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**REPORT OF THE MEETING  
OF THE OIE SCIENTIFIC COMMISSION FOR ANIMAL DISEASES**

**Paris, 2 – 5 March 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 2 to 5 March 2010. The Commission was welcomed by Dr Kazuaki Miyagishima, Head of the Scientific and Technical Department. During the second day of the meeting, Dr Bernard Vallat, Director General of the OIE, welcomed the members of the Commission and stressed the importance of ensuring good coordination and communication, including through joint meetings, between the Scientific Commission with the other OIE Specialist Commissions. He reaffirmed the commitment of the OIE for the joint OIE/FAO global Foot and Mouth Disease (FMD) control strategy adopted during the OIE/FAO Global Conference on FMD held in Paraguay in June 2009. He indicated that the Scientific Commission should play an important role in this process by providing the scientific rationale and support for a global control programme on FMD. Following requests from OIE Members, he invited the Commission to consider the possibility of developing criteria for the official recognition of disease status of Members for classical swine fever (CSF). Dr Vallat confirmed that the Council of the OIE had taken note of the proposal of the Scientific Commission of the need for a declaration of confidentiality and impartiality by members of Specialist Commissions and *Ad hoc* groups, and indicated that this subject would be addressed by the Council for more detailed discussion at its future sessions. He acknowledged that there were still problems to be resolved before a final declaration for the global eradication of rinderpest could be made, while both the OIE and FAO were currently expecting to achieve global eradication in 2011. He stated that the adoption of guidelines for rinderpest virus sequestration would constitute an important step towards global eradication. He once again emphasised the importance of the scientific role of the Commission and the *Ad hoc* Groups supporting its work by evaluating requests of Members for disease status recognition and preparing relevant recommendations.

The meeting was chaired by Dr. Gideon Brückner, President of the Scientific Commission, and Dr. Kenichi Sakamoto and Dr Kris De Clercq acted as rapporteurs.

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 8 to 11 September 2009**

The Commission reviewed and adopted the report of the meeting of the Scientific Commission of 8 to 11 September 2009.

The President of the Commission 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, which accompany the heavy agenda. He recalled the previous decisions of the Commission on the importance of synchronising meeting schedules with those of the other Specialist Commissions, notably the Terrestrial Animal Health Code Commission and the Biological Standard Commission, and highlighted the need that there should be an overlap of meetings to provide an opportunity for discussions between the Commissions. It was noted with appreciation that the Scientific and Technical Department had made arrangements to this effect in planning the next meetings of the Specialist Commissions in September 2010, creating also a possibility of scheduling a meeting of the Presidents of the relevant Commissions. The following issues arising from the report of the September meeting of the Commission were briefly discussed:

### **1.1. Mandate and working procedures of the Scientific Commission**

The Commission reviewed and adopted the new terms of reference and noted that the proposal for a change of the name of the Commission from Scientific Commission for Animal Diseases to Scientific Commission for Terrestrial Animal Health would be considered by the Council of the OIE.

### **1.2. Agreement of confidentiality and impartiality of Members of the Specialist Commissions and *ad hoc* Groups**

The Commission took note of the comment by the Director General that this issue would be analysed by the newly appointed legal advisor to the OIE, for further discussion and a decision by the Council of the OIE.

### **1.3. OIE guidelines on A/H1N1 outbreaks for Members**

The Commission reviewed and endorsed with thanks the document “OFFLU Strategy document for surveillance and monitoring influenzas in animals” that was developed by the OIE/FAO network of expertise on animal influenza (OFFLU). Note was taken of an addition to this document prepared by the Working Group on Wildlife Diseases to reflect the specific requirements for wildlife surveillance related to animal influenzas. The document was already available on the OFFLU website.

### **1.4. OIE/FAO programme for a global FMD control strategy**

Information was provided by the Scientific and Technical Department on discussions that had recently taken place between the OIE and the FAO on future collaboration in planning for a global FMD control strategy. The Commission discussed and reviewed the draft plan for such a strategy that was developed by the *Ad hoc* Group on FMD. It was acknowledged that the document provided an excellent basis for further discussion but still needed to be refined to provide a sound scientific rationale for the development of a global strategic plan if aspects of the proposed strategy (which included concepts reflected in the proposal for a “Progressive Control Pathway for FMD” developed by the FAO) were to be included as new text into the *Terrestrial Animal Health Code*. The Commission concluded that further refinement of the document and the possible development of text for inclusion into the *Terrestrial Code* chapter on FMD should be done as a matter of priority by the *Ad hoc* Group on FMD, for further consideration by the Commission.

### **1.5. BSE surveillance: Recommendations on the use of the BSurvE model**

The Commission noted that the recommendation on this aspect from the *Ad hoc* Group on BSE status recognition was still pending. The Commission reiterated its previous decision that the *Ad hoc* Group at its next meeting should conclude their discussions on this aspect and advise the Commission accordingly.

### **1.6. Continuation of official status recognition for CBPP**

The Commission noted that only six Members were recognised free from CBPP and that except for two possible pending applications, very few countries seem to be interested in obtaining official recognition for CBPP status. The Commission suggested that the Director General could evaluate the real trade advantages experienced by the Members currently recognised as officially free from CBPP as well as the reasons for other Members not submitting dossiers for evaluation, and determine the need to further continue official assessment of country applications for CBPP status recognition.

### **1.7. Peste des Petits Ruminants (PPR)**

The Commission noted that its request to convene an *Ad hoc* Group to consider standards for the *Terrestrial Code* could not be implemented. The Commission reiterated its previous decision on the importance of this disease and urged the Scientific and Technical Department to convene an *Ad hoc* Group of experts as a matter of urgency. Preference should be given to include experts from countries facing real challenges of the disease – especially Africa, Asia and Eastern Europe.

## 1.8. Comments of the CVP on the report of the Scientific Commission of September 2009

The Commission considered the request of the Standing Veterinary Committee of the Southern Cone Countries (CVP) to review the requirements in Chapter 8.5 (FMD) of the *Terrestrial Code* as it relates to a *containment zone*. The Commission noted that there were possible inconsistencies between the text in Chapters 4.3 and 8.5, subsequently proposed changes to the text in Articles 4.3.3 and 8.5.7, and forwarded the text to the *Terrestrial Code* Commission for consideration and further processing.

## 1.9 *Ad hoc* Group on climate and environmental changes as it relates to animal diseases and animal production

The Commission was informed that following a discussion on this aspect at the Council of the OIE and taking into consideration the recommendations of Resolution XXXI adopted at the 77<sup>th</sup> General Session, the Director General decided to convene an *Ad hoc* Group to discuss this subject with the view to developing a policy document for the OIE. The *Ad hoc* Group would report back to the Commission after its first meeting scheduled for April 2010.

## 2. Review of reports of *Ad hoc* Group meetings

### 2.1. Reports of the *Ad hoc* Group on Epidemiology: 15 – 17 September 2009, 17 – 19 November 2009 and 5 – 7 January 2010

During the meeting of the Commission in September 2009, several priority issues were identified for subsequent discussion by the *Ad hoc* Group, which should then advise the Commission. The most important issues were: the development of a draft policy on the wildlife-livestock interface to guide future approaches in the setting of OIE standards; the development of explanatory text on the concept of a *protection zone*; and providing further clarity on the application on the concept of *compartmentalisation* for Members. Selected Chapters in the *Terrestrial Code* on which Member comments were received were also forwarded to the *Ad hoc* Group for advice to the Commission. These are reflected under section 5 of this report. The Commission noted with appreciation the excellent work of this *Ad hoc* Group in assisting the Commission in its decision-making process.

The Commission reviewed and adopted the reports after detailed discussions. The reports are attached as Appendix III, IV and V.

#### 2.1.1. *Harmonisation of surveillance guidelines for Classical swine fever (CSF), avian influenza (AI) and Newcastle disease (ND)*

Following a request of the Code Commission, the Scientific Commission requested the *Ad hoc* Group to review the approach in the *Terrestrial Code* for the surveillance guidelines for CSF and to harmonise the approach with that of AI and ND. The Commission reviewed and adopted the revisions made to Chapter 15.3 for further attention of the Code Commission.

#### 2.1.2. *Surveillance and vaccination programmes: Antibody prevalence*

The *Ad hoc* Group had confirmed the view of the Commission expressed during its meeting in September 2009, that as a general guideline, to protect against FMD virus infection, a herd should maintain more than 80% animals having a high enough level of antibodies.

#### 2.1.3. *Draft policy paper on the wildlife-livestock interface as it relates to standard setting by the OIE*

The Commission noted with appreciation the work done by the *Ad hoc* Group to give inputs on this important issue for the OIE. The Commission endorsed the recommendations of the draft document as reflected in the report of the *ad hoc* Group. Of particular interest are the proposed approaches for disease status of OIE listed diseases with a wildlife component; the application of zoning and compartmentalisation for such diseases; approaches to surveillance guidelines and the advantages of a pathogen approach for these diseases. The proposals of the *Ad hoc* Group would now be combined by the Scientific Commission with the recommendations of the Working Group on Wildlife Diseases to produce a document for which inputs would be sought from the Code Commission before a final policy for further guidance be formulated.

#### 2.1.4. *Comments on aspects of the pilot project on compartmentalisation*

The Commission noted that the *Ad hoc* Group provided comments on documents provided to the Group by the International Trade Department without being sanctioned or requested by the Scientific Commission. Observing that discussions on this aspect had not been requested by the Scientific Commission nor in any documents provided to the Commission for referral to the *Ad hoc* Group, the Commission reiterated its decision of its September meeting that working examples of the application of the concept of compartmentalisation by Members (for example the export of ostriches, and marketing of pigs from ASF infected areas and the pilot projects on compartmentalisation initiated by the OIE) could be studied and evaluated to help to allay the fears and uncertainties that remained with some Members in applying this concept. Examples of the pilot studies to be requested from the International Trade Department and together with examples already received from a Member should be provided to the *Ad hoc* Group for evaluation during its next meeting and to provide advice to the Scientific Commission.

#### 2.1.5. *Evaluation on the progress with the development of a 'Handbook for Terrestrial Animal Health Surveillance'*

The Commission noted and supported the comments of the *Ad hoc* Group to ensure that momentum be maintained in the development of this important handbook for Members.

#### 2.1.6. *Guiding text for Chapter 4.3 on the requirements for the establishment and maintenance of a protection zone*

The Commission reviewed and discussed the draft text for Article 4.3.4 of the *Terrestrial Code*, to provide more clarity to Members for the establishment of a *protection zone*. The Commission proposed to change the text in the *ad hoc* Group report, taking into account that a protection zone need not necessarily only be applied to separate infection from non-infection and that the emphasis should be broader to accommodate the separation of subpopulations of different status. It was accepted that a *protection zone* could for example also be established between a zone free without vaccination and a zone free with vaccination. Recognition should also be given on the difference in risk in the event of an outbreak of a disease whether a protection zone was situated within or outside a free zone. The Commission also reiterated its view that for practical purposes a "high surveillance zone" and a *protection zone* are identical concepts and that the latter term should be used where this concept was applied, given the former term was not defined within the OIE *Terrestrial Code* glossary. The text proposed by the *Ad hoc* Group was amended accordingly and the Scientific Commission decided to forward it to the Code Commission for consideration.

The Scientific Commission noted that work on the development of generic guidelines on surveillance and control of new and emerging zoonotic diseases as well as the development of guidelines for generic approaches to disease control, was ongoing and would be incorporated into the work programme of the *Ad hoc* Group for 2010/2011.

## 2.2 **Reports of the *Ad hoc* Group on Evaluation of Rinderpest Disease Status of Members: 23 – 24 September 2009 and 19 – 21 January 2010**

The Commission expressed its appreciation to the efforts by the OIE to expedite the process to conclude the recognition for global disease status of the remaining 22 countries. The Commission also supported the division of these 22 countries in two categories to enable more focused attention on those countries from which more detailed information would be required to enable an evaluation in accordance with the requirements of the *Terrestrial Code*.

Note was also taken of the outcome of the meeting of the FAO/OIE Joint Committee on the Global Eradication of Rinderpest that took place at the FAO in Rome in December 2009 and of the decisions taken on the actions needed in the post rinderpest eradication period to ensure maintenance of global rinderpest free status. The Commission added its support to that of the Biological Standards Commission, which adopted draft guidelines for rinderpest virus sequestration, and supported the request of the *Ad hoc* Group that this process would be addressed separately from the process for official status recognition.

The Commission acknowledged and supported the proposal for a review of the current *Terrestrial Code* Chapter to reflect the actions that need to be taken in the post rinderpest eradication period.

The Commission supported the opinion of the *Ad hoc* Group on the transparent approach recently taken by the Iranian Veterinary Authorities to verify their free status following an investigation by the FAO on information provided by the OIE.

The recommendations for the allocation of rinderpest disease freedom to the following countries and territories evaluated by the *Ad hoc* Group were supported by the Scientific Commission: Bangladesh, Cambodia, Cameroon, Central African Republic, Chad, Kuwait, Djibouti, Russian Federation, Palestinian Autonomous Territories, Maldives, Niger, Nigeria, Yemen, Georgia, Israel, Qatar, Somalia<sup>1</sup>, Syria, Dominica, Tonga, Wallis and Futuna, Faeroe Islands.

The Commission supported the request of the Delegate of the United Kingdom for the allocation of rinderpest free status to non-contiguous territories listed by the Delegate in his letter of 25 January 2010 to the Director General. The member of the Commission from Argentina requested to have his abstention in this discussion recorded in this latest report.

The reports of the *Ad hoc* Group were adopted.

### **2.3 Report of the *Ad hoc* Group on Brucellosis: 24 to 26 November 2010**

The Commission reviewed and adopted the report of the *Ad hoc* Group. The draft chapter was reviewed and minor changes were made. The Commission expressed concern on the possible trade restrictions implied with the approach of the *Ad hoc* Group on safe commodities for trade and requested that further scientific evidence be sought on hides and skins as well as meat as possible safe commodities for trade.

The Commission requested that another meeting of the *Ad hoc* Group be scheduled to review the changes made and to consider drafting similar chapters for brucellosis in small ruminants and porcines.

The Commission requested that the Scientific and Technical Department enquire, via the Biological Standards Commission, from the expert group on camelidae the feasibility and need for a specific chapter in the *Terrestrial Code* on Brucellosis in camelids and to advise the Commission accordingly.

The Commission agreed to review again the draft Chapter on Bovine Brucellosis at its next meeting after review by the *Ad hoc* Group and would then forward it to the Code Commission for consideration.

The report of the *Ad hoc* Group was adopted and is attached as [Appendix VI](#).

### **2.4 Report of the *Ad hoc* Group on Evaluation of FMD Status of Members: 15 – 16 December 2009**

#### *2.4.1. Recommendations of the Ad hoc Group on Evaluation of FMD Status of Members*

The Commission reviewed the evaluations on the Foot and Mouth Disease status of Members undertaken by the *Ad hoc* Group and confirmed the recommendations and took decisions as follows:

**San Marino:** Recommended as country free of FMD where vaccination is not practised

**Lesotho:** Recommended as country free of FMD where vaccination is not practised, following additional data from the Delegate of the country.

**Botswana Zone 4a:** Recommended as a zone free from FMD where vaccination is not practised.

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<sup>1</sup> The forthcoming meeting of AU/IBAR Somali Ecosystem Rinderpest Eradication Coordination Unit (SERECU-II) is expected to re-confirm the information on the disease free status.

**Philippines - Zones 1 and 3 (Island of Luzon):** The *Ad hoc* Group had requested the Commission to consider these zones as FMD free where vaccination is not practised. The movement of vaccinated animals from Luzon Zone 2 to these zones was banned on 18 March 2009 and thus Luzon Zones 1 and 3 would be eligible for free status without vaccination on 18 March 2010 in accordance with the recommendation of the *Ad hoc* Group, as a lapse of 12 months after enforcement of the movement ban would provide sufficient assurance on absence of virus circulation and infection. The Commission resolved to recommend the granting of free status without vaccination for Zones 1 and 3, provided the country could verify that the *status quo* did not change since submission of the report to the OIE. The recommendation to grant free status to Zones 1 and 3 should be confirmed after ascertaining compliance with the requirements of the *Terrestrial Code* by end of March 2010.

**Swaziland:** The Commission confirmed the reinstatement of Swaziland as a country free from FMD not practising vaccination, following the successful containment of an outbreak of FMD in 2000 and 2001.

**Turkey - Thrace region:** The Commission noted that there were initially non-conformities related to the *Terrestrial Code* Article 8.5.9 due to the exception allowing the transfer of animals from the infected zone in Anatolia to markets in Thrace and the probability of home-slaughter. Moreover, there was no evidence provided on the number of suspected cases and the follow-up. Following the meeting of the *Ad hoc* Group in December 2009, the OIE received an official letter from Turkey on a Ministerial decision banning the transfer of ruminants from Anatolia to Thrace.

Following its request to the Director General, the Delegation of Turkey had a discussion with the Commission on the Ministerial declaration and the control measures that had been implemented since the submission of the original request to the OIE and its evaluation by the *Ad hoc* Group. The Commission once again expressed its concern to the Delegation on the need for proof of compliance with Articles 8.5.9 and 8.5.12 of the *Terrestrial Code* and on the need to provide information on suspected cases as an indicator of vigilance. The Delegation was informed that the Commission would consider recommending the requested status for the Thrace region, provided that 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.

After consultation with the Director General, it was also decided that an expert mission would be despatched to Turkey before the General Session in May in order to verify the implementation and supervision of the Ministerial declaration. A letter to this effect would be sent by the Director General to the Delegate of Turkey, and OIE Members would be notified accordingly in a letter informing them of country status applications that would be presented for adoption at the World Assembly of OIE Delegates in May 2010.

**Columbia:** The Commission considered the request of the Delegate of Colombia to reinstate the FMD free status with vaccination after the successful establishment of a containment zone to manage the outbreak of FMD in the region and after compliance with the requirements of the *Terrestrial Code* for the reinstatement of status. The Commission had a discussion with a Delegation of Columbia explaining the decision of the Commission to reinstate the FMD free status with vaccination. The Commission conveyed its concern to the Delegation for the relatively long period of 4 months that it took to meet the requirements for the establishment of a containment zone.

Two further applications from other Members were discussed and the Commission endorsed the opinion of the *Ad hoc* Group not to grant the requested free status.

#### 2.4.2. *Establishment of a containment zone*

Following the discussions with the Delegation of Columbia and the request received from the CVP (see section 1.8 of this report) the Commission once again reviewed the requirements for the establishment of a containment zone. It was reiterated that to enable a country to gain full trade advantage with the establishment of a containment zone, the establishment thereof should be a rapid process and be implemented without delay. The text in Article 8.5.7 of the *Terrestrial Code* was amended accordingly for clarification, reflecting this need. The proposed text would be submitted to the Code Commission for consideration.

#### 2.4.3. OIE/FAO programme for a global FMD control strategy

The discussions of the Scientific Commission on this subject are reflected under section 1.4 above.

#### 2.4.4. Guiding text for Chapter 4.3 on the requirements for the establishment and maintenance of a protection zone

The discussions of the Scientific Commission on this subject are reflected under section 2.1.6 above.

#### 2.4.5. FMD outbreak in Republic of Korea

The Commission discussed the request of the Delegate of the Republic of Korea (ROK) in a letter addressed to the Director General on 8 February 2010, to maintain the status of the Island of Jeju as a zone free from FMD where vaccination is not practised, while recognising that the FMD status of the mainland of the ROK has been revoked following recent outbreaks of the disease.

The Commission noted that in November 2002 when the FMD status of the ROK was reinstated following an outbreak of FMD earlier in 2002, the Island of Jeju was included in this reinstatement by default given that the island was integral part of the national territory. The Commission agreed that should the ROK wish that Jeju be granted a FMD status separate from the rest of the ROK, a new, separate application would need to be submitted to the OIE and be evaluated by the Scientific Commission and by a relevant *ad hoc* Group, before any recommendation be forwarded to the World Assembly.

The Commission reviewed and adopted the report after detailed discussions.

### 2.5. Report of the *Ad hoc* Group on Rabies: 12 – 13 January 2010

The report of the *Ad hoc* Group, together with the proposed draft Chapter for the *Terrestrial Code*, was reviewed by the Scientific Commission. The Commission reiterated that the primary focus of the Chapter should be on lyssavirus genotype-1 (i.e. 'classical rabies') infections with the main objective to control canine or dog-transmitted rabies. Several changes to the draft chapter were proposed for further discussion by the *Ad hoc* Group and re-submission to the Commission for approval. The proposal for a category for disease freedom in areas mainly threatened by dog rabies (dog-to-dog transmitted rabies) was regarded as a novel initiative and the Commission supported this initiative as well as the linkage in the proposed text between the existing OIE Guidelines for the control of stray dogs and rabies control. The Commission questioned the scientific rationale to include canine semen as a risk factor for rabies transmission and requested that scientific justification be provided if it was proposed for inclusion in the text. Several Articles in the proposed draft chapter on the movement of animals and wild species could also be considered for merging in order to make the chapter more user-friendly.

The Scientific and Technical Department was requested to convene another meeting of the *Ad hoc* Group to consider the comments and suggestions of the Commission before the draft Chapter could be submitted for further processing by the Code Commission. It was also suggested that an expert from the Asian region, where dog rabies was an ongoing problem and a major cause of human mortalities, should be considered for inclusion in the *Ad hoc* Group for the next meeting.

