Report of the Meeting of WOAH Terrestrial Animal Health Standards Commission

Original: English (EN)

9 to 19 September 2024
Paris

Introduction and Members contribution

This report presents the work of the WOAH Terrestrial Animal Health Standards Commission (hereinafter 'the Code Commission' or 'the Commission') who met in Paris, France from 9 to 19 September 2024.

The Code Commission wished to thank the following Members for providing written comments for the WOAH *Terrestrial Animal Health Code* (hereinafter 'the *Terrestrial Code*') : Argentina, Australia, Brazil, Canada, China (People's Republic of), Japan, Mexico, New Caledonia, New Zealand, Norway, South Africa, Switzerland, Thailand, the United Kingdom (UK), the United States of America (USA), Members of the WOAH Americas Region and the Member States of the European Union (EU). The Commission also wished to thank the following organisations for providing comments: the International Coalition for Animal Welfare (ICFAW), International Egg Commission (IEC), International Poultry Council, World Renderers Organizations (WRO), and to acknowledge the valuable advice and contributions from numerous experts of the WOAH scientific network.

The Code Commission reviewed all comments that were submitted prior to the deadline and were supported by a rationale. The Commission thanked Members that submitted their comments following the Guide for WOAH Members and International Organisations on submitting comments during the process for the elaboration of WOAH International Standards ('Guide'). The Commission wished to highlight that comments received on texts circulated with this report that are not in line with this Guide will not be considered or published. The Commission made amendments to draft texts, where relevant, in the usual manner by 'double underline' and 'strikethrough'. In relevant Annexes, amendments proposed at this meeting are highlighted in yellow to distinguish them from those made previously.

As communicated in the Commission's September 2023 report, the Director General agreed to progressively implement a process to improve the transparency of the WOAH process for the elaboration of Standards for better documentation and traceability of the process.

The first step in this process was the publication on the Delegates' website (in April 2024) of comments submitted by WOAH Members and partners and that were considered by the Commission at its February 2024 meeting. Comments were uploaded onto the Delegates' website at the same time as the publication of the Commission's report. Comments were published in the language that they were submitted.

The next step in this process is the publication of comments considered by the Commission together with the Commission responses in a specific annex (refer to Annex 3). Commission responses are presented in English, French or Spanish according to the language version of the report and associated Annex 3. However, due to resource constraints, the background text is presented only in English for all three language versions of the reports and their associated Annex 3 (EN, SP and FR). The comment itself and the rationale are published in the language that they were submitted.

Status of annexes

Annex 3 presents the comments considered and the Commission's responses. It is not presented for comments.

Texts in **Part A** (Annexes 5 to 14) are presented for comments and, after addressing the comments received in February 2025, will be proposed for adoption at the 92nd General Session in May 2025. Texts in **Part B** (Annexes 4 and 15 to 25) are presented for comments.

How to submit comments

The Code Commission strongly encourages WOAH Members and Organisations with a WOAH Cooperative Agreement to participate in the development of WOAH International Standards by submitting comments on topics and relevant annexes of this report.

Engagement of the Members and these Organisations in the standard-setting process through the submission of comments is critical to ensure that standards are based on the latest scientific and technical data, take into consideration the different contexts among Members and stakeholders and can be implemented. To ensure that comments are considered, they should be submitted by the deadline and in the format described in the Guide and the Standard Operating Procedure for WOAH Members and International Organisations to submit comments during the process for the elaboration of WOAH International Standards (SOP) available on the Delegate's website and the WOAH public website.

Members are reminded that comments that are not correctly formatted as described in the Guide and SOP, especially comments that are not supported by an argumented justification, will not be considered by the Commission. Any questions on the requirements for formatting and submission of comments should be sent to TCC.Secretariat@woah.org

The Commission also draws the attention of Members to those instances where the Scientific Commission for Animal Diseases (the Scientific Commission), the Biological Standards Commission, a Working Group or an *ad hoc* Group have addressed specific comments or questions and proposed answers or amendments. In such cases, the rationale is described in the respective reports of the relevant entity and Members are encouraged to review these reports together with the report of the Code Commission. These reports are available on the dedicated webpages on the WOAH website, e.g., for *ad hoc* Group reports:

https://www.woah.org/en/what-we-do/standards/standards-setting-process/ad-hoc-groups/

Deadline for comments

Comments on relevant texts in this report (Part A and Part B) must be received by 27 December 2024 to be considered by the Code Commission.

Where to send comments

All comments should be sent to TCC.Secretariat@woah.org

Date of the next meeting

The Code Commission noted that the dates for its next meeting are 4 to 14 February 2025.

List of Annexes

- Annex 1. Adopted agenda
- Annex 2. List of participants

Commission's response to circulated Annexes in its February 2024 report for information (PART C)

- Annex 3

Texts for comments and to be proposed for adoption (PART A)

- Annex 5. Glossary
- Annex 6. User's Guide
- Annex 7. New Chapter 4.X. Biosecurity (track change version, for information)
- Annex 8. New Chapter 4.X. Biosecurity (clean version)
- Annex 9. Chapter 7.1. Introduction to the recommendations for animal welfare
- Annex 10. New Chapter 8.Y. Infection with Nipah virus
- Annex 11. Chapter 11.5. Infection with *Mycoplasma mycoides subsp. Mycoides* SC (contagious bovine pleuropneumonia)
- Annex 12. New Chapter 11.X. Infection with bovine pestiviruses (bovine viral diarrhoea)
- Annex 13. Chapter 12.1. Infection with African horse sickness virus
- Annex 14. Infection with *Trypanosoma equiperdum* (dourine)

Texts for comments (PART B)

- Annex 4. Work programme
- Annex 15. Glossary
- Annex 16. Chapter 1.6. Procedures for official recognition of animal health status, endorsement of an official control programme, and publication of a self-declaration of animal health status, by WOAH
- Annex 17. Chapter 5.4. Measures and procedures applicable to the exportation of commodities
- Annex 18. Chapter 5.5. Measures and procedures applicable to the transit of commodities
- Annex 19. Chapter 5.6. Measures and procedures applicable to the importation of commodities
- Annex 20. Chapter 5.7. Border inspection posts and quarantine centres
- Annex 21. Chapter 8.8. Infection with foot and mouth disease virus
- Annex 22. Chapter 8.13. New World screwworm and Old World screwworm
- Annex 23. Crimean-Congo haemorrhagic fever
- Annex 24. New Chapter 10.X. Infection with avian metapneumovirus
- Annex 25. Equine encephalomyelitis (Eastern and Western)

1. Welcome

1.1. Welcome from the Directors

On 9 September, Dr Emmanuelle Soubeyran, the newly elected WOAH Director General, and Dr Montserrat Arroyo, WOAH Deputy Director General, International Standards and Science (WOAH DDG ISS), met with the members of the Biological Standards Commission, the Scientific Commission for Animal Diseases, and Terrestrial Animal Health Standards Commission to offer a formal welcome for the new term of Specialist Commissions, following the elections at the 91st General Session in May 2024.

Dr Soubeyran congratulated the members on their election and extended her appreciation to the members' employing institutions and national governments for their support. Dr Soubeyran outlined her vision for innovation, strategic development, and increased visibility for WOAH, emphasising collaboration, digitalisation, and global programme enhancements. Dr Soubeyran informed Commission members that WOAH will continue with the ongoing process to revise the Basic Texts of the Organisation, with a focus to review its governance, to ensure WOAH's credibility among Members and stakeholders.

Dr Soubeyran highlighted the critical role played by the Specialist Commissions, as leaders of the Organisations technical governance, and stressed the importance of Commission expertise for WOAH's reputation and recognition. She also emphasised the importance of collaboration among Specialist Commissions. Dr Soubeyran reiterated her commitment to promote inclusivity and transparency and noted that it was of utmost importance not only to promote the active engagement of all Members in the process for the elaboration of standards, but also to ensure that WOAH standards address the needs of all Members and that they are implementable worldwide.

Dr Soubeyran stressed WOAH's activities to improve transparency through the publication of Members comments. Further she reminded the Commission about the digitisation of the WOAH standards in the form of the WOAH Standards Online Navigation Tool to provide users with streamlined access and navigation. Inclusion and member involvement were also highlighted as essential elements of WOAH's governance. Dr Soubeyran shared plans to increase Member participation in the standard-setting processes and shared that upcoming Regional Commission Conferences will include dedicated sessions for Members to share priorities for standard-setting work items. In closing, Dr Soubeyran reaffirmed WOAH's commitment to transparency, credibility and inclusivity in all its operations.

Dr Arroyo highlighted the significance of a new term, noting the addition of new members, geographic balance, and improved workload management. She also stressed the importance of inclusivity, transparency, and continuity in each of the Commissions' work. In closing, Dr Arroyo highlighted the main points of the Specialist Commissions Performance Management Framework and emphasised its value to ensure the continuous improvement of the Commission's work.

Commission members expressed appreciation for these updates and wished Dr Soubeyran success in her term as Director General.

1.2. Director General

Dr Soubeyran, the WOAH Director General, met the Code Commission on 16 September 2024 and thanked its members for their support and commitment to achieving WOAH objectives.

The Commission noted that, in addition to promoting participation in the process for the elaboration of Standards, it was also important to promote adequate implementation of WOAH Standards by all Members, and while the lack of implementation is sometimes due to inadequate resources, for others it is due to a lack of understanding. It was highlighted that the Observatory should play a critical role in improving these aspects. The Commission also reported that issues have been observed in the

Spanish and French versions of the standards and emphasised that good quality translations and timely publication are important to ensure inclusivity of non-English speaking countries.

The Commission noted the improvements introduced over the past years for the selection of candidates for election of the Specialist Commissions and noted that it is very important to provide a clear description of the time that experts being elected will require, as it is usually underestimated outside the Organisation.

The Commission and the Director General also discussed the content of the *Terrestrial Code* and its progressive expansion over time and shared views on the needs which are being raised, such as the further inclusion of wildlife or companion animals, or the request for more detailed recommendations on disease prevention and control.

