He also emphasised that the Collaborating Centres or institutions involved in editing this *Guide* would be acknowledged appropriately. The Group received favourable answers to the question on whether this future *Guide* could be used by the involved Collaborating Centres and institutions for training courses and whether extracted sections of it could be included in training manuals for specific purposes or a specific target public.

4. Evaluation of current working procedures for the compilation of the future *Guide* and discussion of suggestions for improvements

The Internet working platform that was established in January 2010 within "Google doc" was considered inappropriate for the work of the *ad hoc* Group and by the current contributing authors additionally involved in the editing of this *Guide*. Therefore the Group decided to abandon this platform and to revert to simple sharing of the working documents by email. It was stressed that this would entail a need for a consistent manner of naming and dating circulated versions of chapters, as well as discipline within the Group in editing. The following file naming rule was proposed and accepted:

ChapterX date (yyyymmdd) initials of **only** the last revising author: e.g. Chapter1_20100414JP

Comments added to the files should refer to the sections of the *Guide* and not to page numbers. The table of contents would serve as a reference and the updated version containing the conclusions of this meeting would be circulated promptly. In order to avoid unnecessary mailings, the Group recommended that a main coordinator, as designated for each chapter, would take over the role of circulating draft chapters within the sub-group of authors of a specific chapter and addressing the revisions received, before sending it out to the entire Group. The following experts accepted to coordinate on the individual chapters:

Chapter 1:	Preben Willeberg (content) and Angus Cameron (explanatory glossary)
Chapter 2:	Aaron Scott
Chapter 3:	Jeffrey Mariner
Chapter 4:	Jane Parmley
Chapter 5:	Larry Paisley

It was suggested that revising authors also provide a pdf version of updated chapters to avoid problems of formatting of figures and tables due to conversion of files between different word versions or different page set ups. The inclusion of text boxes for single or multiple examples used to complement the theoretical content was welcomed. These text boxes should focus on "how to do" and be representative of a variety of backgrounds and opinions. The Group considered adding a short introduction to each chapter to better lead the reader of the *Guide* to the appropriate sections relevant to his or her activities and level of veterinary education. The Group repeatedly discussed the question of how much technical details were needed to understand the concepts and which technical details could remain referenced for further reading. At the current stage some of the chapters were considered slightly too technical. The authors were referred back to the "instructions for authors" to address issues such as use of simple language, consistency between British and American English style, taking into account that the assisting scientific editors could partly address some of these issues. An overall harmonisation of the document across chapters would take place during the second revision round in August. The circulation of first drafts to a small number of persons corresponding to target audience (external collaborators) for feedback and comments was considered useful. It was re-confirmed that

the two Collaborating Centres taking part in this project and focusing on wildlife would ensure that wildlife aspects were covered adequately throughout the *Guide*. Upon request the Group clarified the role and expected contribution from the leading scientific editor Prof. Coetzer (and his institution) to the *Guide*. A need was identified to have an experienced reviewer who would be able to check the document's consistency as a whole and whether it was appropriately tailored to the target audience.

The Group concluded that there was a need to set deadlines for revisions to be submitted to the chapter coordinators (e.g. 2 weeks) to prevent any further delay in the schedule and to facilitate the integration of updates. Additionally, a short monthly update on the stage of progress of the individual chapters would be shared with all *ad hoc* Group participants. The Group had no objections to letting the OIE Headquarters decide which versions of chapters and at which time point it was appropriate to share the content with the *ad hoc* Group on Epidemiology or the Scientific Commission.

5. Review of proposed chapter 1 (introduction), chapter 2 and chapter 3

5.1. Chapter 1: Introduction

In view of the other draft chapters available, the Group identified the need to revisit chapter 1.

A graphic showing the relationships of the different chapters and steps in developing and conducting surveillance may be a helpful addition to the beginning of the *Guide*. This would support the Group's opinion that the section on how to use this *Guide* should be expanded to better specify which sections were targeted at which different audiences (Chief Veterinary Officers versus field veterinarians or para-veterinarians). Chapter 1 should make clear that the surveillance systems treated would address live animals and surveillance associated with the slaughter of animals, but not animal products. From the perspective of decision makers, the need to add a section on the best use and who would use the information collected in surveillance programmes was considered crucial. It was also suggested to briefly introduce in chapter 1, probably as part of an explanatory glossary, the basic concepts of sensitivity and specificity over the different levels of interest (individual herd, surveillance programme itself and [epidemic] thresholds [also to be addressed in chapters 3 and 5]). As a general comment, the Group agreed to emphasise the application and utility of methods other than the classical ones described in the standard textbooks (thereby adjusting for the most recent developments in surveillance approaches) and at the same time provide clear guidance on how to choose a method or a combination of methods.

5.2. Chapter 2: Roadmap for designing a surveillance system, critical components of a plan

The review and comments revealed that wildlife aspects and how surveillance informed policy and decision-making should be considered in more depth The Group identified a need to better distinguish between developing the surveillance plan and the resulting surveillance programme (e.g. assisted by a flow-chart). The Group also intended to expand on the differentiation between purposes and objectives of surveillance systems or plans, respectively by adding, for example, a simple list of common purposes and objectives of surveillance, including the implications for the different people involved (from operational to decision makers). The issue of objectives of surveillance and how the data received may be used or misused for objectives that are not specified in the programme was also discussed. The section on communication/engagement of all stakeholders and the section on budgetary aspects of surveillance planning would be reviewed again in more detail.

The numerous comments on chapter 2 would be consolidated by the chapter coordinator who requested to receive more examples from the Group to be included throughout the chapter.

5.3. Chapter 3: Performance: assessment/evaluation of surveillance systems

A first draft of chapter 3 was available for discussion, the Group tried to adjust the sections' content in the light of the previous generic discussions on the *Guide* (more examples, different levels of readers, etc.). This chapter may help to differentiate clearly between the objectives of the surveillance conducted and the objectives of the evaluation of the surveillance. An important observation was added: existing surveillance programmes that need to be changed (over time), to be reduced or even ceased should also be considered in the *Guide*. The question of "how much surveillance is enough" mainly addressed in this chapter, could also be examined in other chapters. The examples on assessment or evaluation of surveillance systems should focus on the characteristics of the system rather than on a categorisation into "good" and "bad" systems. A stronger link between elements and the objectives of the surveillance evaluation, especially when comparing between systems was considered helpful. It was decided to keep the section on cost and cost-effectiveness short as it is already a large technical activity on its own, conducted by specialised experts. Nevertheless, examples of the link between sustainability and value of the programme and the 'political' environment would add to this section. A section on evaluation of Performance of Veterinary Services (PVS) at the end would complete the current picture.

6. Discussion on the outline, next steps and content of chapters 4 and 5

6.1. Chapter 4: Data sources:

No draft chapter was yet available, but the Collaborating Centre responsible for the chapter shared its thoughts on the details of the suggested sections, and the re-arranged sections were reflected in the revised table of contents. Particular attention should be given to covering data sources that are representative of the different situations encountered in the field (e.g. husbandry systems, data collectors, places where data can be collected, temporal aspects), the broad range of surveillance topics to be addressed in this guide and the accessibility, maintenance and form of surveillance databases. Combining data where useful and examples of when and how to do this, as well as the implications for management, could be discussed in this chapter.

6.2. Chapter 5: Tools and methods

This chapter would more or less follow on from chapters 3 and 4 in providing the tools to do performance assessments and analyse data sources. The political dimensions of choosing and implementing certain tools or methods would also need to be considered in chapter 5. It should also describe compensation mechanisms or other incentives as tools. The concept of freedom from diseases and, in consequence, the framework for understanding evidence of freedom could also link up to aspects in chapter 3, notably probability of freedom versus sensitivity of a surveillance programme.

7. Adjustment of the time plan for the compilation of the first version of the *Guide*

The initial time plan could not be maintained for various reasons and the Group discussed options to reduce rather than extend the 2-month delay. Based on the discussions and conclusions above, the Group proposed the following revised timeline:

Milestones	**Deadlines**
Second *ad hoc* Group meeting held, feedback on chapters 1-3	Mid-April 2010
First draft of explanatory glossary containing key terms (A. Cameron)	25 April 2010
Send chapters for review with chapter authors group	15 May 2010
All chapters drafted and ready (includes editing within the chapter group)	1 July 2010
First revision round of the entire Guide by the entire Group	by 1 August 2010*
Collect comments from external test readers	during August 2010

Milestones	**Deadlines**
Second revision round of the entire Guide by the entire Group	by 1 September 2010
Last review by Scientific Commission and *ad hoc* Group on Epidemiology	mid-September 2010*
Final draft ready to submit for publication	end of September 2010
Publication	around March 2011

* If major revisions were necessary, reconsider the timelines at that time

8. Finalisation and adoption of draft report

The draft report was reviewed by the Group, amended and accepted subject to circulation for minor comments to be received in the week that would follow the sending out of the draft report by email.

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…/Appendices

Appendix I

MEETING OF THE OIE *AD HOC* GROUP ON THE EDITING OF A GUIDE ON TERRESTRIAL ANIMAL HEALTH SURVEILLANCE

Paris, 14–15 April 2010

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Agenda

1. Adoption of the agenda and appointment of a rapporteur
2. Review of comments received by other *ad hoc* Groups and the Scientific Commission
3. Review and comparison of collected publications on animal health surveillance
4. Evaluation of current working procedures for the compilation of the future *Guide* and discussion of suggestions for improvements
5. Review of proposed chapter 1 (introduction), chapter 2 and chapter 3
6. Discussion on the outline, next steps and content of chapters 4 and 5
7. Adjustment of the time plan for the compilation of the first version of the *Guide*
8. Finalisation and adoption of draft report

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Appendix II

MEETING OF THE OIE *AD HOC* GROUP ON THE EDITING OF A GUIDE ON TERRESTRIAL ANIMAL HEALTH SURVEILLANCE

Paris, 14 – 15 April 2010

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Appendix VI

Original: English
April 2010

REPORT OF THE MEETING OF THE OIE *AD HOC* GROUP ON THE INTERACTION BETWEEN CLIMATE AND ENVIRONMENTAL CHANGES AND ANIMAL DISEASES/ANIMAL PRODUCTION

Paris, 27–28 April 2010

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The meeting of the OIE *ad hoc* Group on the Interaction between Climate and Environmental Changes and Animal Diseases/Animal Production was held from 27 to 28 April 2010, at the OIE Headquarters in Paris. The participants were welcomed by Dr Bernard Vallat, Director General of the OIE, Dr Kazuaki Miyagishima, Deputy Director General and Head of the Scientific and Technical Department, and by Dr Gideon Brückner, President of the OIE Scientific Commission for Animal Diseases.

Dr Vallat described the background to the convening of the *ad hoc* Group. In follow-up to a Technical Item on the subject of animal disease, animal production and climate change, presented by Dr Peter Black at the 77th General Session of the World Assembly of Delegates to the OIE in May 2009, a Resolution had been adopted calling for action on this theme. Dr Vallat reminded the *ad hoc* Group that animal production was often held to be one of the causes of climate change or at least to have negative effects on the environment and the climate. He requested that the Group also work on shedding light on and communicating both positive and negative aspects of animal production.

The OIE was requested to provide Members with recommendations of actions to take in the face of climate change. The Group agreed that the issue was extremely complex and that with regard to animal disease and production, choices needed to be made that could often be a trade-off between benefits including socio-economic aspects and the cost in terms of environmental impact.

The meeting was chaired by Dr Gideon Brückner; Dr Peter Black was appointed Rapporteur.

The agenda and list of members of the *ad hoc* Group and other participants are given in Appendices I and II.

1. Terms of reference and agenda for the *ad hoc* Group meeting

The draft agenda and the Terms of Reference were adopted, with one amendment to the agenda – that an item on communication be added: providing advice to promote effective communication of objective and scientifically sound information on issues concerning climate change, to and amongst stakeholders as well as the general public. The Terms of Reference as agreed upon are given in Appendix III.

It was further clarified that for the purpose of the discussions of this *ad hoc* Group, climate change means a change of climate attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable periods. Some aspects of climate variability, including increasing frequency and intensity of extreme weather events such as droughts and floods, may be attributable to climate change. Environmental change means a change in major physical and biological systems, either caused naturally or influenced by human activity. This includes changes in land use (e.g. deforestation, land clearing, conversion of wetlands, soil degradation), water quality and quantity (e.g. overuse and pollution of water supplies), biodiversity (e.g. loss of species), and air quality (e.g. air pollution) but explicitly excludes climate change.

2. Positive and negative impacts of climate and environmental changes on emerging and re-emerging animal diseases

The Group agreed that it was difficult to compile a list of positive and negative effects of climate change on animal diseases as there were still significant gaps in the knowledge available. For a certain set of conditions climate change might have positive effects while for other conditions it might have negative effects. It could therefore result in a too simplistic approach to categorise climate changes in terms of positive and negative impacts on animal diseases.

However, positive outcomes resulting from the increased global awareness on climate change issues should be acknowledged such as, for example, the increase in agro-meteorology data and research on animal diseases associated with climate change. Although agriculture had the capacity to adapt in many countries, there was a need to build resilience to deal with the range of challenges likely to arise with climate change. Countries increasingly recognised the need to invest in systems contributing to the control and prevention of animal diseases at source. The Group acknowledged that climate change necessitated collaboration and cooperation among countries, as the challenges posed were global by nature. In this process of cooperation the UNFCCC[1] principle of common but differentiated responsibilities should be taken into account.

Animal diseases, climate change and uncertainty

The Group acknowledged that uncertainty and information gaps continued to be a feature of discussions involving climate change and direct causal connections between climate change and animal diseases required further research. Accurate predictions of the behaviour of animal disease could not be made on the basis of climate projections (or observed environmental changes) alone. There was recognition that the impacts of climate change would not be evenly distributed across the globe. In addition, the relationships were in a flux within a system that continued to evolve, making it difficult to forecast accurately the rate, distribution and scale of emergence and re-emergence of many animal diseases.

Several different disciplines needed to combine their resources to address the challenges of climate change with respect to emerging and re-emerging animal diseases. Changes in animal production systems to mitigate risks or adapt to climate change might also have consequences for animal disease incidence and distribution. In addition, extreme climate change events might directly affect animal welfare and health, for example, through heat stress or compromised reproductive performance. No single discipline or organisation could address on its own the issues of climate and environmental changes and their impacts on emerging and re-emerging animal diseases and animal production. Partnerships and collaboration would be essential to build a more coherent view of the future landscape and to devise a range of strategic options on what might need to be done and how. In particular, climate change issues needed to be mainstreamed at the level of policy makers so that they are shared across and between governmental institutions and ministries, and that issues related to climate change become a primary government concern.

The Group discussed the important role of the private sector in addition and complementary to *Veterinary Services*[2] in stimulating investments and capacity building to improve the quality of surveillance, monitoring and responses to climate and environmental change-induced disease incidences.

Although it was clear that global warming was occurring, estimates of future climates were uncertain due to the range of possible future climate change and mitigation scenarios and to the limitations of present models. In addition, the complex relationships between the various factors that drive changes in disease incidence and distribution added another layer of uncertainty. While there were several robust projections regarding future climates, more research was required to understand the relationship between environmental and climate change, and animal disease.

1 United Nations Framework Convention on Climate Change
2 See *Glossary* in the OIE *Terrestrial Animal Health Code*

Risk mitigation

Veterinary Services worldwide should adapt surveillance strategies in relation to perceived and predicted risk. Evolving production systems were likely to change disease profiles and these changes would require revised surveillance and animal disease control strategies. The OIE should evaluate its general and/or disease-specific surveillance guidelines in the *Terrestrial Animal Health Code* to take into account both climate change issues and production systems changes.

Identification of climate-sensitive OIE listed diseases might assist Members in better targeting their disease surveillance strategies. It might also be useful to subsequently correlate incidence and spread of diseases to climate change projections to identify vulnerable regions and communities.

Risk mitigation and other adaptation strategies to lessen the effects of climate change would require adequate veterinary governance and resources to address the challenges posed by climate and environmental change. This could include training of veterinary practitioners and other stakeholders as well as prioritising research. Risk scenarios, sensitivity analyses and vulnerability assessments would help inform the prioritisation process. This should also include measures to enhance transfer of both indigenous and scientific knowledge. Such measures should be aimed at the appropriate target groups at the international, regional, sub-regional, national and sub-national level.