The Commission requested that the comments and suggestions of the *Ad hoc* Group on a review of the Chapter on rabies in the *Terrestrial Manual*, be forwarded to the Biological Standards Commission for consideration.

The Commission, with appreciation, took note of the information provided by the Scientific and Technical Department on the progress with hosting of the next global OIE conference on rabies in Korea in 2011. It was confirmed that a member of the Commission would participate in the preparation process.

The Commission reviewed and adopted the report after detailed discussions. The report is attached as Appendix VII.

## **2.6. Report of the *Ad hoc* Group on Diseases of Honey Bees: 25 – 27 January 2010**

The Commission reviewed and adopted the report of the *Ad hoc* Group. The *Ad hoc* Group was thanked for excellent work done on this important issue for the OIE. The Commission supported the recommendations made by the *Ad hoc* Group on changes and amendments to Chapter 4.14., “*Hygiene and disease security procedures in apiaries*” in the *Terrestrial Code* and agreed to forward these to the Code Commission for further processing. Comments were also made on changes necessary in the *Terrestrial Manual* which the Commission agreed to forward to the Biological Standards Commission for consideration. The Commission concurred with the *Ad hoc* Group that an OIE publication on guidelines for honey bees could be very useful for Members and should be considered for publication by the OIE.

The Commission supported the request of the *Ad hoc* Group that a Chapter on Nosema be considered for re-introduction as well as a review of the current list of OIE listed diseases for honey bees.

Special note was taken of the comments of the *Ad hoc* Group on the importance of diseases of honey bees and use of pesticides as they relate to global food security. The Commission expressed its support to these comments.

The Commission noted that the newly amended chapters could provide valuable information for the OIE Working Group on Wildlife Diseases (WGWD) especially in relation to disease in wild bees, and requested that the amended Chapters and report of the *Ad hoc* group be forwarded to the WGWD after review by the Code Commission.

The Commission reviewed and adopted the report after detailed discussions. The report is attached as [Appendix VIII](#).

## **2.7. Report of the *Ad hoc* Group on the Official Disease Status Recognition for Equine Diseases – African Horse Sickness: 27 – 29 January 2010**

Following a request by the FEI (International Equine Federation) to the Director General that the OIE give consideration for the official recognition of disease status of OIE listed equine diseases, the Commission during its meeting in September 2009 supported the request and concluded that such a process should be initiated under the auspices of the Commission; the Director General was requested to convene an *Ad hoc* Group for this purpose. African horse sickness (AHS) and Glanders were identified as the two priority diseases, starting with AHS. During the meeting of the 26th Conference of the OIE Regional Commission for Asia, the Far East and Oceania held in November 2009 in Shanghai, People’s Republic of China, this issue was discussed in detail and a Resolution was adopted requesting the Director General to proceed with this process.

The Scientific Commission took note of and supported the comments of the *Ad hoc* Group on the different approach and considerations needed for evaluating official disease status of equidae relative to the approach taken for livestock diseases such as FMD or BSE. The proposal by the *Ad hoc* Group that provision should be made for the historical recognition of freedom from AHS, self-declaration of freedom, including seasonal freedom from disease, was supported by the Commission. The comments by the *Ad hoc* Group on official disease status recognition for Glanders, which was also related to the availability of a reliable diagnostic test, were noted and would be considered again after the revised chapter for AHS be submitted for adoption to the World Assembly.

The Scientific Commission endorsed the proposed changes to the *Terrestrial Code* Chapter on AHS as well as the two country questionnaires on AHS drafted by the *Ad hoc* Group to assist Members applying for official disease status recognition, similar to the process applied for FMD, CBPP, rinderpest and BSE. Of notable importance was the inclusion of a concept of a *containment zone* for AHS which the Commission supported as it could be instrumental in reducing the financial impact of the disease in countries having a free status for AHS. The response of the *Ad hoc* Group on Member comments on specific *Terrestrial Code* Chapters on equine diseases, was discussed and endorsed by the Scientific Commission for consideration by the Code Commission.

The Commission noted that the chairman of the *Ad hoc* Group, who was also the current editor for the *Terrestrial Manual* Chapter on AHS, requested inputs from the *Ad hoc* Group members on possible changes and amendments to the revised Chapter on AHS in the *Manual*. The *Ad hoc* Group discussed this matter and recorded their comments for consideration by the Biological Standards Commission.

The Scientific Commission expressed its appreciation for the excellent work conducted by the *Ad hoc* Group in such a limited time. The report was adopted with the request that the relevant documents and appendices be forwarded to the Code Commission and Biological Standards Commission for their consideration.

The Commission reviewed and adopted the report after detailed discussions. The report is attached as Appendix IX.

## **2.8. Report of the *Ad hoc* Group on Bovine Spongiform Encephalopathy (BSE) Risk Status Evaluation of Members: 9 – 10 February 2010**

The Commission noted that due to the large number of dossiers received for evaluation within the limited time of two days, the *Ad hoc* Group could not consider other issues on the agenda. The Commission discussed and adopted the report of the *Ad hoc* Group, including the recommendations on the allocated risk status of the 9 Member dossiers that were evaluated.

The Commission agreed to recommend to the General Assembly to adopt the risk status recognition of the following Members:

India:	negligible risk status
Republic of Korea:	controlled risk status
Panama:	controlled risk status
Peru:	negligible risk status

Three other countries requested a review of their controlled BSE risk status to obtain a negligible BSE risk status. The *Ad hoc* Group, based on detailed evaluation, had concluded that the applicant countries did not yet meet the requirements of the *Terrestrial Code* to qualify for a change in risk status.

Two other countries were evaluated and it was concluded that they did not yet meet the requirements of the *Terrestrial Code* for either a controlled or negligible risk status for BSE.

The Commission invited the *Ad hoc* Group, during its next meeting, to finalise comments to the Commission on the application of the BSurvE model in BSE surveillance. Comments received from Members on the current country questionnaire for evaluating BSE risk status and the revision of the form for annual reconfirmation of BSE risk status should also be considered by the *Ad hoc* Group at its next meeting to provide advice to the Commission.

The Commission reviewed and adopted the report after detailed discussions.

## **2.9. Report of the *Ad hoc* Group on Swine Vesicular Disease (SVD): 16 – 17 February 2010**

Following extensive comments received from Members on the draft Chapter, the Commission had decided to refer the entire Chapter back to the *Ad hoc* Group for review. The Commission reviewed the report of the *Ad hoc* group and the proposed amendments to the draft Chapter for the *Terrestrial Code*. The Commission noted the remarks and recommendations of the Group on the possibility of removing SVD from the list of OIE listed diseases due to lack of proof of international spread and given the fact that new tests and technologies were now available to distinguish SVD from FMD, one of the apparent main reasons why the disease was originally included in the OIE list having been difficulties for differential diagnosis for FMD in pigs. The Commission discussed this issue in depth and concluded not to support the recommendation to remove SVD from the OIE list at this stage but agreed that the situation should be monitored and re-evaluated at a later stage.

The Commission recommended that the graphic representation on singleton reactors in the report be reviewed by the Biological Standards Commission to check compatibility and consistency with the Chapter on SVD in the *Terrestrial Manual*.

With the exceptions outlined above, the Commission adopted the report and agreed that the report, together with the amended Chapter, be submitted to the Code Commission for consideration.

The Commission reviewed and adopted the report after detailed discussions. The report is attached as Appendix X.

#### **2.10. Report of the *Ad hoc* Group on Crimean Congo Haemorrhagic Fever (CCHF): 16 – 17 February 2010**

Although the need for convening such an *Ad hoc* Group was identified some time ago, limited availability of suitable experts had prevented the OIE from proceeding with this matter. It was evident from the report of the *Ad hoc* Group that the matter was discussed in detail and the recommendations of the *Ad hoc* Group were supported by the Commission. It was agreed that due to valid reasons identified by the *Ad hoc* Group, consideration could not be given at this stage to develop a Chapter for the *Terrestrial Code* on this disease as well as other related haemorrhagic fevers and that the Biological Standards Commission should be invited to take note of the recommendation of the Group, as supported by the Scientific Commission, that there was a need for the inclusion of diagnostic tests on CCHF and other related haemorrhagic fevers in the *Terrestrial Manual*.

The Commission concluded that an approach similar to that taken for CCHF should be followed for PPRS in pigs, i.e. not to proceed with the development of a Chapter for the *Terrestrial Code* but to compile information on the control and diagnosis of the disease and publish it on the OIE website and in the *Bulletin*. The Scientific and Technical Department was requested to consider managing such an informative publication with the assistance of the experts of the *Ad hoc* group.

The Commission adopted the report and recommendations of the *Ad hoc* Group, as attached in Appendix XI.

#### **2.11. Report of the *Ad hoc* Group on the Handbook for Terrestrial Animal Health Surveillance: 29 September – 1 October 2009**

The Commission reviewed and adopted the report of the *Ad hoc* Group, and noted with appreciation that good progress was made in formulating a work plan for the completion of this important task for OIE Members. Taking note of the inputs already received, the Commission reiterated its request for support by the Scientific and Technical Department to ensure that good momentum be maintained to complete the process.

The Commission adopted the report and recommendations of the *Ad hoc* Group, as attached in Appendix XII.

#### **2.12. Report of the *Ad hoc* Group to Develop an OIE Network of Collaborating Centres to Reduce the Risk of Infectious Diseases at the Animal-Human-Pathogen-Ecosystems Interface: 28 – 29 July 2009**

The Commission took note of the report of this *Ad hoc* Group, which was already discussed and approved by the Biological Standards Commission, and concluded that outputs of this *Ad hoc* Group might usefully be incorporated into the proposed Handbook for Terrestrial Animal Health Surveillance, currently under elaboration.

#### **2.13. Report of the OIE/FAO/WHO consultative *Ad hoc* Group on Collaborative Activities on Antimicrobial Resistance: 30 September – 1 October 2009**

The Commission took note of the report of the *Ad hoc* Group and agreed with the proposal requesting the Director General to convene an *Ad hoc* Group to update the existing Chapter in the *Terrestrial Code* on antimicrobial resistance. A date for the meeting of such an *Ad hoc* Group was provided for on the working programme of the Commission.

#### **2.14. Report of the *Ad hoc* Group on Diagnostic Tests for Trypanosomoses: 30 March – 1 April 2009**

The Commission took note of the report of the *Ad hoc* Group that reports to the Biological Standards Commission and considered the request for the Commission to consider the development of a Chapter for the *Terrestrial Code* on Surra. This request was not supported by the Commission due to possible unjustified trade implications and the lack of clear, differential diagnostic tests for the disease.

#### **3. Report of the Working Group on Wildlife Diseases: 1 – 4 February 2010**

The Commission reviewed and endorsed the report of the Working Group on Wildlife Diseases (WGWD) with appreciation. The Commission during its meeting in September 2009 had requested the WGWD together with the *Ad hoc* Group on Epidemiology, to take on the important task to prepare text on a draft policy for the OIE on the wildlife/livestock interface and how this would relate to future policy on standard setting, disease surveillance and recognition of country status for disease.

The Commission noted the request of OFFLU for the WGWD to review and give inputs on a document on surveillance for avian influenza viruses in wild birds. As this document had apparently already been adopted by OFFLU, the Commission requested the Scientific and Technical Department to ensure in the future that taking into consideration other working relationships already in operation, any requests for specific inputs for work by the WGWD or *Ad hoc* Groups be channeled through the Commission in principle and not forwarded directly by other entities or Departments to the Working Group or *Ad hoc* Groups.

The Commission noted that the Working Group produced a document on the sensitivity and specificity of some diagnostic tests for wildlife diseases in 2005 and 2006, and supported this work and the proposal that the document be updated on a yearly basis. The Commission suggested that the document also be forwarded to the Biological Standards Commission for review.

The Commission was informed that as a result of the OIE notification system in operation for the reporting of occurrences of wildlife diseases (WAHIS-Wild) it was proposed that the Chairman of the WGWD need not to reflect disease situations in the presentation to the World Assembly but that this information now be incorporated into the report to the World Assembly on the global situation of animal diseases. The Commission could not fully agree with this proposal as it was considered that the WGWD was in a better position to inform the World Assembly on the epidemiological aspects related to new and emerging diseases in wildlife and that even if the data submitted to the OIE electronically were to be reflected in another presentation, the Chairman of the WGWD should still inform the World Assembly on epidemiological aspects related to these diseases. While it was accepted that for the 79<sup>th</sup> General Session the WGWD would not have the full benefit of access to new information covering a full calendar year as a result of adopting an earlier meeting date, the WGWD should nevertheless remain responsible for conveying the supporting epidemiological information to the World Assembly.

The Commission supported the proposal of the Working Group that the White Nose Syndrome of bats be considered for inclusion in the list of diseases reportable to the OIE and agreed that this request should be forwarded to the Animal Health Information Department of the OIE.

The Commission supported the request of the Working Group that Chronic Wasting Disease in deer be monitored closely and considered for listing by the OIE.

Note was taken of the good progress with the training of Focal Points for Wildlife and the involvement of the OIE Collaborating Centres in Canada and South Africa in this process.

The Commission was informed of the EU-funded cooperative programme on “*Novel technologies for surveillance of emerging and re-emerging infections of wildlife*” (*WildTech*) and the “*Emerging Pandemic Threats Program*” recently created and funded by the US Agency for International Development that aimed at improving the global capacity to predict and prevent emerging diseases with pandemic potential (EPT). The Commission supported both initiatives and recommended that a member of the WGWD represent the interest of the OIE at meetings of Wildtech with a view to reporting back to the WGWD and the Commission.

Note was taken of the progress being made with the OIE-driven global conference on wildlife scheduled for February 2011. The Commission requested to be involved in this process and suggested that a presentation by a member of the Commission could be included in the scientific programme of the conference.

As indicated in section 2.6 above, the Commission noted that the newly amended chapters on diseases of honey bees could provide valuable information for the OIE Working Group on Wildlife Diseases especially in relation to disease in wild bees, and requested that the amended Chapters and report of the *Ad hoc* group be forwarded to the WGWD, after its review by the Code Commission.

The Commission noted with appreciation that the next meeting of the Working Group was scheduled earlier (12 – 15 October 2010) in the OIE meeting cycle so as to enable both the Scientific and Code Commissions to fully consider inputs and suggestions of the Working Group relative to issues that might be presented for adoption at the World Assembly (Doc. 78 SG/13 GT).

#### **4. OIE Networks of FMD and Bluetongue Reference Laboratories**

##### **4.1 Foot and mouth disease**

The Commission invited a representative from the OIE Reference Laboratory at Pirbright, Dr David Paton who was managing the OIE/FAO Reference Laboratories Network and the ReLAIS database delegated Dr Jef Hammond, to provide to the Commission an overview on the current global status of FMD and activities of the network. Dr Hammond provided a detailed overview on the current global situation in a presentation to the Commission, which would be shared with the World Assembly of OIE Delegates during the report of the President of the Commission at the 78<sup>th</sup> General Session in May 2010. The Commission noted with thanks the annual report of the network.

##### **4.2 Bluetongue**

The Commission, with appreciation, took note of the annual report of the OIE Reference Laboratory Network on Bluetongue.

#### **5. Issues referred to the Scientific Commission by the Terrestrial Animal Health Standards Commission (Code Commission) and issues for further consideration by the Code Commission**

The Scientific Commission reviewed several Chapters of the *Terrestrial Code* with Member comments, which had also been discussed by the relevant *Ad hoc* Groups operating under the Scientific Commission. Comments of the Scientific Commission were added to the following Chapters for further consideration by the Code Commission:

- |     |               |   |
|-----|---------------|---|
| 1.  | Chapter 10.4  | Avian Influenza (Article on surveillance)                                 |
| 2.  | Chapter 1.4   | Animal Health Surveillance  |
| 3.  | Chapter 4.3   | Zoning and Compartmentalisation   |
| 4.  | Chapter 4.4   | Application of Compartmentalisation                                       |
| 5.  | Chapter 8.5   | Foot and Mouth Disease (aspects on compartmentalisation)                  |
| 6.  | Chapter 15.3  | Harmonisation of surveillance guidelines of CSF, Newcastle disease and AI |
| 7.  | Chapter 12.1  | African horse sickness  |
| 8.  | Chapter 12.7  | Equine influenza  |
| 9.  | Chapter 12.10 | Equine viral arteritis  |
| 10. | Glossary      | Definition of a <i>quarantine station</i>                                 |

- The Scientific Commission reviewed the amended definition for the glossary of the *Terrestrial Code* and supported the amendment now acknowledging that a *quarantine station* could be used for both import and export quarantine.
- The Scientific Commission developed amended text on a containment zone (Chapters 4.3 and 8.5) for further consideration by the Code Commission.
- Explanatory text was developed for describing a *protection zone* (chapter 4.3) and was forwarded to the Code Commission for consideration.
- The *Terrestrial Code* Chapter on African horse sickness was *in toto* revised and questionnaires based on the FMD template were added to provide for official recognition of disease status for AHS. The Scientific Commission agreed to forward these to the Code Commission for consideration.

- The *Terrestrial Code* Chapters with Member comments on honey bee diseases (Chapters 9.1, 9.2, 9.3 and 9.4) as well as amendments to Chapter 4.14 were reviewed for further consideration by the Code Commission.
- Chapter 11.3 on bovine brucellosis was reviewed and amended for another review by the Commission at its September meeting before submission to the Code Commission.
- Chapter 8.10 on rabies was reviewed and amended for another review by the Commission at its September meeting before submission to the Code Commission.

## **6. Issues referred to the Scientific Commission by the Biological Standards Commission and issues for further consideration by the Biological Standards Commission**

- Draft Chapter for the *Terrestrial Code* on Surra – see section. 2.13 above
- Guidelines for sequestration of rinderpest virus – see section 2.2 above

### ***Requests for consideration/noting by the Biological Standards Commission:***

- Brucellosis – *Ad hoc* Group report and section 2.3 above
- Rabies – *Ad hoc* Group report and section 2.5 above
- Diseases of honey bees – *Ad hoc* Group report and section 2.6 above
- African horse sickness – *Ad hoc* Group report and section 2.7 above
- SVD – *Ad hoc* Group report and section 2.9 above
- Crimean Congo haemorrhagic fever – *Ad hoc* Group report and section 2.10 above
- Antimicrobial resistance – *Ad hoc* Group report and section 2.12 above
- Diagnostic tests for wildlife diseases – section 3 – report of the WGWD, Appendix VI

## **7. Other Issues Discussed by the Commission**

### **7.1 Orbiviruses of wild ruminants and bluetongue virus and epizootic haemorrhagic disease virus (EHD)**

The Scientific Commission discussed the suggestion of developing a separate Chapter on EHD in the *Terrestrial Code*. It was concluded that there was a need to discuss this matter in depth, the possible options being either the development of a new Chapter for this disease or including this into the current Chapter on bluetongue. This question would be added to the agenda of the next meeting of the Scientific Commission, also considering the comments from the WGWD.

### **7.2 Official disease status recognition for classical swine fever (CSF)**

Following a request from the Director General, the Commission agreed to request the Director General to convene an *Ad hoc* group to consider possible amendments to the *Terrestrial Code* Chapter on CSF to make provision for official status recognition. A meeting of such an *Ad hoc* Group was already scheduled in the working programme of the Commission.

### **7.3 Guidance for Members on the control of Q Fever**

Following outbreaks of Q Fever and subsequent human cases of the disease in a Member country, the Commission was requested to consider possible development of a Chapter on Q Fever in the *Terrestrial Code*. After detailed discussion, the development of a new chapter was not considered feasible or necessary; however the Commission suggested that the Scientific and Technical Department consider compiling available information on the epidemiology and control of the disease including the related public health aspects, for publication on the OIE website and possibly also in the *OIE Bulletin*.

#### **7.4 Enquiry on the perceived discrepancy between the use of the terms virus circulation and virus infection in the *Terrestrial Code***

The Commission on request discussed the use of the term “virus circulation” for the identification of a case of FMD as described in the *Terrestrial Code* but not similarly for other listed viral diseases. The Commission considered that the term had been specifically introduced into the FMD chapter to accommodate the need to distinguish between areas free with and free without vaccination for FMD – a concept not applicable to the other viral diseases. The Commission therefore concluded that there was no need to propose an amendment to other Chapters on viral diseases.

#### **7.5 Expert missions to Members to assess the maintenance of official disease status**

In discussing this issue, the Commission reiterated the need to conduct such missions to Members - not only to verify compliance with the conditions of the *Terrestrial Code* for a particular disease status, but also to assist Members in the application of the requirements of the *Terrestrial Code* where Members might have encountered difficulties. For the MERCOSUR region, the Director General would only be requested to arrange for such a mission in 2011 to follow-up on the Agreement between the OIE and the CVP. The Commission agreed that Columbia would be included in the next expert mission and that possibly an expert mission to the Andes region of South America could be considered as well as expert missions to other regions of the OIE to assess the maintenance of disease status.

### **8. Working programme of the Scientific Commission for 2010 and 2011**

The Commission reviewed and updated the progress made with its working programme adopted during its meeting in September 2009. Dates for *Ad hoc* Group meetings following the General Session in May 2010 were identified and recorded on the work programme of the Commission. Priorities for the next twelve months were also identified and adopted by the Commission.

### **9. Next meetings of the Scientific Commission for Animal Diseases**

The next meetings of the Scientific Commission were scheduled to take place at the OIE headquarters from 7 to 10 September 2010 and 15 to 18 February 2011.