Commission members congratulated Dr Soubeyran as new WOAH Director General and thanked her for her support and these updates. They also acknowledged the important work of the Secretariats in support of their work.

1.3. Deputy Director General-International Standards and Science

Dr Montserrat Arroyo, WOAH DDG ISS, met with the Code Commission on 9 September 2024 and thanked new and re-elected members for their ongoing contributions to this important area of WOAH work.

Dr Arroyo reminded the Commission members of the main principles for the functioning of WOAH Specialist Commissions and confirmed the full commitment of the Secretariat to support Commission work to assure the best quality outcomes.

In line with the priorities outlined by the new WOAH Director General, Dr Arroyo highlighted the importance of continuing to improve the transparency, documentation, and traceability of the standard-setting process and to strive for more inclusivity and Member participation. In this regard, she thanked the Commission for their support to the initiatives undertaken by the Secretariat to evolve the presentation of the Commission's report (see item 8.1 of this report), and congratulated the Commission on the improvements made during the last term to improve reporting of its work programme discussions, and noted that very positive feedback had been received from Members. Dr Arroyo also expressed her commitment to continue to work closely with the four Commissions to ensure better alignment of work and priorities between the Specialist Commissions and other relevant WOAH activities.

The Commission members thanked Dr Arroyo for the ongoing support and commitment to improve the work of the Commission. The Commission acknowledged the significant progress in the quality of the work of the Secretariat over the past years, highlighting that it has made the work of the Commission easier and more efficient, despite the continuously growing workload. The Commission also recognised the improved and streamlined interactions among the Specialist Commissions. The Commission fully supported the decision to promote the transparency of the standards-setting process. The Commission expressed its commitment to improve the communication with Members, notably with regards to the management and prioritisation of the work programme for the development and revision of the *Terrestrial Code*, and to provide clearer information on the Commission inputs and decision making.

The Commission expressed the importance of WOAH to continue to promote Members awareness of the standard-setting process and the standards themselves, and to consider other ways to support the Members in the preparation of their inputs, such as the establishment of a designated officer that could support the Delegate and that could be subject to a specific capacity building programme.

Following Dr Arroyo's address, Dr Gillian Mylrea, Head of the Standards Department, conducted an induction session given this was the start of a new term of Specialist Commissions. This was the final session of the Specialist Commission induction programme which also included induction sessions for new Commission members, the Presidents, and Commission members and Secretariats, to meet and discuss information relevant to this new term.

2. Adoption of the agenda

The proposed agenda was discussed and adopted, taking into consideration the priorities of the work programme and time availability. The agenda and the list of participants are presented in Annexes 1 and 2, respectively.

3. Cooperation with Other Specialist Commissions

3.1. Scientific Commission for Animal Diseases

The Secretariat updated the Code Commission on relevant activities of the Scientific Commission and the Code Commission provided responses, where relevant, as noted below.

The Code Commission thanked the Scientific Commission for its collaborative work in providing opinions to support the consideration of relevant comments received and for the input provided on different work items. The Code Commission reminded Members that its consideration of the Scientific Commission's contributions is noted under the relevant agenda items of this report and encouraged Members to read this report together with the reports of the Scientific Commission.

Assessments of pathogenic agents against the listing criteria in Chapter 1.2. 'Criteria for the inclusion of diseases, infections and infestations in the WOAH list'

The Commission was informed that at its September 2024 meeting, following an assessment against the listing criteria, the Scientific Commission had recommended that Nairobi sheep disease be delisted, and that it had also recommended that a reassessment of paratuberculosis be undertaken. The Code Commission acknowledged the information and will consider the report when forwarded.

Assessments to determine whether diseases should be considered as 'emerging diseases'

The Commission was informed that, in accordance with point 5.1. of the Standard Operating Procedure for determining whether a disease should be considered as emerging, the Scientific Commission recommended subjecting SARS-CoV-2 in animals to an assessment against the listing criteria of *Terrestrial Code* Chapter 1.2, and that the expert assessment will be presented for consideration of the Scientific Commission at its meeting in February 2025.

Removal of questionnaire chapters (Chapters 1.7. to 1.12.)

In September 2019, the Code Commission and the Scientific Commission agreed on exploring the removal of the questionnaires for official recognition of animal health status and endorsement of official control programmes (Chapters 1.7 to 1.12) from the *Terrestrial Code* and instead more appropriately maintaining them on the WOAH website. In February 2021, both Commissions agreed that this should be done upon completion of the necessary harmonisation of all relevant disease-specific chapters.

Out of the six diseases that are included in the WOAH procedure for official status recognition, most of the harmonisation work has been completed and the revised *Terrestrial Code* chapters were adopted. The only outstanding chapters are Chapters 11.5., and 12.1., which are being circulated for comment and will be proposed for adoption in May 2025.

The Code Commission was informed that at its September 2024 meeting, that the Scientific Commission confirmed the rationale for removing the questionnaires and had agreed to progress this work after adoption of the Chapters 11.5., and 12.1.

The Commission reconfirmed its support to this initiative and emphasised that Chapters 1.7. to 1.12. do not comprise an actual standard, as Members' applications should be based on the provisions in the disease-specific chapters, and not on these chapters, which only provide procedural information on how to structure the documentation to be submitted.

The Code Commission agreed that, in addition to the harmonisation of the disease-specific chapters, the removal of the questionnaires would require the amendment of the sixth paragraph of Article 1.6.1. of Chapter 1.6. and agreed to circulate this proposed change for comment at this time, together with other amendments proposed in that chapter (see item 7.2 of this report). The Commission also agreed to wait until the adoption of Chapters 11.5., and 12.1., before proposing the questionnaires removal for adoption.

3.2. Biological Standards Commission

The Secretariat updated the Code Commission on relevant activities of the Biological Standards Commission, including the list of chapters in the *Terrestrial Manual* that will be updated during the 2024/2025 review cycle.

Given that the revision of some of these chapters could impact the corresponding chapters in the *Terrestrial Code*, the Code Commission agreed to continue to work closely with the Biological Standards Commission to ensure that relevant amendments in the corresponding chapters of the *Terrestrial Code* and the *Terrestrial Manual* are well coordinated and aligned. The Code Commission was informed that experts who undertook the review of a *Terrestrial Manual* chapter would also be requested to provide advice regarding the possible need to consequentially amend an existing Code chapter. The Biological Standards Commission would ensure that this information is provided to the Code Commission, when appropriate.

A meeting of the Bureaux (i.e., the President and the two Vice-Presidents) of the Code Commission and the Biological Standards Commission was held on 11th September 2024 and chaired by WOAH DDG ISS. The purpose of this meeting was for the two Bureaux to update each other on the relevant work of each Commission on topics of common interest, and to discuss and agree on the planning and coordination on these topics.

The Bureaux discussed the following topics:

- The *Terrestrial Manual* chapters to be reviewed in the 2024/2025 review cycle, and the progress of development and revision of *Terrestrial Code* chapters,
- ongoing considerations on *Terrestrial Manual* Chapter 3.9.1. ‘African swine fever (infection with African swine fever virus)’ of the *Terrestrial Manual*,
- *Terrestrial Manual* Chapter 3.3.4. ‘Avian influenza (including infection with high pathogenicity avian influenza viruses)’,
- *Terrestrial Manual* Chapter 3.1.8. ‘Foot and mouth disease (infection with foot and mouth disease virus)’,
- *Terrestrial Manual* Chapter 3.1.21. ‘Rinderpest (Infection with rinderpest virus)’,
- the revision of *Terrestrial Code* Chapter 1.6. ‘Procedures for official recognition of animal health status, endorsement of an official control programme, and publication of a self-declaration of animal health status, by WOAH’ including Glossary definition for ‘laboratory’ (see item 7.2. of this report),
- the use of the term ‘biosafety’ and ‘biosecurity’ in the *Terrestrial Manual* and the *Terrestrial Code,*
- the revision of *Terrestrial Code* Chapter 14.8. ‘Scrapie’ (see item 4.1.11. of this report),
- the revision of *Terrestrial Code* chapters on equine encephalitides (see item 4.1.10. of this report),
- animal hosts to be targeted by WOAH Standards for a listed disease, (see item 4.1.1. of this report),
- *Terrestrial Manual* chapters on non-listed diseases.

The Bureau of the Code Commission advised that the Code Commission had agreed to revise the draft Article 1.6.4. and the Glossary definition of 'laboratory' in the *Terrestrial Code,* which was currently limited to diagnostic purposes and needed to consider other purposes. The Bureau of the Biological Standards Commission agreed with the draft Article 1.6.4. and noted that the definition of 'laboratory' could be broadened to include vaccine production and research facilities, and it will review this when the Code Commission shares a proposal of the revised definition.

The Code Commission thanked the Biological Standards Commission for providing inputs to support the decisions of the Code Commission on relevant comments. The Code Commission reminded Members that its considerations of the Biological Standards Commission's responses to specific comments are noted under the relevant agenda item of this report. The Code Commission also encouraged Members to read the Biological Standards Commission's report for the details of its inputs.

3.3. Aquatic Animal Health Standards Commission

On the margin of this meeting, the Bureaux of the Code Commission and the Aquatic Animals Commission held a meeting chaired by the WOAH DDG ISS. The purpose of the meeting was for the Secretariats and the two Bureaux to update each other on the work of each Commission on relevant topics of common interest, discuss and agree on the planning and coordination of those topics, and to exchange experiences to harmonise approaches to horizontal chapters. Both Commissions committed to continuing this annual meeting to ensure enhanced coordination in the future.