Current global intelligence systems such as the OIE/FAO/WHO Global Early Warning and Response System for major animal diseases (GLEWS) present the opportunity to further increase their analytical and predictive capacity with respect to emerging diseases. It would however be desirable to formalise linkages between the animal health sector and the institutions with climate change expertise at the national and international levels to further complement the information made available through these systems to national governments. The OIE network of Reference Laboratories and Collaborating Centres could also play a role as sources of expertise to assist OIE Members to enhance their capacity.

The Group noted that some of the conclusions of the 4th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) for human health (Group II, Chapter 8) were equally applicable to animal health and should be considered in determining and formulating research needs:

"*Key research priorities include addressing the major challenges for research on climate change and health in the following ways.*

- *Development of methods to quantify the current impacts of climate and weather on a range of health outcomes, particularly in low- and middle-income countries.*

- *Development of health-impacts models for projecting climate-change-related impacts under different climate and socio-economic scenarios.*

- *Investigations on the costs of the projected health impacts of climate change; effectiveness of adaptation; and the limiting forces, major drivers and costs of adaptation.*

Low-income countries face additional challenges, including limited capacity to identify key issues, collect and analyse data, and design, implement and monitor adaptation options. There is a need to strengthen institutions and mechanisms that can more systematically promote interactions among researchers, policymakers and other stakeholders to facilitate the appropriate incorporation of research findings into policy decisions in order to protect population health no matter what the climate brings" [3].

3 http://www.ipcc.ch/publications_and_data/ar4/wg2/en/ch8.html

3. Positive and negative interactions between climate and environmental changes and animal production

The *ad hoc* Group reviewed a number of recently published documents (the list is given in Appendix IV), in particular documentation made available by the FAO. The Group supported the FAO recommendations documented in the *State of Food and Agriculture 2009* (*SOFA*) – *Livestock in the Balance,* which improved the analysis of previous publications. In particular:

- The Group acknowledged that all domestic animal production systems produce green house gas (GHGs) mostly due to natural processes, particularly methane from enteric fermentation and manure and nitrous oxides from manure and fertiliser. Current evidence indicated that, at farm level, ruminant systems had a higher GHG footprint per kg of product than monogastric production systems. Differences could be reduced if carbon sequestration in grassland and carbon emissions from deforestation for soybean or other feed-grains were taken in account in carbon accounting.

- The Group endorsed the use of analytical methods such as life-cycle analysis for each industry to identify the most efficient production systems in terms of GHG emissions. The methodologies used should be consistently applied and include comparable scales. Nevertheless, the Group also underlined that life-cycle analysis involved emissions upstream and downstream livestock production at farm level, due, for example, to industrial activities and transport, and that technologies and fuels used in these phases of the chain were not determined by the livestock sector itself. At the same time the Group noted the high weight that emissions originated in land use changes (in particular deforestation) had in the estimates of the carbon footprint published for the livestock sector. In this regard, avoiding deforestation seemed to be beneficial not only to reduce GHG emissions and loss of biodiversity, but also a major option to significantly reduce the carbon footprint of livestock.

- Future food security demands would require increasing the efficiency and capacity of production systems to feed the growing human population. Life-cycle analysis within these production systems would be critical to identify mitigation options while satisfying these demands;

- As with many environmental goods and services, where the external costs of resource exploitation are often not costed into the true price of the goods, the ecological costs of animal production systems, if internalised, would also lead to changes in the product prices. Subsequently, consumption patterns, production processes and trade flows would adjust to reflect the new price signals.

- Win–win scenarios might be possible with the application of best management farming practices (e.g. animal selection, breeding practices, diet manipulation), which could increase resource use efficiency and reduce emissions in most productive units.

The Group discussed the importance of livestock to people's livelihoods and acknowledged that:

- 1 billion people, of which 700 million are poor, keep livestock upon which they are dependent for food and income (including 60% of rural households)

- Livestock farming has multiple outcomes in addition to production of food (e.g. manure used as fertiliser or fuel, draught, security/assets, co-products such as leather/wool)

- Livestock production systems can contribute effectively to the shaping and maintenance of landscapes – a function which may complement their primary food production purpose; such a function may be rewarded when ecosystem services, including carbon-sequestration, are identified and recognised.

- Animal products provide 15 per cent of dietary energy and 25 per cent of protein supply for the total human population. In addition, livestock products provide essential nutrients. In this regard, the Group acknowledged that ongoing debates on the interaction between the consumption of animal products and effects on human health need to be monitored.

The Group considered the environmental benefits associated with livestock production systems relative to ecosystem services, such as:

- Nutrient recycling (manure), nitrogen fixation, carbon sequestration in soils, and efficient conversion of solar energy in grasslands and croplands.

- Grassland-based livestock production systems, particularly in sylvo-pastoral settings, can contribute to enhanced biodiversity, watershed management and carbon sequestration in soils and above-ground and below-ground vegetation.

Risks associated with livestock production

The Group recognised that the sheer size of the projected increase in animal production over the next 40 years in response to the demand for animal protein by a world population growing to 9.2 billion people, with an anticipated 70% living in urban centres, might lead to a negative environmental impact, primarily related to mostly unavoidable methane and nitrous oxide emissions.

The Group noted that other environmental risks associated with livestock production systems include:

- Production and use of artificial N-fertiliser for feed grain production associated with substantial GHG emissions (when it goes beyond what is compensated by correct use of manure as a fertiliser);

- Land use change, particularly forest conversion for pasture establishment and feed grain production, as a powerful net source of GHG emissions. Nevertheless, it was noted that not all livestock production systems produced land conversions, e.g. those based on grazing of natural grasslands/rangelands;

- Waste associated with intensive livestock production systems, unless well managed, which could have a detrimental effect on environmental quality, in particular with water resources.

The Group agreed that most of the GHG footprint of animal products was associated with pre-farm gate activities and that the GHG footprint of production systems varied significantly according to species, system type and management practices. Therefore, risk management decisions, including mitigation options, must be made on the basis of relevant whole system assessments – thus the importance of life-cycle analytical approaches.

Risk mitigation

The Group recognised that risk mitigation options did exist to reduce the GHG footprints of production systems. However, the levels of GHG reduction possible with current technologies were unlikely to overcome the growth in GHG emissions due to rapidly increasing demand for animal source protein and corresponding increase in animal production unless the transfer of efficient resource use technologies and supporting policies were embedded in the changed production systems to mitigate emissions.

Consideration should be given to the co-benefits of different production system options when decisions on trade-offs were required, for example, environmental services provided by grassland-based systems versus GHG emissions from grazing ruminants..

The Group recognised that a wide range of criteria must be taken into account when developing optimal animal production systems with lower emissions per unit product, relevant to the local environment and socio-economic and cultural needs, including such issues as ecosystem services, animal welfare, and animal disease risks.

Some of these mitigation measures are technological in nature, while others related to policy and institutional instruments and could involve internalisation of costs, which, due to pricing systems that reflect the life-cycle perspective, could adjust consumer perception of and demand for animal products. Internalisation of costs could also facilitate investments in risk mitigation measures.

The Group concluded that much more research was required to extend the range and effectiveness of mitigation pathways and to ensure their effective, practical application. Current mitigation options were well documented, such as in the SOFA, EU and IPCC publications referred to in this Report.

4. Other factors influencing the interactions between climate and environmental changes and animal diseases/production

The Group recognised that there were a wide range of other factors such as population growth rates, political and economic stability, changing consumer preferences, increasing urbanisation, globalisation of trade and tourism, biosecurity policies and systems and availability of fossil fuels and alternative energy sources, which would impact on the interactions between climate change and environmental change, animal diseases (including zoonoses) and animal production. There was a close relationship between the global emission reduction targets and the impact on production systems, including animal health.

International political cooperation would play a significant role in reconciling national interests and the development of strategic GHG mitigation options and policies while still ensuring global and national food security.

5. Future OIE approaches and actions on climate and environmental changes

1. The Group reiterated its support for Resolution No. 31 adopted by the OIE World Assembly of Delegates in May 2009[4], which called for the convening of the present *ad hoc* Group. The Group recommended, among others, that the OIE should systematically collaborate with other relevant organisations in this area, in particular with respect to having animal disease issues associated with climate change adaptation and mitigation strategies on the agenda of the UNFCCC negotiations.

2. The Group also identified the general lack of knowledge and information within the veterinary community on climate change specific issues and the subsequent need to support the establishment, development and growth of international, regional, national and local networks amongst agricultural, environment and veterinary agencies to generate, disseminate and apply such knowledge.

3. The Group recognised that animal welfare issues need to be taken into account when developing mitigation pathways to counteract the negative impacts of climate change, and agreed that the OIE should ensure that these issues are further addressed by the appropriate, designated expert Groups.

4. OIE Members should be aware that direct causal connections have yet to be clearly established between climate change and animal diseases. Accurate predictions of the behaviour of animal disease cannot be made on the basis of climate projections (or observed environmental changes) alone. However, it is not necessary to establish clear causal links between either climate change or environmental change and animal disease emergence before designing and implementing robust strategies to deal with disease emergence.

4 "Impact of climate change and environmental changes on emerging and re-emerging animal diseases and animal production"

5. The OIE should consider whether it is worthwhile to prepare a table of climate-sensitive OIE listed diseases, based on available information and evidence, as a tool for developing appropriate disease prevention strategies. It should be noted that climate change does not refer only to incremental changes of long-term means over time, but also to changes in variability and increases in frequency and intensity of extreme events.

6. The Group recognised the importance of communicating issues concerning climate change in an accurate and well-balanced manner and recommended that this report and other related reports on climate change and animal disease should be considered in their appropriate contexts.

7. The Group suggested that the OIE consider the convenience of conducting some additional activities to facilitate generation and dissemination of knowledge on the relationship between animal diseases/production and climate change, such as:

   a) Encourage more research and expert meetings to better quantify the positive and negative contributions of livestock production to the environment, including climate change.

   b) Monitor new evidence and research on the relationship between animal health and climate change.

   c) Consider whether the *Terrestrial Animal Health Code* could be adapted to include elements addressing climate change issues.

8. The Group recommended that the OIE monitor developments in the knowledge of the relation between climate change and animal health, and the effectiveness of mitigation measures.

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…/Appendices

Appendix I

MEETING OF THE OIE *AD HOC* GROUP ON
THE INTERACTION BETWEEN CLIMATIC AND ENVIRONMENTAL CHANGES
AND ANIMAL DISEASES/ANIMAL PRODUCTION
Paris, 27–28 April 2010

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Agenda

1. Terms of Reference
2. Positive and negative impacts of climate and environmental changes on emerging and re-emerging animal diseases
3. Positive and negative interactions between climate and environmental changes and animal production
4. Other factors influencing the interactions between climate and environmental changes and animal diseases/production
5. Future OIE actions on climate and environmental changes

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Appendix II

MEETING OF THE OIE *AD HOC* GROUP ON
THE INTERACTION BETWEEN CLIMATIC AND ENVIRONMENTAL CHANGES
AND ANIMAL DISEASES/ANIMAL PRODUCTION
Paris, 27–28 April 2010

List of participants

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Appendix III

TERMS OF REFERENCE

To address the role of climate and environmental changes on emerging and re-emerging animal diseases and animal production, and vice versa, over the short, medium and long term, by:

- Considering socio-economic and other factors that affect OIE's activities in relation to animal health, food security and animal production food safety, such as increasing trade and tourism, changing consumer preference, role of animal proteins in human nutrition, role of draught animals in local economy, and increasing urbanisation;

- Assessing the need for scientific information for the real impact of climatic and environmental changes on the occurrence of animal diseases and on animal production;

- Identifying a wide range of relevant factors that should be considered in understanding the two-way interactions between climatic and environmental changes and animal diseases/animal production, such as pasture land use and animal feed production, role of animal manure in the agriculture and consequences of substitution fertilisers for animal/plant productions;

Appendix IV

DOCUMENTS DISTRIBUTED/CONSULTED

1. European Commission "Trend of agriculture GHG emissions", Presentation at Climate Smart Food (November 2009)

2. European Centre for Disease Prevention and Control (ECDE) Technical Document: Climate change and communicable diseases in the EU Member States – Handbook for national vulnerability, impact and adaptation assessments

3. Commission of the European Communities: Commission Staff Working Document: *The role of European agriculture in climate change mitigation,* SEC (2009) 1093 final

4. Food and Agriculture Organization of the United Nations (FAO): *"State of Food and Agriculture 2009" – Livestock in the Balance, Chapter 4 on climate change*

5. Perspectives: Crimean–Congo Hemorrhagic Fever in Europe: Current Situation Calls for Preparedness *Eurosurveillance, Volume 15, Issue 10, 11 March 2010*

6. Food and Agriculture Organization of the United Nations (FAO)/ International Dairy Federation (IDF): Greenhouse Gas Emissions from the Dairy Sector - A Life Cycle Assessment

7. Organisation for Economic Co-operation and Development (OECD). Round Table on Sustainable Development (24 February 2010): John Stephenson, *Livestock and climate policy: less meat or less carbon?* SG/SD/RT(2010)1

8. Global Warning: Climate Change and Farm Animal Welfare. A report by Compassion in World Farming – 2008. Revised 2009.

9. Initial comment on associations between climate change and animal welfare. International Coalition for Animal Welfare (ICFAW), April 2010

10. Humane Society of the United States: An HSUS Report: The Impact of Animal Agriculture on Global Warming and Climate Change

11. Intergovernmental Panel on Climate Change (IPCC). Fourth Assessment Report, 2007.

Appendix VII

Original: English
June 2010

DRAFT REPORT OF THE MEETING OF THE OIE AD HOC GROUP ON THE EVALUATION OF FOOT AND MOUTH DISEASE STATUS OF MEMBERS

Paris, 16 - 18 June 2010

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1. Opening and adoption of the agenda

The meeting of the OIE *ad hoc* Group on the Evaluation of Country Status for Foot and Mouth Disease (FMD) was held at OIE Headquarters, Paris from 16-18 June 2010. Dr Miyagishima, Deputy Director General, welcomed the Group and stated that FMD would become the next disease of importance for global control after rinderpest. He noted that there was an increasing spirit of collaboration between OIE and FAO, and that Dr Vallat was adamant that contributing scientific concepts and schemes to global control was the responsibility of the OIE, and its Scientific Commission in particular, which would bolster complementarity and synergy between the two organisations. The task of this *ad hoc* group was to determine a plan on how to link the FAO progressive control pathway (PCP) for FMD to the existing standards of the OIE. The Group was expected to also take into consideration procedural aspects, feasibility and resulting workload for a future OIE endorsement of FMD control programmes. The meeting benefited from the valuable input of the FAO which sent two experts on 17 June to join the meeting.

In its previous meeting the *ad hoc* Group elaborated a draft working document, which described a possible strategy for global FMD control by linking the FAO PCP approach to the OIE's international standards and the existing procedures of official recognition of FMD free status. This draft strategy document had been reviewed in detail and endorsed by the Scientific Commission. The basic idea of the strategy was also presented during the General Session in May 2010 and was well received by the OIE Delegates who expressed their high expectations for this new approach. In consequence the work of this Group elaborating the details of the strategy was given high priority within OIE.

Dr Saraiva was appointed to chair the meeting and Dr. Vosloo acted as rapporteur. The *ad hoc* Group endorsed the proposed agenda.

The Agenda and list of participants are presented as Appendices I and II, respectively.

2. Identification of the key components of regional or national FMD control plans and how those plans are implemented

The Group continued its review of existing national or regional FMD control plans. The discussions built also on the regional specificities of FMD epidemiology and approaches to control the disease and the difficulties encountered. The Group revisited the draft strategy document produced at its last meeting in December 2009 and suggested certain changes to better clarify the guidance for the next steps. The Group agreed that the following points were to be considered universally pertinent for the quality and success of any FMD control programme:

a. Efficiency of veterinary services
b. Disease surveillance
c. Diagnostic capability
d. Vaccination
e. Emergency response
f. Regional integration

g. Social participation
h. Knowledge of livestock production systems
i. Knowledge on the epidemiological situation
j. Outbreak investigation

The detailed aspects of these key components for a national FMD control programme were partly amended or completed where necessary. The section on vaccination coverage and population immunity was critically reviewed, as well as the section on the roles of FAO and OIE in driving the national, regional and global FMD control programmes. The Group extensively discussed the questions on the feasibility of applying zoning to the new category of an 'endorsed FMD control programme' and possibilities for endorsement of adjacent zones of the same ecosystem, but crossing national borders. Further it was highlighted that there was a need to work in more detail on creating incentives for countries to adopt the pathway and to progress in FMD control with the ultimate goal of achieving one day an officially recognised free status. The strategy document was updated accordingly to reflect the discussions of the meeting over the three days (see Appendix III).