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.../Appendices

**MEETING OF THE OIE SCIENTIFIC COMMISSION FOR ANIMAL DISEASES**  
**Paris, 2 - 5 March 2010**

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**Agenda**

1. Report of the meeting of the Scientific Commission for Animal Diseases of 8 to 11 September 2009
  - 1.1. Mandate and working procedures of the Scientific Commission
  - 1.2. Agreement of confidentiality and impartiality of Members of the Specialist Commissions and *ad hoc* Groups
  - 1.3. OIE guidelines on A/H1N1 outbreaks for Members
  - 1.4. OIE/FAO programme for a global FMD control strategy
  - 1.5. BSE surveillance: Recommendations on the use of the BSurvE model
  - 1.6. Continuation of official status recognition for CBPP
  - 1.7. Peste des Petits Ruminants (PPR)
  - 1.8. Comments of the CVP on the report of the Scientific Commission of September 2009
  - 1.9. *Ad hoc* Group on climate and environmental changes as it relates to animal diseases and animal production
2. Review of reports of *Ad hoc* Group meetings
  - 2.1. Reports of the *Ad hoc* Group on Epidemiology: 15 – 17 September 2009, 17 – 19 November 2009 and 5 – 7 January 2010
    - 2.1.1. *Harmonisation of surveillance guidelines for Classical swine fever (CSF), avian influenza (AI) and Newcastle disease (ND)*
    - 2.1.2. *Surveillance and vaccination programmes: Antibody prevalence*
    - 2.1.3. *Draft policy paper on the wildlife-livestock interface as it relates to standard setting by the OIE*
    - 2.1.4. *Comments on aspects of the pilot project on compartmentalisation*
    - 2.1.5. *Evaluation on the progress with the development of a 'Handbook for Terrestrial Animal Health Surveillance'*
    - 2.1.6. *Guiding text for Chapter 4.3 on the requirements for the establishment and maintenance of a protection zone*
  - 2.2. Reports of the *Ad hoc* Group on Evaluation of Rinderpest Disease Status of Members: 23 – 24 September 2009 and 19 – 21 January 2010
  - 2.3. Report of the *Ad hoc* Group on Brucellosis: 24 to 26 November 2010
  - 2.4. Report of the *Ad hoc* Group on Evaluation of FMD Status of Members: 15 – 16 December 2009
    - 2.4.1. *Recommendations of the Ad hoc Group on Evaluation of FMD Status of Members*
    - 2.4.2. *Establishment of a containment zone*
    - 2.4.3. *OIE/FAO programme for a global FMD control strategy*

- 2.4.4. *Guiding text for Chapter 4.3 on the requirements for the establishment and maintenance of a protection zone*
  - 2.4.5. *FMD outbreak in Republic of Korea*
  - 2.5. Report of the *Ad hoc* Group on Rabies: 12 – 13 January 2010
  - 2.6. Report of the *Ad hoc* Group on Diseases of Honey Bees: 25 – 27 January 2010
  - 2.7. Report of the *Ad hoc* Group on the Official Disease Status Recognition for Equine Diseases – African Horse Sickness: 27 – 29 January 2010
  - 2.8. Report of the *Ad hoc* Group on Bovine Spongiform Encephalopathy (BSE) Risk Status Evaluation of Members: 9 – 10 February 2010
  - 2.9. Report of the *Ad hoc* Group on Swine Vesicular Disease (SVD): 16 – 17 February 2010
  - 2.10. Report of the *Ad hoc* Group on Crimean Congo Haemorrhagic Fever (CCHF): 16 – 17 February 2010
  - 2.11. Report of the *Ad hoc* Group on the Handbook for Terrestrial Animal Health Surveillance: 29 September – 1 October 2009
  - 2.12. Report of the *Ad hoc* Group to Develop an OIE Network of Collaborating Centres to Reduce the Risk of Infectious Diseases at the Animal-Human-Pathogen-Ecosystems Interface: 28 – 29 July 2009
  - 2.13. Report of the OIE/FAO/WHO consultative *Ad hoc* Group on Collaborative Activities on Antimicrobial Resistance: 30 September – 1 October 2009
  - 2.14. Report of the *Ad hoc* Group on Diagnostic Tests for Trypanosomoses: 30 March – 1 April 2009
  - 3. Report of the Working Group on Wildlife Diseases: 1 – 4 February 2010
  - 4. OIE Networks of FMD and Bluetongue Reference Laboratories
    - 4.1 Foot and mouth disease
    - 4.2 Bluetongue
  - 5. Issues referred to the Scientific Commission by the Terrestrial Animal Health Standards Commission (Code Commission) and issues for further consideration by the Code Commission
  - 6. Issues referred to the Scientific Commission by the Biological Standards Commission and issues for further consideration by the Biological Standards Commission
  - 7. Other Issues Discussed by the Commission
    - 7.1 Orbiviruses of wild ruminants and bluetongue virus and epizootic haemorrhagic disease virus (EHD)
    - 7.2 Official disease status recognition for classical swine fever (CSF)
    - 7.3 Guidance for Members on the control of Q Fever
    - 7.4 Enquiry on the perceived discrepancy between the use of the terms virus circulation and virus infection in the *Terrestrial Code*
    - 7.5 Expert missions to Members to assess the maintenance of official disease status
  - 8. Working programme of the Scientific Commission for 2010 and 2011
  - 9. Next meetings of the Scientific Commission for Animal Diseases
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MEETING OF THE OIE SCIENTIFIC COMMISSION FOR ANIMAL DISEASES

Paris, 8 – 11 September 2009

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## MEETING OF THE OIE *AD HOC* GROUP ON EPIDEMIOLOGY

Paris, 15–17 September 2009

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The OIE *ad hoc* Group on Epidemiology was welcomed by Dr Gideon Brückner, President of the Scientific Commission for Animal Diseases, who gave an overview on the main topics on the agenda. He reflected on some of the discussions from the latest meeting of the Scientific Commission (8-11 September 2009) emphasising in particular topics related to the activities of the *ad hoc* Group on Epidemiology. Dr Brückner stressed the urgency of making progress on the OIE *Handbook on Terrestrial Animal Health Surveillance*, taking account of the Scientific Commission's view on how to successfully finalise this project. He briefed the Group on the Scientific Commission's opinion to support the OIE in the ongoing discussions on the livestock–wildlife interface.

Later during the meeting, the new Head of the Scientific and Technical Department, Dr Kazuaki Miyagishima, introduced himself to the *ad hoc* Group and elaborated further on the OIE's view concerning selected topics on the agenda or requested by the Group.

The meeting was chaired by Dr Cristóbal Zepeda and Dr Jeffrey Mariner was designated to act as rapporteur.

### 1. Adoption of the agenda

The Group reviewed the agenda and recognised that the requested tasks could not all be addressed in a single meeting. The first six agenda items called for reviews of specific texts and *Terrestrial Animal Health Code (Terrestrial Code)* chapters in the light of OIE Member comments. The last three agenda items related to the development of new guidance documents on issues of importance to the OIE Members. Based on the briefing by the President of the Scientific Commission, it was agreed to follow the order of tasks on the agenda as this reflected the priorities identified by the Commission. The Group decided to postpone two agenda items to later meetings, notably the meeting scheduled in November 2009:

- Agenda item 8: Development of generic guidelines on surveillance and control of emerging infectious diseases;
- Agenda item 9: Guidelines on generic approaches to disease control.

The Group decided to address two additional topics, which were added to the agenda item 6 (Other matters):

- A Member comment in the chapter on Foot and mouth disease (FMD) (at the request of the Terrestrial Code Commission and the Biological Standards Commission); and
- a draft framework for identifying critical control points for disease risk mitigation in product value chains.

The Group adopted the amended agenda as described above. The agenda and list of participants are at Appendices I and II, respectively.

## 2. Terms of Reference for the *ad hoc* Group on Epidemiology

The Group discussed the draft Terms of Reference provided by the Scientific Commission and made changes to clarify the language without changing the content. The categories of activities where the *ad hoc* Group contributes to the application of epidemiological concepts in developing surveillance and disease control provisions and in the development of chapters for the *Terrestrial Code* were elaborated. In addition, the Terms of Reference describe the role of the *ad hoc* Group in relation to other OIE expert groups (*ad hoc* Groups, Working Groups) and in the continuous establishment of countries' disease status. The revised Terms of Reference are at [Appendix III](#).

## 3. Handbook on Terrestrial Animal Health Surveillance

The *ad hoc* Group agreed that it should continue to follow the development of the *Handbook on Terrestrial Animal Health Surveillance*, to be undertaken by a separate *ad hoc* Group. The Group recommended that the handbook should be of practical use and targeted at audiences at all levels in the Veterinary Services. The current table of contents was very broad and needed to be focused on achieving effective surveillance that meets national objectives. One goal was to assist countries in establishing effective and auditable surveillance systems based on performance indicators.

## 4. Review of OIE Member comments on selected *Terrestrial Code* chapters

### Chapter 1.4 on Animal Health Surveillance

The Group reviewed all the comments received from OIE Members on the revised chapter and provided the scientific rationale to the Scientific Commission, as requested.

### Chapters 4.3 and 4.4 on Zoning and Compartmentalisation

The Group reviewed all the comments received from OIE Members on the revised chapters and provided the scientific rationale to the Scientific Commission, as requested.

### Chapter 8.5 on Foot and mouth disease (Member comments on compartmentalisation only)

The Group reiterated its opinion that the concept of compartmentalisation was applicable to FMD. The Group reviewed Member comments on the application of disease free compartments to FMD and noted that the majority of the comments appeared to be focused on cattle production systems. The Group recognised that production systems exist within infected countries that are characterised by limited FMD risk owing to the nature of the management system. The example of vertically integrated swine production systems was mentioned and recognised. The Group also noted that technically, FMD-free compartments should be feasible with or without vaccination, and that vaccination in disease free compartments was permitted in other disease chapters. However, the Group noted that acceptability of vaccination as a control option within FMD free compartments may be challenging at this point in time and that an incremental strategy might be more appropriate. The chapter was referred back to the Scientific Commission for approval.

### Additional Member comment addressed in the chapter on Foot and mouth disease

The Group responded to an *ad hoc* request to address a comment from a Member on the use of non-structural protein (NSP) tests in surveillance programmes for FMD in vaccinated herds. The Group indicated that the tests should be suitable for detecting infection in vaccinated herds. It was noted that interpretation of test results was dependent on the rate of false positives in a vaccinated population and that this was in turn dependent on the purity of the vaccine in use. The Group recommended that the Scientific Commission request additional input from the Biological Standards Commission and/or OIE Reference Laboratories on FMD on the performance of the NSP tests and their ability to discern the intensity of immune responses.

## 5. Harmonisation of surveillance provisions in the chapter on Classical swine fever with those on Avian influenza and Newcastle disease

While reviewing the Classical swine fever (CSF) surveillance provisions, the Group simplified the text by removing unnecessary or redundant text. In harmonising the CSF surveillance provisions with those for Avian influenza and Newcastle disease, the Group deleted redundant text from the CSF chapter that also appears in the Avian influenza and Newcastle disease chapters. The Group suggested that similar changes be made to the Avian influenza and Newcastle disease chapters.

## 6. Development of a draft policy document on the livestock–wildlife interface

As an initial step the Group discussed the Terms of Reference for this task in order to frame the process for the development of a concept paper on the livestock–wildlife and to identify the questions to be addressed, seeking, as necessary, additional clarification from the Scientific and Technical Department. Possible resource documents and definitions of terms from the OIE as well as other literature to guide future discussion were identified. The experts drafted an outline of the concept paper, covering the key topics to be addressed; this outline would be circulated to all the *ad hoc* Group participants. The Group agreed to address some initial concepts prior to its next meeting in November 2009.

## 7. Development of generic guidelines on the surveillance and control of new emerging zoonotic diseases

This item was postponed to the next meeting of the *ad hoc* Group on Epidemiology, scheduled for November 2009.

## 8. Guidelines on generic approaches to disease control (in contrast to concepts for obtaining freedom stipulated in the *Terrestrial Code*)

This item was postponed to the next meeting of the *ad hoc* Group on Epidemiology, scheduled for November 2009.

## 9. Other matters

### Risk management tools: value Chains and critical control points

Dr Jeffrey Mariner provided a short presentation outlining a framework for applying critical control point approaches to the mitigation of disease risks in livestock product value chains. This concept was presented as a tool identifying, planning and evaluating potential control points. The Group considered the concept as interesting and particularly relevant to forthcoming discussion on general guidelines for disease control (see item 8).

### Surveillance and vaccination programmes

The Group discussed the use of sero-surveys using sample sizes based on the detection of the presence of antibodies as a tool for both surveillance and vaccine campaign monitoring. The concept was to set a minimum threshold for detection of the presence of sero-positives to the desired herd immunity target for the vaccination programme. For example, if the herd immunity target was 80%, the survey could be designed to detect antibodies at an 80% herd prevalence level with 95% confidence. This design would require only 4 to 5 samples per herd. Should the survey reveal clusters of herds where the presence of antibody was not detected at the 80% threshold, this would suggest vaccination campaign failures warranting follow-up. The Group found these discussions and concepts to be of interest and decided to consider the subject again when drafting general guidelines for disease control.

**10. 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.

**11. Next meeting of the *ad hoc* Group**

The Group was informed that its next meeting was scheduled for 17 to 19 November 2009.

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.../Appendices

**MEETING OF THE OIE AD HOC GROUP ON EPIDEMIOLOGY**  
**Paris, 15–17 September 2009**

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**Agenda**

1. Adoption of the agenda
  2. Terms of Reference for the *ad hoc* Group on Epidemiology
  3. *Handbook on Terrestrial Animal Health Surveillance*
  4. Review of Member comments on selected *Terrestrial Code* Chapter
  5. Harmonisation of the surveillance provisions in the chapter on Classical swine fever with those on Avian influenza and Newcastle disease
  6. Development of a draft policy document on the livestock–wildlife interface
  7. Development of generic guidelines on the surveillance and control of new emerging zoonotic diseases
  8. Guidelines on a generic approaches to disease control (in contrast to concepts for obtaining freedom stipulated in the *Terrestrial Code*)
  9. Other matters
  10. Adoption of draft report
  11. Next meeting of the *ad hoc* Group
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**MEETING OF THE OIE AD HOC GROUP ON EPIDEMIOLOGY**  
**Paris, 15–17 September 2009**

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Appendix III**OIE AD HOC GROUP ON EPIDEMIOLOGY**

**Next meetings:  
Paris, 15–17 September 2009  
& 17–19 November 2009**

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**Draft Terms of Reference  
(as revised by the Group)**

The OIE Scientific Commission for Animal Health re-iterated the need for a core group of epidemiologists to be involved in issues related to disease surveillance, general provisions on zoning, regionalisation and compartmentalisation. Additionally, participants in the *ad hoc* Group on epidemiology repeatedly served other *ad hoc* Groups as invited experts by providing supplementary expertise on epidemiology if needed; e.g. in respective *ad hoc* Groups on evaluation of OIE Members' disease status or *ad hoc* Groups in charge of drafting or revising disease-specific provisions on surveillance as a guidance for OIE Members.

**Terms of Reference:**

The *ad hoc* Group on Epidemiology is requested to support the work of the Scientific Commission by:

- developing general provisions for animal disease control,
- developing specific recommendations for disease surveillance,
- contributing to the application of epidemiological concepts in the chapters of the *Terrestrial Code*,
- participating in other *ad hoc* Groups or Working Groups as invited experts,
- proposing procedures for formally recognising the animal health status of OIE Members and participating in official disease status evaluations.

The *ad hoc* Group on Epidemiology will comprise experts who are well recognised specialists in this field and who are from renowned institutions involved in veterinary epidemiology (e.g. OIE Reference Laboratories, Collaborating Centres, institutes having an agreement with the OIE, etc.).

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## MEETING OF THE OIE *AD HOC* GROUP ON EPIDEMIOLOGY

Paris, 17–19 November 2009

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The OIE *ad hoc* Group on Epidemiology was welcomed by Dr Lea Knopf of the Scientific and Technical Department, who gave an overview on the main topics and priorities on the agenda. She reflected on the ongoing discussions on the livestock–wildlife interface and the Group’s task to develop a policy paper on this topic with high priority.

The meeting was chaired by Dr Cristóbal Zepeda and Dr Jeffrey Mariner was designated to act as rapporteur.

### 1. Adoption of the agenda

The Group reviewed the agenda and recognised that the requested tasks could not all be addressed in a single meeting and decided to focus on the policy paper on the livestock-wildlife interface. The Group decided to postpone several agenda items to later meetings.

The Group adopted the amended agenda. The agenda and list of participants are at Appendices I and II, respectively.

### 2. Policy paper on the wildlife-livestock interface

In its September meeting the Scientific Commission had developed terms of reference (Appendix III) for the task to develop a draft policy paper for OIE on the wildlife-livestock interface. The Group was able to discuss all the points in the terms of reference on and made substantial progress in elaborating this draft policy note.

The Group reviewed the definitions on wildlife developed by the Working Group on Wildlife Diseases and adopted them for the purposes of the wildlife-livestock interface policy paper. The Group noted that the use of these definitions throughout the *Terrestrial Code* would aid in clarifying and harmonising the OIE’s policy on the wildlife-livestock interface. As feral animals are often the same species as the domestic livestock of concern, infection in feral populations may offer greater risk than infection of wildlife species. Examples or areas requiring harmonization is the use of the term ‘wild pigs’ in the African swine fever and Aujeszky’s disease chapters which appear to combine feral and wild species in one term. For example, the Group proposed that the term ‘wild pigs’ be replaced by ‘feral and wild pigs.’

The Group assessed 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. The Group noted that for some diseases the status of wildlife affected the disease status of the Member and that for others the disease status of wildlife did not have an impact on the disease status of the Member. The choice of approach appeared to be based on a consideration of the risk posed by the disease status of wildlife to the national status and to trade. This was considered to be in line with the principles of the SPS-Agreement of the WTO and the OIE policy on risk-based decision making.

The Group reviewed the definition of “vector” in the *Terrestrial Code* and recommended that more specific definitions be developed for biological vs. mechanical vectors as well as arthropod vs. vertebrate vectors to assist in the discussion of specific risks that the disease status of wildlife poses to the safety of trade. The Group consulted the dictionary on veterinary epidemiology (by J. Last) on the definition of vector, but could not agree with the proposal described.

In regard to the item in the terms of reference on the suitability of a pathogen approach as opposed to a species approach for wildlife diseases, the Group reviewed the new reporting requirements that would be integrated into WAHIS as WAHIS-WILD in the future and found that the system was currently pathogen based and no further action was required.

The Group discussed the importance of wildlife disease monitoring as an indicator of eco-health within the context of the One World One Health (OWOH) initiative. The Group considered that the partnership for OWOH did not include an environmental health partner(s) and recommended that the present participating institutions needed to consider adding an environmental institution(s) and/or update the mandates of existing partners to fill the gap. As part of the discussion, the Group reviewed and supported the report of the *ad hoc* Group to Develop an OIE Network of Collaborating Centres to Reduce the Risk of Infectious Disease at the Animal-Human-Pathogen-Ecosystems Interface.

### **3. Discussion of the ‘Objectives to Guide Institutions and Authors’ and the ‘Revised Outline of the ‘Guide for Terrestrial Animal Health Surveillance’**

The *ad hoc* Group on epidemiology reviewed the Guidance to Authors and the Revised Outline of the ‘Guide for Terrestrial Animal Health Surveillance’. It was noted that generally progress had been made on the development of the ‘Guide for Terrestrial Animal Health Surveillance’ and that a useful time plan was in place. It was noted that the draft of Chapter 2 was under preparation but that the revision of Chapter 1 was now due. The electronic working platform (Google work group) for revision of Chapter 1 has not been established and should be established without delay so that the Guidance to Authors and Chapter 1 can be distributed to institutions and authors in the coming month.

The Group requested that the *ad hoc* Group on the Editing of a Guide on Surveillance Terrestrial Animal Health Surveillance be aware that the Handbook on Import Risk Analysis was in the process of being updated. The Group also stressed the importance of practical examples as communication tools for the surveillance guide, as it was not clear from the Guidance to Authors document or the revised outline of the guide how practical examples will be integrated into the Surveillance Guide.

### **4. Comments on aspects of the pilot project on compartmentalisation**

The International Trade Department requested that the Group provide input into the development of performance indicators for the pilot project on compartmentalisation. As this related to the item on compartmentalisation on the agenda, the Group felt it was an appropriate topic for discussion. The Group discussed aspects of the proposed compartmentalisation project. The economics of compartmentalisation were discussed and it was mentioned that the cost of compliance with the requirements of compartmentalisation should be considered in relation to the price of products and the market conditions in target importing countries. The Group also discussed that the compartments in the proposal would focus on avian influenza but would not address Newcastle disease. The Group did not find that either economics of the approach or the focus on avian influenza be a likely constraint in this specific case. It was noted that the credibility of certification process was a major criteria for success of the scheme.

The Group noted that a separate evaluation system was needed to measure the success of the pilot compartmentalisation scheme. This should be based on an audit of the adherence to procedures and include assessment of the bio-security system using HACCP principles, and confirmation of disease freedom of the compartment to confirm the accuracy of results provided by the compartmentalisation system. The Group noted that that the management system was expected to detect and correct problems in the course of implementation. Detection of problems and documentation of prompt and effective corrective actions was considered a prerequisite of a healthy, functional system.