The Bureaux discussed issues of mutual interest notably:

- The approach taken by both Commissions in the planning and progress of their work programme and prioritisation of items,
- ongoing work on Glossary definitions to consider harmonisation between the *Terrestrial Code* and the *Aquatic Code* if relevant,
- the Aquatic Animals Commission's work on Chapter 4.3. 'Application of Compartmentalisation' in the *Aquatic Code,*
- the plan for a revision of Chapter 4.4. 'Zoning and Compartmentalisation' and development of a new chapter on the Implementation of Zoning of the *Terrestrial Code* (see item 4.1.5. of this report),
- the work both Commissions are undertaking on standards on emergency management (see item 4.1.4. of this report),
- the current and planned work on e-certification that will be undertaken jointly for *Terrestrial Code* and the *Aquatic Code* (see item 4.1.7. of this report),
- the potential works on AMR related Chapters following the adoption of the revised *Terrestrial Code* Chapter 6.10. (see item 4.3.2.1. of this report),
- the new *Terrestrial Code* chapter on biosecurity.

The Bureaux discussed and highlighted the importance of the User's Guide, emphasising the need for it to support better understanding and interpretation of the Codes, and agreed to make continuous updates to align with ongoing revisions of the chapters and other relevant works.

In addition, the Bureaux agreed to work together on e-certification, including Chapters 5.1. 'General obligations related to certification' and 5.2. 'Certification procedures' for both the *Terrestrial Code* and *Aquatic Code*, to ensure harmonisation and consistency across the C*odes* and noted that it could be a good opportunity to develop an introductory Chapter for Section 5 of both Codes, to provide clarity on its objectives and how the chapters should be used.

4. Work Programme and priorities

The Code Commission discussed ongoing priority topics on its work programme, pending issues with recently adopted chapters and considered comments and new requests received. Specific discussions are captured in the relevant item of the report.

Comments on the Work Programme were received from Australia, Canada, Norway, Switzerland, the WOAH Americas region, the EU and the International Egg Commission (IEC).

Comments to propose new work are addressed in item 4.3. of this report; comments on ongoing work items discussed in this meeting are addressed in the corresponding item.

The Code Commission noted a comment to improve the presentation of the Code Commission report by using table format capturing the summary of the comments and the Commission's responses to them. The Commission explained that this would be considered in the work to improve the transparency of the WOAH process for the elaboration of Standards (see item 8.1. of this report) and noted that related changes were already implemented at this meeting.

The Code Commission noted a comment expressing concerns that chapters recently drafted had taken a "precautionary" approach. The Commission acknowledged that the perception of risks may vary among experts involved in drafting new or revised standards, in the same way that variation is also observed between comments of different Members. Nonetheless, the Commission highlighted that its role was that the *Terrestrial Code* be based on the most recent scientific and technical information, as clarified in the User's guide, and that the standards be developed through discussion with Members and experts to achieve a balance ensuring safety while avoiding unnecessary barriers to trade.

The Commission reminded Members that the work programme outlines the current and planned work to be undertaken to develop *Terrestrial Code* standards. The Commission commended the increased interest shown by Members in discussions of the work programme and strongly encouraged Members to continue to provide feedback as to whether they agree with the topics being proposed, as well as their level of prioritisation.

4.1. Ongoing priority topics (other than texts circulated for comments)

The Code Commission discussed the progress of a number of ongoing priority topics for which no new or revised text is circulated in this report.

4.1.1. Animal hosts to be targeted by WOAH Standards for a listed disease

Background

At its September 2023 meeting, following the work to develop the Framework for *Terrestrial Code* Standards, the Code Commission discussed the need to better define which animal hosts should be included in a disease-specific chapter of the *Terrestrial Code*, taking into account their epidemiological significance in relation to the respective disease, and how this would be addressed in the corresponding chapter of the *Terrestrial Manual*.

The Code Commission considered how disease-specific chapters address animal hosts for different purposes: 'animals susceptible to the disease'; 'animals referred to in the definition of the disease'; 'animals targeted for defining animal health status(es)'; 'animals targeted for surveillance' and 'animals for which trade recommendations are provided' and noted that there were differences among chapters, and agreed to develop a clear and consistent approach to define how animal hosts for a listed disease are included in the *Code* and *Manual*, clarifying its purpose and implications in collaboration with the Scientific and Biological Standards Commissions.

At its February 2024 meeting, the Code Commission agreed to the establishment of a dedicated ''task force' between the Code Commission, the Scientific Commission and the Biological Standards Commission to progress this work.

This dedicated task force comprising members from the Biological Standards Commission, Code Commission and Scientific Commission was convened and worked remotely between February and April 2024 to produce a report for the consideration of the three Specialist Commissions.

Discussion

The Commission considered the report of the task force and agreed, in general, with the proposed approach to rationalise the coverage of animal hosts for listed diseases in WOAH Terrestrial Standards (i.e. the *Terrestrial Code* and the *Terrestrial Manual*) and provided feedback to the Secretariat.

The Commission supported the proposal to include further content in the *Terrestrial Manual* about the epidemiology of the disease and the susceptibility of animals beyond those relevant for inclusion in the *Terrestrial Code* and highlighted the importance of having a clear description of the relevance of the different animal hosts when an assessment for listing disease is made. The Commission highlighted the value of having a clear and consistent approach to how these hosts are included in WOAH international standards, which will allow the Commissions and other experts, when drafting standards, to have a common understanding of the different purposes and implications (i.e. for notification, animal health status, trade, or surveillance purposes) of the inclusion of specific animal hosts in the disease-specific chapters of the *Terrestrial Code*.

The Commission noted that the Secretariat will continue working to integrate the input of the three Commissions and requested the Secretariat report back at its next meeting. The Commission also requested that the results of this work be incorporated into the “Framework for *Terrestrial Code* Standards” in due course.

4.1.2. Wildlife health

Background

At its September 2021 meeting, the Code Commission discussed a proposal from the WOAH Working Group on Wildlife (WGW) to develop a new chapter in the *Terrestrial Code* on surveillance of diseases of wildlife, provided feedback and requested the WGW to consider its comments before progressing with this work. In February 2022, the Code Commission was informed that the WGW had progressed other work related to this topic and agreed to continue discussing the possible inclusion of new items related to wildlife health management in its work programme.

In September 2022, considering the progress being made under the WOAH Wildlife Health Framework, the Commission agreed to include a new item on its work programme to consider how the *Terrestrial Code* addresses the health of wildlife and agreed to continue discussions with the WGW on relevant work.

In February 2023, the Commission and the Chair of the WGW agreed to foster a closer collaboration to promote early identification of potential cooperative work in standards development for the *Terrestrial Code* and to include possible contributions from the WGW to relevant items in the Code Commission’s work programme.

Since September 2023, the WGW has been providing comments on relevant chapters being circulated, and an effective collaboration has been driven by the Secretariat to promote the contribution of the WGW at the early stages of the relevant work items.

Discussion

The Secretariat updated the Commission on the progress of the ongoing exchanges with the WGW and commended its engagement to actively contribute to the Code Commission's work to review and develop the *Terrestrial Code*.

The Code Commission acknowledged that the WGW has made valuable comments on different items at this meeting, which are addressed specifically in each report item. The Commission reaffirmed its commitment to continue working collaboratively towards improving how the *Terrestrial Code* addresses the health of wildlife.

4.1.3. Glossary: 'poultry'

Background

In May 2023, at the 90th General Session, some Members requested that the revision of the definition of 'poultry' be included in the Commission's work programme to ensure it provided Members with greater flexibility and to clarify issues for non-poultry birds or birds that played no epidemiologically significant role.

At its September 2023 meeting, the Code Commission considered the request as well as comments received to review the Glossary definition of 'poultry' and agreed to add the revision of the definition of 'poultry' to its work programme as priority 4, noting that this work should be addressed as part of its future work to review Section 10 Aves of the *Terrestrial Code*.

At its February 2024 meeting, the Code Commission considered requests from some Members to increase the priority level for this work. The Commission thanked the Members for the thorough information provided on the implementation challenges with the current definition in the context of recent global epidemics of avian influenza but was not able to agree on a suitable amendment that could address these challenges. The Commission re-emphasised that, being a Glossary definition, its application was not limited to one disease but to the whole *Terrestrial Code*, and that careful consideration should be given before introducing further changes.

The Commission acknowledged the challenges raised and agreed to increase the priority of this item to priority level 2 and requested the Secretariat to engage in consultation with experts to prepare for further discussion at the next Code Commission meeting in September 2024.

The Code Commission acknowledged comments raised at the 91st General Session in May 2024 requesting the prioritisation of this work due to some challenges faced in international trade.

In preparation for this meeting, the Secretariat requested advice from the chair of the last *ad hoc* Group that reviewed the Glossary definition, the International Egg Commission and the International Poultry Council on potential amendments to the 'poultry' definition.

Discussion

The Code Commission reviewed the inputs provided by the experts and organisations, and reviewed all comments received since 2022 (last adoption) concerning the 'poultry' definition, which expressed diverse opinions on whether to add or remove certain categories of birds. They also discussed some of the references that had been provided by Members. The Commission considered that the current glossary definition of 'poultry' is very detailed and although it is meant to apply to all chapters of the *Terrestrial Code*, the status and trade concerns mainly relate to high pathogenicity avian influenza. The use of the definition needed to be considered in all contexts, including in countries without intensive poultry industries.

The Commission agreed to increase the priority level of this work item from 2 to 1 and requested the Secretariat to develop a proposal to address the definition before the next meeting that would have more simplicity and could be applicable to all contexts and relevant chapters of the *Terrestrial Code*.

4.1.4. WOAH standards on emergency management

Background

At the 89th General Session of the World Assembly of WOAH Delegates, Resolution No.28 was adopted following a Technical Item on emergency management, which recommended that WOAH ensures its International Standards further integrate emergency management. In April 2023, WOAH hosted a Global Conference on Emergency Management which rallied support through a diverse multi-sectoral audience to further support efforts to strengthen the capacities of Veterinary Services in emergency management.

In September 2023, the Code Commission reviewed and supported a proposal from WOAH Headquarters to further develop standards on emergency management, as part of the work to progress the outputs of the conference and its previous work to further integrate emergency management into its work programme.

At its February 2024 meeting, the Code Commission discussed the proposed approach and draft Terms of Reference for an *ad hoc* Group to develop standards on emergency management for the *Terrestrial Code*. The Commission proposed that the *ad hoc* Group include a member of the Scientific Commission and considered that since the Aquatic Animals Commission would identify important parallels in the *Aquatic Code*, this work should be initiated in close coordination between both Commissions from its early stages.