The Group was informed about the new OIE internal policy that executive summaries of PVS evaluation reports could be made available for the *ad hoc* Groups involved in official evaluation of disease status of Members. The experts expressed their appreciation as this additional insight would facilitate the evaluation process. A strong recommendation of the *ad hoc* Group was therefore to equally have access to the executive summaries of the PVS evaluation for evaluations of the newly proposed status of 'endorsed national FMD control programmes'.

3. Review of the FAO Progressive Control Pathway for FMD

The invited experts from FAO, Dr Peter de Leeuw and Dr Giancarlo Ferrari, joined the meeting on 17 June. The Group briefed them on the draft strategy paper's intention and the main discussion points of the past day. The FAO experts gave an excellent overview on the history of development of the PCP tool and the rationale behind the individual stages or phases (0 – 5) in the progressive FMD control. It was explained that the stages outlined should be seen as a dynamic progression where a country would start by abiding by certain criteria that would develop or improve over time to reach the suggested output. The Group learnt from the FAO experts on their experience with the currently existing regional roadmaps (Eurasia, Africa), where countries of a region or sub-region entered the PCP and re-assessed their progress along the pathway through regularly, usually annually, convened workshops. Aspects on transparency in reporting on countries' FMD situation and resulting unjustified trade sanctions from importing countries were highlighted. It was noted that the regional roadmaps triggered mostly positive dynamics and competition between the countries in making progress in FMD control, but that many programmes were still very strongly dependent on external funding in order to sustain. The *ad hoc* Group had fruitful exchanges in clarifying the detailed meaning and criteria and expected output of the individual stages of the PCP tool. The Group intended to define minimum criteria in accordance with the key elements of an FMD control programme; it was therefore important to clarify the weight and position of these criteria along the described stages of the PCP. Considering the technical criteria outlined in the draft strategy paper and the descriptive document of the stages of the PCP tool, there was agreement from the FAO that the OIE would endorse a national FMD control plan only at the beginning of the PCP Stage 3.

4. Considerations for the implementation of an OIE endorsement of national FMD programmes

Taking into consideration the guidance from the OIE secretariat and the recommendations of the FMD conference of Asunción, Paraguay June 2009, the Group evaluated options for the practical implementation of the future stage of an "OIE endorsed FMD control programme". The Group was informed that high level discussions between FAO and OIE on the existing organisational frameworks would be held shortly and that the global initiative to control FMD would possibly be tightly linked to the FAO/OIE Global Framework for the Progressive Control of Transboundary Animal Diseases (GF-TADs). There was agreement that GF-TADs structures would best take responsibility for preparing countries in progressing in the PCP stages 0 – 2 before their control programmes would enter in the more official stage of applying for an endorsed FMD control programme (more or less corresponding to PCP stage 3). GF-TADs structures were different between the regions and it would be important to ensure that there would be consistency and harmonisation across the regions for the guidance to countries for entering and progressing in the PCP.

The Group recalled that first experiences from the Regional workshop to review the progress of the West Eurasia FMD network, held in October 2009 in Istanbul, Turkey, organized by FAO in consultation with OIE, and hosted by the Ministry of Agriculture, Turkey. This report reflected the progress made since the PCP was adopted in Shiraz, Iran 2008. The participating countries had proposed a steering committee consisting of members such as CVOs to evaluate results and 'submissions' from countries in order to move on to the next PCP stage. It was proposed that such a steering committee from a group of countries would engage with regional GF-TAD structures. It was noted that this process could become a model also for other diseases of priority for GF-TADs, generally focussing on improvement of animal health.

The Group felt that the role of the Regional Animal Health Centres within the PCP process needed to be determined. They could provide technical support to countries in their quest at regional level, but the GF-TADs would design and implement the process on a global level.

The Group enquired from FAO on the potential number of countries that would be ready in near future to apply for endorsement of their FMD control programme by OIE in order to estimate the expected workload for the evaluation of applications. The overview provided by FAO revealed that most countries who engaged in the PCP were still at lower stages and that there was only a limited number of countries that would be able to progress successfully to the PCP Stage 3 in the immediate future. The Group agreed that the application for endorsement of the FMD control programme would best be assessed and evaluated by the *ad hoc* Group on evaluation of FMD status of Members and subsequent endorsement by the Scientific Commission. However, it was not considered necessary to seek adoption of such a status by the World Assembly of OIE Delegates. A list of Members having an endorsed FMD control programme could be published on the OIE website after endorsement by the Scientific Commission.

5. Amendments to the existing FMD Chapter of the *Terrestrial Code* in support of recognition by the OIE of 'endorsed national FMD control programmes'

The *ad hoc* Group prepared a draft Article on the provisions for an OIE-endorsed FMD control programme for inclusion into the *Terrestrial Code* Chapter on FMD (8.5.). The key components of an FMD control programme as identified in the draft strategy document were taken into consideration. Surveillance requirements for an endorsed national FMD control programme, trade facilitating measures and aspects of diagnostic tests and standards for vaccines were discussed in great detail.

In summary, a country would be expected to comply with general obligations for OIE Members (e.g. regular sanitary reporting) and to submit evidence on the efficiency of the veterinary services to control FMD, programme's sustainability, information on the FMD epidemiology, detailed plan on their approach to controlling / eradicating FMD in the country or zone, including a timeline, surveillance and outbreak investigation, details on diagnostic and vaccination activities and the emergency response plan implemented in case of outbreaks.

The Group reflected on potential incentives to apply for the new status of an "OIE-endorsed FMD control programme", with a view to facilitation in bilateral, regional trade, including with countries that would join the category of a country or zone with an endorsed FMD control programme. The Group identified a number of Articles on commodities in the FMD Chapter (e.g. on live animals, milk, meat, direct transfer for slaughter, embryos and semen) that could accommodate the new category of country/ zone status. An OIE-endorsed FMD control programme could possibly alleviate the need to provide separate documentation to trade partners for export.

6. Consideration of the need for a questionnaire to support Members wishing to apply for endorsement of a national FMD control programme

After the revisions of the FMD Chapter in the Terrestrial Code, the group agreed that a specific questionnaire to apply for an OIE-endorsed FMD control programme was needed. The group proceeded with adapting the existing questionnaire for FMD free status practising vaccination, as it provided a useful template, and also ensured that consistency with OIE terminology was achieved.

7. Maintenance of the status of 'endorsed FMD control programme'

The status of 'OIE-endorsed FMD control programme' was considered as a dynamic process where there would be progress in FMD control over time as initially proposed by the submitted planning of the FMD control programme of the country concerned. Therefore, retention on the list of countries or zones with an OIE-endorsed FMD control programme would require an annual update on the progress of the programme and information on significant changes concerning the key elements of the control programme. Additionally, changes in the epidemiological FMD situation or other significant events should be reported to OIE, in order to provide an opportunity to review the endorsement.

It was not excluded that the OIE would withdraw or suspend the endorsement of an FMD control programme, if there was evidence of decreased efficiency of the veterinary services or an uncontrolled increase in incidence inconsistent with the objectives of the endorsed programme (as a limited number of outbreaks of FMD at that stage would still be expected).

The Group also had a discussion on the effect of a country's officially recognised FMD free status being suspended due to an outbreak of FMD and whether this country should automatically fall into the category of 'country with an endorsed FMD control programme'. The experts compared the situations of the two categories of countries or zones and concluded that a formerly officially free country would usually seek re-instatement of free status as quickly as possible. These procedures for recovery of free status were well established and in most cases it would cost the country more effort to apply for an endorsed FMD control programme instead of going through recovery of status. The Group agreed that the status of an endorsed FMD control programme should be granted by application and not by default if a free country or zone lost its status.

8. Finalisation and adoption of the draft report

The *ad hoc* Group reviewed and amended the preliminary outline of the draft report provided by the rapporteur. The Group agreed that the report would be subject to a short period of circulation to the Group for comments and adoption. At the end of the meeting it became evident that some of the amendments to the Terrestrial Code chapter on FMD still needed additional minor effort from the Group for refinement to maintain consistency within the chapter (i.e. between Articles). Therefore the draft chapter was re-circulated for finalisation. The revised chapter would be referred to Scientific Commission for comments as soon as possible.

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…/Appendices

Appendix I

MEETING OF THE OIE AD HOC GROUP ON EVALUATION OF FOOT AND MOUTH DISEASE STATUS OF MEMBERS

Paris, 16 - 18 June 2010

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Agenda

1. Opening and adoption of the agenda
2. Identification of the key components of regional or national FMD control plans
3. Review of the FAO Progressive Control Pathway for FMD
4. Considerations for the implementation of an OIE endorsement of national FMD programmes
5. Amendments to the existing FMD Chapter of the Terrestrial Code in support of recognition by the OIE of 'endorsed FMD control programmes'
6. Consideration of the need for a questionnaire to support Members wishing to apply for endorsement of a national FMD control programme
7. Maintenance of the status of 'endorsed FMD control programme'
8. Finalization and adoption of the draft report

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Appendix II

MEETING OF THE OIE AD HOC GROUP ON EVALUATION
OF FOOT AND MOUTH DISEASE STATUS OF MEMBERS
Paris, 16 - 18 June 2010

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Appendix III

Global strategy for the control of Foot and Mouth Disease

Discussion document
Updated version June 2010

Introduction

The control of foot and mouth disease (FMD) has a significant impact on international trade and food security. During the *OIE/FAO Global Conference on FMD Control* held in Asunción (Paraguay) in June 2009, the OIE Delegates and other conference participants endorsed a set of recommendations thereby committing themselves to move towards global FMD control.

The challenges related to the progressive control of FMD worldwide would require a joint commitment by all OIE Members and other international partners. The OIE's strategy has been to establish sustainable mechanisms to integrate all stakeholders (public sector, private sector and regional or international organisations) as partners in the funding and delivery of global, regional and national disease control programmes. The following technical discussion document was developed to support the global strategy for the control of FMD and took into consideration the recommendations of the conference. It aims also to build on baseline strategies of OIE, such as good veterinary governance and effective communication, which are key to mobilize and maintain worldwide efforts to control FMD.

Objectives

The objective of a global FMD control strategy is to consolidate disease free regions by a gradual reduction in the incidence of FMD. Three main objectives are identified:

1. Maintain the status in FMD free countries and zones without vaccination

2. Maintain the status in FMD free countries and zones applying vaccination and where appropriate, progress to the status of FMD free without vaccination

3. Gradually improve control in FMD infected countries aiming at an OIE recognised status

Regional strategies

The control of FMD on a global scale demands the integration of several regional approaches. The status of FMD free countries can be severely compromised if neighbouring countries do not adopt comprehensive integrated measures that are agreed upon at a regional level. When attempting to institute an FMD control and eradication program, it is important to recognize that different regions of the world face a variety of problems. The type and importance of diverse production systems and species as well as economic considerations, regarding among other things the cost of vaccination, surveillance and access to export markets, may influence the choice of strategy adopted. Therefore, it is expected that regions will adopt varying strategies that suit their particular circumstances. Successful regional strategies such as those instituted in South America, based on a thorough knowledge of livestock production systems, trade relationships and disease occurrence could be the basis to customize FMD control strategies in other regions of the world.

Global, regional and country level coordination

Coordination of a global scale effort to control FMD needs to occur at three levels:

- at the country level with the involvement of producers, including subsistence farmers as well as medium and large scale producers, official veterinary services and other key players within government and the private sector;

- at the regional level through the adoption of harmonized approaches, and in close coordination with neighbouring regions; and finally,

- at a global level to identify areas of potential concern as well as to identify possible solutions that can be adapted from region to region.

Transparency in reporting outbreaks and their thorough investigation are the cornerstones to understanding the epidemiological situation and to measure success.

Proposed strategies

In order to fulfil the objective of global control of FMD, regional strategies need to consider the current FMD status of the countries or zones.

FMD free countries and zones without vaccination

The objective of a strategy in FMD free countries or zones without vaccination is three-pronged (three barriers of defence): i) the application of measures to avoid the introduction of the infection; ii) implementation of surveillance to ensure the detection of infection and iii) development of contingency plans in case of an emergency. Consideration should be given to the following elements:

- Prevention
    - Import requirements following the recommendations of the OIE Code and risk analysis
    - Monitoring of FMD risks in neighbouring countries and trading partners
    - Establishment of protection zones as appropriate
- Early detection
    - Disease awareness
    - Surveillance and Reporting
    - Diagnostic capability
- Emergency response
    - Development of national contingency plans considering different possible approaches
        - Stamping-out
        - Modified stamping-out
- Vaccination with or without slaughter of vaccinated animals
    - Compensation

FMD free countries and zones with vaccination

In addition to the points outlined above, countries or zones applying vaccination should ensure that vaccination coverage is sufficient to stop virus circulation. Once enough evidence is gathered documenting the absence of virus circulation, countries should consider ending the use of vaccine. Cessation of vaccination will gradually reduce population immunity and may lead to FMD outbreaks if virus is still circulating undetected. Therefore, decisions leading to a prohibition of routine prophylactic vaccination should be based on a thorough risk assessment taking into consideration:

- The existence of undetected remaining pockets of FMD infection in the national population of susceptible livestock and wildlife
- The risk of reintroduction from neighbouring countries or zones or wildlife populations where applicable

Infected countries or zones

The FAO has proposed a strategy based on a progressive control pathway (PCP) and regional roadmaps for infected countries/zones to initiate FMD control. The PCP includes six different stages ranging from zero when there is continuous FMDV circulation with no reporting or control actions to five when a country is officially recognized by the OIE as free without vaccination. Currently, the OIE recognizes only three different statuses for countries in

regards to FMD: countries not free from FMD (PCP stages 0-3), FMD free countries or zones applying vaccination (PCP stage 4) and FMD free countries or zones without vaccination (PCP stage 5) (Figure 1). The PCP proposal does not explicitly discuss the use of zones as part of the strategy. However, zoning may provide a useful tool to prioritize the use of resources and constitute the building blocks towards reaching country freedom. Zones could theoretically extend over more than one country and simultaneous applications for endorsement could be submitted. However, countries should be evaluated separately to ensure equivalence of other factors such as the status of veterinary services, etc.

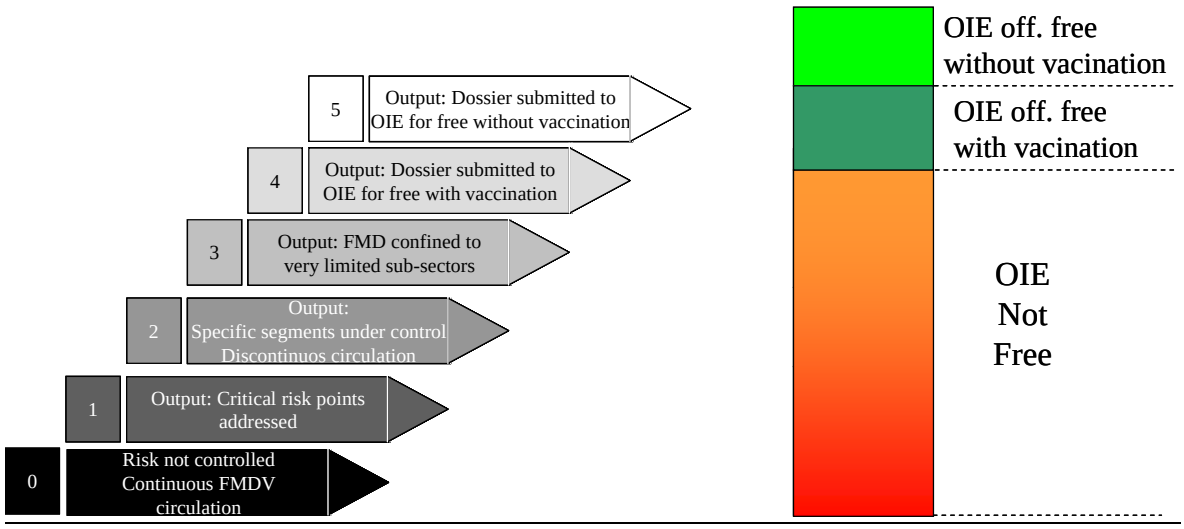


Figure 1 – Relationship between FAO's Progressive Control Pathway and OIE's official FMD statuses.

Both processes are complementary and support the overall objective of global FMD control. To strengthen the level of integration between both approaches it is proposed that the OIE recognizes the effort of FMD infected countries by endorsing their FMD control programmes as an additional step in the process (Figure 2). While this endorsement will not change the status of a country or zone, it will provide additional assurance that a country or zone has control over the situation and thus act as an incentive to further increase their efforts. This can enhance the credibility when compliance with requirements contained in the chapter on FMD for specific commodities is certified and may also contribute to safer trade in animals and their products between countries of equivalent status.