In general, it was noted that countries interested in establishing disease free compartments should complete the PVS evaluation as part of the preparation for development of the scheme. The PVS tool would help to identify areas requiring strengthening and completion of the process will help to support the credibility of the certification process as it relates to compartments.

The pilot project was an opportunity to advance the concept of compartmentalisation. Many countries were interested to see specific, practical examples tested and evaluated. Thus, there would be considerable scrutiny of results of this pilot programme. An unsuccessful pilot project could be a major setback for broad acceptance of the compartmentalisation approach.

It was suggested that a checklist or framework for audit procedures which could be potentially applicable to compartments and zones, would be useful guidance for evaluating compartments. The Group would be willing to contribute to the development of a framework for auditing compartments and zones, if requested.

## **5. 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.

## **6. Next meetings of the *ad hoc* Group on Epidemiology**

The Group suggested tentative dates for next meetings for 5 to 7 January, 16 to 18 March and 16 to 18 June 2010.

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.../Appendices

Appendix I

**MEETING OF THE OIE AD HOC GROUP ON EPIDEMIOLOGY**  
**Paris, 17 – 19 November 2009**

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**Agenda**

1. Adoption of the agenda and appointment of a rapporteur
  2. Development of a draft policy document on the livestock-wildlife interface
  3. Development of generic guidelines on the surveillance and control of new emerging zoonotic diseases
  4. Guidelines on generic approaches for disease control (in contrast to concepts of obtaining freedom stipulated in the Terrestrial Code)
  5. Guidelines on implementation of compartmentalisation, containment zone and protection zone
  6. Follow up on the future “Guide on Terrestrial Animal Health Surveillance”
  7. Finalisation and adoption of draft report
  8. Next meetings of the *ad hoc* Group
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## Appendix II

**MEETING OF THE OIE AD HOC GROUP ON EPIDEMIOLOGY  
Paris, 17–19 November 2009**

**List of participants**

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Appendix III

**TERMS OF REFERENCE FOR THE DEVELOPMENT OF A DRAFT POLICY  
FOR THE OIE ON THE WILDLIFE-DOMESTIC ANIMAL INTERFACE**

(Scientific Commission, September 2009)

- 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
  - Examine trade issues related to wildlife – trade in wildlife *per se* and commodities that originate from wildlife species
  - Review of the policy for reporting of disease occurrences in wildlife taking into consideration trade concerns
  - Consider the need to alter the focus on wildlife diseases from a species approach a pathogen approach and how this would have an impact on the current policy for developing international standards
  - Analyse the implications in the development of OIE standards of the role of wildlife in the *One-World-One-Health* concept and the recommend approach the OIE should consider
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## MEETING OF THE OIE AD HOC GROUP ON EPIDEMIOLOGY

Paris, 5 – 7 January 2010

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The OIE *ad hoc* Group on Epidemiology was welcomed by Dr Lea Knopf from the Scientific and Technical Department, who gave an overview on the main topics and priorities on the agenda. Dr Elisabeth Erlacher-Vindel, Deputy Head of the Scientific and Technical Department joined the meeting and added information on the ongoing discussions on the livestock–wildlife interface and the aspects to be discussed with the Working Group on Wildlife Diseases, scheduled for early February 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. Policy paper on the wildlife-livestock interface

The Group reviewed the comments provided on the draft policy document and made appropriate changes to the text. For those diseases where the disease status of wild animals affects the status of the livestock populations, additions were made to the comments column in Table 2 of the policy document to indicate where zoning and compartmentalisation approaches might be considered to be applicable.

The Group discussed the request for explicit guidance in the *Terrestrial Code* on the livestock-wild animal interface. The Group proposed that the risk-based rationale identified as implicitly present in the *Terrestrial Code* (Section b, Draft Policy on Wildlife-Domestic Animal Interface) be clearly stated in the *Terrestrial Code*. Subsequently, the *Terrestrial Code* could be revised to harmonize minor departures from these general principles in the specific chapters or justify exceptions where deemed necessary.

### 3. Guiding Text for Chapter 4.3 on Requirements for the Establishment and Maintenance of Protection Zones

The Group reviewed the history of the concepts of buffer, containment, protection and surveillance zones in a documentation provided by the Scientific and Technical Department (Appendix III) to achieve a fuller understanding of the issues under consideration. The participants observed that the term ‘containment zone’ as used in OIE standards and documents was intended as a tool in outbreak response, whereas the OIE concepts of ‘buffer zone’ and ‘protection zone’ were intended as mechanisms for mitigating risks between established disease free and infected zones. It was noted that OIE Members used the terms ‘protection zone’ and ‘surveillance zones’ in regulations to refer to mechanisms to contain focal outbreaks of disease. The Group felt that a clear and consistent definition of the term ‘protection zone’ was needed and that this would require a dialogue process. The Group developed the following checklist of questions to guide the discussion on protection zone:

- What is the purpose of a protection zone?
- Where should protection zones be located (in free or infected zones or both?)
- What is the disease status of a protection zone?
- What happens if an outbreak occurs in the protection zone?
- Can one trade from the protection zone?

- What measures should/may be applied?
- Are protection zones permanent or temporary?
- Do protection zones require regulatory definition?
- What are the surveillance requirements in protection zones?

The Group reviewed the definition of protection zone and felt that there was no need to have protection zones between free areas of different status (e.g. areas with and without vaccination). The purpose of protection zones was to prevent introduction of infection to disease free zones. The *ad hoc* Group proposed to amend the definition as follows:

“Protection zone

means a zone established to protect the health status of animals in a free country or free zone, from those in an infected country or zone of a different animal health status, using measures based on the epidemiology of the disease under consideration to prevent spread of the causative pathogenic agent into a free country or free zone. These measures may include, but are not limited to, vaccination, movement control and an intensified surveillance.”

After considering several options, the Group drafted an Article for incorporation as guiding text in Chapter 4.3. of the Terrestrial Code as principles for establishing a protection zone. The text was transmitted to the Scientific Commission for their consideration.

The Group recommended that protection zones should be documented as part of the application for official recognition of freedom when protection zones are based in disease free country or zones.

The Group discussed how implementation of vaccination in the protection zone would affect the status of disease free areas without vaccination. The Group noted that implementation of vaccination in a protection zone should change the status of the protection zone to a disease free zone with vaccination. The original disease free zone without vaccination would retain its disease-free-without-vaccination status. Measures would need to be in place to prevent vaccinated animals from entering the free-without-vaccination zone from the protection zone.

Procedural issues on the self-declaration or official recognition of protection zones should be addressed in the individual disease chapters.

#### 4. Generic Guidelines on Surveillance and Control of New and Emerging Zoonotic Disease

The Group discussed the objectives and other relevant issues of surveillance for emerging infectious disease. Dr Kate Glynn was invited to brief the Group on One Health related activities from an OIE perspective. It was noted that the ‘OIE Network of Collaborating Centres to Reduce the Risk of Infectious Disease at the Animal-Human-Pathogen-Ecosystems Interface’ (One Health Network) was created as an *ad hoc* Group to contribute to development of institutional capacity on the One Health concept and emerging diseases. It was agreed that emerging disease surveillance activities should be integrated into mainstream surveillance systems to enhance sustainability and cost-effectiveness. To this end, the Group agreed that it would be appropriate to suggest a joint meeting of the Epidemiology Group and the One Health Network *ad hoc* Group to develop appropriate guidelines on surveillance and control of new and emerging zoonotic disease. The Group also suggested that it would be appropriate to capture a summary of the key points in a section of the OIE ‘Guide for Terrestrial Animal Health Surveillance’ currently under preparation.

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

The Group was informed of the progress on the surveillance guide and noted that progress had been made on the preparation of Chapter 2, but that the draft of Chapter 1 had not yet been revised as had been decided in the first *ad hoc* meeting on the Guide (October 2009). It was stated that although some work had been accomplished, the progress did not kept pace with the schedule envisaged in the work plan. The Group agreed that the April meeting of the *Ad hoc* Group on preparation of the Guide should be held on schedule. It was also recommended that a 'Google Group' be created to enhance communication between participants and provide a platform for sharing documents for revision.

## 6. Development of Generic Approaches for Disease Control

The Group briefly discussed the topic and agreed that the Group would appreciate further information on possible approaches. It was decided that the topic would be taken up again in the next meeting, when an appropriate amount of time could be dedicated to the discussions. The *ad hoc* Group participants agreed to gather information in preparation for the discussion.

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

The Group confirmed the dates for next meetings for 16 to 18 March and 16 to 18 June 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, 5 – 7 January 2010**

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**Agenda**

1. Adoption of the agenda and appointment of a rapporteur
  2. Policy paper on the wildlife-livestock interface
  3. Guiding Text for Chapter 4.3 on Requirements for the Establishment and Maintenance of Protection Zones
  4. Generic Guidelines on Surveillance and Control of New and Emerging Zoonotic Disease
  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. Adoption of the draft report
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## Appendix II

**MEETING OF THE OIE AD HOC GROUP ON EPIDEMIOLOGY**  
**Paris, 5 – 7 January 2010**

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## Appendix III

Historical evolution of selected definitions in the *Terrestrial Animal Health Code*

Year	Name	Definition
2003	<b>Buffer zone</b>	means a zone established within, and along the border of, an <i>infected zone</i> using measures based on the epidemiology of the disease under consideration to prevent spread of the causative pathogenic agent into a free country or a <i>free zone</i> . These measures may include, but are not limited to, vaccination. Vaccinated animals must be recognisable by a specific permanent mark. The vaccines used must meet standards defined in the <i>Terrestrial Manual</i> . The <i>buffer zone</i> should have an intensified degree of disease surveillance and control.
2005		means a <i>zone</i> established to protect the health status of animals in a free country or <i>free zone</i> , from those in a country or <i>zone</i> of a different <i>animal health status</i> , using measures based on the epidemiology of the <i>disease</i> under consideration to prevent spread of the causative pathogenic agent into a free country or <i>free zone</i> . These measures may include, but are not limited to, vaccination, movement control and an intensified degree of disease surveillance.
2006-08		No changes, 2009 renamed to protection zone
2009	<b>Protection zone</b>	means a <i>zone</i> established to protect the health status of <i>animals</i> in a free country or <i>free zone</i> , from those in a country or <i>zone</i> of a different <i>animal health status</i> , using measures based on the epidemiology of the <i>disease</i> under consideration to prevent spread of the causative pathogenic agent into a free country or <i>free zone</i> . These measures may include, but are not limited to, vaccination, movement control and an intensified degree of <i>surveillance</i> .
2003	<b>Surveillance zone</b>	means a zone established within, and along the border of, a <i>free zone</i> separating the <i>free zone</i> from an <i>infected zone</i> . The <i>surveillance zone</i> should have an intensified degree of surveillance.
2005-08		No changes
2009		Concept included in the definition of protection zone
2003	<b>Zone</b>	is a clearly defined part of the territory of a country with a distinct animal health status. The following types of zones are recognised: <i>free zone</i> , <i>infected zone</i> , <i>surveillance zone</i> and <i>buffer zone</i> .
2005		means a clearly defined part of a country containing an animal <i>subpopulation</i> with a distinct health status with respect to a specific <i>disease</i> for which required surveillance, control and biosecurity measures have been applied for the purpose of <i>international trade</i> .
2006-09		No changes
2003	<b>Free zone</b>	means a zone in which the absence of the disease under consideration has been demonstrated by the requirements specified in the <i>Terrestrial Code</i> for free status being met. Within the zone and at its borders, appropriate <i>official veterinary control</i> is effectively applied for <i>animals</i> and animal products, and their transportation.
2005		means a zone in which the absence of the <i>disease</i> under consideration has been demonstrated by the requirements specified in this <i>Terrestrial Code</i> for free status being met. Within the zone and at its borders, appropriate <i>official veterinary control</i> is effectively applied for <i>animals</i> and animal products, and their transportation.
2006-09		No changes
2003	<b>Compartment</b>	means an autonomous epidemiological entity defined on the basis of either geography ( <i>zone</i> ) or management ( <i>enterprise</i> ) for the purpose of <i>international trade</i>
2005		means one or more <i>establishments</i> under a common biosecurity management system containing an animal <i>subpopulation</i> with a distinct health status with respect to a specific <i>disease</i> or specific <i>diseases</i> for which required surveillance, control and biosecurity measures have been applied for the purpose of <i>international trade</i> .
2006/07		No changes
2008		means an animal <i>subpopulation</i> contained in one or more <i>establishments</i> under a common biosecurity management system with a distinct health status with respect to a specific <i>disease</i> or specific <i>diseases</i> for which required <i>surveillance</i> , control and biosecurity measures have been applied for the purpose of <i>international trade</i>
2009		No changes

2008	<b>Containment zone</b>	means a defined <u>zone</u> around and including suspected or infected <u>establishments</u> , taking into account the epidemiological factors and results of investigations, where control measures to prevent the spread of the <u>infection</u> are applied.
2009		No changes



**REPORT OF THE MEETING OF THE OIE *AD HOC* GROUP ON BRUCELLOSIS**  
**Paris, 24 – 26 November 2009**

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A meeting of the OIE *Ad hoc* Group on Brucellosis was held at the OIE Headquarters in Paris, from 24 to 26 November 2009. Dr Kazuaki Miyagishima, Head of the OIE Scientific and Technical Department, welcomed the participants on behalf of the Director General of the OIE.

The Agenda and the List of participants are presented as Appendices I and II.

Dr Bruno Garin-Bastuji was designated as chairman of this meeting and Dr Francisco Reviriego-Gordejo as Rapporteur. Dr Sergio Duffy, Member of the Scientific Commission, attended the meeting as an observer.

**1. Objectives**

Dr Elisabeth Erlacher-Vindel, Deputy Head of the Scientific and Technical Department, explained the agenda and the background for the needed revision of the chapters on brucellosis and pointed out that the recent adoption of the revised chapter on bovine tuberculosis could serve as a model to the Group. Thereafter Dr Sarah Kahn, Head of the International Trade Department, introduced general aspects of discussions and ongoing work of the Terrestrial Code Commission and emphasised that the overall aim was to improve consistency within the *Terrestrial Code* by aligning different chapters as requested by the OIE Members. The chapter on bovine tuberculosis adopted in May 2009 was proposed as a model to align to. Safe commodities for trade should be identified and listed in the relevant chapter whenever possible. Food safety issues should also be addressed in a similar manner as they had been tackled in the bovine tuberculosis chapter.

**2. Agenda and Terms of Reference**

The agenda and the proposed terms of reference for this *ad hoc* Group were adopted.

The Group referred to the brucellosis chapters of the recently revised *Terrestrial Manual* which were adopted in May 2009 and reflected on the latest scientific evidence.

In discussion with the Scientific and Technical Department, the Group agreed to start revising the chapter on bovine brucellosis as a matter of priority, the chapters on brucellosis of small ruminants and brucellosis of porcines would be addressed at a second stage.

**3. Review of Chapter 11.3. on Bovine Brucellosis in the OIE *Terrestrial Animal Health Code***

**a) General comments**

A preliminary draft had been prepared by Dr Matt Derick Ekron aligning the existing bovine brucellosis chapter with the recently adopted chapter on bovine tuberculosis. The Group decided to use Dr Ekron's draft text as the basis for discussion and further elaboration of the revisions.

Regarding the animal species of concern, bison, water buffaloes, yak and all domestic cattle species were considered to be within the scope of the chapter. However, the Group noted that the brucellosis chapter of the *Terrestrial Manual* should be revised as regards the tests and vaccines used for these different species. Additional information and possibly additional provisions on times frames when using vaccines and for testing were needed.

Need for separate surveillance guidelines: The surveillance approaches for brucellosis were generally covered by the provisions of chapter 1.4. on animal health surveillance. Specifications were considered and reviewed in the individual articles of the draft chapter for achieving and maintaining bovine brucellosis free status including the testing regimes.

#### b) Specific comments

The Group preferred to keep the approach already discussed and proposed in 2005 and 2007, namely maintaining two separated categories of provisions depending on the vaccination status (with or without vaccination). Countries, zones or herds not practising vaccination would have the possibility to prevent introduction of “recently vaccinated animals”. Three years after stopping vaccination was considered a reasonable time frame and sufficient protection for countries or zones not practising vaccination, but this period might be shortened to two years. Animals vaccinated more than three (or two) years ago (brucellosis free herd with vaccination) should be considered equivalent to non vaccinated animals in a brucellosis free herd without vaccination for the purpose of the *Terrestrial Code*. The Group used as an additional reference the report of the meeting of the *ad hoc* Group on brucellosis in 2005.

The validity of a serological test performed on samples that were taken from an animal that had calved recently was discussed and it was agreed that prescribed tests were only reliable 30 days after calving.

Safe commodities: Commodities safe for trade regardless the brucellosis disease status of the country, zone or herd of origin were identified and their list was included in the appropriate article of the draft chapter.

Hides and skins could be considered safe commodities, provided that they were processed (salting, removal of hair, etc.) to minimise the possible risks of contamination with *Brucellae*. A definition of hides and skins would have to be elaborated further in order to enable the final decision on whether skins and hides could be considered safe commodities. The Group was not sure about the value of identifying commodities that needed to be accompanied by certain provisions in order to be listed as safe commodities and therefore restricted the list in a pragmatic way.

Safety of meat: Some commodities were identified as safe enough, such as muscle meat, brain and spinal cord, thyroid, parathyroid glands, thymus, digestive tract and their derived products.

Other raw meat or meat products from animals from herds not free from brucellosis and especially from animals being eliminated in the framework of eradication activities should not enter international trade, because some organs (liver, spleen, kidneys, lymph nodes, testes and udder) may pose a human health risk due to contamination with *Brucellae*, particularly if used or consumed unprocessed.

Camelids: The relevance of brucellosis in camelids was broadly discussed. The *ad hoc* Group on brucellosis was briefed by the Scientific and Technical Department on the work done by the *ad hoc* Group on diseases of *camelidae*. The experts agreed that camelids should be taken into consideration for the epidemiology of brucellosis (in particular *B.melitensis*) and there would maybe be a need for a specific chapter in the *Terrestrial Code* on brucellosis in *camelidae*, similar to the one on tuberculosis in captive deer. The *ad hoc* Group on brucellosis proposed to provide additional technical input, especially regarding diagnostic tests and vaccination, to the *ad hoc* Group on diseases of *camelidae*. Exchange between the two *ad hoc* Groups and other disease specific *ad hoc* Groups would be welcomed.

The concept of herd: It was considered necessary to lay down some provisions related to the possible contact of bovine animals with other susceptible species (particularly sheep and goats).

Recovery of free status: Possible provisions for a specific procedure to recover the free status of a country or zone should an outbreak occur were briefly discussed and proposed in the revised chapter. It was agreed that this issue may need additional discussions.

Vaccines: The Group recommended that the OIE request that more research be carried out on the safety and efficacy of B19, Rev-1 and RB51 vaccines in all major host species cattle, sheep and goat, as well as in camels, yaks and water buffaloes and individual vaccine efficacy against the most important *Brucella* species (*B. abortus*, *B. melitensis* and *B. suis*).

#### 4. Other issues

The discussion of the other brucellosis chapters and on brucellosis in species other than bovines would be pursued once the approaches proposed in the revised bovine brucellosis chapter were approved by the Scientific Commission first and by other specialised bodies of the OIE, if need be. The Group therefore requested an additional meeting to complete their work by possibly taking into consideration the feedback received from the Scientific Commission.

#### 5. Finalisation and 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 of the meeting captured the major discussions, but would nevertheless be circulated electronically along with the draft chapter on bovine brucellosis to allow for minor comments by participants of the Group for a short period.

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.../Appendices

Appendix I

**MEETING OF THE OIE *AD HOC* GROUP ON BRUCELLOSIS**  
**Paris, 24 – 26 November 2009**

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**Agenda**

1. Objectives
  2. Agenda and Terms of Reference
  3. Review of Chapter 11.3. on Bovine Brucellosis in the OIE *Terrestrial Animal Health Code*
  4. Other issues
  5. Finalisation and adoption of the draft report
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## Appendix II

## MEETING OF THE OIE AD HOC GROUP ON BRUCELLOSIS

Paris, 24 – 26 November 2009

## List of Participants

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**MEETING OF THE OIE *AD HOC* GROUP ON RABIES**  
**Paris, 12 - 13 January 2010**

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The meeting of the OIE *ad hoc* Group on rabies was held at OIE Headquarters, Paris from 12-13 January 2010.

**1. Opening, 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, particularly in the light of the current situation of rabies in the different regions of the world, recent research developments and epidemiology of the different bat lyssavirus strains, requirements for declaring a rabies free status for domestic animals or/and wildlife, to clarify the need for specific guidelines for rabies surveillance and to consider trade safety and facilitation options.

The meeting was chaired by Dr Tony Fooks, assisted by Dr Hume Field as rapporteur. The Chair emphasised the need for revisions and proposals to be science-based.

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

**2. Adoption of draft Terms of Reference of the *ad hoc* Group**

The draft terms of reference for this meeting as provided by the Scientific Commission were accepted by the Group.

**3. Overview on the current rabies situation in the world**

Each invited expert attending the meeting provided a brief overview on the rabies situation in the region he or she knew best. The following key points were noted for further comparison and reference when the Group started to work on the review of OIE standards on rabies.