The *ad hoc* Group on emergency management met in April 2024 to initiate its work to develop standards on emergency management for the *Terrestrial Code.*

Discussion

The Code Commission reviewed the *ad hoc* Group's report and commended the Group for its work.

The Commission took note of the recommendations pertaining to chapters that currently reference emergency management and agreed that these recommendations will be evaluated at a later stage, should these chapters be included in the Commission's work programme, and consider the progress of this specific work.

The Code Commission agreed with the *ad hoc* Group's recommendation to develop a chapter on emergency management and requested that the *ad hoc* Group ensure close coordination with the *ad hoc* Groups working on the chapters on biosecurity and animal welfare at the time of killing, as well as with potential future work on disinfection and disposal of dead animals.

The Commission reviewed the outline of the proposal by the *ad hoc* Group for the new chapter and recommended the following additions to the Group's proposal:

- Definition of 'animal health emergency';
- Reference of the One Health approach within emergency management;
- Incorporation of early warning systems and animal health intelligence as key elements of prevention and mitigation strategies;
- Inclusion of content addressing political support, advocacy, and legislation;

- List the relevant stakeholders and their roles and responsibilities in emergency management;
- Emphasis on the significance and advantages of regional and international collaboration;
- Consideration of trade implications in the context of emergency management.
- Ensuring technical aspects of emergency preparedness and response are addressed either in the chapter or via referencing other chapters.

The Code Commission agreed to progress the work and recommended, if required, that the Group develop specific definitions applicable to this chapter where possible rather than modify existing glossary definitions, except when clearly confusing. The Commission reiterated the importance of ensuring the linkages with other chapters of the *Terrestrial Code* when drafting the chapter to avoid inconsistencies and duplications.

The Commission requested the Secretariat to report back on progress at its next meeting.

4.1.5. Revision of Chapter 4.4. Zoning and compartmentalisation

Background

At its September 2021 meeting, the Code Commission discussed specific issues raised in the 88th General Session on several texts that were adopted at that General Session. Among these topics, the Commission agreed to a comment to consider amending Article 4.4.7. to clarify whether a time limit should be defined for a containment zone. The Code Commission recalled that a similar proposal had been made by the Scientific Commission and discussed at the Code Commission's February 2021 meeting. The Code Commission discussed possible ways to address this request and shared a proposed amended text with the Scientific Commission for its consideration.

At its February 2023 meeting, the Code Commission noted the opinion of the Scientific Commission regarding how the proposed amendment could be applied to diseases for which WOAH grants an official animal health status.

At its September 2023 meeting, the Code Commission considered the proposed revised Article 4.4.7. and some relevant comments received on disease-specific chapters that had been circulated for comment that highlighted differences in Members' understanding of critical aspects of the implementation of zoning. The Commission noted that a thematic study was being undertaken by the WOAH Observatory on this topic that could provide valuable information on the current state of implementation of related WOAH Standards on zoning and challenges faced by Members, and agreed not to proceed with its review of the revised Article 4.4.7., but rather to expand the scope of this work item to clarify critical concepts in Chapter 4.4. 'Zoning and compartmentalisation' and the development of a new chapter on the implementation of zoning. The Commission requested the Secretariat to prepare a background paper to be considered in collaboration with the Scientific Commission at the February 2024 meetings.

At its February 2024 meeting, the Commission agreed to request that an *ad hoc* Group be convened to develop a new Chapter 4.X. 'Implementation of zoning' for the *Terrestrial Code* and to also review relevant points in Chapter 4.4. 'Zoning and compartmentalisation' to ensure consistency and complementarity between the two chapters.

The Commission highlighted the critical points that should be taken into consideration for the upcoming work. The Commission noted that the new Chapter 4.X. should address the basic definitions of 'zoning' as a fundamental animal health management tool, and separately describe the different objectives and contexts of use. Furthermore, the chapter should clarify the principles for the definition of the animal health status of established zones and include information relevant to Chapter 1.6. with regards to the procedures for official recognition of animal health status, endorsement of an official control programme, and publication of a self-declaration of animal health status. The new chapter should also define the interrelation

between the implementation of zoning and the recognition of zoning for international trade purposes. The Commission also requested that this work also include a review of the relevant Glossary definitions.

The Code Commission requested the Secretariat to draft the Terms of Reference for an *ad hoc* Group to undertake this work for consideration by the Code Commission and the Scientific Commission at their September 2024 meetings.

Discussion

The Code Commission discussed the draft Terms of Reference for an *ad hoc* Group on zoning provided by the Secretariat, as well as the anticipated timing of an *ad hoc* Group. Considering that the Secretariat informed the Commission that the *ad hoc* Group might not be convened before the second trimester of 2025, the Commission proposed to begin the work by establishing a task force with members from the Scientific Commission and the Code Commission, to review relevant Glossary definitions and Articles in Chapter 4.4. 'Zoning and Compartmentalisation' as a priority. The task force would look at definitions and implementation of zones, to see where modifications are needed to bring clarity and provide practical guidance. The Code Commission also considered that the task force could provide recommendations on topics to be considered for a global forum on zoning planned to be hosted by WOAH. Feedback from the forum and detailed guidance from the task force would facilitate the work of the *ad hoc* Group, which would be convened after the forum.

The Code Commission considered that Chapter 5.3. 'WOAH procedures relevant to the agreement on the application of sanitary and phytosanitary measures of the World Trade Organization' need to be considered for future work of the Commission. This chapter includes concepts on acceptance of zones and equivalence of sanitary measures between trading partners that may need to be expanded to address Member concerns about bilateral recognition of zones.

The Commission requested that the Secretariat coordinate with the Scientific Commission to agree on the formation of the task force on zoning and its meeting date. Following meetings of the task force and the forum on zoning, the Terms of Reference can be updated before an *ad hoc* Group is convened.

4.1.6. Revision of Chapter 4.7. Collection and processing of bovine, small ruminant and porcine semen

Background

At its September 2019 meeting, the Code Commission requested that an *ad hoc* Group be convened to revise Chapter 4.6. 'General hygiene in semen collection and processing centres' and Chapter 4.7. 'Collection and processing of bovine, small ruminant and porcine semen', as well as provisions in relevant disease-specific chapters of the *Terrestrial Code* and the *Terrestrial Manual.*

In September 2023, the Commission highlighted that the current Chapter 4.7. should be revised, aiming for a full new text providing recommendations for all species covered in the new Chapter 4.6. (i.e. bovids, equids, small ruminants, suids and cervids) and should only address WOAH listed diseases. The Commission noted that, after having a draft text, the relevant provisions in the disease-specific chapters of the *Terrestrial Code* will also have to be reviewed for consistency. The Code Commission requested the Secretariat to convene the *ad hoc* Group to proceed with the revision of Chapter 4.7., as complementary to the revised Chapter 4.6.

In February 2024, the Code Commission discussed the progress of the work of the *ad hoc* Group and acknowledged that an electronic consultation was ongoing to seek advice from additional experts to cover the broad range of animal species to be addressed by the revised chapter. The electronic consultation was completed, and the Secretariat worked with the chair of the *ad hoc* Group to review and collate the input for the different animal species.

The revised Chapter 4.6. ‘Semen collection, processing and storage’ was adopted at the 91st General Session, in May 2024.

The *ad hoc* Group met in July 2024 to initiate the revision of Chapter 4.7., focussing first on the general provisions and the recommendations for bovines.

Discussion

The Code Commission reviewed the *ad hoc* Group’s report and commended the Group for its work. The Commission also reviewed the texts drafted by the *ad hoc* Group. Thanks to the good preparation of the meeting by the Secretariate, the Commission had the opportunity to meet and discuss with the chair of the *ad hoc* Group.

The Code Commission acknowledged the challenges faced by the *ad hoc* Group to address the request of the Commission, notably the difficulties in transforming the current text, based on current practices and cross-references to disease-specific chapters, to a new chapter expected to actually describe risk mitigation measures directed at the pathogenic agents and animal hosts of relevant listed diseases. The Commission explained that the expectation is for the chapter to provide a mechanism to facilitate the safe trade of animal semen produced in approved semen collection centres, to be used in conjunction with the provisions in the relevant articles in disease-specific chapters, avoiding redundance and contradictions. The Commission stressed that the objective is to simplify and not complexify.

The Code Commission stressed that the new Chapter 4.6. provides recommendations for the safe collection, processing and storage of semen, which, if traded in compliance with the relevant provisions in all specific articles for the relevant diseases (according to the animal disease status at origin), should be considered safe for trade. Nevertheless, the Commission highlighted that using these articles can become very cumbersome for countries exporting semen regularly, as it often implies the development of a wide range of protocols for certification, which should, in any case, be applied specifically for each different consignment, with often superfluous testing protocols. Chapter 4.7. should provide a set of recommendations that would allow the definition of a high health status donor sub-population for all relevant listed diseases, from which semen could be traded with simplified certification that would ensure its safety by demonstrating its origin. In the disease-specific chapters articles on certification for semen, options will be given to either source the semen from that subpopulation or be subjected to the current recommended risk mitigation measures.

The Commission considered that, to achieve such an objective, the provisions of Chapter 4.7. should be risk-based and consistent with the recommendations in the different disease-specific chapters. In particular they should provide for the safe introduction of animals (consistent with the specific recommendations for the importation or transfer of animals not for slaughter) and the maintenance of their distinct health status during their stay (consistent with the specific recommendations for the maintenance of status, and semen certification). The Commission also confirmed that the new Chapter 4.7. should reflect different risks posed by different semen collection centres located in different countries or zones with different animal health status’ for the listed diseases of concern.

The Commission agreed with the diseases that the Group recommended for inclusion for bovines noting that the *Terrestrial Code* currently includes recommendations for the trade of semen for Rift Valley fever, contagious bovine pleuropneumonia and lumpy skin disease, and requested the Group to take these into consideration.

The Code Commission requested the Secretariat to report back at its next meeting.