Endorsement by the OIE will require that countries having reached stage 3 of the PCP submit to the Scientific Commission their FMD control programme for consideration, providing details on the following key elements:

1. Efficiency of veterinary services
2. Disease surveillance
3. Diagnostic capability
4. Vaccination
5. Emergency response
6. Regional integration
7. Social participation
8. Knowledge of livestock production systems
9. Epidemiological situation
10. Outbreak investigation

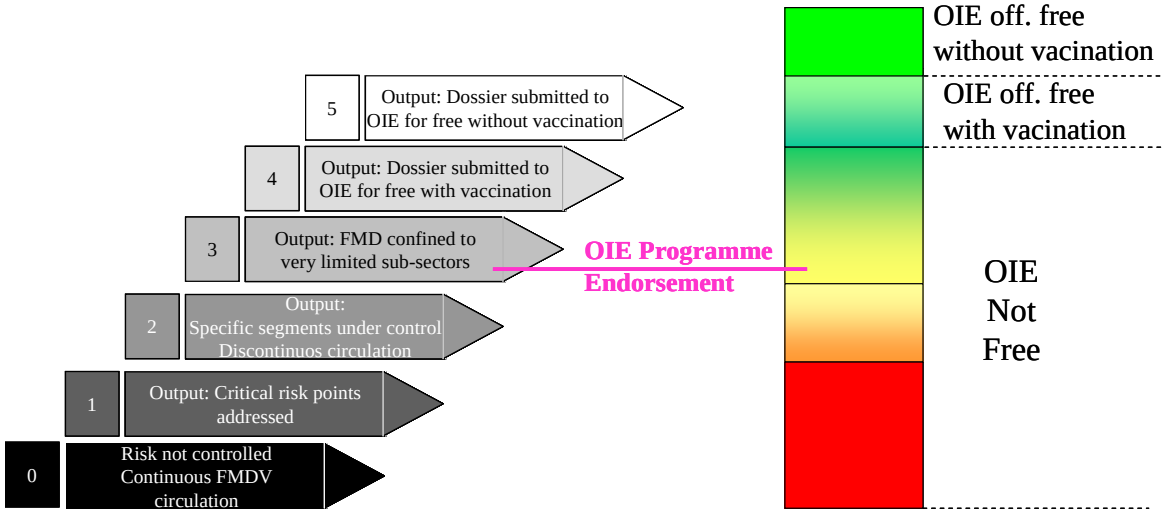


Figure 2 – Proposal to modify the categories recognized by the OIE in regard to FMD

Efficient veterinary services

Evaluation of veterinary services

Countries that have, or plan to initiate, FMD control programs should have efficient veterinary services. A first step to assess their effectiveness is to undergo an *Evaluation of Performance of Veterinary Services* (PVS assessment) followed by a gap analysis to address the potential weaknesses and capitalize on the current strengths of the system. The PVS assessment, although strongly recommended, won't be compulsory for countries or zones applying for OIE endorsement of their FMD control programme.

Engagement of key players

All successful FMD control programs involve the participation of farmers and producers in every step of the process. A continuous dialogue between the official veterinary services, producer associations, private veterinarians and para-veterinarians will assist in the development of strategies that stand a better chance of adoption and success. The FMD control strategy needs to establish a communication link with subsistence and small scale producers who are not usually represented in producer's associations. Community animal health workers could assist in the process.

Political support and sources of funding

The first component of a national programme is the political commitment of the government and of the producers. The existence of a strong veterinary service that has the power and the resources to implement the program is an essential prerequisite. Political and financial support is relatively easy to obtain in countries exporting livestock and their products. When the country or zone or certain strata of the small scale producers are not involved in international trade, the incentives to control FMD may not be readily apparent. The FMD situation in such countries, zones or subpopulations might pose a risk if the disease goes unchecked. Regional collaboration is required to directly or indirectly finance control efforts. While additional funding can be sought among livestock associations, slaughtering plants and vaccine production enterprises, coordination, however, should remain under the control of the Veterinary Authority. The legal framework needs to be established in each country to fully support the national and regional FMD control programme.

Disease surveillance

Detection of disease

Disease reporting, active clinical surveillance and epidemiological investigation are the most important components of a surveillance system geared towards the timely detection of FMD. Detection of disease will be most effective if those directly in contact with the susceptible population have the necessary knowledge and are integrated in the system and have incentives or are encouraged to report suspicions. This includes farmers, community animal health workers, para-veterinarians, private practitioners, official veterinarians and other local sources of information at the community level. Serological surveys, either random or targeted, are important in assessing disease prevalence, substantiating disease freedom or assessing the effectiveness of vaccination coverage, but have limited use in the detection of disease. Tests for antibodies to FMD viral non-structural proteins are available to help detect undisclosed virus circulation in vaccinated populations, even in the format of pen-site tests.

Surveillance coverage

An effective surveillance system should reach all geographic areas in a country as well as all susceptible species and production systems. Surveillance systems, including diagnostic laboratories, should monitor continuously the geographic distribution of different strains circulating in domestic animals and wildlife. In countries where wildlife plays a role in the epidemiology of FMD, surveillance systems need to include specific activities to ensure that an effective separation between domestic species and wildlife is maintained.

Diagnostic capability

National laboratories

All clinical suspicions of FMD require laboratory confirmation following the recommendations of the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals. National and sub-national laboratories need to ensure that diagnostic results are communicated to the national surveillance system, field veterinarians and producers. A continuing quality control program for the laboratories should be in place to ensure that diagnosis and vaccine control are carried out in compliance with strict quality standards. National laboratories are also needed to provide independent and impartial quality control of vaccines through testing of vaccine-induced protection. This needs to be measured both before (potency tests) and after (population immunity) batch release.

Reference laboratories

Regional control schemes can be facilitated by a regional reference laboratory, preferably recognized by and collaborating with OIE and FAO. These reference laboratories provide training, test reagents, test validation and proficiency testing that promotes harmonization and cooperation between national laboratories and strengthens their capability. Twinning is a new concept developed by the OIE with the objective of pairing OIE reference laboratories or laboratories with recognized expertise in FMD with laboratories in countries wishing to improve their diagnostic capability in this area. National laboratories should submit samples to OIE reference laboratories for confirmation of findings and for in depth characterization such as genetic typing and vaccine matching. A global network of OIE and FAO FMD Reference Laboratories has been established to pool surveillance data, to share virus strains and reagents and to promote best practices in laboratory methods. The network contributes to transparency and early warning of emerging threats and provides vaccine strain recommendations.

Vaccination

Role of vaccination

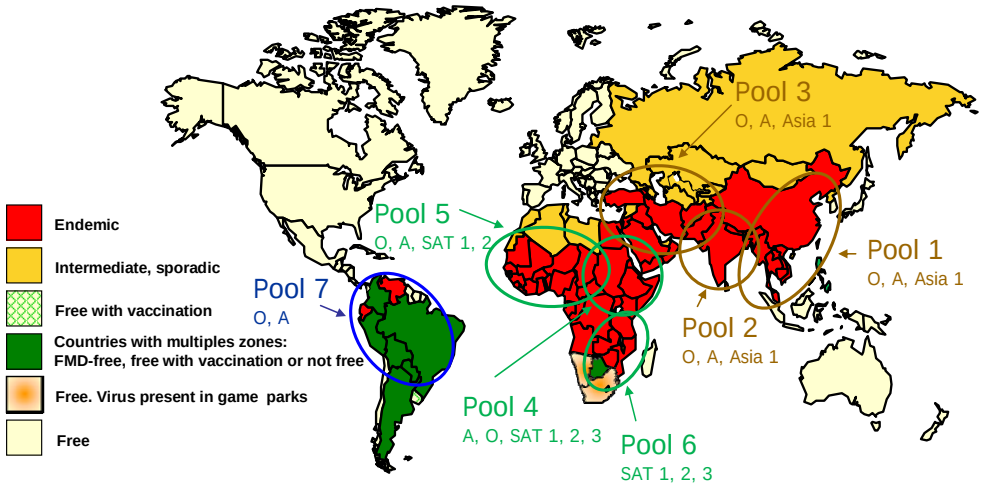
Vaccination is an essential tool in the control of FMD. However, vaccination on its own will not achieve the desired results unless the vaccination program is part of an integrated control strategy. Vaccination does not prevent infection, but prevents the occurrence of clinical signs and thus reduces viral shedding. Vaccination campaigns should be properly documented to monitor vaccination coverage and serologically monitored for their effectiveness.

Vaccine quality

Highly effective vaccines are available. Nevertheless, many countries still use vaccines that may not conform to international standards in terms of purity, safety, potency and efficacy. Vaccines used within FMD control programs should be licensed under the authority of the official veterinary services in accordance with international standards and preferably tested independently for safety and potency. Countries wishing to obtain the endorsement of their national control programme by the OIE should demonstrate compliance with the standards prescribed in the Terrestrial Manual or provide a timeline for the transition to the use of such vaccines.

Vaccine matching

Seven major regional FMD virus pools have been identified (Figure 3). Each pool requires vaccines containing the appropriate serotypes and subtypes of FMDV. Countries should be encouraged to share FMDV isolates with OIE reference laboratories and develop regional or sub-regional programs and laboratory capacities, to harmonize and optimize efforts for the control of the strains present in a region and to have recommended vaccine strains for each pool.



Pool positions are approximate and colours indicate that there are three principal pools, two of which can be subdivided into overlapping areas

Figure 3 – Regional FMDV pools
(Source: Institute for Animal Health, Pirbright Laboratory, United Kingdom)

Vaccine delivery

Effective delivery of vaccine, including preservation of the cold chain and proper injection, is the cornerstone for reaching an adequate level of population immunity. Government/private schemes can be established to ensure vaccine distribution at the local level. In South America, for example, such schemes have been established in which local enterprises share the responsibilities to deliver vaccines to producers. This joint venture allows that local public/private enterprises become responsible for the application of the vaccine charging the farmer a small, variable fee that revolves back to the local enterprise to pay for administrative and contractual expenses.

Vaccination coverage and administration of vaccines

Over and above the needs to maintain and observe the cold chain, vaccination campaigns must be properly prepared and announced, and the administration of the vaccines to the animals must be properly supervised and documented. Evidence on vaccination coverage of the target populations should be maintained.

Population immunity

Vaccination programs should aim to achieve a level of population immunity sufficient to avoid the spread and persistence of FMD in a population. Suppression of FMD may be achieved by vaccinating the entirety of the susceptible population, or focusing on populations of greater epidemiological significance. For example, most

South American and several southern African countries only vaccinate bovines, while ovines, caprines and swine are not or not systematically included in their vaccination programs. However, in other ecosystems the silent persistence of FMD virus in sheep is considered source of continues virus circulation also in other susceptible animals. If certain species are excluded from the vaccination program the epidemiological rationale to do so should be documented. The population immunity necessary to effectively suppress clinical disease in a herd or a given subpopulation strongly depends on the potency of the administered vaccines.

FMD vaccination programs should include periodic surveys to assess the level of population immunity and to identify potential areas or production systems where the desired level of immunity is not adequate.

Vaccine banks

Viral antigens for vaccine production can be stored deep frozen in readiness for thawing and formulation to provide a rapid response to an incursion of new strains of FMD virus either into FMD free countries or into countries where the strain in question had not been previously found. Banks could also be useful in regions where the disease is endemic to ensure sufficient stocks are available if targeted vaccination is needed. Such banks may be held at National or Regional levels. The access rights and replacement obligations must be clearly established and backed up by appropriate funding.

Vaccine banks need the effective support by laboratories that have the capacity to carry out vaccine matching tests, taking also into account the potency of the available antigens, in order to provide advice to managers on the priority antigens to be stored in the bank.

Role of research

There should be continuing dialogue with the research laboratories and their funding agencies to address the needs arising in the field to improve diagnostics, surveillance and control and to support risk assessment and decision making. The establishment of networks of research laboratories has been helpful to develop consensus on funding gaps and priorities and through collaboration to deliver critical mass for developing better tools and control options.

Emergency response

Emergency plans

Each country should have an emergency response plan that is regularly updated and tested (including simulation exercises) and embedded in the legal framework. Emergency funds should be available to cover operational costs and indemnities. Coordination with all role players including the police and armed forces should be well established to ensure control efforts will be executed rapidly and with success. It is also important that these plans are coordinated on a regional level between countries in geographical proximity or close commercial ties.

Compensation

Appropriate compensation is essential to ensure cooperation by farmers. Funding is essential and often lacking thus leading to non compliance if the disease occurs again. Where possible, regional funds could be pooled to ensure a source is available in an emergency and to protect the region from a disease incursion. Partnerships between government and the private sector have proven effective to develop contingency funds in several parts of the world.

Regional integration

Each of the regional FMDV pools requires a regional approach (regional road map) specifically designed to reduce the spread of FMDV among the countries involved. Individual country programmes need to consider their relationship with other programmes existing in the region. Regional agreements, including the chief veterinary officers in each country and representatives from OIE, FAO and other relevant regional organizations should be established to ensure proper coordination.

Close cooperation between administrations is required to constantly analyse factors that have a direct or indirect impact on the epidemiology of the disease, such as environmental, political and economic events that may affect previously established trade and animal movement patterns or set incentives to promote or abandon disease control measures.

Within GF-TADs it is essential that neighbouring steering committees work closely together and assist each other where necessary.

The role of OIE and FAO

Countries wishing to obtain endorsement of their FMD control programmes by the OIE should submit a dossier based on the specific questionnaire developed for this purpose. The SCAD will review the information and may, if required, ask for additional information. Endorsement of the control programme will not require the approval by the annual World Assembly of OIE Delegates. Endorsement and revocation of endorsement will rely on the recommendation of the FMD *ad hoc* group and final approval of the Scientific Commission.

GF-TADs with the support of the relevant regional and international organizations will play a role in regional coordination and implementation of the PCP process. The application of this process will strengthen the role of GF-TADs in the global FMD control. The OIE will make an assessment of national control programmes that have reached PCP level 3.

The OIE and FAO could further provide advice to countries or regions in areas such as the design of surveillance programmes or vaccination strategies. In addition, an OIE and / or FAO will recommend specific vaccine strains for each of the regional FMDV pools ensuring that countries base their choice of vaccine on scientific data. This information could assist vaccine manufacturers in developing new vaccine strains for the different pools. The current FAO/IAEA TCP programme and the OIE laboratory twinning programme could be utilised to develop laboratory capacity and so improve diagnostic capacity in countries.

Incentives to apply for endorsement

Endorsement of national FMD control programme by the OIE could act as an incentive for countries to embark on efforts to further control disease and could facilitate access to funding via an already demonstrated success and commitment to improvement.

A country with an OIE endorsed FMD control programme may find it easier to establish bilateral trade agreements with other FMD infected countries as the endorsed status provides additional assurance on the quality of veterinary services and disease control methods applied in the country. In particular, endorsement could facilitate trade for certain commodities as described in Articles 8.5.9; 8.5.12; 8.5.23 and 8.5.26.

Countries at this level will be in a better position to establish disease free zones or compartments.

Auditing process

Once on the endorsed pathway, countries will have to be open to audits by the OIE and FAO through their GF-TAD structures or offices not only to monitor the progress or maintenance of the endorsement, but also for assistance where the necessary levels are not maintained. Audits of the status will happen on request of the country or zone or on the initiative of the regional coordinating bodies on a regular basis.

Endorsement of the FMD control programme (PCP step 3) will be made by the OIE using generic procedures for official disease status recognition. In addition to the regular audits, countries or zones have to submit an annual report to the OIE stating any changes (if applicable) in the control programme that could affect the endorsement of their FMD control programme.

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Appendix VIII

Original: English
June 2010

REPORT OF THE MEETING OF THE OIE *AD HOC* GROUP ON NOTIFICATION OF ANIMAL DISEASES AND PATHOGENIC AGENTS

Paris 29 June – 1 July 2010

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The OIE *ad hoc* Group on Notification of Animal Diseases and Pathogenic Agents met at the OIE Headquarters from 29 June to 1 July 2010.

The meeting was chaired by Dr Arnon Shimshony and Dr Franck Berthe acted as rapporteur.

The terms of reference and the members of the *ad hoc* Group and other participants are listed in Appendix I and II, respectively.