▪ **Africa**

- Historically, the disease has been present for more than a century in the continent at large. There is evidence that the existence of four genotypes of rabies virus in Africa is considered as a cradle for Lyssavirus evolution. Information about rabies is poorly documented and the disease is generally under reported. However a team of experts led by the late Dr. G.C. Bishops did a commendable work in rabies research in Southern Africa.
- It is documented that in South Africa, as early as mid 19th and 20th centuries, sporadic cases of rabies occurred. The disease was first confirmed in dogs, by rabbit inoculation; in 1893 another case was reported in a dog imported from another country. The first reported endemic rabies was first confirmed in 1928 in South Africa following the deaths of two children who had been bitten by yellow mongoose in North West Province of South Africa. Around the 1940s dog rabies was said to have occurred due to contact with endemic mongoose form of the disease. Other rabies transmitters such as black-backed jackal populations are the source of infection.

- Three of the six rabies-related virus, namely Mokola, Lagos bat and Duvenhage viruses have been isolated in some African countries such as South Africa, Zimbabwe, Namibia, Botswana, Nigeria and other African countries where human deaths have also been reported. Most of countries do have rabies outbreaks even though the virus isolation is not done. Currently, control measures of rabies by vaccination of dogs and cats is efficient in some countries such as Tunisia while in other countries such as Lesotho there is significant decrease in population vaccination coverage which puts the continent at risk.. The concept of one world one health should be emphasized and put in practice in the control of such diseases like rabies. The increase of zoonotic disease outbreaks due to closer interaction between wildlife, livestock and people is the main concern in Africa and rabies is one of these diseases.
  - The canine strain of rabies virus has become well adapted to dogs, jackals and bat-eared foxes and the virus spreads readily within and between these species. However, the canine strain is not highly adapted to humans and cats, and does not usually spread readily within these species.
- **The Americas**
- Genotype 1 “classical” rabies virus is endemic in different terrestrial wildlife species as well as in bats in the Americas, and in domestic animal populations (canine rabies) in parts of central and South America.
  - In Latin America, a regional programme for the elimination of dog-transmitted (urban) rabies and prevention of wildlife rabies was initiated in 1983 and since then a substantive decrease in rabies cases was recorded, both, in humans and animals.
  - Dog-to-dog transmission of rabies virus was eliminated in the majority of the municipalities of the Region, but is still disseminated in Bolivia; Cuba; Dominican Republic; El Salvador; Guatemala and Haiti; in limited zones in Argentina; Brazil; Colombia; Mexico; Paraguay; Peru and Venezuela. Belize; Canada, Chile; Costa Rica; Ecuador; Guyana; Nicaragua; Panama. Suriname and Uruguay are considered free from dog-to-dog transmission of rabies.
  - No cases of rabies in humans and animals are registered in the Caribbean Islands with the exception of Cuba, Hispaniola (Dominican Republic and Haiti) and Puerto Rico.
  - In the period 2000-2009 rabies in non-haematophagous bats (NHB) were reported by Argentina; Brazil; Canada; Chile; Colombia; Cuba; Dominican Republic; United States; Mexico; Peru and Uruguay. An average of 2.6 cases per year of human rabies transmitted by NHB were reported in the same period (0,0029 cases per million inhabitants). Spillover infection from NHB to domestic species is considered a potential threat but occurred rarely and no cases of maintained circulation of bat rabies virus were reported among domestic species.
  - Rabies transmitted by haematophagous (vampire) bats is found throughout the distribution of these bats (from central Mexico in the North, throughout Central and South America to Northern Argentina). Outbreaks or isolated cases of human rabies transmitted by bats are recurrently reported, especially in areas without livestock where haematophagous bats feed on human blood in communities far away from health care attention (average of 14,9 human cases of haematophagous bats-transmitted rabies per year in the 2000-2009 period); haematophagous bats-transmitted rabies is frequently reported in livestock reared within the vampire bat habitats: 3 human cases of rabies transmitted by cows and 1 case transmitted by a horse were reported in said period.
  - Rabies in non-domestic carnivores were reported in a wide variety of carnivores, including bobcats, coatis, coyotes, foxes, mongooses, otters, bears, pumas, badgers, opossums, raccoons, skunks, weasels and wildcats. The follow up of the national programmes for the elimination of human rabies transmitted by dogs and prevention of rabies in wildlife is performed through the network of rabies directors in the ministries of agriculture and health (REDIPRA, see <http://fos.panalimentos.org/redipra>).

- Bat variant rabies spillover and perpetuation has been detected in mammalian carnivore species in the USA in a sustained focus in northern Arizona during on two occasions in recent years.
  - Human and animal cases of rabies in the Americas since 1970 can be consulted in the SIRVERA system administered by PAHO/WHO (<http://www.paho.org/common/Display.asp?Lang=E&RecID=10378> ).
- **Australia**
- Australia has been historically free of genotype 1 rabies virus, and was not known to have any member of the genus until Australian bat lyssavirus (ABLV, genotype 7) was first described in bats in 1996.
  - Two fatal human cases attributed to ABLV have been reported.
  - Active and passive surveillance of companion animal species, livestock, feral and native species has not identified evidence of infection in any non-bat animal species.
  - ABLV-infected bats have been reported from multiple locations in Australia, and serological evidence suggests a wide geographic and taxonomic distribution in bats. Surveillance has employed both active and passive strategies. Passive surveillance through submission and laboratory examination of sick bats can extend knowledge of the disease, and is helpful as a sentinel procedure. Passive surveillance positively biases the sample to the 'sick' subpopulation of bats and therefore enhances the detection rate.
  - The prevalence of viral antigen in opportunistic submissions of sick, injured and/or orphaned Megachiroptera, as detected by fluorescent antibody test (FAT), is typically 5–10%, but may be as low as 1% or as high as 17% depending on the species. Antibody prevalence in sick, injured and orphaned Megachiroptera is up to 20%. Both antigen and antibody prevalence in wild-caught Megachiroptera are less than 1%.
  - Antibody prevalence in sick, injured and rescued Microchiroptera (up to 5%) is lower than for Megachiroptera (up to 20%), but also appears to vary with species. One study found that the yellow-bellied sheath-tailed bat had significantly higher antibody prevalence (up to 62.5%) than other species, suggesting that this bat plays an important role in the ecology of ABLV. Both antigen and antibody prevalence in wild-caught Microchiroptera are less than 1%.
- **Europe**
- In Europe, the principal vector and reservoir of classical rabies (genotype 1) is the red fox (*Vulpes Vulpes*). Raccoon-dogs (*Nyctereutes procyonoides*) play a significant role in the epidemiology of rabies in Eastern and Northern European countries. In Turkey, the domestic dog is the main vector of rabies.
  - Rabies cases in Europe are attributed, to a much lesser extent, to lyssaviruses genotypes 5 and 6 (European bat lyssaviruses type-1 and -2). These viruses (EBLVs) are host-adapted to insectivorous species of European bats.
  - Sylvatic rabies (predominantly fox rabies) has been significantly controlled by the successful implementation of oral rabies vaccination (ORV) campaigns. As a result, the majority of the western infected European countries are now free of fox rabies. The most recent European country to be declared rabies free was Germany (September 2008).
  - In 2008, two European countries lost their OIE rabies free status.
    - France reported secondary cases of rabies in indigenous dogs following the illegal importation of an infected dog from Morocco in February 2008 and lost its OIE status for two consecutive years.
    - Italy was re-infected in October 2008 by vulpine rabies from endemic regions on the Balkans.

- Rabies Bulletin Europe (WHO) reported 9,707 cases of rabies in Europe in 2008; these cases were mainly associated with red foxes (5,106 cases, 52.6%), dogs (1694 cases, 17.5%), cats (1,343 cases, 13.8%), cattle (703 cases, 7.2%), raccoon-dog (359 cases, 3.7%), bat (33 cases, 0.3%) and humans (14 cases, 0.1%). In some Eastern European countries (Belarus, Ukraine, Russia) a high number of rabies cases were diagnosed in domestic animals.
- In European countries free of rabies in terrestrial mammals, rabies is restricted to relatively rarer bat or imported rabies cases.
- Spillover infections of EBLVs from insectivorous bats to non-flying species are rare. Adaptation of an EBLV strain in a non-flying species has never been reported, confirming the fact that the virus is still highly specific to bat host only and that the rabies cycle occurring in Europe in bats is distinct from the one existing in wildlife.
- Imported human cases of rabies from endemic regions to Europe occur, but rarely.

#### 4. Review of the Chapter 8.10. on Rabies, *Terrestrial Code 2009*

The ad hoc Group noted that the stated aim of the OIE *Terrestrial Code* was in particular to assure the sanitary safety of international trade in terrestrial animals and their products through the detailing of science-based health measures to be used by importing and exporting countries to avoid the transfer of pathogenic agents, while avoiding unjustified sanitary trade barriers. The Group agreed that the review and any proposed revisions of chapter 8.10. and other related chapters of the *Terrestrial Code* be consistent with this aim. In addition to the content, the Group undertook to revise the structure of chapter 8.10., consistent with recently updated chapters of the *Terrestrial Code*.

##### *Article 8.10.1.*

A number of definitions were proposed for the “General Provisions” section to better clarify the aim and scope of the Chapter. It was recognised that rabies disease could be caused by any member of the genus, but that classical rabies virus (genotype 1) constituted the principal threat to trade and the global rabies burden.

##### *Article 8.10.2.*

Considerable time was spent reviewing the requirements for rabies-free country status, particularly the issue of the various known bat lyssaviruses. The Group agreed that current evidence indicated ‘genotype’ rather than ‘species origin’ was the fundamental determinant of risk of host-switching. Reports of establishment of bat rabies in non-bat species all involved the non-bat-specific genotype 1 rabies virus. There was no evidence that the bat-specific EBLVs or ABLV would behave similarly, despite considerable research focus. Thus, the Group concluded that the detection of sporadic and aberrant cases of non-genotype 1 lyssaviruses in species other than bats was not a basis for loss of the rabies-free status. The Group recognised that there was insufficient knowledge on Lagos bat virus (genotype 2), Mokola virus (genotype 3), Duvenhage virus (genotype 4) and the new uncharacterised lyssavirus strains to determine any potential trade risk. While this suggested that the precautionary principle should apply to these viruses until sufficient knowledge was available, it was recognised that genotype 1 was currently endemic in all countries where these viruses were found, thus all these countries would currently be classified ‘infected’ under the *Terrestrial Code* definition. However, this might change in the future, and research into the ecology of these viruses (and their hosts) should be fostered.

The Group gave in-depth consideration to a suggestion to create a new category of ‘Countries free of dog-to-dog transmission of rabies’. The rationale was to facilitate trade (for example, via the EU Directive for movements of pet animals between Member States and from third countries), to advance public health in relation to rabies, and to provide an incentive to countries that have little prospect of becoming rabies-free in all mammals to invest in rabies control. The Group agreed to propose this new category. It was suggested that consideration of within-country zoning might be possible in the future.

*Article 8.10.3. & 8.10.4.*

The Group made no substantial changes to these sections.

*Article 8.10.5. -8.10.8.*

The Group discussed a number of revised recommendations for importation of live animals from rabies infected countries. It was noted that species, the animal's origin (captive-bred or wild-caught) and biosecurity level in the facility were all determinants of risk, and the Group sought to tailor import recommendations accordingly. Revised recommendations relating to laboratory animal species, wild mammals, and primates were proposed. It was proposed that rodents and lagomorphs raised under biosecure conditions would benefit from relaxed recommendations. Revised recommendations were also proposed for wild mammals, with species and husbandry practice being the key determinants of recommendations. Recommendations for the importation of non-human primates were also reviewed, acknowledging the special quarantine issues elaborated in the *Terrestrial Code* chapter 6.12. on zoonoses transmissible from non-human primates. The Group suggested that the OIE secretariat consider possible contribution of experts from the Working Group on Wildlife Diseases to enable finalisation of the recommendations on import conditions for non-captive wildlife species of infected countries and their related rabies risk.

In addition, in Article 8.10.5., the interval prior to shipment in which a positive antibody test should be undertaken post-vaccination was reduced from 3-24 months to 3-12 months, to better ensure the test results were relevant at the time of shipment.

*Article 8.10.9.*

Consideration was given to easing recommendations on the importation of frozen dog semen. After discussion canvassing the absence of scientific evidence on semen being a mode of rabies transmission, the Group decided against recommending removal of the minimal existing recommendations until a formal risk assessment was available.

## **5. Review of Chapters related to or to be cross-referenced in Chapter 8.10.**

*Chapter 5.11. (International veterinary certificate)*

The Group briefly reviewed Chapter 5.11. - Model international veterinary certificate for dogs and cats originating from rabies infected countries. In relation to Section V (Serological Testing), it was agreed that there was need for more consistency between chapters addressing rabies within and of the *Terrestrial Code*, the *Terrestrial Manual* and concerning other OIE sources regarding the type of serological test required. Further, it was proposed that, as vaccine standards dictate that vaccination produce a protective titre, that the serologic test, carried out post-vaccination, simply needed to demonstrate sero-conversion of the animal, and that this did not require a neutralizing antibody test. A complementary model certificate for dogs originating from countries free of dog-to-dog transmission was also proposed to be elaborated.

## **6. Remaining agenda points and items for a next meeting**

Due to time constraints, the Group could not consider in detail the agenda items other than those reported above. The Group considered that the forum of email and/or teleconference to address the remaining agenda items was unsatisfactory. Notes were added to the individual Articles of the revised chapter 8.10. to facilitate reference to pending issues. A follow-up meeting of the Group was proposed to take place in mid 2010.

Issues identified by Group members for possible future consideration were:

1. Including also ferrets where referring to "dogs and cats";
2. Rabies and zoning and compartmentalisation concepts;
3. Consider developing a definition of status of countries free from terrestrial rabies (wild and domestic carnivores);

4. Collect more scientific data on the haematophagous bat transmitted rabies (genotype 1);
5. Other dog diseases of public health concern (e.g. visceral leishmaniasis) to cross-reference in Chapter 7.7 (Guidelines on Stray Dog Population Control).
6. Role of wild region-specific rabies reservoirs species in rabies maintenance, especially other than *canidae* (mongoose, racoons, *mephitidae*, etc.)
7. Control strategies related to available vaccines (and diagnostic tests) for dog rabies

## 7. Finalisation and adoption of the draft report

The Group undertook to finalise the drafted revisions and the meeting report by email in a timely fashion.

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.../appendices

Appendix I

**MEETING OF THE OIE AD HOC GROUP ON RABIES**

**Paris, 12 - 13 January 2010**

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**Agenda**

1. Opening, Adoption of agenda and appointment of a rapporteur
  2. Adoption of draft Terms of Reference of the *ad hoc* Group
  3. Overview on the current rabies situation in the world
    - Africa
    - The Americas
    - Australia
    - Europe
  4. Review of the Chapter 8.10. on Rabies, *Terrestrial Code 2009*
  5. Review of Chapters related to or to be cross-referenced in Chapter 8.10.
  6. Remaining agenda points and items for a next meeting
  7. Finalisation and adoption of the draft report
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Appendix II

**MEETING OF THE OIE AD HOC GROUP ON RABIES**  
**Paris, 12 – 13 January 2010**

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## REPORT OF THE MEETING OF THE OIE *AD HOC* GROUP ON DISEASES OF HONEY BEES

Paris, 25–27 January 2010

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The meeting of OIE *ad hoc* Group on Diseases of Honey Bees was held in Paris from 25 to 27 January 2010.

The meeting was chaired by Dr Wolfgang Ritter and Drs Denis Anderson and Jeff Pettis acted as rapporteurs. The Agenda, List of Participants and Terms of Reference are presented in Appendices I, II and III of this report, respectively.

### 1. Introduction

Dr Bernard Vallat, Director General of the OIE, welcomed the participants. He stressed the importance of bees for the environment and food security and the consequential urgent need to address the current collapse in bee colonies around the world, which seemed to be caused by several factors including bee diseases, climate change and agricultural practices. He informed the participants that the OIE had been requested by its Members to provide adequate standards and guidelines to improve the health of bees and to reduce risks linked with trade and that for this reason this issue had been included in the Fifth Strategic Plan of the OIE (2011–2015) as a major issue to be addressed.

### 2. Recommendations to the OIE to improve its strategy concerning the health of honey bees

After review of the current situation of bee diseases in the world and further discussion, the Group proposed that OIE:

- considers the validation and assessment of diagnostic methods for bee diseases in order to achieve standardisation of techniques among OIE Members;
- encourages OIE Members to organise and support workshops on bee diseases at the international/regional level;
- encourages good communication between the Chief Veterinary Officer and the other relevant national authority(ies) in OIE Members, so that information provided by OIE on bees is passed onto the relevant experts working outside of the Veterinary Services;
- considers publishing a special issue of the OIE *Scientific and Technical Review* dedicated to bee health; possible topics include diagnostic tests and detection methods, invasive biology, biosecurity measures, sanitary procedures and the management of risks linked with trade.

### 3. Review of the OIE list of honey bee diseases and the relevant chapters of the *Terrestrial Animal Health Code* with the general aim of improving surveillance methods and providing greater security in international trade in bees and bee products

#### Review of the OIE list of honey bee diseases

The Group discussed the possibility of including viruses in the *Terrestrial Animal Health Code* (*Terrestrial Code*) and concluded that knowledge on the clinical signs and modes of action of most bee viruses was insufficient to warrant their inclusion at this stage.

Concerns were raised that the identity and pathology of Thai sacbrood virus, causing distinct clinical signs in Asian honey bee colonies, was poorly understood and called for immediate research. Concerns were also raised that strain variation within the Kashmir virus group could be an issue for bee health and required urgent research.

Based on the existing decision tree in the *Terrestrial Code*, the Group reviewed the OIE list of honey bee diseases and considered that there was no need for the moment to include new honey bee diseases.

The Group proposed additionally that the worldwide distribution and disease status of *Nosema* be reviewed in light of the spread of *Nosema ceranae*. Pending the outcome of this review and the relative risk associated with *N. ceranae*, the Group proposed a revised chapter on *Nosema* be reincluded in the *Terrestrial Code*.

**Proposed changes for Chapter 4.14., “Hygiene and disease security procedures in apiaries” of the *Terrestrial Code*.**

Article 4.14.2.: The Group recognised the need for general guidelines for bee surveillance programmes. However, this did not warrant a new chapter in the *Terrestrial Code*, as surveillance recommendations could be included in Chapter 4.14 “Hygiene and Disease Security Procedures in Apiaries”.

Article 4.14.3-1.: The Group proposed that this item be removed, because the information was already covered in all the disease chapters.

Article 4.14.3-2.: The Group proposed that the time interval for annual inspection be reduced from three to two inspections per year, as two annual inspections would be adequate to cover the active brood-rearing period. The Group also proposed to add an evaluation of at least 10% of hives containing bees because the original text could be interpreted as requiring 100% inspection of all colonies, and this was not necessary.

Article 4.14.3-3.: The Group proposed that beekeepers should immediately notify Veterinary Authorities of any suspect unusual epidemiological event, because otherwise it would be difficult or impossible for beekeepers to comply with the current requirement specified in the *Terrestrial Code*.

Article 4.14.3-6.: The Group proposed that the 10-day requirement for sample collection be extended to 30 days, because a 30-day interval would produce the same outcome and safeguards as the 10-day period.

Article 4.14.4-4.: The Group proposed that this article should be updated to serve as guidelines for sanitation and disinfection of hive equipment. Therefore, the recommendations included in the chapters of the *Terrestrial Code* related to bee diseases and mentioning to develop a new chapter (Chapter X.X) were considered unnecessary.

**4. Review of the recommended diagnostic test methods described in the chapters of the OIE *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals***

The Group updated the chapters 2.2.0. Introductory Note on Bee Diseases; 2.2.1. Acarapisosis of Honey Bees; 2.2.4. Nosemosis of Honey Bees; 2.2.5. Small Hive Beetle; 2.2.6. *Tropilaelaps* Infestation of Honey Bees and 2.2.7. Varroosis of Honey Bees. It proposed some updates and comments to the author of Chapter 2.2.2. American Foulbrood of Honey Bees and Chapter 2.2.3. European Foulbrood of Honey Bees. The updated chapters, and the proposed changes and comments for the author of Chapters 2.2.2. and 2.2.3. would be provided to the OIE Headquarters to be forwarded to the Biological Standards Commission by 12 February 2010. The Group agreed to include in each chapter a paragraph on the collection and transport of samples.

While the international exchange of bees was an important and growing industry, the Group observed that, for the moment, there were no prescribed test methods for international trade of animal and animal products in the bee disease-specific chapters of the *Terrestrial Manual*. It therefore proposed that some test method(s) already described in these chapters be designated as prescribed test methods for the diseases in question. Specifically, the Group recommended the following: polymerase chain reaction (PCR) for American Foulbrood of honey bees; PCR for European foulbrood of honey bees; and debris, brood or bee examination for Varroosis.

## 5. Review of OIE Member comments in the chapters on honey bee diseases

The Group reviewed all the comments received from OIE Members (Argentina, Australia, Canada, European Union and Switzerland) on the revised *Terrestrial Code* chapters and provided the scientific rationale to the Scientific Commission, as requested.