4.1.7. Revision of chapters on certification procedures (Chapters 5.2. and 5.10.)

Background

In September 2022, the Secretariat updated the Code Commission on the activities that WOAH had recently implemented to gain a better understating of e-certification practices implemented by WOAH Members, including the completion of a WTO Standards and Trade Development Facility project on electronic veterinary certification. The Secretariat also informed the Commission of the relevant work of other international organisations on e-certification and Single Window and noted that the implementation of e-certification for animals and animal products was still limited while the use of electronic phytosanitary certificates was well established in many countries, including the IPPC e-certification hub. The Secretariat reported that in 2021 Codex adopted revised 'Guidelines for design, production, issuance and use of generic official certificates (CXG 38-2011)', specifically related to transitioning to paperless certification.

The Secretariat proposed that the Commission consider developing similar guidance to that of Codex to ensure alignment of standards for e-certification. The Code Commission agreed to revise Chapter 5.2. 'Certification procedures', of the *Terrestrial Code* to address e-certification in more detail, and to align, as relevant, with the Codex Guidelines. The Commission was informed that WOAH would also develop reference data models for the WOAH model certificates for international trade in animals and animal products, to align with reference data models for food products that are included in the Codex Guidelines. The Code Commission agreed to include the revision of Chapter 5.2. in its work programme, and to undertake this work in collaboration with the Aquatic Animals Commission, to address jointly the corresponding Chapter 5.2. in the *Aquatic Code*.

This item remained as priority 3 on the work programme until February 2024, when it was changed to priority 2.

In June 2024, the Secretariat convened an expert consultation group to create data models and standards for the model health certificates in place in the *Terrestrial Code* and the *Aquatic code*, as well as a guidance document on how to use these standards.

Discussion

The Secretariat updated the Code Commission on progress relating to the creation of WOAH data models and data standards for electronic certificates to meet the criteria currently included in Chapter 5.10. 'Model veterinary certificates for international trade in live animals, hatching eggs and products of animal origin' of the Terrestrial Code and Chapter 5.11. 'Model health certificates for international trade in live aquatic animals and aquatic animal products' of the *Aquatic Code*. WOAH has convened an expert group on data models and standards.

The Code Commission reviewed the draft Terms of Reference for an *ad hoc* Group to update several chapters of the *Terrestrial* and *Aquatic Codes* regarding certification procedures. The Code Commission clarified that the *ad hoc* Group should be convened to update Chapter 5.1. 'General obligations related to certification' and Chapter 5.2. 'Certification procedures' of both *Terrestrial* and *Aquatic Codes* as appropriate to incorporate electronic certification, including references to the newly developed electronic data models and standards. The *ad hoc* Group should also consider the Codex 'Guidelines for design, production, issuance and use of generic official certificates' (CXG 38-2001) and update the *Codes* for consistency as appropriate. The Commission also requested that the *ad hoc* Group review model health certificates in Chapters 5.10. and 5.11. respectively of both *Codes* to determine if updates need to be made to those documents. The *ad hoc* Group should also review existing Glossary definitions of both *Codes* and propose new or revised definitions, if relevant. The Commission proposed modifications to the draft Terms of Reference to reflect these priorities.

The Secretariat informed the Commission that the detailed electronic data models and standards have already been developed by information technology experts and that the *ad hoc* Group's focus and competency should target integrating e-certification and related standards and processes into the relevant *Code* Chapters.

The Commission requested the Secretariat to report back at its next meeting.

4.1.8. Revision of chapters on the welfare of animals during transport by land, sea and air (Chapters 7.2., 7.3. and 7.4.)

The Code Commission discussed the *ad hoc* Group's June 2024 report and agreed with their proposal to merge Chapters 7.2 (Transport of Animals by Sea), 7.3 (Transport of Animals by Land) and 7.4 (Transport of Animals by Air), into a single chapter, titled 'Animal Welfare During Transport'. The Code Commission agreed that no additional modes of transport are relevant for this work other than water, land and air. Nevertheless, the Code Commission requested the *ad hoc* Group to discuss the need to include some relevant recommendations for the transport of animals by foot given its relevance in many parts of the world (e.g. transhumance).

The Code Commission agreed that relevant references to the Live Animal Regulation (LAR) of The International Air Transport Association (IATA) for transport by air can be included. However, the Code Commission acknowledged that WOAH, as an international standard-setting body, is primarily responsible for standards on animal welfare for transport by air and duplication of recommendations between the two organisations should be avoided. The Code Commission also emphasised that because access to the LAR of IATA is not free of charge and would not be accessible to all WOAH Members, content pertaining to WOAH's mandate should be included in the *Terrestrial Code*.

The Code Commission recommended that the *ad hoc* Group reduce the number of chapter-specific definitions and only include the necessary definitions in the chapter, so they are assessed in context. The Code Commission also advised that the terms and definitions used in the revised chapter be consistent with other Code Chapters.

The Code Commission also acknowledged the reception of spontaneous comments from a Member in Chapter 7.2. Transport of animals by sea and agreed to request the *ad hoc* Group to consider them in their discussion at their next meeting.

The Code Commission reviewed the progress made so far on the draft chapter and provided further specific comments which will be addressed in the next *ad hoc* group meeting in early 2025.

The Commission requested the Secretariat to report back at its next meeting.

4.1.9. Revision of Chapter 7.6. Killing for disease control purposes (Proposed: Animal welfare at the time of killing. Articles 7.6.1. to 7.6.8. of Chapter 7.6.)

Comments were received from Argentina, Australia, Canada, China (People's Republic of), Japan, Mexico, New Zealand, Norway, Nouvelle Calédonie, South Africa, Switzerland, United Kingdom, United States of America (USA), International Egg Commission (IEC), International Coalition for Animal Welfare (ICFAW), and the EU.

Background

In February 2018, the Code Commission agreed to revise Chapter 7.5. 'Slaughter of animals' and Chapter 7.6. 'Killing of animals for disease control purposes' and requested that an *ad hoc* Group be convened to undertake this work as well as the revision of related Glossary definitions.

At its June 2023 meeting, the *ad hoc* Group started work on Chapter 7.6. and developed a draft revised chapter and submitted its report together with the draft chapter to the Code Commission for consideration at its September 2023 meeting.

At its September 2023 meeting, the Code Commission considered the *ad hoc* Group report and the draft revised Chapter 7.6., provided feedback on the proposed text, and requested that the *ad hoc* Group be reconvened to continue working on the draft chapter.

In February 2024, the Code Commission reviewed the draft chapter and agreed to circulate for comments the first eight articles of the draft revised chapter and agreed to continue working in the intersession and discuss the rest of the chapter during their September 2024 meeting.

Discussion

The Commission reviewed the comments received and made further recommendations for the *ad hoc* Group to consider in its next meeting, which would take place in October 2024, such as the proposed new title for the chapter, the scope of the revised chapter and the consistency of the use of some terms in the revised chapter.

The Code Commission also requested the *ad hoc* Group to continue drafting the remainder of the chapter, taking into account this guidance from the Commission.

The Commission requested the Secretariat to report back at its next meeting.

4.1.10. Revision of chapters on equine encephalitides (Chapters 8.10., 12.4. and 12.11.)

Background

In September 2022, the Code Commission agreed to include the revision of Chapter 8.10. 'Japanese encephalitis' in its work programme following requests from Members. The Commission also noted that the revisions of Chapter 12.4. 'Equine encephalomyelitis (Eastern and Western)' and Chapter 12.11. 'Venezuelan equine encephalomyelitis' had been included in its work programme in February 2020, but that work had not been yet initiated. Considering the similarities across these diseases, the Commission agreed to revise the three disease-specific chapters together, to ensure a consistent logic is applied to all of them. The Commission also agreed that Chapter 8.21. 'West Nile fever' should be taken into consideration in the same manner.

While acknowledging that a major revision of these chapters will be needed, before discussing revised texts of the chapters, the Code Commission requested a scientific assessment of the animal hosts, their epidemiological role and their relevance for surveillance and disease prevention and control be undertaken in collaboration with the Scientific Commission. At the same time, an assessment of these diseases against the criteria for the inclusion of diseases, infections and infestations in the WOAH list of notifiable terrestrial animal diseases in accordance with Chapter 1.2. of the *Terrestrial Code* should be undertaken.

At its February 2024 meeting, the Code Commission considered the conclusions of the Scientific Commission provided in its September 2023 report on the assessment of Japanese encephalitis (JE), Eastern (EEE) and Western equine encephalomyelitis (WEE), and Venezuelan equine encephalomyelitis (VEE), and agreed that they meet the listing criteria. The Commission noted that the assessment reports did not provide sufficient information on the role of the different animal hosts and their significance in the epidemiology of the disease, as previously agreed between the two Commissions. The Commission highlighted that it considered this information essential to review the corresponding chapters in the *Terrestrial Code* and requested that these considerations be explicitly discussed by the *ad hoc* Group.

The Code Commission agreed to revise *Terrestrial Code* chapters on equine encephalitides and noted that the *ad hoc* Group should consider all chapters that address the five encephalitides [i.e., EEE, WEE, JE, West Nile fever and VEE]; assess whether EEE and WEE should be covered in separate chapters; define the animal hosts to be targeted for each disease, and whether the names of diseases containing specific country names should be re-considered, taking into account the relevant WHO guidelines.

An *ad hoc* Group met in June 2024 to initiate this work.

Discussion

The Code Commission considered the report of the June 2024 meeting of the *ad hoc* Group on Revision of Chapters on Equine Encephalitides of the *Terrestrial Code* and the revised Chapter 12.4. 'Equine encephalomyelitis (Eastern and Western)' drafted by the Group (see item 7.8. in this report), as well as the opinion of the Scientific Commission on the Group report. The Commission agreed with proposals for the future approach to revise the chapters on JE and VEE. The Commission requested the Secretariat to provide the Commission's opinions and decisions made for the revised Chapter 12.4. as guidance to the *ad hoc* Group for consideration in the upcoming work.

The Code Commission requested the Secretariat to report back at its next meeting.