Dr Bernard Vallat, Director General of the OIE, welcomed the participants and thanked them for assisting the OIE. He reminded that the collection and dissemination of information on animal diseases is an essential part of the OIE policy on transparency. The creation of a single disease list have had consequences in terms of disease surveillance since member countries would ideally have to be able to monitor and report on all diseases on the list. He underlined the need for active surveillance in certain instances such as Rift Valley fever or Crimean Congo haemorrhagic fever (CCHF), and the possible need for assistance to OIE members on the organization of and resources for national surveillance systems. He emphasized the importance of criteria to list emerging diseases.

Dr Karim Ben Jebara introduced the WAHIS and WAHID systems and the progress in the collection and collation of information. He suggested that this information be used to re-assess any change in the disease situation since the implementation of WAHIS and WAHID and if such changes and the collection of better quantitative data may imply modification of the list. The *ad hoc* Group began its work by considering the diseases in the list, by using the current criteria for listing, and information collected by WAHID. The *ad hoc* Group followed the three-tear decision-making tree of the OIE *Terrestrial Code*: diseases were first evaluated in terms of their potential for international spread; then the zoonotic potential with severe consequences or a high impact at country or zonal level was considered. Finally morbidity and mortality in naïve population was used. The decision-making model for disease inclusion confirmed most of the formerly listed diseases, although not all of them. This report mainly focuses on instances where a change was identified by the *ad hoc* Group.

It was noted that bee diseases had already been addressed by the honey bee diseases *ad hoc* Group.

The *ad hoc* Group expressed the need to improve the practicality of reporting and notification. A more user-friendly system would be likely to improve the applicability of information collected. It was also recognised that having less diseases to report on would likely help to improve the accuracy of the information provided by Members to the OIE.

For instance, in the case of diseases such as CCHF, the *ad hoc* Group considered that, in absence of clinical disease in animals, there is no good data. Similarly, for animal diseases which are mainly listed because of their zoonotic potential, the *ad hoc* Group questioned the usefulness of information gathered. For example, horses are dead-end hosts for the Western equine encephalomyelitis virus and clinical cases are rare. This is very different from the Japanese encephalitis where pigs are amplifiers and play a major role in the epidemiology of the disease. Nevertheless, the *ad hoc* Group decided that Western equine encephalomyelitis should remain on the list due to the current criteria being fulfilled. The *ad hoc* Group also recognised that some of these diseases, such as Venezuelan equine encephalomyelitis, are mis-placed and should be moved into the category of multiple species diseases.

The need for case definitions was recognised for many of the diseases that are currently listed. In particular, where disease distribution is known to be broad, such as Q fever for example, a case definition should include epidemiological considerations of relevance with regards to risk of spill-over to human populations. More generally speaking, the lack of case definition was recognised as a major cause of mis-reporting and the *ad hoc* Group strongly recommended that case definitions be developed for listed diseases and put in the respective *Code* disease chapters when they exist. As a transition measure the available *Terrestrial Manual* case description should be used.

The *ad hoc* Group questioned the current structure of the list, based on animal species. Examples were given where cattle diseases are also diseases in wildlife, such as bovine viral diarrhoea that also occurs in deer, or bovine tuberculosis, which is a serious problem for wild boars. In such cases, the name of the disease, and its place in the list, may be mis-leading. The *ad hoc* Group recommended that a presentation by alphabetical order in a table including susceptible species be considered.

The *ad hoc* Group also recommended that disease names include the name of the pathogen. This was recognised of particular importance to avoid reports under the same heading for different pathogens as, for example, in the case of contagious agalactia. Other examples of issue related to names of diseases were discussed, such as sheep pox and goat pox, as well as Western equine encephalomyelitis; this name may be mis-leading since birds are susceptible species of zoonotic relevance, not horses. The *ad hoc* Group also suggested that the list be based on names of the disease agents.

During the discussions, the need for internationally accepted definitions of some listed diseases became apparent. As an example, relations between bluetongue and epizootic haemorrhagic disease (EHD) were discussed; EHD is currently covered by the *Manual* chapter on bluetongue. The *ad hoc* Group recommended that accepted definitions of listed diseases be decided upon and included in each disease chapter of the *Terrestrial Code*.

With leptospirosis, the *ad hoc* Group discussed the need to consider certain serovars or types. This would also apply to many other diseases where information would be more relevant if collected on critical strains or types of the disease agent. The *ad hoc* Group recommended that guidance be developed to better address this issue.

1. Summary of key discussions on diseases currently on the list

Swine vesicular disease - The disease has shown international spread. The *ad hoc* Group recommended that the disease remain on the list because numerous countries are free and the disease may have significant morbidity or infection in naïve populations.

Vesicular stomatitis – The disease is limited to the Americas and there is no evidence of international spread. It was felt that the reasons for maintaining the disease listed were differential diagnosis with foot and mouth disease and its unclear epidemiology. The *ad hoc* Group recommended that the disease remain on the list because numerous countries are free and the disease may have significant morbidity in naïve populations.

Scrapie – There is proven spread and several countries are involved in proving disease status or having eradication programmes. There is significant morbidity and even mortality with some evidence of differences in host susceptibility as reported by a case study in Cyprus. The disease is proposed to be retained on the list.

Echinococcosis/hydatidosis – There are free countries and the zoonotic potential is important. The *ad hoc* Group recommended that the disease remain on the list.

Leptospirosis – Several countries report freedom from the disease, and countries may be free from specific serovars. The disease has zoonotic implications, it is ubiquitous and reporting should focus on specific serovars. The *ad hoc* Group recommended that the disease be removed from the list. However, should certain serovars be identified meeting the criteria, they should be reconsidered for listing.

Q fever – There is potential for international spread and it is zoonotic. The disease may cause massive abortions in small ruminants and cows. The *ad hoc* Group recommended that the disease remain on the list. The *ad hoc* Group also recommended that a case definition be developed.

Paratuberculosis – Several countries have instituted eradication programmes. Morbidity in animals can be significant. The *ad hoc* Group recommended that the disease remain on the list. The *ad hoc* Group also recommended that the need to distinguish between paratuberculosis in cattle and small ruminants be considered.

Tsetse-transmitted trypanosomosis – The potential for international spread exists in absence of vector control. It is a zoonotic disease and has significant morbidity and mortality in affected countries. The *ad hoc* Group recommended that the disease remain on the list. The *ad hoc* Group also recommended that the name of the disease and other trypanosomosis (i.e. dourine, surra) be changed to clarify their aetiology and their geographical location (*Tsetse-transmitted trypanosomosis* is present in sub-Saharan Africa only).

Brucellosis – To improve the accuracy of the data collected, the OIE disease names were changed to: "Brucellosis (*Brucella melitensis)*", "Brucellosis (*Brucella abortus)*" and "Brucellosis (*Brucella suis)*" respectively, and moved to the multi-species group (see recommendation for alphabetical list). Brucellosis (*Brucella suis)* is still an important occupational disease. The *ad hoc* Group recommended that the diseases remain on the list.

Eastern equine encephalitis and *Western equine encephalitis* – Western equine encephalitis does not develop a viraemia sufficient to infect vectors. Both diseases meet the criteria for zoonotic impact and may have high mortality in horses. The *ad hoc* Group recommended that they be retained on the list. The *ad hoc* Group commented that reports on disease incidence should also cover birds because of their role in epidemiology of the diseases and risk of spill-over to human populations and horses.

Japanese encephalitis – The disease affects horses and pigs, and is a significant human disease. The *ad hoc* Group commented that reports on disease incidence should focus on pigs because of their role in amplifying the disease. The *ad hoc* Group recommended that the disease remain on the list.

Fowl cholera - There is no evidence of international spread. The disease is not known to be zoonotic. The *ad hoc* Group recommended that the disease be removed from the list.

Marek's disease – The disease is widespread. The *ad hoc* Group recommended that the disease be removed from the list.

Leishmaniosis – There is a lack of data for proven international spread; however the disease is a significant zoonosis and dogs travelling to endemic areas can get infected. The *ad hoc* Group recommended that the disease remain on the list.

West Nile fever – It has been initially listed as an emerging disease in the Western hemisphere; it is zoonotic and has caused multiple human cases and several deaths. The *ad hoc* Group recommended that the disease remain on the list in the multi-species group.

Crimean Congo hemorrhagic fever – It is an important zoonotic disease and infected animals do not show clinical signs. It is a tick-borne disease; it occurs where suitable ticks are present. There is no evidence of international spread, and there are several countries free from the disease. The *ad hoc* Group commented that there is no good information on the animal disease currently. The *ad hoc* Group recommended that the disease remain on the list.

Camelpox – The disease is believed to fit the criteria for inclusion although the *ad hoc* Group questioned the actual significance of morbidity. However, and in line with the information included in Chapter 2.9.2. of the *Terrestrial Manual*, the *ad hoc* Group recommended that the disease remain on the list.

Sheep pox and goat pox - The *ad hoc* Group recommended that the disease remain on the list and this important disease be separated into sheep pox and goat pox for improvement of epidemiological information.

Theileriosis - The *ad hoc* Group recommended that the disease remain on the list. The *ad hoc* Group also recommended that the disease name include the mention of the aetiological agent: *Theileria parva* and *T. annulata*.

Cysticercosis – The disease does not fulfil criterion for proven international spread but has an important zoonotic potential. The *ad hoc* Group recommended that the disease remain on the list.

Nairobi sheep disease - The *ad hoc* Group recommended that the disease remain on the list because it meets the criteria (see Table).

A summary Table of the assessment is provided in Appendix III.

2. Enterovirus encephalomyelitis (Teschen/Talfan disease)

During the May 2010 General Assembly, it was agreed that Teschovirus encephalomyelitis would be included in the OIE list of diseases with the annotation "under study" for review by the *ad hoc* Group. Dr Julio Pinto reported on the current situation in Haiti. He indicated that Teschovirus was isolated, along with porcine circovirus. The *ad hoc* Group recognised that the rare occurrence of clinical form (Teschen disease) was an argument for delisting the disease. The *ad hoc* Group agreed that this disease is one of those poorly defined. Talfan and Teschen viruses are indistinguishable from other type 1 enteroviruses, which are very common in the pig population. Serological cross-reactions occur. The *ad hoc* Group recommended that the disease should not be included in the list. Nevertheless, the *ad hoc* Group commented that the obligation for notification of epidemiological changes would apply. It was also noted that assistance to Haiti would be needed.

3. Chronic wasting disease

Dr Torsten Mörner exposed the current situation of chronic wasting disease (CWD) and the risk of its international spread to other regions of the world, especially in farmed wild animals. The *ad hoc* Group discussed the request made by the OIE Working Group on Wildlife Diseases to reconsider this disease for a possible listing. The disease was recognised to meet the criteria. The *ad hoc* Group agreed to add this disease on the list. The OIE Working Group on Wildlife Diseases will be requested to provide a list of susceptible species to this disease.

4. Bovine neonatal pancytopenia (BNP)

The *ad hoc* Group reviewed the information provided by the Animal Health Information Department on bovine neonatal pancytopenia (BNP). This information was prepared on the basis of the epidemiological reports received from Members (including vaccine origin hypothesis) following OIE request, and scientific papers recently published on this issue. Dr Karin Schwabenbauer presented the situation in Germany and informed about an initiative to coordinate the research at the national level. The *ad hoc* Group welcomed this initiative and recommended that OIE continue its efforts to gather information on this issue and provide assistance to Members in further investigation.

5. Criteria for listing diseases

The *ad hoc* Group discussed the current listing criteria. The *ad hoc* Group expressed some difficulties in applying the current listing criteria and the decision tree according to the disease situation and surveillance. The *ad hoc* Group reviewed the listing criteria as they are laid down in the *Aquatic Code* and noted they are slightly different from the ones in the *Terrestrial Code*. It was agreed that some changes could be brought to the criteria for their improvement.

It was proposed to change the wording of international spread into "the agent has the potential for international spread" via live animals, their products or fomites. This criterion should be associated to reference to disease freedom or programmes for eradication in Member countries.

The *ad hoc* Group noted that when diseases are ubiquitous or extremely widespread, or when extensive vaccination is carried out in most OIE Members, it may be decided, in such cases, not to list a disease although it would meet the criteria themselves.

The zoonotic potential should be maintained in the criteria.

A request should be made that a robust case definition be available.

A proposed new decision tree is provided in Appendix IV.

6. Disease occurrence codes and differentiation between domestic and wild species

The *ad hoc* Group discussed the WAHIS and WAHID disease occurrence codes following their differentiation in 2009, when relevant, for domestic and wild species. The *ad hoc* Group expressed the need to make this difference clear for the "never reported" occurrence codes and that the current system does not allow that. Dr Ben Jebara explained that the "never reported" occurrence code means that the disease has never been reported in the country regardless of the species involved. In order to overcome few situations where countries have not observed the disease in wildlife, while it occurred in domestic species, it was agreed that a note could be added into WAHIS by the Animal Health Information Department upon request by the concerned Member in order to make it available for end-users in WAHID interface so to clarify these rare situations.

7. Notification of emerging diseases by Members to the OIE

Dr Karin Schwabenbauer reported on recent experience with notification of emerging diseases. More specifically, the examples of calf bleeding syndrome and pandemic influenza A H1N1 were discussed. The lack of legal basis for notification at the national level often hampers immediate notification of emerging diseases by Members. Dr Karim Ben Jebara gave a presentation on the notification of pandemic influenza A H1N1, as notified by Members between May 2009 and early 2010. In compliance with the provisions of the *Code* (Chapter on notification of diseases and epidemiological information), OIE Members were required to consider the disease as an emerging disease and notify any occurrence, if there is a significant morbidity or mortality or a zoonotic impact, as stated in the *Terrestrial Code*. This was particularly important right at the onset of the pandemic in Mexico, when little information was available on this novel virus and the effect of the disease on animals, or on any role that animals might play as a an additional source of infection for humans. The *ad hoc* Group recognised the difficulty that some countries may have to notify emerging diseases because of the lack of legal tools, which are mainly related to notifiable diseases in certain countries, with the absence of schemes for compensation to farmers, etc. In the case of the pandemic influenza A H1N1, notification by OIE members of the first cases only does not contribute to have a clear picture of the animal disease and its spread.

The *ad hoc* Group recognised that communication on emerging issues may lead to rapid consequences on trade. Several propositions were discussed, such as i) transmission of information by members in a letter to OIE with no precast format for information, ii) dissemination of information on the website dedicated to delegates only, or iii) using GLEWS to share preliminary information. The *ad hoc* Group recommended that informal, simple and responsive channels of communication should be identified and used under certain circumstances, especially when, for example, the aetiological agent is still not completely known.

8. Convention on Biological Diversity and invasive species

The *ad hoc* Group took note of a working document from the Convention on Biological Diversity mentioning that OIE would explore options for broadening its mandate to address animals that are potentially invasive and if the OIE criteria for listing diseases take into account invasive species. The *ad hoc* Group recommended addressing these issues by the OIE Working Group on Wildlife Diseases.