## 6. Update on the current global health situation regarding bees

Each participant in the Group provided a brief account of the bee health situation in his region. These presentations are summarised below:

### Africa

The management of honey bee diseases in Sub-Saharan Africa should include consideration of the circumstances unique to the continent. Commercial beekeepers represent only a fraction of the total harvested honey; a large majority of the production is collected from small-scale traditional beekeepers. There is a general lack of organised beekeeping organisations representing beekeepers, and of resources to establish registration processes, inspection, diagnoses and research capacity. Wild African bees are considered as a natural resource that needs to be protected as they serve as pollinators ensuring plant biodiversity and as a source of new bees for beekeepers.

### Asia

The expert from the Asia region was not able to attend the meeting.

### Central and South America

There is not much information available about the status of bee diseases in Latin America. Different kinds of beekeepers (ranging from professionals owning more than 10,000 colonies to hobbyists and small beekeepers with just 5 or 10 colonies), different climates (from tropical to temperate), and different honey bee races give the Region a huge diversity.

Each country in the region has a different sanitary status with respect to some diseases such as American foulbrood, European foulbrood and Acarapisosis. Other diseases, such as Varroosis and Nosemosis, are spread around the whole continent but cause different levels of damage. Most parts of Latin America are free of Small hive beetle, however Mexico is currently infested. *Tropilaelaps* spp. is an exotic disease for the region.

Colony collapse disorder (CCD): At the moment, there are no reports of massive colony losses as have been documented during the last few years in Europe and the USA, characterised by rapid losses of adult worker bees. This does not mean that there are no colony losses at all in Latin America. There are many reported cases in relation to specific factors such as *Varroa* infestations, nutritional problems, toxicological reasons and *Nosema* infestations.

### Europe

Without any doubt, the *Varroa* mite represents one of the most important problems for beekeeping in Europe for many years. Often, treatment is applied too late or incorrectly and the resulting bee damaged to the bee colony's death, mainly in autumn and winter. Today, Nosemosis is the most frequent cause of colony losses in spring. *Nosema apis* has been nearly completely replaced by *Nosema ceranae* imported from Asia. Probably the new pathogen can multiply quicker in warmer climate. In some Mediterranean countries, like Spain, the new pathogen has been held responsible for some disastrous losses. In the Central and Northern European countries, however, losses caused by *Nosema* infestation have not increased.

Regarding American foulbrood, notifiable in Europe, the approval of antibiotics has been requested. This pathogen can only be eradicated, at least locally, by the methods prescribed in Europe and practiced in most of the European Union countries. These methods also apply to European foulbrood, notifiable in a small number of countries only. If the disease does not become endemic, as it has in Switzerland and the UK, the cleansing behaviour of the bees is generally sufficient to initiate self-healing. The *Tropilaelaps* mite and Small hive beetle, *Aethina tumida*, are not yet spread in Europe and are notifiable.

**North America**

Honey bees in North America are exposed to a variety of pests and diseases including most of the worldwide health threats, with the exception of the parasitic mite *Tropilaelaps*. Over the past 3–5 years, honey bee colony losses have increased to approximately 30% per year in both the USA and Canada and threaten crop pollination. Repeated colony losses have resulted in a doubling of the pollination fees that growers must pay for crops such as apples, almonds and blueberries. The reasons for these losses include queen problems, parasitic Varroa mites, starvation and CCD. The causes of CCD are surely multi-factored, and poor nutrition and pesticide exposure have been implicated. Recent research has indicated that sub-lethal exposure to pesticides can result in increased pathogen levels. Research continues to try to unravel the multiple factors that threaten the health of honey bees and other pollinators.

**Oceania**

Oceania consists of numerous islands in the Pacific Ocean and nearby regions.

- a) Micronesia: virtually nothing is known about honey bees or their pests and diseases.
- b) Melanesia: the following pests and diseases are present: *Varroa destructor* (only in the Indonesian Province of Papua on the island of New Guinea); *Varroa jacobsoni* (in New Guinea and the Solomon Islands); *Tropilaelaps mercedesae* (only in the Indonesian Province of Papua on the island of New Guinea); Nosemosis (*Nosema apis*) (in New Guinea, the Solomon Island and Fiji); Nosemosis (*Nosema ceranae*) (only in the Solomon Island); American foulbrood (*Paenibacillus larvae*) (in New Guinea and Fiji); Chalkbrood disease (*Ascosphaera apis*) (in Fiji) and Bee viruses (Sacbrood Bee Virus [SBV], Chronic bee paralysis virus [CBPV], Kashmir Bee Virus [KBV] and black queen-cell virus [BQCV]) (in New Guinea, the Solomon Island and Fiji).

European foulbrood (*Melissococcus plutonius*); the small hive beetle (*Aethina tumida*) and the tracheal mite (*Acarapis woodi*) have not been reported.

c) Australasiai) Australia

The following pests and diseases are present: Small hive beetle (*Aethina tumida*); Nosemosis (*Nosema apis* and *N. ceranae*); American foulbrood (*Paenibacillus larvae*); European foulbrood (*Melissococcus plutonius*); Chalkbrood disease (*Ascosphaera apis*) and Bee viruses (SBV, CBPV, KBV, Israeli Acute Paralysis Virus [IAPV], BQCV, Cloudy wing virus [CWV], Bee virus X [BVX] and Bee virus Y [BVY]).

The parasitic mites *Varroa* spp., *Tropilaelaps* spp., and *Acarapis woodi* are not present. Deformed wing virus has not been reported.

ii) New Zealand

The following pests and diseases are present: Varroa mite (*Varroa destructor*); Nosemosis (*Nosema apis*); American foulbrood (*Paenibacillus larvae*); Chalkbrood disease (*Ascosphaera apis*) and Bee viruses (SBV, CBPV, KBV, BQCV, Deformed wing virus [DWV] and Acute bee paralysis virus [ABPV]).

The small hive beetle, *Tropilaelaps* mites and *Acarapis woodi*, are not present. *Nosema ceranae* and European foulbrood (*Melissococcus plutonius*) have not been reported.

d) Polynesia

Little is known about the pest and disease status of honey bees in Polynesia. However, *Varroa destructor* has been reported from both Tonga and Hawaii.

A new form of *Varroa jacobsoni* that is pathogenic to *Apis mellifera* was detected in Papua New Guinea (the eastern region of the island of New Guinea) in 2008 and it now presents a major threat to beekeeping in Oceania (particularly Australia) and globally. The Asian honey bee (*Apis cerana*), first introduced into New Guinea during the 1970s from Indonesia, has developed into an invasive pest in eastern parts of Micronesia (Papua New Guinea and the Solomon Islands).

## **7. Consideration of the necessity of drafting general guidelines for bee health surveillance as a separate chapter in the *Terrestrial Code***

The Group recognised the need for general guidelines for bee surveillance programmes. However, this did not warrant a new chapter in the *Terrestrial Code*, as surveillance recommendations could be included in Chapter 4.14. Hygiene and Disease Security Procedures in Apiaries.

## **8. Review of the role of wild bees in disease transmission to honey bees**

The Group identified “wild bees”, to be feral and wild honey bees. It noted that, as for the other domestic animals, wild bees could be a reservoir for different diseases of concern for managed honey bees. The Group agreed that the free status of a country for a specific bee disease listed by the OIE needs to take into consideration the presence or the absence of the disease in question in the wild bee populations. Managed honey bees could also infect wild bee populations.

## **9. Consideration of bee health in relation to food security and the use of pesticides**

The Group stressed the important role of honey bees in the pollination of agricultural crops. Fruits, nuts and vegetables, which are about 80% reliant on honey bees for pollination, add invaluable diversity and nutrients to the human diet. Worldwide, the annual value of bee pollination was estimated to be 153 billion euros: Thus, the Group believed that maintaining a healthy and productive honey bee population was critical to global food security.

The Group agreed that the irresponsible use of pesticides might have an impact on bee health, in particular by weakening bees and increasing their susceptibility to different diseases (e.g. Nosemosis). However pesticides were not considered as the only factor affecting bee health. Absence of biosecurity measures and Climate change might also have detrimental effects on bee health.

## **10. Other matters**

The Group had been requested by the OIE Publication Department to review a draft summary for a technical series that would be dedicated to the world of bees. The Group proposed that the summary should be modified to be more specific. The Group highlighted the need for a book or ‘booklet’ for veterinarians outlining how bees differ from other animals and how standard veterinary methods could be adapted to deal with bees. Such a booklet could be entitled as “A Veterinary Services Guide to Honey Bees”, for example. The Group would offer some suggestions for topics to be addressed at a later stage.

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.../Appendices

Appendix I

**MEETING OF THE OIE AD HOC GROUP ON DISEASES OF HONEY BEES**

**Paris, 25-27 January 2010**

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**Agenda**

1. Introduction
  2. Recommendations to the OIE to improve its strategy concerning the health of honey bees
  3. Review of the OIE list of honey bee diseases and the relevant chapters of the *Terrestrial Animal Health Code* with the general aim of providing greater security in international trade in bees and bee products
    - Review of the OIE list of honey bee diseases
    - Proposed changes for Chapter 4.14., “Hygiene and disease security procedures in apiaries” of the *Terrestrial Code*.
  4. Review of the recommended diagnostic test methods described in the chapters of the OIE *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals*
  5. Review of OIE Member comments in the chapters on honey bee diseases
  6. Update on the current global health situation regarding bees
    - Africa
    - Asia
    - Central and South America
    - Europe
    - North America
    - Oceania
  7. Consideration of the necessity of drafting general guidelines for bee health surveillance as a separate chapter in the *Terrestrial Code*
  8. Review of the role of wild bees in disease transmission to honey bees
  9. Consideration of bee health in relation to food security and the use of pesticides
  10. Other matters
-

## Appendix II

## MEETING OF THE OIE AD HOC GROUP ON DISEASES OF HONEY BEES

Paris, 25-27 January 2010

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Appendix III

**MEETING OF THE OIE AD HOC GROUP ON DISEASES OF HONEY BEES**

**Paris, 25-27 January 2010**

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**Terms of Reference**

- Propose recommendations to the OIE to improve its strategy concerning the health of honey bees;
  - Taking into account the existing decision tree in the *Terrestrial Animal Health Code*, review of OIE list of honey bee diseases and the relevant chapters of the *Terrestrial Code* with the general aim of providing greater security in international trade in bees and bee products;
  - Review the recommended diagnostic test methods described in the chapters of the *OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals*;
  - Review and address OIE Member comments in the chapters on honey bee diseases;
  - Update on the current global health situation regarding bees;
  - Consider the necessity of drafting general guidelines for bee health surveillance as a separate chapter in the *Terrestrial Code*;
  - Review the role of wild bees in disease transmission to honey bees;
  - Consider bee health in relation to food security and the use of pesticides.
  - Other matters
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**MEETING OF THE  
OIE AD HOC GROUP ON OFFICIAL DISEASE STATUS RECOGNITION  
OF AFRICAN HORSE SICKNESS (AHS)**

**Paris, 27 – 29 January 2010**

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The meeting of the OIE *ad hoc* Group on official disease status recognition on African Horse Sickness (AHS) was held at OIE Headquarters, Paris from 27-29 January 2010.

**1. Opening, Adoption of agenda and appointment of a rapporteur**

Dr Kazuaki Miyagishima, Deputy Director General, welcomed the members of the Group on behalf of Dr Bernard Vallat, the Director General of the OIE. The meeting was chaired by Dr José Sánchez-Vizcaíno and Dr Alf-Eckbert Füssel acted as rapporteur. The Agenda and list of participants are presented as Appendices I and II, respectively.

**2. Adoption of draft Terms of Reference of the *ad hoc* Group**

The draft terms of reference for this meeting as provided by the Scientific Commission were accepted by the Group.

**3. Review and update the *Terrestrial Code* chapter on AHS taking into consideration the existing concepts on free country, zoning and compartmentalisation and draft provisions for consistency with the official disease status recognition procedures**

Dr. Lea Knopf of the Scientific and Technical Department introduced the procedures of OIE official disease status recognition and the framework for the prioritisation of diseases for the recognition of an official status. The Group considered a priority list of equine diseases for possible official freedom recognition. Glanders was intensively discussed, but no final decision was taken by the Group to recommend this disease for official disease status recognition. However, the Group suggested that members of the *ad hoc* Group would take this question forward to the equine industry, in particular the International Movement of Horses Committee (IMHC). The Group agreed that:

1. To establish a procedure for official disease status recognition for an equine disease would send an important, positive signal to the Governments and the equine sector. It was welcome that OIE considered to provide the veterinary services and the equine sector with more detailed guidance on their responsibilities and the requirements for international movements of equidae and the potential sanitary implications; and
2. In line with the suggestion of the Scientific Commission, focus should be placed on AHS as a model for testing the scientific aspects and the practicability of official disease status recognition for an equidae disease which would be also the first vector born disease to be included into the procedure.

While comparing AHS to the four livestock diseases already included in the procedures of diseases free status recognition, the Group considered first the conditions for the recognition of an official AHS free status based on historical grounds (Article 1.4.6. of the *Terrestrial Code*). It was noted that AHS had a certain limitation in geographical extension and that many OIE Members might have relatively small equine populations or industries. Furthermore, international trade in equidae would not affect all OIE Members, in some cases international trade would even be so limited that an application for official AHS free status recognition might not be warranted. In addition, the Group observed that there were other relevant particularities for the equine sector, if compared to the livestock sector (ruminants, porcines): Not all movements of equidae being of commercial nature, there was temporary admission and re-entry after temporary export; there was not always an importer in the importing country; equidae may be scheduled for competitions or races (time constraints for import procedures); there were no clearly established or known trade patterns; and the operators were frequently less professional - but these activities cited above were major economic drives.

Because diseases of equidae and equidae themselves had been for quite some time out of focus of the governmental veterinary services, import rules were frequently not risk-based, and scientifically justified risk mitigating measures were not always implemented. Equidae were frequently kept on holdings which were not registered and which were in many countries insufficiently identified or described. Horses for competition purposes were invariably under intensive veterinary care. However, those veterinary equine practitioners or specialists in charge did frequently have only a poor understanding of trade-related notifiable diseases.

The Group therefore agreed that a baseline list of historically free countries should be established, if official recognition of AHS free status was to be introduced to the OIE's mandate. Unlike in the case of the diseases currently included in the procedure of official disease status recognition (foot and mouth disease, rinderpest, contagious bovine pleuropneumonia and bovine spongiform encephalopathy), co-existence of self-declaration and official recognition of status might be recommended.

In general, the existing criteria for an AHS free country or zone were considered sufficiently flexible to provide a basis for the procedure of official recognition of free status and for the conditions for recovery of the status following an outbreak. The Group evaluated the introduction into Chapter 12.1. of the concept of compartmentalisation for AHS. The OIE had included the concept of compartmentalisation for a vector-borne disease-specific Chapter only in the case of African swine fever. The Group agreed that at present it was not advisable to introduce the concept of compartmentalisation in the *Terrestrial Code* chapter on AHS, as the purpose of keeping equidae, the nature of the vector and the varying competences of the vector were incompatible with the concept of compartmentalisation.

The Group discussed the practical aspects, advantages and disadvantages of the introduction into the Chapter 12.1 of the concept of a containment zone. The Group agreed that it was appropriate to include this concept and adapted the Chapter accordingly. Although the various criteria for a containment zone were discussed, it was decided not to make specific recommendations on the minimum size of a containment zone, as this would be determined by the circumstances within the particular zone and the requirements for surveillance.

Seasonal freedom from AHS should remain subject to self-declaration, as it was considered not feasible to provide an official status for a changing seasonal freedom.

In addition to the proposed changes related to official disease status recognition, the Group agreed on specific recommendations for vector-protected and vector-proof quarantines and for vector protection of equidae during air transportation (Article 12.1.10.).

The Group reviewed Chapter 12.1 of the *Terrestrial Code* and suggested amendments to the existing text to be considered by the Scientific Commission at their next meeting. Those amendments, amongst others, related to the possibility of adapting quarantine requirements to the availability of validated diagnostic tests for agent detection and identification.

#### **4. Draft a questionnaire for Members to submit applications for official recognition of disease status**

The Group, using the existing FMD questionnaires as a template, prepared questionnaires for Members applying for the official recognition of AHS free countries or zones.

## 5. Recommendations for updates to the *Terrestrial Manual*

The Group analysed the draft of the *Terrestrial Manual* Chapter on AHS (version for 2010) and identified specific areas that required further revision.

Doctor Sanchez-Vizcaíno agreed to provide the Group with an updated document by 8 February 2010.

The Group agreed to recommend to the Scientific Commission that the reviewed Chapter of the *Terrestrial Manual* be transferred to the Biological Standards Commission for their consideration.

The Group recommended to the Scientific Commission to request the Biological Standards Commission to support the validation of the diagnostic tests mentioned in that AHS Chapter. The current lack of validated tests would compromise the introduction of the concept of OIE's recognition of AHS free countries and zones. The OIE might wish to consider involvement of the equine industry in facilitating the test validation process.

## 6. Review of Member Comments on equine disease chapters of the *Terrestrial Code*

The group reviewed the comments received by OIE from Members on the Chapters 12.1. (AHS), 12.7 (equine influenza) and 12.10 (equine viral arteritis):

Chapter 12.1. : Kenya's comment on the adaptation of the Chapter to the use of inactivated vaccines against AHS was noted, however such vaccines were currently not commercially available.

Chapter 12.7. : The Group made a proposal for amending Article 12.7.4, taking into account the comments by Australia and the EU together with Switzerland.

Chapter 12.10. : The Group provided clarification, to a representative of the International Trade Department of the OIE, on the intent of the revised Article 12.10.3. and recommended that the text proposed by the EU should be incorporated into this Chapter.

The corresponding chapter texts containing the response to the Member comments were forwarded to the Scientific Commission for their consideration.

## 7. 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 of the meeting captured the major discussions, but would nevertheless be circulated electronically to allow for minor comments for a short period, as two participants of the Group had to leave before the finalisation of the report.

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.../Appendices

Appendix I

**OIE AD HOC GROUP ON OFFICIAL DISEASE STATUS RECOGNITION  
OF AFRICAN HORSE SICKNESS (AHS)  
Paris, 27 – 29 January 2010**

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**Agenda**

1. Opening, Adoption of agenda and appointment of a rapporteur
  2. Adoption of draft Terms of Reference of the *ad hoc* Group
  3. Review and update the *Terrestrial Code* chapter on AHS taking into consideration the existing concepts on free country, zoning and compartmentalisation and draft provisions for consistency with the official disease status recognition procedures
  4. Draft a questionnaire for Members to submit applications for official recognition of disease status
  5. Recommendations for updates to the *Terrestrial Manual*
  6. Review of Member Comments on equine disease chapters of the *Terrestrial Code*
  7. Adoption of the draft report
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## Appendix II

**OIE AD HOC GROUP ON OFFICIAL DISEASE STATUS RECOGNITION  
OF AFRICAN HORSE SICKNESS (AHS)**

**Paris, 27 – 29 January 2010**

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## REPORT OF THE OIE *AD HOC* GROUP ON SWINE VESICULAR DISEASE

Paris, 16-17 February 2010

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A meeting of the OIE Ad hoc Group on Swine Vesicular Disease (SVD) was held at the OIE Headquarters in Paris from 16 to 17 February 2010.

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

Dr Kazuaki Miyagishima, Deputy Director General of OIE welcomed the Group members on behalf of Dr Bernard Vallat, the OIE Director General. Dr Lea Knopf of the Scientific and Technical Department explained the agenda and updated the Group on the procedural progress of the SVD draft Chapter since the last meeting of the SVD *ad hoc* Group held in April 2008. The OIE had received numerous Member comments on the circulated SVD draft chapter. Additionally, related *Terrestrial Code* chapters which were partly used as models to draft the SVD chapter were also revised substantially since the last meeting of the Group. Therefore the Scientific Commission decided to refer the SVD draft chapter and OIE Member comments back to the *ad hoc* Group for revision to reflect the aforementioned considerations in the Chapter on SVD so that the latter correctly captures the disease characteristics and recent scientific findings.

Dr Silvia Bellini chaired the meeting, and Dr Georgi Georgiev and Dr Jef Hammond co-acted as rapporteurs. The draft agenda was agreed upon, with addition of reconsideration of the appropriateness of the maintaining of SVD on the OIE list. The agreed agenda and list of participants are attached as Appendices I and II, respectively.

### 2. SVD and criteria for listing the disease by OIE

The Group found it important to note from the outset that SVD was only included in the OIE list of notifiable diseases due to its clinical similarity with foot and mouth disease (FMD). The Group agreed that it was still difficult to justify the inclusion of SVD on the OIE list of notifiable diseases as SVD barely fulfilled the necessary criteria as described in Chapter 1.2. of the *Terrestrial Code* and as discussed during the meeting of the *ad hoc* Group on diseases / pathogenic agent notification in 2004. The Group took into consideration that nowadays diagnostic tests are available to differentiate promptly the two diseases. The Group re-opened the debate on the OIE listing of SVD highlighting the older and more recent facts and referring to the discussion at its previous meetings, as follows:

Although “international spread” of the disease apparently occurred in the early 1990s, the later appearance of the disease in Portugal in 2007 could not be linked to other foci of infection. International spread would appear to be the only criterion now fulfilled by SVD and therefore its inclusion in the list could be questioned. The *ad hoc* Group considered that the OIE criteria for listing a disease left room for interpretation, especially since no time lines were given for the occurrence of proven international spread. The last time, international spread was proven for SVD was in the early 1990s.