4.1.11. Revision of Chapter 14.8. Scrapie

Background

At its February 2021 meeting, the Code Commission noted that a revision of Chapter 14.8. 'Scrapie' had been on its work programme for many years and agreed to progress this work.

At its September 2021 meeting, the Code Commission reviewed a background document prepared by the Secretariat and recalled the previous discussions between the Code Commission and the Scientific Commission on this chapter and noted that the main issue pending was the assessment of scrapie against the listing criteria in accordance with Chapter 1.2., as reported in the September 2014 report of the Scientific Commission. Therefore, the Commission requested that an assessment against the listing criteria be conducted following the relevant SOP. In February 2022, the Secretariat informed the Code Commission that the WOAH DDG ISS had considered the request for an assessment and concluded that an assessment was not justified. The Code Commission noted that the Scientific Commission was informed of this decision at its February 2022 meeting and encouraged Members to refer to that report for more information.

At its February 2023 meeting, in response to comments to prioritise the work to review Chapter 14.8., the Code Commission agreed to progress this work. At its September 2023 meeting, the Code Commission noted that some Members requested that live animal testing and testing for genetic resistance to scrapie be included as valid methods for ensuring the safe trade of sheep and goats and highlighted that there was no precedent in the *Terrestrial Code* of providing such recommendations.

In September 2023, the Code Commission acknowledged a range of requests to revise Chapter 14.8. had been submitted by Members over the last years and requested that the Secretariat develop a plan to revise the chapter. At its February 2024 meeting, the Commission reviewed the draft Terms of Reference for the *ad hoc* Group.

An *ad hoc* Group met in April 2024 to revise Chapter 14.8. 'Scrapie'.

Discussion

The Commission considered the report of the *ad hoc* Group, the draft revised chapter prepared by the *ad hoc* Group, and the opinion of the Scientific Commission and the Biological Standards Commission at its September 2024 meeting.

The Commission agreed with both Commissions on the need to seek further clarification on the methods for genotyping and whether there is consensus in the scientific community on the resistant genotypes. The Commission also considered that further clarification was needed on the consideration of the epidemiology of the disease, notably the different risk pathways and whether the proposed approach for a risk status was suitable, and on the consideration of the atypical variants of the pathogenic agent.

The Code Commission agreed not to circulate the draft text proposed by the *ad hoc* Group and requested that it be thoroughly revised after the consideration of the abovementioned points.

The Code Commission requested the Secretariat to report back at its next meeting.

4.1.12. Revision of Chapter 14.9. Sheep pox and goat pox

Background

In February 2023, in response to a comment, the Code Commission agreed to include the revision of Chapter 14.9. 'Sheep pox and goat pox', in its work programme. Further comments supporting this revision were reviewed by the Code Commission at its September 2023 meeting.

At its February 2024 meeting, the Code Commission and the Scientific Commission agreed to prioritise this work since there had been reports of incursion of the disease into new areas, apparent under-reporting of cases and difficulties in diagnosis owing to recombination between lumpy skin disease virus and sheep pox and goat pox virus.

Discussion

The Code Commission considered the draft Terms of Reference for an *ad hoc* Group to undertake the revision of Chapter 14.9. 'Sheep pox and goat pox'. The Commission agreed with the proposed Terms of Reference and provided various considerations to the Secretariat.

The Commission acknowledged the opinion of the Scientific Commission to include in the revised chapter, in addition to the usual content of disease-specific chapters, recommendations on disease prevention and control, including vaccination, which would benefit Members in controlling the disease. The Commission noted that this is not a content that is usually included in chapters for which WOAH does not endorse official control programmes but agreed that it could be relevant to include such provisions for this disease, as well as for other disease-specific chapters when relevant. The Commission agreed to request the *ad hoc* Group to develop those provisions as part of the draft chapter and to seek the opinion of Members on adding this type of content to a disease-specific chapter.

The Code Commission requested the Secretariat to report back at its next meeting.

4.1.13. Revision of Chapter 5.12. Model passport for international movement of competition horses

Background

The revision of Chapter 5.12. 'Model passport for international movement of competition horses' of the *Terrestrial Code* was included in the Commission work programme, but no work has been undertaken yet.

Discussion

The Code Commission considered a comment requesting to amend Appendix A of Chapter 5.12. to expand the organisations that issue competition horse passports.

The Secretariat updated the Code Commission on the current use of equine passports (such as the Federation Equestrian Internationale's Horse App) actively being used in the movement of competition horses and on ongoing WOAH activities to develop regional harmonised international veterinary protocols for movements of high health status (HHP) competition horses being undertaken in collaboration with the International Horse Sports Confederation.

The Code Commission agreed that Chapter 5.12. 'Model passport for international movement of competition horses' of the *Terrestrial Code* is outdated because updates have been made to various equine disease-specific chapters and current industry practices have not been taken into account.

The Code Commission noted that many of the activities related to the issuance of passports and harmonisation of international veterinary certificates are focused on HHP horses and indicated that Chapter 5.12. updates should be applicable to all competition horses. The Commission also noted that Chapter 5.12. should not reiterate information included in disease-specific chapters, but rather refer to the appropriate disease-specific chapters. The Commission requested the Secretariat to draft Terms of Reference for the revision of Chapter 5.12., and to consider if the work of this *ad hoc* Group should be combined with the proposed revisions of certification chapters and model health certificates (Chapters 5.1., 5.2., and 5.10.)

The Code Commission requested the Secretariat to report back at its next meeting.

4.2. Items under consideration for inclusion in the work programme

The Code Commission discussed several topics for which a request for inclusion in the Commission's work programme had been previously considered, but a decision had not yet been made pending the provision of more data or information. The Commission highlighted the following topics for which a decision was made at this meeting.

4.2.1. Chapter 8.4. Infection with *Brucella abortus*, *B. melitensis* and *B. suis*

Background

At its February 2021 meeting, in response to a comment to prioritise the revision of Chapter 8.4. Infection with *Brucella abortus, B. melitensis* and *B. suis*, the Code Commission noted that the Biological Standards Commission had been working to update the corresponding *Terrestrial Manual* Chapter 3.1.4. and agreed to wait until that work progressed to consider starting new work on this chapter. At the May 2022 General Session, the updated *Terrestrial Manual* Chapter 3.1.4. was adopted.

At its September 2022 meeting, given that the updated Manual Chapter 3.1.4. was adopted, the Code Commission discussed the request again. The Commission noted the global situation of the disease, including the situation on Members' self-declaration of freedom from the disease, and considered there was no new element justifying the revision of the chapter, especially in terms of potential alternatives to the current Articles 8.4.4. and 8.4.5. The Commission decided not to include the revision of Chapter 8.4. in its work programme but invited Members to submit any proposal with a scientific justification to amend the current provisions.

Discussion

The Code Commission considered a request to review Chapter 8.4. 'Infection with *Brucella abortus, B. melitensis* and *B. suis*', to incorporate alternative, progressive pathways for achieving country freedom from Brucellosis, arguing that the current requirement of regular

testing of 99.8% of herds and 99.9% of Bovids for three years is unfeasible for many countries. The comment also suggested to clarify the use of tools like zoning, compartments, and stepwise approaches, which could provide more attainable routes to freedom.

The Commission acknowledged the comments and highlighted that, in addition to the disease-specific chapters, horizontal chapters such as Chapter 1.4. 'Animal health surveillance', Chapter 4.18. 'Vaccination', or Chapter 4.19. 'Official control programmes for listed and emerging diseases' should also be used if specific provisions are not present in a chapter or to support alternative strategies.

The Commission agreed to add the revision of Chapter 8.4. to its work programme, as priority 3. Nevertheless, the Commission considered that the request did not present a clear description of the problem nor a specific proposal to change and requested the Secretariat to work with a member of the Commission intersession to further understand the need. Members are encouraged to provide additional evidence and clarifications describing how the current standards would impact international trade and their ability to achieve a free status at country, zone or herd level using alternative methods than those recommended in Chapter 8.4.

4.3. New proposals and requests for inclusion in the work programme

The Code Commission considered the following proposals or requests for developments or revisions of standards in the *Terrestrial Code*.

4.3.1. New requests from Members and International Organisations

4.3.1.1. Revision of Chapter 8.18. Infection with *Trichinella* spp.

Background

At the 91st General Session in May 2024, Article 8.18.1. of Chapter 8.18. 'Infection with *Trichinella* spp.' was revised to align with the revised Chapter 3.1.22. of the *Terrestrial Manual*, adopted the previous year. Poland, on behalf of the EU, made an intervention requesting the Code Commission to consider, at its next meeting, additional comments on Chapter 8.18.

Discussion

The Code Commission reviewed the comments submitted after the General Session on Chapter 8.18. 'Infection with *Trichinella* spp.', which aimed mostly to add clarity with regards to the role and risks associated with different animal hosts.

The Commission agreed on the relevance of the points raised, but did not see them as urgent and agreed to include the work item in its work programme as priority 4.

4.3.1.2. Development of guidelines on vaccine cold chains

The Code Commission considered a request from a Member proposing the development of guidelines for reliable cold chains as a key element of successful vaccination, as the establishment and maintenance of cold chains is integral to vaccine efficacy.

The Commission noted that Chapter 4.18. provides guidance to Veterinary Services for the use of vaccination in support of disease prevention and control programmes and that Article 4.18.8. includes reference to the establishment and maintenance of cold chains for the implementation of vaccination programmes. While the Commission acknowledged that the *Terrestrial Code* does not contain guidance on cold chains, it considered that such detailed operational or logistical content would be too detailed to be included in the *Terrestrial Code* and agreed not to include this item in its work programme.

Nonetheless, the Commission requested the Secretariat to forward the request to the Biological Standards Commission for consideration of the topic for inclusion in the *Terrestrial Manual*, or for possible discussion with WOAH Headquarters to consider developing guidelines on the principles of vaccine cold chain infrastructure and logistics considerations, outside of the Code.