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…/Appendices

Appendix I

TERMS OF REFERENCE

Ad hoc Group on Notification of Animal Diseases and Pathogenic Agents

Paris, 29 June to 1 July 2010

The *ad hoc* Group is requested to:

a) Assist the OIE Headquarters in reviewing the OIE notification system by addressing the following points:

1. On the basis of the better quantitative data collected since 2005 and using the current criteria of the *Code*, review the world animal health situation of OIE-listed diseases using WAHID (www.oie.int/wahid) and identify those diseases that are still meeting the criteria to be listed in the OIE single list of diseases and, according to the newly collected quantitative information, identify those that could not meet the criteria and that should be removed from the OIE list;

2. Analyse the request made by the OIE *ad hoc* Group on Swine Vesicular Disease to remove the disease from the OIE list of diseases and assess the situation according to the listing criteria of another vesicular disease, namely vesicular stomatitis;

3. Address the strong request made by the OIE Working Group on Wildlife Diseases to reconsider chronic wasting disease examination to be listed in the OIE list of diseases;

4. Study comments made by QUAD countries on listing criteria and provide advice;

5. Advise on the WAHIS and WAHID disease occurrence codes following their differentiation in 2009, when relevant, for domestic and wild species;

6. Evaluate the notification of emerging diseases by Members to the OIE, more specifically according to the experience of the notification of influenza A H1N1 in animals;

b) Review the summary information prepared by the Animal Health Information Department on bovine neonatal pancytopenia (BNP) of the reports received by Members (including vaccine origin hypothesis) and advise the OIE on whether further work needs to be done on this topic by the OIE and draft recommendations.

c) Any other business

Appendix II

MEETING OF THE OIE *AD HOC* GROUP ON NOTIFICATION OF ANIMAL DISEASES AND PATHOGENIC AGENTS

Paris 29 June – 1 July 2010

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List of participants

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Appendix III

Table I: Outcome of the evaluation of the OIE-listed diseases against the current listing criteria

Disease	Criterion for including an OIE-listed disease						Outcomes Listed Y/N
	International spread			Zoonotic potential	Significant spread in naïve populations[1]		
	Proven spread on three occasions or	3 countries free / impending free or	++ countries with disease absence OIE reports		Significant mortality	Significant morbidity	
Foot and mouth disease	X			*		X	Y
Rift valley fever	X			X			Y
Newcastle disease	X			*	X		Y
Vesicular stomatitis		X				X	Y
Swine vesicular disease	X	X			-	X	Y
Rinderpest	X				X		Y
Peste des petits ruminants	X				X		Y
Contagious bovine pleuropneumonia	X				X		Y
Lumpy skin disease	X					X	Y
Bluetongue	X				X		Y
Sheep pox and goat pox	X				X		Y
African horse sickness	X				X		Y
African swine fever	X				X		Y
Classical swine fever	X				X		Y
Highly pathogenic avian influenza	X			X[#]			Y
Aujeszky's disease	X				X		Y
Anthrax	X			X			Y
Bovine spongiform encephalopathy	X			X			Y
Pullorum disease (*Salmonella Pullorum*)		X				X	Y
Bovine genital campylobacteriosis		X				X[2]	Y
Contagious equine metritis	X					X[3]	Y

[1] Worst case scenario
[*] Some reports of zoonosis might be known; but not severe
[#] Some, but not all HPAI, have zoonotic potential
[2] Only likely if infection spread via semen
[3] As above

Disease	Criterion for including an OIE-listed disease						Outcomes Listed Y/N
	International spread			Zoonotic potential	Significant spread in naïve populations[1]		
	Proven spread on three occasions or	3 countries free / impending free or	++ countries with disease absence OIE reports		Significant mortality	Significant morbidity	
Varroosis	X					X	Y
Scrapie	X					X	Y
Echinococcosis/Hydatidosis		X		X			Y
Heartwater	X				X		Y
~~Leptospirosis~~	~~X~~[2]			~~X~~			~~N~~
Q fever	X			X			Y
Rabies	X			X			Y
Paratuberculosis	X			[3]		X	Y
New world screwworm (*Cochliomyia hominivorax*)	X			X			Y
Old world screwworm (*Chrysomya bezziana*)	X			X			Y
Trichinellosis	X			X			Y
Bovine anaplasmosis		X				X	Y
Bovine babesiosis		X				X	Y
Brucellosis (*Brucella melitensis)*	X			X			Y
Brucellosis (*Brucella abortus)*	X			X			Y
Crimean Congo hemorrhagic fever[4]		X		X			***Y***
Bovine tuberculosis	X			X			Y
Enzootic bovine leukosis	X					X	Y
Haemorrhagic septicaemia		X			X		Y
Infectious bovine rhinotracheitis/infectious pustular vulvovaginitis	X					X	Y
Theileriosis	X				X		Y
Trichomonosis	X					X[5]	Y
Trypanosomosis (tsetse–transmitted)	X[6]			X			Y
Brucellosis (*Brucella ovis)*		X				X	Y
Caprine arthritis/encephalitis		X				X	Y
Contagious agalactia			X			X	Y

[1] Worst case scenario
[2] ~~For certain serovars~~
[3] Link postulated to Crohn's Disease
[4] Disease distribution usually limited to tick (Hyalomma) distribution
[5] If spread via semen is included
[6] International spread likely to occur if the vector is not held in check

Disease	Criterion for including an OIE-listed disease						Outcomes Listed Y/N
	International spread			Zoonotic potential	Significant spread in naïve populations[1]		
	Proven spread on three occasions or	3 countries free / impending free or	++ countries with disease absence OIE reports		Significant mortality	Significant morbidity	
Contagious caprine pleuropneumonia		X			X		Y
Enzootic abortion of ewes due to *Chlamydophila abortus*	X			X			Y
Salmonellosis due to *Salmonella abortus ovis*	X					X	Y
Maedi–visna	X					X	Y
Nairobi sheep disease			X		X		Y
Dourine			X			X	Y
Eastern equine encephalomyleitis		X		X			Y
Western equine encephalomyleitis		X		X			Y
Venezuelan equine encephalomyelitis	X			X			Y
Equine infectious anaemia		X				X	Y
Equine influenza	X					X	Y
Equine piroplasmosis		X				X	Y
Equine rhinopneumonitis			X			X	Y
Glanders	X			X			Y
Equine viral arteritis			X			X	Y
Japanese encephalitis	X			X		X	Y
Surra (*Trypanosoma evansi*)		X				X	Y
Porcine cysticercosis			X	X			Y
Brucellosis (*Brucella suis)*			X	X			Y
Porcine reproductive and respiratory syndrome	X					X	Y
Transmissible gastro-enteritis		X				X	Y
~~Enterovirus encephalomyelitis (Teschen, Talfan)~~	-	-	-	-	-	-	N
Avian infectious bronchitis	X	X				X	Y
Avian infectious laryngotracheitis		X				X	Y
Duck virus hepatitis		X			X		Y
~~Fowl cholera~~							~~N~~

[1] Worst case scenario

Disease	Criterion for including an OIE-listed disease						Outcomes Listed Y/N
	International spread			Zoonotic potential	Significant spread in naïve populations[1]		
	Proven spread on three occasions or	3 countries free / impending free or	++ countries with disease absence OIE reports		Significant mortality	Significant morbidity	
Fowl typhoid (*Salmonella gallinarum*)		X				X	Y
Infectious bursal disease (Gumboro disease)	X					X	Y
Marek's disease	X					X	Y
Avian mycoplasmosis (*M. synoviae*)							
Avian mycoplasmosis (*M. gallisepticum*)		X				X	Y
Avian chlamydiosis	X			X			Y
Turkey rhinotracheitis (industry)[2]	X					X	Y
Myxomatosis	X				X		Y
Tularemia	X			X			Y
Rabbit haemorrhagic disease	X				X		Y
Leishmaniosis	X[3]			X			Y
Chronic wasting disease		X			X	X	Y
Nipah virus encephalitis	Emerging		X	(emerging)X			Y
West Nile fever	Emerging		X	(ermerging)X			Y
Bovine viral diarrhoea	X					X	Y
Small hive beetle (*Aethina tumida*)	Proposed by *the ad hoc* group on bee diseases in July 2003						Y
Mycoplasma synoviae infection (industry)[4]		X				X	Y
Turkey rhinotracheitis (industry)[5]	X					X	Y
Camelpox			X			X	Y

1 Worst case scenario
2 provisional
3 Despite the lack of reliable data, the disease should be included due to its importance as a zoonosis.
4 provisional
5 provisional

Appendix IV

Decision tree

The agent has the potential for international spread, including via live animals, their products or fomites, as suggested by the epidemiological characteristics of the disease or by documented trans-boundary spread

AND

There are a number of countries with populations of susceptible animals free of the disease/infection or facing impending freedom (based on the Animal Health Surveillance provisions, of the *Terrestrial Code*, and in particular those contained in Chapter 1.4.)

OR

OIE annual reports indicate that a number of countries with susceptible populations have reported absence of the disease and (based on the Animal Health Surveillance information notified in WAHIS) for several consecutive years

AND

Transmission to humans has been proven, and human infection is associated with severe consequences (death or prolonged illness)

OR

The disease/infection may cause significant economic impact at the level of a country or a zone in domestic animals

OR

The disease/infection has been shown to or scientific evidence indicates that it is likely to negatively affect wild animal populations that are an asset worth protecting for economic or ecological reasons[1]

AND

A repeatable and robust means of detection/diagnosis exists and a robust case definition is available to clearly identify cases and allow them to be distinguished from other pathologies.

OR

The disease is an emerging disease with apparent zoonotic properties or a rapid spread, or possible significant economical impact and a case definition is available to clearly identify cases allowing them to be distinguished from other pathologies.

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[1] However it may be decided, in limited cases, not to list a disease: where the disease agent is widespread or extensive vaccination is carried out in most OIE Members

Appendix IX

Original: English
July 2010

MEETING OF THE OIE *AD HOC* GROUP

ON EVALUATION OF RINDERPEST DISEASE STATUS OF MEMBERS

Paris, 8 – 9 July 2010

A meeting of the *ad hoc* Group on evaluation of rinderpest disease status was held at the OIE headquarters from 8 to 9 July 2010. The members of the *ad hoc* Group were welcomed by Dr Kazuaki Miyagishima, Head of the Scientific and Technical Department, on behalf of Dr Bernard Vallat, Director-General of the OIE. This meeting was to be the penultimate meeting of the *ad hoc* Group, provided that all remaining Members and non Members without disease status would submit their dossiers later in the year, thus opening an avenue for the declaration of global freedom which could take place at the 79th General Session of the OIE and the FAO Conference, respectively in May and in June 2011. The Joint FAO/OIE Committee on Global Rinderpest Eradication (the Joint Committee), working based on the advice of the OIE Scientific Commission for Animal Diseases (Scientific Commission) and the present ad hoc Group, would ultimately advise the Directors General of the OIE and FAO when all conditions had been met to enable an announcement on the global eradication of rinderpest. The Joint Committee would hold its third meeting the following week in Vienna and review the progress made by FAO and OIE. The *ad hoc* Group noted Resolution No 25 adopted during the 78th General Session, which, among others, requested the Scientific Commission to update relevant OIE *Terrestrial Animal Health Code* chapters to accommodate the new situations in the post–eradication era. The role of the ad hoc Group has therefore been extended to advise, and technically support, the Scientific Commission on the latter point.

1. Adoption of agenda and appointment of rapporteur

The meeting was chaired by Dr John Anderson and Drs Jeffrey Mariner and Peter Roeder acted as rapporteurs to provide a draft meeting report.

The Group reviewed and the draft agenda presented, adopted it with minor amendments. The amended agenda and list of participants are attached as Appendices I and II, respectively.

2. Evaluation of country status for rinderpest freedom

The ad hoc Group discussed the submitted dossiers and reached conclusions as follows.

Dossiers for full evaluation

- **Azerbaijan**

  The Group reviewed the dossier of Azerbaijan and noted that there had been no evidence of rinderpest in the country since 1928 and that vaccination had ceased in 2002. Serological and clinical surveillance had been carried out and the veterinary services had been recently strengthened.

  Recommendation: Azerbaijan be accredited as free from rinderpest

- **Gambia**

  The Group agreed that the dossier of the Gambia was acceptable based on historical grounds.

  Recommendation: Gambia be accredited as free from rinderpest

- **Laos**

  The Group recalled that Laos had previously been recognized as free from rinderpest, but had lost its free status due to a lapse in annual reconfirmation. The Group agreed that the information provided met the requirements for reconfirmation of their disease free status and that Laos should be considered as rinderpest free.

  Recommendation: Laos be accredited as free from rinderpest

- **Saudi Arabia**

  The Group noted that vaccination against peste des petits ruminants (PPR) was continuing and that the vaccine used was not specified in the dossier, however, it was noted that the production of rinderpest vaccine had ceased in 2004 and that all materials for the manufacture of rinderpest vaccine were destroyed.

  Recommendation: Saudi Arabia be accredited as free from rinderpest

- **Sierra Leone**

  The Group noted evidence that the veterinary services and general surveillance systems of Sierra Leone had been strengthened as presented in the dossier and that the systems in place were sufficient to award disease free status, given the history and level of risk within the country. The Group recommended acceptance of the dossier.

  Recommendation: Sierra Leone be accredited as free from rinderpest

- **United Arab Emirates (UAE)**

  The Group noted that the last rinderpest outbreak was in 1995 and vaccination ceased in 2004. Sero-surveillance was carried out in 2009 and 2010 with 3,475 samples tested and no positive samples were found. The Group further noted that there was limited indigenous cattle production in the UAE and that historically, rinderpest events in the country were largely introductions through the trade in cattle. The Group recommended recognition of the UAE as free from rinderpest.

  Recommendation: United Arab Emirates be accredited as free from rinderpest

Letter declarations presented for historical freedom

Letters had been received from eight countries/territories claiming freedom from rinderpest on a historical basis. These were:

- Antigua and Barbuda
- The Bahamas
- Grenada
- Kiribati
- Kosovo
- Saint Kitts and Nevis
- Saint Lucia
- Tuvalu

The Group recognized that the applications provided by the above non OIE members complied with the requirements for historical freedom and recommended that they be recognized as rinderpest free.

Recommendation: Antigua and Barbuda, The Bahamas, Grenada, Kiribati, Kosovo, Saint Kitts and Nevis, Saint Lucia and Tuvalu be accredited as free from rinderpest

Summary of recommendations

Country or territory	*Ad hoc* Group recommendation
Azerbaijan	Accreditation is recommended
Gambia	Accreditation is recommended
Laos	Accreditation is recommended
Saudi Arabia	Accreditation is recommended
Sierra Leone	Accreditation is recommended
United Arab Emirates	Accreditation is recommended
Antigua and Barbuda	Accreditation is recommended
The Bahamas	Accreditation is recommended
Grenada	Accreditation is recommended
Kiribati	Accreditation is recommended
Kosovo	Accreditation is recommended
Saint Kitts and Nevis	Accreditation is recommended
Saint Lucia	Accreditation is recommended
Tuvalu	Accreditation is recommended

3. Update of the list of countries and territories yet to be recognised as free from rinderpest

After taking into account the recommendations of the current meeting and the known actions having taken or taking place in the countries concerned, the Group updated the list of countries and territories to be recognized free from rinderpest. The FAO participant briefed the Group on the plan and progress to facilitate countries that had not yet completed all the necessary actions for recognition of freedom from rinderpest. In Asia, remaining countries were Kazakhstan (full dossier not yet submitted), Kyrgyzstan (full dossier previously submitted and was accepted by the *ad hoc* Group pending clarification of the status of rinderpest as a notifiable disease), Turkmenistan (full dossier previously submitted, but the *ad hoc* Group did not fully evaluate the dossier presented in January 2009 because OIE established that the country and its the veterinary service were not considered to be compliant with OIE Member obligations and not fully functional at that time), Sri Lanka (full dossier not yet submitted) and Federated Micronesia (letter requesting historical freedom not yet submitted). The *ad hoc* Group reiterated that the dossiers of Kyrgyzstan and Turkmenistan had been cleared at its previous meetings and that epidemiologically, the countries were considered free of rinderpest. Any outstanding issues concerning Kyrgyzstan and Turkmenistan did not warrant delay in the global recognition of rinderpest eradication. In Africa, Comoros[1], Sao Tome and Principe[2], and Liberia were yet to submit their short dossier or letter for historical freedom. Kazakhstan had recently initiated sample collection for sero-surveillance, but was experiencing a concurrent FMD outbreak which might delay necessary actions on the completion of compliance with requirements for recognition of rinderpest. Kazakhstan's use of limited quantities of vaccine in limited areas in recent years indicated that a full dossier would be required for recognition of freedom.

The Group strongly recommended that all remaining dossiers be received by the end of August 2010 to meet the timetable for the global declaration of freedom. The serological data from Kazakhstan were seen as a necessary step to the recognition of freedom. The Group recommended that every effort be taken to communicate the sense of urgency to the concerned countries and that an expert(s) be designated to assist Kazakhstan and Sri Lanka to prepare their dossiers by the August 31 deadline. The Group agreed that the remaining dossiers and letters, when received, could be circulated to the *ad hoc* Group for electronic discussion and approval. It was agreed that repeating the same actions that had been taken to date by FAO and OIE were unlikely to achieve success for the remaining countries that had not yet provided their applications and that new strategies needed to be implemented to encourage them to meet the requirements.

1 A communication was received from Comoros on 9 July 2010 and the Group could not review it at its current session.

2 A communication was received from Sao Tome and Principe on 12 July 2010 and the Group could not review it at its current session.

4. General feedback from the FAO/OIE Joint Committee on Global Eradication of Rinderpest, OIE, Paris, April 2010

The Group was briefed by Dr Taylor, the representative of the Joint Committee on the achievements of the latter. The Group noted that the Joint Committee would submit a report advising the OIE and FAO on the global eradication of rinderpest. It was noted that the majority of evidence supporting global eradication was contained in confidential dossiers that could not be made available in a public report. It was suggested that a statement of advice that all available evidence had been reviewed leading to a set of specific conclusions would be sufficient to meet the requirements of the terms of reference of the Joint Committee and rinderpest eradication.