This finding seemed also to be supported by the disease trend towards subclinical and unapparent infections, as officially documented over the past 15 years in Italy (see figure 1). In particular, since 2000 there had been a significant reduction in clinical manifestations of the disease in the field (reducing the requirement for differential diagnosis for FMD) and spread from Italy to other countries had never been demonstrated. If a frequently subclinical disease was made notifiable, then sole reliance on clinical detection might give rise to significant under-reporting and result in silent spread of infection.

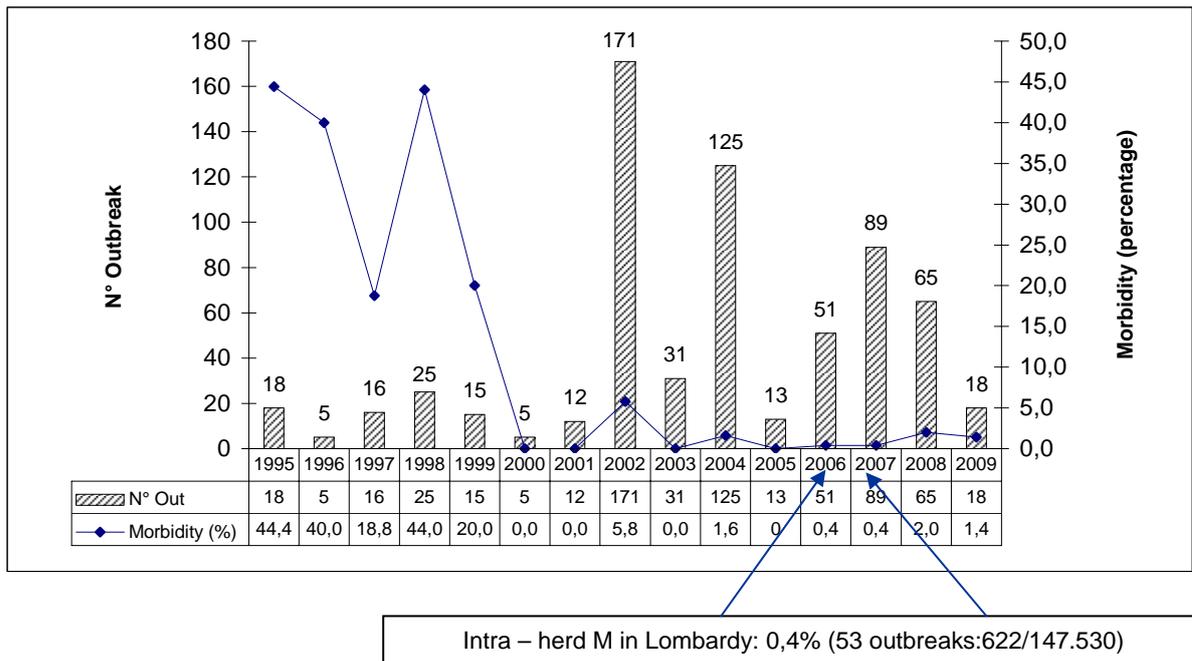


Figure 1. SVD in Italy 1995 – 2009 and occurrence of clinical disease (source: S. Bellini, IZS Brescia, Italy)

### 3. Review of OIE Member comments on the draft chapter on Swine Vesicular Disease circulated and revisions of the Chapter

#### Similarities between SVD and FMD

The Group considered that in view of the marked reduction in clinical appearance of SVD and the difference in its epidemiology and pathway of transmission of SVD compared with FMD, it was not appropriate to apply the same control measures to both diseases. The Group agreed that according to the epidemiology of SVD, compartmentalisation would represent a suitable tool for controlling the disease. In addition, in case of clinical disease, robust and rapid diagnostic tests for detection and differentiation of vesicular conditions, enabling exclusion or confirmation of either FMD or SVD, were now available. Recently developed portable diagnostic tests for FMD showed a high specificity and sensitivity providing thereby a mechanism for detection in the field, which could then be followed up by laboratory confirmation.

It would be worth to re-consider the restrictions on the importation of fresh meat from infected countries, also in view of the low impact of the disease. Due to the pathogenesis of SVD (short viraemic period, no replication of virus in the muscles), the risk of virus being present in muscle meat was considered to be negligible, but could not be excluded (especially intestines). SVD virus was, further, not a zoonotic pathogen.

#### Surveillance for SVD

The revised SVD Code Chapter made reference to surveillance specific to SVD. The Group therefore reconsidered and adapted the existing draft surveillance guidelines on SVD which had been elaborated during the April 2008 meeting. Additional considerations: Surveillance carried out based purely on clinical observations was no longer considered appropriate for detecting SVD on the basis of the updated data showing significant switch from clinical to sub-clinical disease in recent years. Surveillance based on laboratory testing was therefore fundamental to detect the disease and determine the SVD status of a country. And as explained in the report of the Group of April 2008, surveillance for SVD varied considerably within Europe; three countries had undertaken very extensive serological surveillance (Netherlands, Spain, Italy), some other countries had carried out more targeted sero-surveillance and many relied primarily on clinical diagnosis. Due to the frequently subclinical nature of SVD virus infection and the lack of information on surveillance methods, the global distribution of the virus could not be established with certainty.

#### The lack of individual identity for the SVD chapter

Again, the Group noted that SVD was primarily included in the OIE list due to its clinical similarity with FMD. The Group observed that the draft up for revision was based upon chapters written for FMD, classical swine fever and Aujeszky's disease and concluded that it was important to produce a document specific for SVD. Since field evidence demonstrated a very different disease profile and impact compared with the above diseases, an unspecific *Terrestrial Code* Chapter on SVD could easily lead to unjustified trade restrictions (e.g. identical trade barriers for live animals and animal products as for FMD). The Group took note that comments from EU supported the move to modify the restriction criteria in case of outbreaks of SVD. The EU suggested that the current policy on SVD should be reviewed in relation to the new framework of animal health strategy and the ongoing work on categorisation of animal diseases. Further, documentation stated that current EU legislation (based upon FMD) could not be regarded as consistent, proportional and sustainable and needed updating. Already in its last report the *ad hoc* Group considered the requirements to control the disease by stamping out and for stringent international controls on trade as rather disproportionate.

The Group revised the existing draft taking into account the above stated facts, the OIE Member comments and the comments received by email from an *ad hoc* Group member who could not attend the meeting. The updated draft Chapter on SVD would be transferred by the Scientific and Technical Department to the Scientific Commission for their consideration.

#### **4. Finalisation and adoption of draft report**

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

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.../Appendices

Appendix I

**MEETING OF THE  
OIE AD HOC GROUP ON SWINE VESICULAR DISEASE**

**Paris, 16 – 17 February 2010**

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**Agenda**

1. Appointment of chairman and rapporteur and Adoption of agenda
  2. SVD and criteria for listing the disease by OIE
  3. Review of OIE Member comments on the draft chapter on Swine Vesicular Disease circulated and revisions of the Chapter
  4. Finalisation and adoption of draft report
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## Appendix II

## MEETING OF THE OIE AD HOC GROUP ON SWINE VESICULAR DISEASE

Paris, 16 - 17 February 2010

## List of participants

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**REPORT OF THE OIE AD HOC GROUP MEETING  
ON CRIMEAN CONGO HAEMORRHAGIC FEVER (CCHF)**

**Paris, 16 – 17 February 2010**

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The first meeting of OIE *ad hoc* Group on Crimean-Congo Haemorrhagic Fever took place in Paris from 16-17 February 2010.

The meeting was chaired by Dr Noël Tordo, and Prof. Frans Jongejan acted as the rapporteur. The Agenda, list of participants are attached as Appendices I and II, respectively.

**1. Introduction**

Dr. Kazuaki Miyagishima, Deputy Director General of the OIE, welcomed the members on behalf of Dr. Bernard Vallat, Director. Dr. Miyagishima explained to the members of the *ad hoc* Group that the OIE had been strengthening its activities in the field of zoonoses, recognizing the need to fill a gap between animal diseases and human diseases in collaboration with WHO and FAO at the international level. He added that the group should not lose sight of the big picture and provide specific proposals for consideration by the Scientific Commission on Animal Diseases.

Dr. Kathleen Glynn from the Scientific and Technical Department of the OIE briefed the Group on events which led to the addition of CCHF to the OIE list of notifiable diseases and asked the Group to put forward proposals with respect to OIE guidance of CCHF risk management using up-to-date scientific information.

**2. Discussion addressing the terms of reference for the *ad hoc* Group**

**2.1. Update on the current situation of CCHF in the world with special emphasis on CCHF infection in terrestrial animals, the relevance of infected animals for public health (e.g. slaughtering of infected animals), and implications for the safety of animal products**

**a) Current situation**

The group reviewed the statement from the *ad hoc* Group on Animal Disease Notification (November 2004), in which CCHF had been proposed for addition to the OIE listed diseases. At the time, it was stated that CCHF was not shown to have international spread.

Since 2004, there has been an increase in the number of documented human CCHF cases occurring from hyper-endemic to sporadic fashion over the past decade from countries in Eastern Europe, Central Asia, Russia, the Middle East including the Saudi Arabian peninsula, and Africa. This is particularly well-documented in Turkey and Russia. Increased public awareness and surveillance may be contributing to the increase in reported cases. A majority of the knowledge of animal infections with CCHF virus has been the result of investigations following outbreaks of human disease. Increased circulation of CCHF virus has historically been associated with ecological changes, particularly changes in land use and agricultural practices.

The *ad hoc* Group briefly reviewed the WAHIS/WAHID data for CCHF. No immediate notifications had been reported to OIE since CCHF was added as a listed disease in 2006, but six countries reported the confirmed or suspected presence of CCHF in animals in their 6-monthly reports during 2005-2009. In the absence of guidance on surveillance and diagnostic measures, interpretation of these reports is difficult. There are countries in which human cases have been reported for which animal situation has not been described. The Group noted that there had been research and field investigation studies documenting animal or tick infections in additional countries found in the literature that were not officially reported.

The Group reviewed several examples of these studies.

#### Turkey

One study was conducted in 2005 in areas where human cases had been reported. 74% of 400 cattle were tick infested and the predominant species was *Hyalomma marginatum*; 79% of the 250 cattle tested were CCHF IgG ELISA positive (using a commercially available test, conducted by Central Veterinary Institute of the Ministry of Agriculture).

In subsequent studies ticks were collected from livestock and wildlife and the environment in various places, and both animals and ticks were tested for CCHF virus presence. High tick infestation rates were seen. Animals (cattle, wild boars, hares, partridges) and *Hyalomma* ticks (including egg batches) from these animals and environment were positive for CCHF by RT-PCR. This confirms the important role of wildlife in virus circulation.

Scientists were able to use information on environmental habitat from remote sensing (NDVI) and tick surveillance information gathered from previous studies. GIS mapping of tick distribution and humans cases identified a strong correlation between habitat fragmentation and disease incidence.

#### Southern Federal districts of Russia

Studies conducted in Russia found similar results, and in addition highlighted the potential role of rooks in virus circulation.

### **b) Infected animals/public health**

The public health risk from animals can be divided into exposure to infected ticks on animals, or exposure to infective blood or tissues. The majority of human cases are associated with history of tick-bite.

However, viremic animals are considered a risk with respect to blood-borne transmission to slaughterhouse workers and anyone slaughtering infected animals. Human cases have been associated with the slaughter of infected livestock including ostriches.

In slaughter or animal husbandry situations (e.g. sheep shearing or milking), it can be difficult to discriminate between tick exposure or blood-borne exposure as the transmission route for individual human cases.

### **c) Animal products**

Limited information regarding the presence of CCHF virus is available in milk or milk products. Further studies are warranted to describe the potential risk to humans.

Muscle is not expected to be a replication site for the virus. Even if virus were to be present in the muscles or other tissues of infected animals, after post-slaughter acidification has occurred, meat is presumed to be non-infectious, based on the highly labile nature of the CCHFV. Specific data for CCHFV distribution in animal tissues or survival in tissues/animal products and the oral transmission route are not available. The Group discussed whether information was available for similar viruses that could be extrapolated to CCHF, but none were identified by the Group.

Hides after slaughter may contain infected ticks which may reattach to humans. Ticks, however, detach from animals as the body temperature drops. Hides therefore should not pose a great risk based on ticks being present, but ticks detaching from animals during the slaughter process may pose a risk to reattach to humans if they have only recently been feeding on the animal and need to seek a new host.

**2.2. Review the recent research developments, research initiatives of CCHF and trade implications (also commodities)**

The *ad hoc* Group noted that there is limited current experimental CCHF research in animals. In part this is due to the fact that there are high levels of biosafety concern (CCHF is a BSL-4 agent in most of the non-endemic areas, and BSL-3 in several endemic countries), and there is no described disease in animals.

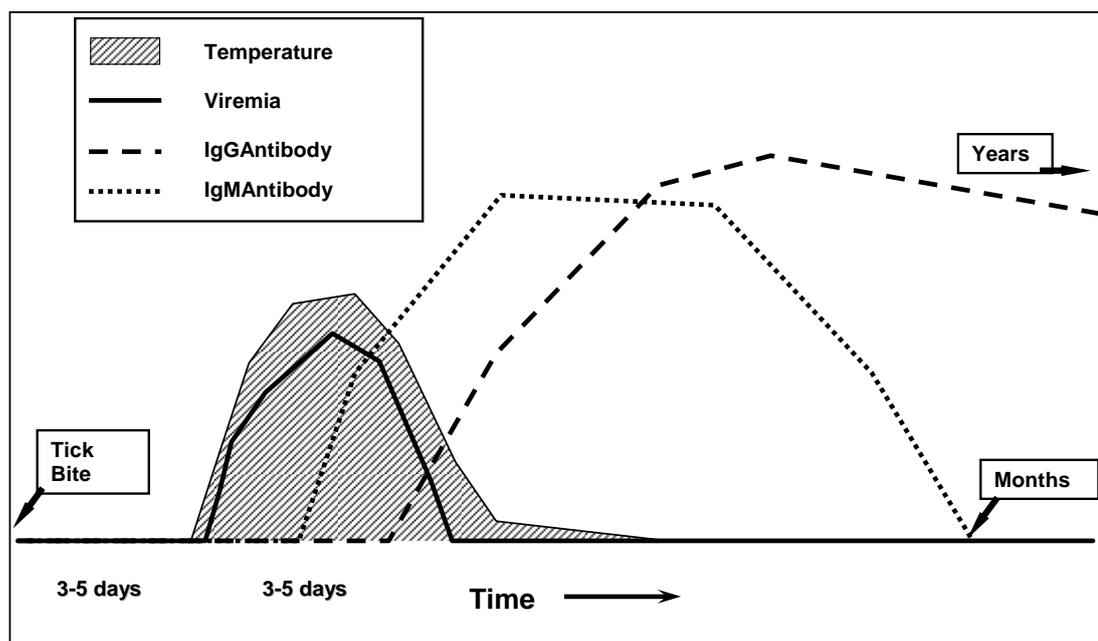
The Group identified previous research related to natural history of CCHF infection in animals and ticks. Dr Vatansever reported on a few studies in which experimental infection had been done in sheep – documenting incubation and duration of viraemia, ability to re-infect animals, ability for feeding ticks to become infected in non-viremic animals. In addition, experimental CCHF competency studies for several tick species has been reported in the past.

The knowledge on tick/host/pathogen interaction is highly fragmented for CCHF, due in part to the lack of entomological studies. Dr Jongejan presented information on the transmission dynamics using other viruses that may be applicable to CCHF using a relevant host and competent/non-competent vector ticks in a high containment environment.

Trade of live animals infected with CCHF virus was discussed by the Group. In particular the risk of spread of CCHF virus into a new geographic area through the introduction of infected livestock, other animals (wildlife or migrating birds), or infected ticks was discussed. The introduction of a viremic animal into an area that had not yet documented CCHF cases and that has a local competent vector could allow transmission and establishment into the new area. Trade of animals infested with ticks infected with CCHF virus and where either this tick or both suitable habitat and preferred hosts are present could allow introduction of CCHF virus into new area.

**2.3. Review the current state of surveillance for, diagnosis of, and control measures for CCHF among animals, including vector related issues**

The dynamic of the CCHF infection in human is well characterized (see figure), but few data exist for animal infection



The Group reviewed the available diagnostic tests, with respect to their use in different animal species or ticks, the availability of the assay (either laboratory developed assays or commercially available assays) and the biosafety needs related to the production of the different tests. It is important to note that this information is mainly derived from human testing and that no recommendation or guidelines are currently available for animal testing. Available testing may be not useful for trade purposes, and measures to prevent the export/import of the pathogen or vector may be based on vector control measures and or quarantine and not testing.

A table summarizing this information is provided here:

Assays		Species Specific <sup>&amp;</sup>	Tick	Biosafety Production requirement <sup>§</sup>	Commercial Availability	Best sample	Biosafety (utilisation)
ELISA Antigen detection	Live virus	No	Yes	BSL3/4	limited	Blood <sup>@</sup> /tick suspension	No*
	recombinant	No	Yes	BSL-2	limited	Blood <sup>@</sup> /tick suspension	No*
PCR/Taqman		No	Yes	BSL-2		Blood <sup>@</sup> /tick suspension	No*
Virus isolation		No	Yes	BSL3/4	NA	Blood <sup>@</sup> /tick suspension	BSL3/4
IgG detection	IFA	Yes	NA <sup>#</sup>	BSL3/4	limited	Blood/serum/plasma	No*
	ELISA	Yes	NA	BSL3/4	limited	Blood/serum/plasma	No*
IgM detection		Yes	NA	BSL3/4	limited	Blood/serum/plasma	No*
Seroneutralisation <sup>+</sup>	Live virus	No	NA	BSL3/4	NA	Blood/serum/plasma	BSL3/4
	Pseudovirus	No	NA	BSL-2	NA	Blood/serum/plasma	No*

# NA=non applicable

& species specific reagents should be used but may not be available for some animal species. Proper design of the test should be applied to avoid false positive or negative results

§ some components of the assays should be produced in containment laboratories.

\* Inactivation techniques available for original sample (non infectious after this inactivation step)

@ other samples: serum, plasma, tissue suspension

+ reserved to reference laboratories

It was agreed that very little animal surveillance is being conducted systematically, including in countries with previously documented human cases, infected animals, or infected ticks.

Dr. Vatasever presented the approach taken in Russia as one exception to this statement. In addition to testing of animals and ticks in response to human cases, they are also conducting surveillance of tick infestation in animals. Field stations have been established in areas where there have been previously identified cases in humans. Starting in March/April through June, cattle are monitored for tick infestation. Public health interventions efforts are made based on classification of areas as high risk (more than 3 adult *Hyalomma* ticks per cattle). These procedures were published in 2001 and updated in 2009 by the Russian Ministry of Health, although the Group did not know how they had been implemented.

Acaricide treatment of cattle and in special circumstances environmental treatment has been implemented as a control measure. No data are available of the usefulness and efficacy of this procedure for preventing CCHF virus circulation and human disease.

#### 2.4. Evaluate existing OIE guidance relevant to CCHF, and determine whether it accurately reflects current diagnostic standards, surveillance methods, and control measures for CCHF including vector related issues

The *ad hoc* Group realised that specific guidance with respect to diagnostics methods and interpretation of test results was lacking and was currently not provided by the OIE. There was no *Terrestrial Code* or *Terrestrial Manual* Chapter for CCHF, and Chapter 2.9.1 in the *Terrestrial Manual* (Bunyaviral diseases of animals (excluding Rift Valley fever)) did not address CCHF. There was no Technical Disease Card for CCHF, no prescribed or alternate tests, or other non-binding guidance specific to CCHF.

The *ad hoc* Group reviewed *Terrestrial Code* chapter 1.5 on Surveillance of arthropod vectors of animal diseases to assess its relevance to CCHF. Although not specially aimed at CCHF, this chapter might be easily adapted to be applicable to CCHF surveillance/control if a country elected to implement vector surveillance.

The guidance should be implemented based on the vector transmitting CCHF virus, for instance, taking into account the seasonality of vectors, host preference of ticks, and measures to limit risks when handling potential infected ticks.

## 2.5. Advise the OIE on the need for specific guidelines for diagnosis, surveillance, and reporting of CCHF in terrestrial animals

The Group agreed on the need for specific OIE guidelines for diagnosis, surveillance, reporting, as well as control of CCHF in terrestrial animals.

Diagnosis: The Group felt that there was a need for OIE to provide guidance to Members in the use and interpretation of various diagnostic assays and that the precise description of recommended test procedures would be best addressed in a separate chapter for CCHF in the OIE *Terrestrial Manual*.

Surveillance: Information drawn from surveillance of animal and tick populations is crucial to evaluate the risk for humans. The Group did not identify the best and effective means to conduct such surveillance. The Group wished to obtain more information on the programme in Russia, including the combined roles of Ministry of Health and the Veterinary Services, to assess whether it could serve as a potential model for surveillance and control. Exchange of information on animal and human occurrences of CCHF between representatives of animal and human health services at all levels would benefit the control of CCHF.

Reporting: OIE Members must report occurrences of CCHF in animals to the OIE as it is a listed disease. Strengthened collaboration between OIE, WHO and FAO through the Global Early Warning and Response system for major animal diseases including zoonoses (GLEWS) was seen as a welcome development.

Control: It was mentioned that in addition to the direct benefit of the control of *Hyalomma* ticks for livestock health, there would likely be an indirect benefit for human health through the reduction of tick populations. The Group felt that there was a need for guidance from OIE regarding the implementation of tick control programmes that would also need to address the potential effects on the epidemiology of tick-borne diseases of livestock.