4.3.1.3. New definitions for 'control', 'elimination' and 'extinction', and revision of definition for 'eradication'

The Code Commission considered a comment requesting the development of definitions for 'control', 'elimination' and 'extinction', and the revision of the definition for 'eradication' to be in line with those terms used in the World Health Organization (WHO).

The Commission reviewed the rationale and reference documents provided and noted that there are differences between the definitions for these terms between WOAH and WHO. However, considering the purpose of the *Terrestrial Code*, such as disease control, the Commission noted that there have been no specific problems with the differences in Glossary definitions for these terms. The Commission highlighted that differences in terminology used by international organisations could occur based on the purposes of the terms and decided not to add this work to its work programme.

4.3.2. Other requests

4.3.2.1. Follow up of Chapter 6.10. (Revision of Chapter 6.8. 'Harmonisation of national antimicrobial resistance surveillance and monitoring programmes')

The Code Commission considered a proposal from the Working Group on Antimicrobial Resistance to amend Chapter 6.8. 'Harmonisation of national antimicrobial resistance surveillance and monitoring programmes' of the *Terrestrial Code* to expand its text to include considerations on surveillance programs for companion animals and on integrated surveillance. For the latter, the Working Group considered it should take into consideration existing Codex guidelines on integrated monitoring and surveillance of foodborne antimicrobial resistance (adopted in 2021) and with ongoing initiatives, such as that from the Quadripartite Technical Group for Integrated Surveillance that is currently developing guidelines for integrated surveillance across the human, animal, crops/plants and the environmental sectors, and the Global Leader Groups on AMR's pocket guide for policy makers on integrated surveillance.

Chapter 6.8 was first adopted in 2003 and last updated in 2018. The current chapter contains recommendations for animal sector-specific surveillance of antimicrobial resistance, and not for 'integrated' surveillance.

The Code Commission discussed the need for the inclusion of definitions for 'monitoring and surveillance', and 'integrated surveillance' in Chapter 6.8. Knowing that the Glossary already had definitions for 'monitoring' and for 'surveillance', it was considered not an urgency. The Commission recommended however that guidance on prioritisation for components of surveillance programmes should be provided to Members so that they can design and implement risk-based surveillance programmes that optimise the often limited human and financial resources and infrastructure available, taking into account the relevant animal species (food-producing vs non-food producing species) and the AMR epidemiological situation in their countries and territories. This will help ensure the feasibility and sustainability of surveillance programmes for AMR. The Commission also recommended that the language used in Chapter 1.4. be used as guidance for the development of standards on AMR cross-sectoral surveillance, for instance, in reviewing the use of 'passive' and 'active' surveillance terms.

The Code Commission agreed to include this item in its work programme as priority 2. The Commission requested the Secretariat that the Working Group on Antimicrobial Resistance prepare Terms of Reference for the *ad hoc* Group that will revise Chapter 6.8. for consideration by the Commission at its next meeting.

4.3.2.2. Chapter 8.20. Tularemia

The Code Commission considered a proposal from the Scientific Commission to amend Chapter 8.20. 'Tularemia' to incorporate a draft case definition developed by experts and endorsed by the Scientific Commission at its February 2024 meeting.

The Code Commission noted that the current Chapter 8.20. only includes general provisions, provisions for free country and infected zone, and general recommendations for the importation of live hares from infected countries. The Commission also highlighted that as the current chapter was developed in 1982 and last updated in 2014, the articles do not follow the current framework for the *Terrestrial Code*.

The Commission also observed that the Scientific Commission had recommended that the animal hosts for the chapter be defined as 'animals in the order Lagomorpha and Rodentia', but the current chapter targets only hares, genus Lepus.

Based on the above considerations, the Commission agreed to include in its work programme the revision of Chapter 8.20. to include the new case definition. Noting that there had been no urgent issue raised by Members about this disease, the Commission agreed to assign a priority level 3 and requested the Secretariat prepare a draft revised Chapter 8.20. 'Tularemia' to include the new case definition and align the current chapter to the latest framework for the *Terrestrial Code*, without altering the content of current articles, to be considered by the Commission at a future meeting.

4.3.2.3. Revision of Chapter 14.7. Infection with peste des petits ruminants virus

The Code Commission considered a request from the Scientific Commission to develop new provisions in Chapter 14.7. 'Infection with peste des petits ruminants virus', for the importation of susceptible animals from an infected country or zone for slaughter, to address issues faced in the assessment of some annual reconfirmations of official animal health status.

The Code Commission acknowledged that this sort of provision was already present in other chapters and agreed that it could be added to Chapter 14.7. The Commission noted that the revision of Chapter 14.7. was already included in the Commission's work programme, to address the need to reconsider animal hosts to be targeted in the chapter, notably wild ruminants, and some inconsistencies, as discussed in its September 2023 meeting.

The Code Commission reviewed a draft article for the importation of susceptible animals from an infected country or zone for slaughter proposed by the Scientific Commission and provided feedback to the Secretariat on certain points for amendment.

The Commission also highlighted the need to review Article 14.7.19. and Article 14.7.25., which include direct references to articles of Chapter 8.8. Infection with foot-and-mouth disease virus, to solve the inconsistencies in relation to the recent revision of Chapter 8.8. The Commission noted that articles should contain the necessary information to be 'self-sufficient' and not depend on the provisions in another disease-specific chapter.

Additionally, the Commission also noted the exchange between the Scientific Commission and the peste des petits ruminant (PPR) *ad hoc* Group about scientific evidence suggesting that suids may be a possible source for PPR and requested that this be also investigated further.

The Code Commission thus agreed to expand the scope of this work to undertake a broader revision of Chapter 14.7. to address all the pending issues outlined above, as priority level 3. The Commission requested the Secretariat to seek expert advice and the opinion of the Scientific Commission and to report back at a future meeting.

4.3.2.4. Chapter on HPAI

The Code Commission considered a request from the Working Group on Wildlife (Working Group), to include mammals in Chapter 10.4. 'Infection with high pathogenicity avian influenza viruses', to promote Members to do surveillance for high pathogenicity avian influenza (HPAI) in mammals, including wild mammals, and to notify events to WOAH.

The Code Commission questioned the usefulness of including in the *Terrestrial Code* recommendations for surveillance in mammals at this stage, as the purpose of surveillance recommendations in the Code is to assist in the management of a listed disease, in that case a disease of birds.

The Commission re-emphasised that the current *Terrestrial Code* encourages Members to report unusual occurrence of infections or infestations with pathogenic agents of listed diseases under relevant provisions of Chapter 1.1. 'Notification of diseases and provision of epidemiological information' and noted that changes are not to be made to the *Code* solely because of findings of such pathogenic agents in an unusual host.

The Code Commission highlighted that there are precise criteria, and defined SOPs to determine if the listing of a disease should be modified, and that it is based on that assessment that the relevant animal hosts in the Code could be changed. The Commission requested to forward this request to the Scientific Commission to discuss the epidemiological role of mammals for this disease and to consider if a listing assessment should be conducted of if HPAI detection and spread in domestic bovines meets the criteria to be considered an 'emerging disease'.

The Commission considered that such evaluation could be made only after further information becomes available on the epidemiology of the disease.

The Code Commission requested to transfer these requests to the Scientific Commission and proposed that this be discussed between both Commissions in February 2025.

4.3.2.5. Revision of Chapter 11.9. Infection with lumpy skin disease virus

The Code Commission considered a request from WOAH Headquarters to include in its work programme a revision of *Terrestrial Code* Chapter 11.9. 'Infection with lumpy skin disease virus', given that the planned revision of *Terrestrial Code* Chapter 14.9. 'Sheep pox and goat pox' would be an opportunity to elicit the opinion from pox virus experts and to eventually harmonise both chapters in the *Terrestrial Code*.

The Code Commission noted that Chapter 11.9. was last comprehensively updated in 2018, and since then, significant changes in the epidemiology of the disease have been observed, with climate change playing an important role in influencing the vector range and therefore geographical range of lumpy skin disease (LSD) (ref 91GS/Tech-01-AnimalHealthSituation). Whilst historically limited to Africa, in the past decade, LSD has spread to the Middle Eastern, North African and European regions, and lastly throughout Asia.

The Code Commission acknowledged some aspects noted by the Secretariat that could be considered for a future revision, such as the consideration of the role of yaks (*Bos grunniens)* in the epidemiology of the disease, and the development of improved diagnostic tools that could enable the differentiation of infected from vaccinated animals (DIVA), but agreed that there was not sufficient justification or urgency for undertaking such revisions.

The Commission decided not to add this work item to its work programme for the moment and to request the advice of the *ad hoc* Group for the revision of Chapter 14.9. 'Sheep pox and goat pox' on the need to revise Chapter 11.9., as well as on the issues that could be taken into consideration in a future revision.

The Commission requested the Secretariat to report back at a future meeting when more information is available.

4.4. Prioritisation of items in the work programme

Based on a number of considerations and the progress of the different topics since its last meeting, as well as relevant topics addressed during this meeting, the Code Commission discussed the prioritisation of ongoing and future work, and agreed to amend the work programme as presented below:

New items added:

- New definition for 'point of entry' and definition for 'transit country' (part of the revision of Chapters 5.4. to 5.7.)

- Revision of Chapter 1.1. 'Notification of diseases and provision of epidemiological information'

- Removal of questionnaires for official animal health status recognition (Chapters 1.7. to 1.12.)

- Development of an introductory chapter to Section 5 (Chapter 5.X.)

- Revision of Chapter 5.1.'General obligations related to certification' (in conjunction with work item on Chapters 5.2. and 5.10.)

- Revision of Chapter 6.8. 'Harmonisation of national antimicrobial resistance surveillance and monitoring programmes'

- Revision of Chapter 8.4. 'Infection with *Brucella abortus*, *B. melitensis* and *B. suis*'

- Chapter 8.8. 'Infection with foot and mouth disease virus': development of an article with provision for safe trade of fetal bovine serum and consideration of recommendations for import of 'horns'.

- Revision of Chapter 8.18. 'Infection with *Trichinella* spp.'