The Group recommended that the role of the Joint Committee should include the evaluation of the disease status of countries not yet accredited as free of rinderpest, taking due account of epidemiological factors at regional and ecosystem levels. This evaluation should include recommendations on actions required to clarify the status of countries not yet accredited, if appropriate. At present, the principal concern was the lack of dossiers from Kazakhstan and Sri Lanka. The Group suggested that an appropriate contingency plan in the event that dossiers were not forth coming by the end of August 2010 would be for experts to be dispatched to the countries concerned, with a checklist of information required to enable the the Joint Committee to take informed decisions. The Group expressed its expectation that the Joint Committee provide a concise report noting that the vast majority of countries had successfully complied with established procedures for the recognition of freedom and complement it with the Committee's analysis of those countries not yet accredited, together with a recommendation on recognition of global freedom.

5. Activities post rinderpest eradication: Guidance on global emergency response or contingency plans

The Group agreed that a robust contingency plan should ideally be in place prior to an announcement of global eradication of rinderpest and was in fact needed now. It was agreed that it should be the responsibility of OIE and FAO to jointly produce the contingency plan. The FAO participant welcomed the guidance of the Group on development of a contingency plan. The Group recommended that a timeline for preparation of the contingency plan be made public. The Group expressed its doubt that many useful tasks could be completed by the *ad hoc* Group without an additional meeting in September to November. The Group suggested that draft documents be available before this additional meeting, should it be convened.

Importantly, the Group noted that a roadmap or concept note was needed to describe all the activities which need to be completed for finalization of the eradication process. Such a roadmap should assist the Joint Committee in guiding the remaining activities. The development of a response plan to a rinderpest outbreak or suspected outbreak would be one of these activities. A clear picture on this should be made available before the revision to the chapter of rinderpest of *Terrestrial Animal Health Code* could be finalised. The Group also agreed that how the existing mechanisms and institutions (e.g. FAO/OIE Crisis Management Centre, Reference Laboratories) would fit into the overall contingency plan. It was also noted that several elements, including the OIE Code Chapters, would constitute elements of a contingency plan. The Group agreed that the contingency plan should be viewed as a living document that would continually be updated in light of actions taken, changing conditions, resource availability and institutional capacities. The Group suggested that consultants be urgently recruited to prepare draft documents.

The contingency plan should include the following elements:

- Identification of the national competent authority
- Sources of funding (by activity, now and future)
- Reporting and information sharing pathways
- Identification of decision-makers and responsibilities
- Actions to be taken in the event of outbreaks, suspected or confirmed (including rumour tracking)
- Actors responsible for specific actions
- Clear guidance on how national and international authorities will collaborate and coordinate response within member countries
- Defined and ready-to-implement response package for stamping out, including compensation plans

- Defined and ready-to-implement response package for vaccination including vaccines, delivery materials and resources
- Defined criteria for selection of response options
- Specification of vaccines to be used and maintenance of strategic stocks
- Incentives for the maintenance of strategic vaccine stocks
- Strategies and incentives for maintenance of diagnostic capacity

6. Amendments to the existing rinderpest Chapter of the *Terrestrial Animal Health Code* for the activities post global eradication of rinderpest

The Group appreciated the effort made to produce a new draft of the rinderpest Chapter for the *Terrestrial Animal Health Code* and noted that the mechanisms that would be described in the chapter had not yet been fully formulated, to meet the novel challenges of the maintenance of the global rinderpest free status. Either the Group would need to propose new mechanisms, or the roadmap or concept note for the completion of rinderpest eradication should first be provided by OIE and FAO to guide the update of the Chapter.

The following issues were identified as concerns to be addressed in the new chapter:

- Post-eradication awareness and general syndromic surveillance programmes that would detect rinderpest or emergent rinderpest-like disease, if it occurred.
- Mechanism for individual countries to respond to rinderpest outbreaks and regain free status
- Reference or links to a contingency plan and mechanism for re-establishing the validity of global eradication in the event of an outbreak.
- A mechanism for the review of research involving live rinderpest virus from a bio-security perspective.
- Sustainable approaches to the maintenance of diagnostic capacity at the regional reference laboratory level to assure economies of scale and proficiency of testing in the post eradication era when sample streams would be limited.
- A need for a body to oversee the maintenance of global freedom with the mandate to implement contingency plans and coordinate actions to re-establish global freedom. Specification of this body and its modes of operation is a prerequisite for drafting of the new chapter on rinderpest.
- A definition of global freedom from disease (to be added to the glossary of terms)
- The status of rinderpest on the OIE list of notifiable diseases

The new chapter would highlight the need to build upon existing procedures for country free status and the need for innovative approaches to manage the international implications of outbreaks. Provisions should be achievable and enforceable. The Group was not convinced that annual reconfirmation of rinderpest freedom was enforceable and indicated that further thought might be required to design appropriate incentives for the maintenance of vigilance. Methods that depended upon revocation of a countries disease free status would not be applicable, as revocation of a single country freedom would, theoretically, nullify global freedom.

One option might be to continue advocate for good general surveillance and contingency plan/emergency preparedness as a prerequisite for participation in trade. It might be appropriate to create a status category where a country was considered disease free but had not maintained an adequate surveillance system to detect the disease if present or introduced.

In the event of a focal outbreak, the procedure in the *Code* for implementation of containment zones would be a feasible mechanism for an individual country to respond to an outbreak that would not necessitate the suspension of global disease free status. Thus, if it was documented that the source of the outbreak was known and that the outbreak was contained, there would be no change in global status.

The Group recommended that the procedures and regulations in place for maintenance of global freedom from smallpox should be reviewed by FAO and OIE to capture lessons relevant to rinderpest eradication.

Other chapters of the *Code*, such as the Chapter of Animal Health Surveillance should be reviewed by both *ad hoc* Groups on epidemiology and on rinderpest to determine if any additions or changes to accommodate the maintenance of global freedom were warranted. It was also suggested that the *ad hoc* Group on epidemiology review the new rinderpest chapter when it was sufficiently elaborated.

The members of the *ad hoc* Group agreed to continue to elaborate the new chapter while awaiting guidance from the Scientific Commission for Animal Diseases on the issues having broader policy and strategic concern to the Organization.

7. Finalisation and adoption of draft report

The draft report was reviewed by the Group, amended and accepted subject to circulation for minor comments to be received by the coming week.

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…/Appendices

Appendix I

MEETING OF THE OIE *AD HOC* GROUP ON EVALUATION OF RINDERPEST DISEASE STATUS OF MEMBERS

Paris, 8 - 9 July 2010

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Agenda

1. Adoption of agenda and appointment of rapporteur

2. Evaluation of country status for rinderpest

Dossiers for full evaluation

- Azerbaijan
- Gambia
- Laos
- Saudi Arabia
- Sierra Leone
- United Arab Emirates

Letter declarations historical freedom

- Antigua and Barbuda
- The Bahamas
- Grenada
- Kiribati
- Kosovo
- Saint Kitts and Nevis
- Saint Lucia
- Tuvalu

3. Update of the list of countries and territories to be recognized free from rinderpest

4. General feedback from FAO/OIE Joint Committee on the Global Eradication of Rinderpest, OIE, Paris, April 2010

5. Activities post rinderpest eradication

– Guidance on global emergency response or contingency plans

6. Amendments to the existing Rinderpest Chapter of the *Terrestrial Code* for the activities post global eradication of rinderpest

7. Finalisation and adoption of draft report

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Appendix II

MEETING OF THE OIE *AD HOC* GROUP ON EVALUATION OF RINDERPEST DISEASE STATUS OF MEMBERS

Paris, 8 - 9 July 2010

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Appendix III

Lists of residual countries and territories remaining to be recognised free from rinderpest (updated in July 2010)

GROUP 1: Countries considered presenting an insignificant risk of virus persistence

Country/Territory	Present status – action required to achieve accreditation	Action recommended (and who to provide)
Comoros	Dossier needed to apply for historical freedom **Submitted (to be assessed by the *ad hoc* Group)**	
Micronesia (Federated)	Letter seeking freedom on historical basis is needed	OIE: - Communication through the OIE Regional Representation of Asia - Letters of the DG of OIE have been sent
Sao Tome and Principe	Dossier needed to apply for historical freedom **Submitted (to be assessed by the *ad hoc* Group)**	.

GROUP 2: Countries requiring special attention

Country/Territory	Present status – action required to achieve accreditation	Action recommended (and who to provide)
Kazakhstan	Sero-survey planned but not conducted. Kits provided by US TADR programme but progress uncertain.	FAO mission in March 2010, sero-surveillance planned for April 2010 and dossier preparation June 2010 (TCP)
Kyrgyzstan	Convincing dossier (historical freedom) presented was accepted by *ad hoc* Group pending clarification of the status of rinderpest as a notifiable disease. Requests for clarification by OIE were not responded to.	Requires definitive intervention from OIE/FAO to obtain confirmation that rinderpest is a notifiable disease. **Still not resolved** Kyrgyzstan was not there during the 78th GS of OIE, political situation to be watched
Liberia	Not OIE member. Dossier required to be submitted for historical freedom.	FAO mission foreseen in May 2010 (TCP)
Sri Lanka	Requires submission of a dossier with sero-surveillance data which is not available and is unlikely to be forthcoming.	Surveillance planned for April 2010. **In hand TCP**
Turkmenistan	The *ad hoc* Group did not fully evaluate the dossier presented in January 2009 because OIE took the stance that the country and its the veterinary service were not considered to be compliant with OIE Member obligations and not fully functional at that time	OIE to decide what action to take. OIE Regional Representation for Europe is mediating. **Still not resolved** - Letters of the DG of OIE have been sent - Country just started to resume sanitary reporting to OIE - Line of communication being established with OIE

Appendix X

Original: English
August 2010

MEETING OF THE OIE *AD HOC* GROUP ON RABIES

Paris, 4 - 6 August 2010

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1. Opening and adoption of agenda and appointment of a rapporteur

Dr Kazuaki Miyagishima, Deputy Director General of the OIE, welcomed the Group and commented on the agenda items for the meeting, emphasising the need to review and revise the *Terrestrial Code* chapter on rabies focusing on dog mediated rabies and to clarify the need for more specific guidelines on dog rabies control and to consider trade safety and facilitation options. It was emphasised that if possible the Chapter 8.10. should be finalised in time for the submission before the General Assembly in May 2011, which would create synergies with the proposed OIE global conference on rabies to be held on September 2011.

The draft agenda for this meeting as provided by the Scientific Commission was accepted by the Group. The meeting was chaired by Dr Tony Fooks, assisted by Dr Marosi Molomo and Dr Yooni Oh as rapporteurs. The Chair emphasised the amendments to be proposed should be science-based and the rationale for changes be in line with the principles of the *Terrestrial Code*.

The Agenda and list of participants are presented as Appendices I and II, respectively.

2. Review of the comments of the Scientific Commission on the draft text for the revised chapter proposed by the *ad hoc* Group

The participants noted the comments and suggestions of the Scientific Commission which recommended focusing the discussion on control of dog-mediated rabies. As per suggestion, three experts from Asian region had been invited to join the ad hoc group but only two of them were able to attend this meeting. The inclusion of canine semen as a risk factor for rabies transmission had been removed from the Chapter 8.10. because there was no scientific evidence available.

3. Review and finalisation of the draft chapter as amended and proposed by the Scientific Commission

The *ad hoc* Group reviewed Chapter 8.10. on rabies of the *Terrestrial Code* taking into account the revisions of the January 2010 meeting and the comments of the Scientific Commission. The summary of the changes made is the following:

Article 8.10.1.

Under ‘General Provisions’, the Group included non-commercial movement of rabies susceptible species, because of the risk that such animals (mainly pets), if they were not examined, might add to international animal movements.

- The Group highlighted therefore the importance of stating that the aim of the chapter included “the safety of non-commercial movements of domestic carnivores”.

- There was no more need to use of the term 'genotype' (e.g. genotype-1), since it was replaced by the species-specific names, such as 'rabies virus', by the International Commission for Taxonomy of Viruses (ICTV). Other sections of the Chapter were adapted accordingly.

- Ferrets were included as domestic carnivores, since there was increasing trade in ferrets as a pet.

- The Group recommended restricting the 10-day infective period definition to dogs, cats and domestic ferrets, because the pathogenesis studies for estimating infective periods had been conducted only in these species.

- 'Reservoir species' were defined as the principal rabies risk, also for international trade.

Taking into consideration the achievements and perspectives in the control of rabies in wild carnivores, the Group recommended that OIE consider in the future a "free of terrestrial rabies status".

Article 8.10.2.

The Group discussed that the condition for qualifying as a rabies free country related not only to the duration of freedom from rabies for 2 years, but also to the necessity to maintain the freedom through an active surveillance system. Concerning importation, the Group considered applying a differentiation between 'reservoir species' and non-reservoir species.

Article 8.10.2.bis

This article was a new addition by the last meeting of *ad hoc* Group. This article intended to encourage countries to facilitate and achieve elimination of dog-mediated rabies. For this category of status the early detection was considered the key issue for the importation of dogs.

Article 8.10.4.

The definition of 'sufficient distance' was based on the biology of species, including typical home range and hence necessary distance from (multiple) neighbouring infected country or zones.

In case of wild non-captive mammals (e.g. animals dedicated to translocation to wildlife reserves in another country), 6 months of captivity or quarantine were not considered practical or realistic. A 6-month quarantine would severely jeopardize wild animals' health and welfare and could lead to increased mortalities.

Article 8.10.4.bis

The Group agreed that vaccination as well as revaccination should be undertaken in accordance with the vaccine manufacturer's instruction. The variety of vaccines available did no longer justify a rigid, generic prescription of time frames related to vaccination in the *Terrestrial Code*.

Article 8.10.5.

Since micro-chipping to identify individual pet animals (including ferrets) was not available in all countries, the option of using clearly readable tattoos was added. Vaccination should be undertaken in accordance with the recommendation of vaccine manufacturers. Serological tests should be carried out 3 to 12 months prior to shipment instead of 3 to 24 months. If animals were not fulfilling the three conditions - (1) being permanently marked, (2) vaccinated and (3) having a proof of antibody titer from the vaccination, the animal should be quarantined for 6 months.

Article 8.10.6.

The Group decided to treat separately 'domestic ruminants and suids' from 'domestic equids'. For domestic ruminants and suids, as a general rule and for these species, vaccination was hardly ever practiced for the purpose of international trade. It was considered sufficient to check for clinical signs the day prior or on the day of shipment.

Concerning domestic equids, international movements, permanent or temporary, were frequent. For this reason and due to more frequent direct contact of horses with people, it was advisable that the horses be vaccinated according to the *Terrestrial Manual* or kept separately for 6 months prior to shipment (no contact with reservoir species) in an establishment where no report of rabies cases was recorded in the past 12 months.

Article 8.10.8.bis

The Group recommended that Chapter 6.11. on zoonoses transmissible from non-human primates be reviewed by the Working Group on Wildlife Diseases taking into consideration the revisions of the chapter on rabies.

The Group highlighted the importance of the chapter 8.10. in the prevention of human rabies, be it in animal owners or staff working in the animal field. Special emphasis was given to the chapter's impact on global canine rabies elimination, which was considered as one of major public and animal health goals under the One Health approach.

4. Discussion of the report of the Partners for Rabies Prevention (PRP), Banna, Italy, 17 – 20 May 2010

The Chairman briefly informed the Group about the Partners for Rabies Prevention (PRP) meeting held in May 2010. The participants of the PRP meeting were from different background such as industry, scientists, policy makers, NGOs, WSPA, OIE, and FAO. The highlights were the planned re-assessment of the global burden and cost of rabies by PRP, updates on the new diagnostic tools and immuno-contraception methods and the launching of the online "Rabies Blueprint".

The Group noted that advances in dog rabies control were being made by the publication of this blueprint for rabies elimination in dogs (http://www.rabiesblueprint.com).

Note was taken of the need to produce, update and integrate OIE guidelines relevant to dog rabies elimination. The Group noted the importance of the information contained in the Blueprint and recommended that a similar document be produced for the OIE Members to provide more guidance on rabies surveillance and control. The *ad hoc* Group on rabies wished to emphasise to the Scientific Commission and the OIE the usefulness of developing a more extensive OIE guideline for dog rabies elimination as a next step.

The next PRP meeting would take place on 17 October 2010 in Guadalajara (Mexico).

5. Discussion of the comments during the 78th General Session on diagnostic kits for rabies

The Group reviewed the recommendations made by the Biological Standards Commission and noted comments by Dr Vallat. Dr Francois Diaz from the Scientific and Technical Department updated the Group on the progress for the rabies ELISA test for antibody titration. It was noted that an expert panel would be constituted in September 2010 with the specific terms of reference to assess the fitness for purpose of the ELISA test for international trade purpose.