For trade purposes, the Group agreed that acaricide treatment and implementation of a quarantine period of approximately 2 weeks (based on estimated duration of incubation and viremia) would reduce the risk for international spread.

## 2.6. Discussion on the appropriateness to advise OIE Members on drafting of chapters for other zoonotic haemorrhagic fevers

The Group noted that some other zoonotic hemorrhagic fever viruses might deserve consideration for inclusion the *Manual* and/or the *Code* such as Alkhurma virus (a variant of Kyasanur Forest Disease Virus) or Reston Ebola virus because of their occurrence in domestic or wild animals and the human population. The Group further noted that at the present day, only limited information was available on the distribution and impact of these diseases.

## 3. General Conclusions

The Group concluded that the information currently available regarding the characteristics of CCHF infection in animals and the potential transmission to humans, as well as the host, pathogen, and vector interaction, was not sufficient to serve as the evidence basis for comprehensive OIE standards and guidance. Nevertheless, the Group highlighted some areas where the available data might be sufficient to serve as basis for initial or preliminary guidance, such as found in a Technical Disease Card.

#### **4. Other Business, Next Steps**

The Group requested more information on whether and to what extent vector surveillance guidance would be included in the Guide for Terrestrial Animal Surveillance (under preparation), and offered to contribute to development of guidance regarding vector surveillance.

Prof Swanepoel was not able to participate in this *ad hoc* Group meeting. The Members present wished to obtain his invaluable input in further discussions of the Group.

#### **5. Adoption of the draft report**

The members adopted this draft report for submission to and endorsement by the Scientific Commission for Animal Diseases.

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.../Appendices

Appendix I

**MEETING OF THE  
OIE AD HOC GROUP ON CRIMEAN CONGO HAEMORRHAGIC FEVER (CCHF)**

**Paris, 16 – 17 February 2010**

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**Agenda**

1. Introduction
  2. Discussion addressing the terms of reference for the *ad hoc* Group
    - 2.1. Update on the current situation of CCHF in the world with special emphasis on CCHF infection in terrestrial animals, the relevance of infected animals for public health (e.g. slaughtering of infected animals), and implications for the safety of animal products .
      - a) Current situation
      - b) Infected animals/public health
      - c) Animal products
    - 2.2. Review the recent research developments, research initiatives of CCHF and trade implications (also commodities)
    - 2.3. Review the current state of surveillance for, diagnosis of, and control measures for CCHF among animals, including vector related issues
    - 2.4. Evaluate existing OIE guidance relevant to CCHF, and determine whether it accurately reflects current diagnostic standards, surveillance methods, and control measures for CCHF including vector related issues
    - 2.5. Advise the OIE on the need for specific guidelines for diagnosis, surveillance, and reporting of CCHF in terrestrial animals
    - 2.6. Discussion on the appropriateness to advise OIE Members on drafting of chapters for other zoonotic haemorrhagic fevers
  3. General Conclusions
  4. Other Business, Next Steps
  5. Adoption of the draft report
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Appendix II

**MEETING OF THE  
OIE AD HOC GROUP ON CRIMEAN CONGO HAEMORRHAGIC FEVER  
Paris, 16 – 17 February 2010**

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**REPORT OF MEETING OF THE OIE *AD HOC* GROUP ON THE EDITING OF A HANDBOOK  
ON TERRESTRIAL ANIMAL HEALTH SURVEILLANCE  
Paris, 29 September–1 October 2009**

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A meeting of the OIE *ad hoc* Group on the Editing of a Handbook on Terrestrial Animal Health Surveillance was held at the OIE headquarters in Paris from 29 September to 1 October 2009. Dr Kazuaki Miyagishima, Head of the Scientific and Technical Department welcomed the *ad hoc* Group participants on behalf of Dr Bernard Vallat, the Director General of OIE. Two representatives of two institutions invited to and associated with the project, namely Prof. Koos Coetzer (OIE Collaborating Centre for Training in Integrated Livestock and Wildlife Health Management, South Africa) and Dr Tony Martin, (AusVet Animal Health Services, Australia) could not travel but participated in key sessions of the meeting by telephone conference to comment and provide their guidance on the project.

Owing to the physical absence of Prof. Coetzer who had previously been designated as chair of the meeting, the Scientific and Technical Department provided assistance in mediating the interaction of participants physically present and those participating by teleconference. Dr Aaron Scott volunteered to act as rapporteur. The agenda agreed upon and list of participants are attached as Appendices I and II, respectively.

**1. Short presentation of involved Collaborating Centres or institutions and their main expertise**

In addition to editing of a handbook on terrestrial animal health surveillance, this project was also intended to serve as an exchange platform for OIE Collaborating Centres and other institutions involved having renowned expertise in veterinary epidemiology and that are located in different settings and parts of the world. Therefore the participants were given the opportunity to introduce themselves and their institution's particular fields of expertise.

**2. Background, framework and scope of the of the OIE handbook on terrestrial animal health surveillance**

Dr Miyagishima gave some introductory remarks on the background and scope of the handbook on terrestrial animal health surveillance (handbook). This project was repeatedly discussed in several fora of the OIE, in particular in the Scientific Commission for Animal Diseases. The Scientific Commission stressed the necessity of the OIE providing veterinary services with a practical guide to animal disease surveillance for use by veterinarians and veterinary para-professionals alike. The handbook should therefore strike an acceptable balance between academic and theoretical concepts, and the need to be practical and usable under field conditions. The approach and recommendations of the OIE *Terrestrial Animal Health Code* on proving absence of disease or infection and surveillance guidelines to demonstrate freedom from disease and infection for the purpose of disease status recognition, should receive more prominence. Although a wide range of academic text books and manuals were already available, most publications focus on specific topics or diseases and thus a handbook that contains more general and horizontal approaches, including and integrating aspects on wildlife and vector surveillance, would be welcome. Furthermore, the handbook should be a source of practical information for all OIE Members and should not only be targeted at developing countries. Respecting OIE principles, it should not be prescriptive but rather help to choose and implement approaches to animal health surveillance with the ultimate goal of achieving equivalence.

The Scientific Commission delegated to the *ad hoc* Group on Epidemiology the task of writing an introductory chapter describing the target audience, the objectives of the handbook and the purpose of surveillance, and of suggesting an initial outline of chapters and sections reflecting the scope as mentioned above for further discussion. These documents served as a starting point for in-depth discussions of the *ad hoc* Group on Editing of a Handbook on Terrestrial Animal Health Surveillance.

The Group decided that it was necessary to refine the objectives of the handbook and the proposed outline of chapters and sections in the light of information received and ongoing discussions within the Group. Particular emphasis was given to discussion about the target audience, the necessary and acceptable degree of simplicity and ways of incorporating wildlife aspects. The Group agreed to summarise its conclusions in a guidance document for institutions and their contributors involved in the project. This guidance document is attached as Appendix III. The main points were: (i) to incorporate wildlife surveillance throughout the handbook instead of covering it as a separate chapter; (ii) to present the handbook in a clear and straightforward language and with minimal technical jargon; (iii) to focus on applied theory to address real world problems rather than on technical details; and (iv) to supplement OIE principles in the *Terrestrial Code*.

Thereafter the Group focused on the two proposed outlines for the handbook that were made available to the participants. The original proposal, which was compiled by the *ad hoc* Group on Epidemiology, and a restructured alternative chapter outline, which was proposed by a participating institution prior to this meeting were compared. The experts decided to come up with a merged version of the outlines, as both proposals had sections of great value in the light of the refined objectives of the handbook. The following chapters were proposed:

- Chapter 1 describes what this handbook is for;
- Chapter 2 describes components of a surveillance system and tells how to plan a surveillance system with these components;
- Chapter 3 explains how to evaluate the performance of surveillance;
- Chapter 4 informs about potential data sources for carrying out activities described in chapter 2 and 3;
- Chapter 5 is about methods and tools using the data sources (chapter 4) that are available for carrying out activities described in chapters 2 and 3.

The agreed outline including the five chapters and their sections is attached as Appendix IV. The experts suggested that the revised outline be submitted, for information and comment, if any, to the *ad hoc* Group on Epidemiology, which developed the original outline.

### **3. Review and comparison of existing publications on animal health surveillance, including OIE standards**

Throughout the meeting, the Group took into consideration existing manuals, guides or handbooks published by the OIE and other organisations/institutions (online and paper versions) related to animal or human health surveillance as sources of reference and comparison. In terms of the presentation of the handbook, the Group agreed that in view of the target audience the A4 format was preferable, and that there was a need to include simple figures, flowcharts and tables to render the contents more comprehensible. The OIE secretariat indicated that the handbook would most probably be printed in black and white and that the number of pages should not exceed 150 pages in A4.

When comparing existing manuals, guides, handbooks and similar documents, the participants expressed their view of the use of the term “handbook”. It became clear that the content and objectives of the OIE handbook may exceed the generally accepted notion of handbook and that the term “guide” would be preferred. This was in line with the OIE “Guide for Aquatic Animal Health Surveillance” that would be published shortly.

### **4. Establishment and adoption of working procedures for the compilation of the future handbook**

Prior to the meeting the participating Collaborating Centres and other institutions had been asked to express their specific expertise and areas of interest for contributing to sections of chapters as presented in the original outline and table of contents of the handbook. The Group agreed to circulate the revised outline of the handbook to the institutions involved in order to give them a second chance to express interest for contributing to particular sections, because certain sections were merged or their focus was slightly revised.

It was agreed to assign responsibility to two or three institutions for each chapter, except the introductory chapter (chapter 1), which was to be revised by all institutions involved. The institutional contact person was defined as the participant of the *ad hoc* Group. Their role would be to coordinate the activities on the sections contained in the chapter and to oversee that the stated overall objectives of the handbook are well reflected in the output. The participants provided a short description of the focus for each chapter. The re-circulated outline would provide a selection of potential institutions and, if possible, their specialised contributors to individual sections to facilitate the work of the coordinator of that specific chapter and hence the Chief Editor. It was agreed that the institutions coordinating a specific chapter have to take care of the coordination and collaboration between contributors involved across all sections of that chapter and act as a liaison to the OIE headquarters and the Chief Editor. The overall coordination on the five chapters i.e. the entire handbook was attributed to the OIE Collaborating Centre for Training in Integrated Livestock and Wildlife Health Management, South Africa (Prof. Coetzer, acting as Chief Editor, and his team). The detailed aspects of the tasks of the Chief Editor would be defined and be circulated among the Group for comment.

To ensure smooth progress, avoid unnecessary duplication and guarantee a throughout focus on the objectives of the handbook, the Group chose the following top-down approach:

While chapter 1 serves as an introduction to the purpose of the handbook and surveillance, chapter 2 builds on chapter 1. Chapter 2 provides an overview on components of a surveillance system and is a roadmap for designing a surveillance system, i.e. critical components of a surveillance plan and how to put them together. It summarises all the essential components of surveillance systems, what they mean and how they are applied, and their key contributions to the overall system. Chapter 2 refers to the more technically detailed chapters of the handbook on methods and tools, data sources and others, as appropriate. Therefore additional guidance to contributors in terms of style, format and size of sections would be available to contributors as soon as draft chapters 1 and 2 are finalised. The two institutions sharing responsibility and coordination for chapter 2 indicated that a large amount of descriptive material was already available and estimated that it was possible to finalise a first draft of chapter 2, without causing too much delay to the preparation of chapters 3 to 5.

Concerning the harmonisation of texts, style and guidance to contributors given in [Appendix III](#), the revised outline of the handbook and detailed technical instructions to individual contributors would support their work (and the work of chapter coordinators). The experts reviewed a template for instructions to authors and advised on key recommendations to be included and excluded. The Scientific and Technical Department would elaborate on these detailed instructions and would circulate those to the *ad hoc* Group participants for comment. Ms Sara Linnane, scientific editor of the Scientific and Technical Department, would assist in editing and formatting the texts of the handbook received.

The Group also discussed how to efficiently work on and share documents while drafting and reviewing outside the physical meeting. Dr Scott, Dr Mariner and Dr Parmley proposed to check on user-friendly and easily available online document sharing technologies and will report back to the Group.

Procedural aspects on feedback on this project to the Scientific Commission and the *ad hoc* Group on Epidemiology outside their regular meetings need to be clarified.

## **5. Review of the proposed introduction section and content of the handbook**

At the end of the meeting a number of experts reviewed the text of the original introductory chapter for consistency with the proposed content and objectives of the handbook. Owing to time constraints the Group decided to work on this text after the meeting and to circulate it to the Group for further comments as soon as possible.

## 6. Elaboration of a preliminary time plan for the compilation of the first version of the handbook

The majority of participants confirmed that they prefer a rather tight timeline for writing and compiling the handbook. The Group supported the preliminary timeline below, with the understanding that sections should be rather short, considering the expected total volume of around 150 pages and that ample material was already available that needed to be adapted to the context of the handbook. Certain concerns remained as to the detailed timeline for the final, overall editing because of the need for feedback to and from the Scientific Commission and the *ad hoc* Group on Epidemiology and their availability outside their regular meetings.

The Group noted that there might be a need for a second physical meeting during the month of March 2010, irrespective of milestones achieved in the timeliness.

Based on the discussions and conclusion above the Group proposed the following timeline:

Milestones	Deadlines
Complete assignment of institutions and contributors to sections of the outline	1 November 2009
Revision of introductory text (chapter 1)	1 November 2009
Distribution of instructions to contributors and related documents	15 November 2009
Coordinate activities on chapter 2	15 November 2009
First draft Chapter 2	15 December 2009
Feedback on Chapter 2	15 January 2010
Draft chapters 3, 4, 5 available	Mid-March 2010
Second <i>ad hoc</i> Group meeting, feedback on chapters 3–5	End March 2010 (date to be confirmed)
First revision entire handbook	1 May 2010
Revision of draft	1 June 2010
Publication	December 2010, early 2011

## 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 in the week that followed the meeting.

.../Appendices

Appendix I

**MEETING OF THE OIE AD HOC GROUP ON THE EDITING OF A HANDBOOK  
ON TERRESTRIAL ANIMAL HEALTH SURVEILLANCE  
Paris, 29 September–1 October 2009**

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**Agenda**

1. Short presentation of involved Collaborating Centres or institutions and their main expertise
  2. Background, framework and scope of the of the OIE handbook on terrestrial animal health surveillance
  3. Review and comparison of existing publications on animal health surveillance, including OIE standards
  4. Establishment and adoption of working procedures for the compilation of the future handbook
  5. Review of the proposed introduction section and content of the handbook
  6. Elaboration of a preliminary time plan for the compilation of the first version of the handbook
  7. Finalisation and adoption of draft report
-

## Appendix II

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

**Paris, 29 September–1 October 2009**

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## Appendix III

**Objectives to guide institutions and contributors in the preparation of chapters  
for the “Guide for Terrestrial Animal Health Surveillance”**

This *Guide for Terrestrial Animal Health Surveillance* is produced to provide guidance on the planning and implementation of disease surveillance systems that will be efficient and will provide credible information for decision-making purposes. It is intended to be used by veterinary services, their staff and their experts in designing, implementing and evaluating surveillance systems for diseases, infections and residues affecting livestock and wildlife within their country. Other users should also benefit from knowing about the ways in which the information they receive has been obtained, so as to perform a critical evaluation of the fitness of the data for the intended purpose.

The following suggestions should be considered throughout the writing of chapters and sections:

- **Balanced publication, not exclusively focusing on developing countries, should be stimulating and give ideas**
  - “Hands-on” concepts
  - Provide a source of dialogue on innovation to enhance, for example the OIE *Terrestrial Animal Health Code* or existing national practice:
    - e.g. risk-based surveillance and (import) risk assessment
    - e.g. epidemiological modelling as an analytical tool for surveillance
- **Target audience are the veterinary services (public and private):**
  - Consider large degree of diversity in training, skills, experience, responsibilities of staff, across services and between countries
  - Use clear language (plain English)
  - Not necessarily targeted at vets/epidemiologists only, understandable for professional field staff and decision makers
  - Adaptability and flexibility of contents, use of examples, graphs, flowchart, decision trees, text boxes and tables
- **Whenever possible focus on concepts and applied theory to real world problems rather than on technical details** (e.g. provide key references for further reading where appropriate, preferably to easily accessible ones (e.g. scientific articles online))
- **Consider OIE principles in the *Terrestrial Code***
  - Make reference to existing chapters in OIE standards
  - Not prescriptive (equivalence, result oriented)
  - Definitions and surveillance principles (chapters on surveillance and vector surveillance, disease specific articles on surveillance)
  - Surveillance for accurate documentation and/or recognition of disease status for trade
- **Additional aspects on surveillance,**
  - Surveillance for eradication and control of disease has to be considered
  - Certification of national disease status for trade
  - Diseases of economic importance
  - Potential human health impact (including food safety, residues at farm level)

- Emerging diseases of unknown impact
  - Policy setting, resource allocation and strategic decision making
  - **National priorities and capacities**
    - Quality of veterinary services and sustainability of surveillance systems
    - Considerations of cost-effectiveness
    - Integration of different data sets/sources/surveillance systems (including human, livestock, wildlife, environment)
    - Wildlife-livestock interface, wildlife conservation purposes
    - Determination of target species, including wildlife and vectors, adapted to the situation
    - Non-pathogen specific surveillance, e.g. early warning systems, syndromic surveillance, nutritional surveillance
    - “Value” of surveillance, historic perspective (from the past to the future)
-

Appendix IV

**Revised outline of the Guide for Terrestrial Animal Health Surveillance**  
(Version 1, October 2009)

**Chapter 1: Introduction**

- 1.1. Statement of purpose
- 1.2. Overview and importance of surveillance
  - 1.2.1. Purpose of surveillance systems
  - 1.2.2. Overview of attributes of surveillance systems
- 1.3. Key definitions and criteria
- 1.4. How to use this Guide

**Chapter 2: Roadmap for designing a surveillance system: critical components of a plan**

- 2.1. Purpose and objectives of the surveillance plan within the animal/public health programme
- 2.2. Stakeholders/key players in surveillance and their role (veterinary services, practitioners, farmers, reference laboratories, etc.)
- 2.3. Compensation mechanisms
- 2.4. Nature of disease: (known disease/unknown emerging disease)
- 2.5. Expected outcomes of surveillance (and of plan)
- 2.6. Selection of the methods and tools available
- 2.7. Planning the use of data sources (origin of surveillance information)
- 2.8. Target population data
- 2.9. Sampling strategies: disease focus, representativeness, units, etc.
- 2.10. Data processing and analysis
- 2.11. Investigation procedures, follow up of positive results
- 2.12. Communication/reporting/sharing of information
- 2.13. Planning performance measurements based on the attributes required for surveillance system (e.g. timeliness, representativeness,
- 2.14. Surveillance System Implementation Priorities, Timelines, and Internal Communications
- 2.15. Budget issues and estimating costs

**Chapter 3: Performance: Assessment and evaluation of surveillance system**

- 3.1. Quality measures
  - 3.1.1. Diseases that are present: Precision and accuracy (random and systematic error)
  - 3.1.2. Diseases that are absent (sensitivity and specificity)
- 3.2. Coverage and representativeness
- 3.3. Simplicity, practicality, efficiency
- 3.4. Flexibility, multiple utility, portability
- 3.5. Acceptability, ownership, value
- 3.6. Sustainability, robustness, resilience
- 3.7. Cost, cost-effectiveness
- 3.8. Timeliness
- 3.9. Fitness for purpose, usefulness, effectiveness
- 3.10. Evaluation of performance of veterinary services

**Chapter 4: Data sources:**

- 4.1. Personnel involved in data collection
- 4.2. Form of the data collected
  - 4.2.1. Notifications)
    - Farmers
    - Official veterinarians (national, subnational, local)
    - Private/industry veterinarians
    - Community animal health workers/veterinary para-professionals
    - Laboratories
    - Others, non-governmental organisations (NGOs)
  - 4.2.2. Media-based surveillance
  - 4.2.3. Abattoir surveillance
  - 4.2.4. Import/export testing (including quarantine)
  - 4.2.5. Trapping data (vectors)
  - 4.2.6. Hunting samples
  - 4.2.7. Vaccination records
  - 4.2.8. Farm-based production records
  - 4.2.9. Mortality and animal disposal data
  - 4.2.10. Animal movement records
  - 4.2.11. Indirect indicators (drug sales, etc.)

**Chapter 5: Tools and methods**

- 5.1. Classical tools
    - 5.1.1. Passive surveillance
      - Case definitions
      - Reporting systems
    - 5.1.2. Active surveillance
      - Non-random
      - Random
      - Sentinel herds or animals
      - Participatory disease surveillance
    - 5.1.3. Agent surveillance
    - 5.1.4. Vector surveillance
    - 5.1.5. Clinical and syndromic surveillance
    - 5.1.6. Serological surveillance
    - 5.1.7. Surveys and sampling
      - Immunity coverage
  - 5.2. Analysis of data
    - 5.2.1. Presence (e.g. emerging disease)
    - 5.2.2. Absence (e.g. freedom from disease)
    - 5.2.3. Prevalence (e.g. progress of control programmes)
  - 5.3. Communication/reporting/sharing of information
  - 5.4. Tools for optimisation of surveillance systems
    - 5.4.1. Risk-based surveillance
    - 5.4.2. Integration of different data sources in surveillance – randomised, non-randomised, active, passive, targeted, clinical – to increase confidence and optimise the use of resources
    - 5.4.3. Epidemiological modelling
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