The *ad hoc* Group recommended that consideration be given to testing also dog anti-sera from naïve, unvaccinated animals to determine the probability of false positive results. The Group felt that there was a need for evaluation of commercially available rapid diagnostic kits for rabies by the OIE. The Group emphasised the need for a cheap, reliable and standard serological test for use in rabies endemic countries and for international trade.

6. Rabies vaccines and diagnostic procedures in the *Terrestrial Manual* in relation to the proposed *Terrestrial Code* chapter revisions (to the attention of the Biological Standards Commission)

The Group analysed the draft chapter on rabies of the Terrestrial Manual (to be adopted in May 2011). The Group added a few recommendations or comments to preserve consistency between the rabies chapters in both, the *Terrestrial Code* and the *Terrestrial Manual*. The comments related to the new classification of Lyssaviruses, serological diagnostic test results interpretation and more detailed explanations needed for pre-

and post-exposure prophylaxis in food animals. The Group further recommended that OIE take the initiative to promote marketing and administration of high quality rabies vaccines for dogs, in particular in rabies endemic countries.

7. Review of Terrestrial Code chapters cross-referenced in the rabies chapter

a) Chapter 7.7. Guidelines on stray dog population control

The Group provided suggestions and comments on the document. As a next step a *ad hoc* Group could be invited to specifically address detailed revision of this chapter or the Working Group on Animal Welfare (as the authors of this chapter) with invited experts could re-consider the chapter 7.7. including the comments provided in this meeting. The Group extensively discussed the experience that killing of sick animals was more acceptable (to the stakeholders) than killing of healthy animals. Combating rabies in dogs through combination of vaccination and contraception was desirable and pilot projects were underway. The Group highlighted that based on their experience all matters related to euthanasia in dogs had been subject to controversies in many countries and regions of the world, regardless of the stakeholders involved (governmental services, NGOs, private veterinarians etc.).

b) Model international veterinary certificate for dogs and cats originating from rabies infected countries

The Group simplified the international veterinary certificate contained in this *Terrestrial Code* chapter and adjusted its content to the revisions in the rabies chapter. The Group discussed whether this chapter was needed since recommended procedures for veterinary certificates were already described in the other chapters of Section 5 of the *Terrestrial Code* in a generic manner.

8. Update on the organisation of the OIE Global Conference on rabies in 2011

The Scientific and Technical Department informed the Group that two regional conferences on rabies were initiated by the OIE in the past, one in Kiev (2005) and another in Paris (2007). In continuation of OIE's initiatives on rabies control at the animal source, a Global Conference on Rabies Control was scheduled and under detailed planning. The conference would take place in Seoul, Republic of Korea, early September 2011. The Republic of Korea kindly accepted to host this global conference. The Ministry for Food, Agriculture, Forestry and Fisheries of Korea (in particular the National Veterinary Research and Quarantine Services) were currently in dialogue with the OIE Headquarters to arrange for the setting up of the conference. The conference was to focus on strategies and institutional approaches needed for elimination or control of dog rabies. Members of the ad hoc Group offered their assistance to the preparation of the conference.

9. Finalisation and adoption of the draft report

The *ad hoc* Group reviewed and amended the preliminary draft report provided by the two rapporteurs. The Group agreed that the report and revised chapters would be subject to a short period of circulation in the Group for minor comments and final adoption.

In his concluding remarks, the chair thanked the rapporteurs and all other participants of the ad hoc Group for their active participation and meaningful discussion.

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…/Appendices

Appendix I

MEETING OF THE OIE *AD HOC* GROUP ON RABIES

Paris, 4 - 6 August 2010

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Agenda

1. Adoption of agenda and appointment of rapporteur
2. Review of the comments of the Scientific Commission on the draft text for the revised chapter proposed by the ad hoc Group.
3. Review and finalisation of the draft chapter as amended and proposed by the Scientific Commission
4. Discussion of the report of the Partners for rabies prevention (Banna, Italy, 17 – 20 May 2010)
5. Discussion of the comments during the 78th General Session on diagnostic kits for rabies
6. Rabies vaccines and diagnostic procedures in the Terrestrial Manual in relation to the proposed Terrestrial Code chapter revisions (to the attention of the Biological Standards Commission)
7. Review of cross referenced Terrestrial Code chapters (chapters 7.7. and 5.11.)
8. Update on the organisation of the OIE Global Conference on Rabies Control
9. Finalisation and adoption of the draft report

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Appendix II

MEETING OF THE OIE *AD HOC* GROUP ON RABIES

Paris, 4 – 6 August 2010

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List of Participants

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Appendix XI

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OIE mission to Turkey to assess the application of Turkey for the allocation of foot and mouth disease free status with vaccination to the Thrace region

17 to 22 May 2010

Introduction

An application of Turkey was evaluated by the OIE *ad hoc* Group on foot and mouth disease (FMD) to assess their request for the allocation of FMD freedom with vaccination for the Thrace region of Turkey. The *ad hoc* Group, supported by the Commission, had reservations on possible non-conformities with Article 8.5.9 of the *Terrestrial Code* on the exception allowed for the transfer of animals from the infected zone in Anatolia to markets in Thrace and the probability of home-slaughter and the lack of evidence on the number of suspected cases and the follow-up. Following the meeting of the a*d hoc* Group in December 2009, the OIE received an official letter from Turkey on a Ministerial decision governing the transfer of ruminants from Anatolia to Thrace. These control measures were implemented after the submission of the original request to the OIE and evaluation by the *ad hoc* Group. The Commission reiterated the need for proof of compliance with Articles 8.5.9 and 8.5.12 of the *Terrestrial Code* and the need to provide information on the detection and follow-up of suspected cases as an indicator of vigilance. The Commission agreed to consider recommending the requested status for Thrace, provided the Delegate of Turkey could submit to the OIE before 31 March 2010, details on the implementation and supervision of the Ministerial declaration and follow-up on suspect cases. In addition, it was decided that an expert mission would visit Turkey before the General Session in May to verify the implementation and supervision of the Ministerial declaration before a recommendation for adoption could be made to the General Assembly of the OIE.

Following the submission of the requested information from the delegate of Turkey in March 2010, the Director General in consultation with the Delegate, agreed to constitute an expert mission to visit Turkey from 17 to 22 May 2010 to enable a possible decision on the application of Turkey before the presentation and adoption of Resolution 15 at the 78th OIE General Session in May 2010. The members of the expert mission nominated by the Director General were: Drs Gideon Brückner (SCAD, South Africa), Hassan Abdel Aziz Aidaros (SCAD, Egypt), Luis Romero Gonzalez (Spain) and Alf-Eckbert Füssel (EC, DG- SANCO).

Itinerary

In consultation with the Delegate of Turkey prior to the mission, it was agreed that the main purpose of the visit would be to focus on and to investigate and verify the implementation of the ministerial declaration i.e. to assess the movement control measures in place between Anatolia and Thrace for access by road and across the Marmara sea - especially during the Kurban Bayrami religious festival which in 2010, would be from 16 to 19 November. An additional focus area would be the border control measures in operation between the Thrace region, Bulgaria and Greece. Visits for intensive interviews with and briefing by both the central veterinary authorities and the provincial veterinary authorities were arranged.

On 18 May 2010 - interviews were held at the provincial veterinary headquarters in Istanbul followed by visits to the control posts on the road access points between the Anatolian and Thrace sides of Istanbul.

On 19 May 2010 - the mission travelled to Canakkale for a briefing by the provincial veterinary authorities and to assess the control posts for access by boat between Anatolia and Thrace across the Marmara sea.

On 20 May 2010 - the mission travelled to Kirklareli in north-east Thrace for a detailed briefing by the provincial veterinary officials of the Kirklareli province including visits to livestock markets and livestock auction sites.

On 21 May 2010 - a similar visit was made to Edirine for a detailed briefing by the provincial veterinary authorities and a visit to a livestock market.

On arrival back in Istanbul, a detailed briefing was held with the General Director and other officials of the central veterinary authority on the findings and recommendations of the mission.

On 22 May 2010 - departure of mission members.

The mission acknowledged with appreciation that the General Director of the Ministry of Agriculture and Rural Affairs of the headquarters in Ankara, Dr Muzaffer Aydemir, accompanied the mission during the full duration of the visit as well as Dr Haluk Aşkaroğlu Head of the Animal Health Services in Ankara and Dr Sinan Aktas, who not only assisted with translation, but who was also a valuable and important source of information.

Summary of findings and observations

1. During the first round of discussions in Istanbul, details were given on the intent and implementation of the Ministerial Directive 2010/3 of 25 March 2010. This Directive, which was circulated and communicated widely in all 81 provinces of Turkey, contains details on the identification of authorised official veterinarians to handle transportation of FMD susceptible animals to Thrace; the procedures for assignment of official veterinarians to control FMD risk in Thrace; the rules to be followed with the transportation of FMD susceptible animals to Thrace and pre-movement isolation procedures and testing protocol; procedures at control posts and specifically those between Canakkale and Thrace and the Faith Sultan Mehmet (FSM) Bridge between Anatolian and Thrace; the notification of suspect FMD cases; communication with stakeholders and most importantly the additional measures that are specifically applicable to the Kurban festival.

2. Directive 2010/3 was complemented by further more detailed follow-up Directives on procedures for clinical inspection; inspection of trucks at control posts and procedures for the sacrifice of animals for religious purposes. Several briefing meetings and training sessions were conducted with not only he permanent and assigned veterinary personnel but also with officials of the national and provincial police services, metropolitan police; traffic department, Chamber of Commerce; the Sacrifice Services Commission and the Kurban Activity Commission and other religious representative bodies. One of the most important outcomes of the intensive communication strategy was that an agreement was reached between the Minister in Ankara and the Governor of Istanbul for the implementation of the control measures.

3. On request of the mission, detailed information was also provided on animal movement figures during and outside the Kurban festival period (for 2009 and previous years), figures of additional personnel employed, surveillance and testing data and follow-up actions in case of FMD suspect cases.

4. During the Kurban, the intensity of animal movements increases markedly. In 2009, 175 995 cattle and 355 984 small ruminants were moved from Anatolian provinces to Istanbul of which 144 906 cattle and 110 462 small ruminants during the Kurban. From Thrace to Istanbul the comparative figures are 47 752 (4802) cattle and 123 034 (30 842) small ruminants. More or less the same ratio of movement occurred in 2008 and 2007.

5. The permanent identification of all large ruminants is compulsory in Turkey. Data are captured in the TURKVET system together with owner and farm data. This will also be compulsory for small ruminants as from September 2010.

6. The Thrace region is almost self-sufficient and except for the European part of Istanbul, almost all animals originate from Thrace. However, due to a higher demand during the Kurban, additional animals are required from Anatolia for the European side of Istanbul. A total of 655 980 cattle and 1 935 037 small ruminants were slaughtered throughout the country during the 2009 Kurban.

7. Due to the additional restrictions enforced by the 2010/3 Ministerial Directive, a reluctance of owners in Anatolia to have their animals subjected to isolation and testing, was observed. The reluctance relates especially to the apparent burden of consecutive serological tests and probang testing for viral isolation. A valid question was raised whether a probang test is really necessary in the event of two consecutive negative NSP tests. Alternative sacrifice arrangements were thus agreed upon for the slaughter of animals on the Anatolian side in preparation for the 2010 Kurban festival. The arrangements that were concluded with the consent of the religious governing body, the Kurban Activity Commission, owners of supermarkets and the relevant provincial trade and veterinary authorities, allows animals that comply with the requirements for negative FMD status, to be slaughtered on the Anatolian side and the meat made available to the European side or submitted for sharing to the less privileged at selected places. As the Kurban is essentially a religious feast of sacrifice and giving to the less privileged, it was noticed that the arrangement also included the donation of money to finance for example the slaughter and donation of meat from people in the European side of Istanbul to elsewhere not only in Anatolia, but also other Muslim countries such as in Africa.

8. An important FMD risk mitigation factor identified and acknowledged by the mission is that all animals selected and eventually sacrificed for the Kurban, are selected well ahead of time of the actual Kurban festival and are all specially fed and managed. According to religion, such animals must be free of any disease or blemishes. No sick or diseased animal would therefore be accepted for sacrificial purposes.

9. The two main risk areas for possible introduction of infected animals into the Thrace region are firstly the FSM bridge connecting the Anatolian and European sides of Istanbul and Canakkale for possible movement of infected animals by ferry boat across the narrow strip of the Marmara sea. The mission thus focused more intensely on the implementation of Directive 2010/3 at these two risk spots:

    a) The FSM Bridge is the main and only access point for trucks and other vehicles used as possible transport for animals from Anatolia to Thrace. It is a large double highway with several off-ramps before and after entry and exit. A series of permanent control and check points are in operation on both sides of the bridge to ensure that no shortcuts are taken or that animals are moved contrary to the requirements of Directive 2010/3 or cross the bridge from Anatolia to Thrace. These control points are manned by veterinarians, traffic officials and the metro police. A communication system exits between the various control posts which are manned full-time. An embargo is also in operation on the movement of trucks across the bridge between 07:00 to 10:00 and again from 16:00 to 20:00. All movements must be accompanied by the necessary documentation which are thoroughly checked and recorded at the control posts. The mission witnessed the stopping and inspection of several vehicles and was convinced that the system was operating efficiently. Recommendations were made on implementing a standard set of questions at control points and also to implement a system of control as soon as possible to ensure that trucks that pass through, do reach their destination as indicated in the accompanying documentation and within a reasonable estimated time.

    b) The ferry boat system operating at Canakkale is also manned full-time by the same contingent of officials. Although there are two departure points in the vicinity of Canakkale, only one departure point is allowed for the movement of livestock by ferry boat. The same control procedures apply as at the FSM Bridge. In spite of the intensive control measures put into force in accordance with Directive 2010/3, the intensity of livestock transport by ferry boat, are very low and were not perceived as a real risk factor.

10. Visits to the provincial offices at Kirklareli and Edirne confirmed the observations already made at the other provincial offices. Little across-border movement occurs from Bulgaria or Greece (both FMD free) to Thrace. It was especially noticeable to observe to what extent all provinces went to communicate with relevant role players on the implementation of Directive 2010/3 and the common committed among these role players to protect the FMD free status of Thrace. Very little live animal movement takes place from Anatolia to the Thrace region outside Istanbul. The area is mostly self-sufficient in animal production and due to the higher commercial intensity of animal production in the area, the government has now created additional incentives to stimulate a further increase in animal production as it is expected that the Thrace region would become an important source of supply of FMD negative animals for the Anatolia region. Two state of the art export standard abattoirs that are linked to cattle markets are in the process of completion in Kirklareli and Edirne.

Conclusions and recommendations

During a final briefing meeting with the General Director of the Ministry of Agriculture and Rural Affairs of the headquarters in Ankara, Dr Muzaffer Aydemir and other senior officials in Istanbul on 21 May 2010, the mission indicated that they are satisfied with the implementation of Directive 2010/3 to prevent the introduction of FMDV into Thrace. However, the real test would be during the Kurban festival in November 2010. Recommendations that were made during the briefing meeting to further assist and strengthen the efforts by Turkey to achieve and maintain a negative FMD status for Thrace, included the following:

1. The high premium placed by the OIE and its Members on the allocation of official disease free status and the responsibility and obligation of Members to maintain their achieved status – which in most cases are more difficult and more cost-intensive than the initial obtainment of a negative disease status.

2. The consideration of restricting transport of animals into and within Thrace to a dedicated and compartmentalised transport system to mitigate the risk of disease introduction through infected trucks – which according to available evidence, was responsible for the last recorded outbreak of FMD within Thrace.

3. The need for more aggressive and timely follow-up actions on suspect cases

4. Reviewing and updating the administrative procedures at control posts – especially on the FSM Bridge to ensure consistency in inspection procedures

5. Follow-up on trucks that pass after inspection at the FSM Bridge to verify final destination, disinfection of trucks, etc.

6. Consideration of banning or restricting the movement of animals from the endemically FMD infected area in the east of Anatolia.

7. Commitment to obtain and maintain an acceptable threshold value of herd immunity with vaccination throughout the country.

8. Considering utilising the services of veterinarians more productively such as for epidemiological investigations rather than using them for routine inspections at control posts.

Follow-up for the OIE Scientific Commission

1. Recommend to the OIE General Assembly to allocate the status of freedom from FMD where vaccination is practiced to the Thrace region of Turkey.

2. Consider the need for probang testing for viral isolation in the event of consecutive negative NSP tests.

3. Request to the Director General for a possible follow-up visit to assess the maintenance of the control measures to prevent the introduction of FMDV into Thrace.

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