- Revision of Chapter 8.20. 'Tularemia'

- New Chapter 8.X. on Crimean-Congo haemorrhagic fever

- Revision of Chapter 12.8. 'Infection with equid herpesvirus-1 (Equine rhinopneumonitis)'

Items removed:

- All texts adopted at the 91st General Session, in May 2024.

- Chapter 6.2. The role of the Veterinary Services in food safety systems

- Chapter 6.3. Control of biological hazards of animal health and public health importance through ante- and post-mortem meat inspection

- Chapter 8.7. Infection with epizootic hemorrhagic disease virus

- Chapter 8.14. Paratuberculosis

- Chapter 15.3. Infection with porcine reproductive and respiratory syndrome virus

With regards to removal of items, the Commission explained that these had been included in its work programme for a long time with low priority, however, the Members or experts had not provided any inputs to initiate or prioritise this work. The Commission thus considered that there was no need to maintain these work items. The Code Commission also updated its work programme in accordance with the changes in the priorities or the level of advancement of respective items.

The Commission reminded Members that the order of prioritisation used in the work programme reflects the level of priority agreed upon by the Commission, through the close assessment of each item, in terms of its necessity and urgency, taking into consideration Members' requests, proposals from the Secretariat and the resources available.

The Commission highlighted that the inclusion of an item in the work programme means there is a collective agreement of the Commission on the need to undertake certain work, but this does not mean that the work would be immediately initiated. The decision as to when to commence each work item depends on the overall consideration of priorities, the progress of ongoing work and the resources and information available. The prioritisation order aims to provide a guide to plan and organise the work of the Commission and the Secretariat, as well as to improve Members' awareness of the progress of the different topics. The Commission highlighted that the prioritisation order used in its work programme is not necessarily aligned with the actual progress of each work item, as this depends on the complexity of each task. For clarification of the priority order of the work programme, the Commission updated the description of the priority order.

The Commission reminded Members that, although it reviews its work programme at each meeting and reconsiders the prioritisation of items according to changes in necessity and urgency, to maintain continuity it would not significantly modify the prioritisation order too frequently.

Additionally, the Commission thanked Members who commented on work items at an early stage and encouraged Members to also consider the work items in the Commission's work programme that have not yet started or are in preparation (prioritisation orders 3 and 4). Members are invited to submit to the Secretariat their points of interest for specific work, as well as available information, evidence, or expertise that could be taken into consideration in each work item.

The Code Commission reminded Members that the schedule of planned *ad hoc* Group meetings is presented on the WOAH website and that WOAH Delegates can propose experts for specific *ad hoc* Groups, in particular for those that are in the planning phase and not yet formally established, by using the dedicated link.

The updated work programme is presented in Annex 4, for comments.

5. Follow-up of chapters recently adopted

5.1. Chapter 7.5. Animal welfare during slaughter (points under study), Article 7.5.30. Electrical water-bath stunning for poultry. Point 4) Species-specific recommendations.

Background

The revised version of Chapter 7.5. 'Animal welfare during slaughter' was adopted at the 91st General Session in May 2024.

Following interventions by Thailand and China (People's Republic of) during the discussion for the adoption of the chapter, the President of the Code Commission proposed to designate Article 7.5.30. point 4., 'Ducks, geese and quails should not be stunned at frequencies higher than 200 Hz.' and 'Chicken and turkeys should not be stunned at frequencies higher than 600 Hz', as 'under study'. The President also suggested that this recommendation should be reviewed again in September 2024, at the next Code Commission meeting and asked China (People's Rep. of) to send any data that would support a modification of these recommendations.

Discussion

The Code Commission reviewed the supporting data submitted from China (People's Republic of), regarding Article 7.5.30, and requested the Secretariat to share these references with the *ad hoc* Group that reviewed Chapter 7.5., which will meet in October 2024 to continue the revision of Chapter 7.6. 'Killing for disease control purposes'. The Code Commission requested the *ad hoc* Group provide an opinion on the references provided with the comment and report back to the February 2025 Code Commission meeting.

5.2. Infection with foot and mouth disease virus, recommendations for international trade of 'horns' (Chapter 8.8.)

The Code Commission acknowledged a comment raised at the 91st General Session in May 2024 by India requesting the consideration of the risk mitigation measures for the importation of horns in Chapter 8.8. 'Infection with foot and mouth disease virus (FMDV)'.

The Commission reminded Members that the Article 8.8.40. of Chapter 8.8. defines the procedures for the inactivation of FMDV in skins and trophies from susceptible animals and noted that this article could partially cover the inactivation procedures for horns. On the other hand, the Commission noted that it is necessary to clarify whether the current procedures of the article could apply to horns if they are considered as the only exported material or commodity.

The Commission agreed to add this work in its work programme as priority 3 and requested the Secretariat to engage in consultation with experts to prepare for further discussion at a future meeting.

5.3. Revision of Chapter 13.2. Rabbit haemorrhagic disease

The Code Commission acknowledged comments raised at the 91st General Session in May 2024 requesting the revision of Chapter 13.2. 'Rabbit haemorrhagic disease' due to difficulties in achieving the surveillance of wild leporids described in Article 13.2.2.

The Commission considered the comments and reminded Members that a broader revision of this chapter is already included in its work programme as priority 3, and that the partial revision adopted in May 2024 aimed only at including a revised case definition. The Commission noted that, while the potential need to update this chapter was previously discussed in the context of the outbreaks in West Africa and North America, further input from Members and experts is needed to better understand the concrete needs to be addressed.

The Commission agreed to keep this work in its work programme as priority 3 and encouraged Members to submit comments presenting specific issues to address and requested the Secretariat to engage in consultation with experts to prepare for further discussion at a future meeting.

6. Texts circulated for comments and proposed for adoption in May 2025

The Code Commission discussed the following new or revised texts which are circulated for comments and will be proposed for adoption at the 92nd General Session in May 2025.

6.1. Glossary

‘***biosecurity’, ‘biosecurity plan’ and ‘swill’***

Background

In September 2022, the Code Commission requested that an *ad hoc* Group be convened to develop a new chapter on biosecurity. As part of this work, the Commission agreed to review the Glossary definitions for ‘biosecurity’ and ‘biosecurity plan’ and to develop a new definition for ‘swill’, which were circulated for comment, in the Code Commission’s September 2023 meeting report. Comments received were addressed by the Code Commission in February 2024 and in March 2024 by the *ad hoc* Group on Biosecurity.

For additional background information refer to the March 2024 Biosecurity *ad hoc* Group report and item 6.3 of this report.

Discussion

The *Code Commission* reviewed the March 2024 report of the *ad hoc* Group and considered the Glossary definitions for ‘biosecurity’, ‘biosecurity plan’, and ‘swill’, in connection with the new chapter on Biosecurity (See item 6.3 of this report).

The Code Commission proposed amendments to the revised Glossary definitions for ‘biosecurity’ and ‘biosecurity plan’ and the new definition for ‘swill’.

The revised Glossary definitions for ‘biosecurity’ and ‘biosecurity plan’ and the new Glossary definition for ‘swill’ are presented in Annex 5 for comment and will be proposed for adoption at the 92nd General Session in May 2025.

6.2. User’s Guide

Comments were received from Australia, New Caledonia, New Zealand, Norway, Switzerland, the UK and the EU.

Background

At its September 2023 meeting, the Code Commission agreed to revise the User’s Guide, following a discussion at the 90th General Session in May 2023. The Commission proposed several amendments to part B ‘*Terrestrial Code* content’ of the User’s Guide, to incorporate a more detailed explanation of the disease-specific chapters, in line with the newly developed ‘Framework for *Terrestrial Code* standards’, and to develop a new point to explain the use of terms referring to animals (hosts) used in the *Terrestrial Code*. At its February 2024 meeting, the Code Commission considered all comments received, amended the text, and circulated it for comments.

The revised User’s Guide has been circulated twice for comments.

Discussion

The Code Commission considered comments received on the draft revised User’s Guide that was circulated in its February 2024 meeting report and amended the text, as relevant. The Commission’s responses to comments received are presented in Annex 3.

The Code Commission amended several bullet points, for clarity and to align with conventions of the *Terrestrial Code*.

The revised User’s Guide is presented as Annex 6 for comments and will be proposed for adoption at the 92nd General Session in May 2025.

6.3. Biosecurity (new Chapter 4.X.)

Comments on new Chapter 4.X. were received for the Commission's February 2024 meeting, from Argentina, Australia, Canada, China (People's Republic of), Chinese Taipei, Japan, New Caledonia, New Zealand, Switzerland, the USA, the AU-IBAR, the EU, the IEC and the WGW. Comments on the revised associated Glossary definitions were received from Argentina, China (People's Republic of), New Caledonia, Switzerland, the USA, the African Union and the EU. Members are invited to refer to the February 2024 code Commission meeting report and the *ad hoc* report to see how their comments were addressed.

Background

In September 2022, the Code Commission requested that an *ad hoc* Group be convened to initially develop a chapter structure on biosecurity, to describe the content of each article and to revise the associated Glossary definitions for the consideration of the Code Commission and the Scientific Commission.

In February 2023, after considering the *ad hoc* Group's work and feedback from the Scientific Commission, the Code Commission agreed that the proposed structure of the new Chapter 4.X., and the overall content were appropriate and requested that the *ad hoc* Group be reconvened to draft a new chapter and to revise current Glossary definitions for 'biosecurity' and 'biosecurity plan', and to propose a new definition for 'swill'.

At its September 2023 meeting, the Code Commission considered the *ad hoc* Group's report and reviewed the draft new Chapter 4.X., the proposed revised Glossary definitions for 'biosecurity' and 'biosecurity plan', and a new definition for 'swill', together with input from the Scientific Commission. The Code Commission circulated the draft new Chapter 4.X. and the revised Glossary definitions and the new definition for comments.

In February 2024, the Code Commission acknowledged the numerous comments received. The Commission requested that the *ad hoc* Group be reconvened to undertake a thorough revision of the text in response to the comments received. The *ad hoc* Group met in March 2024 and addressed the comments as requested by the Commission. The proposed new Chapter 4.X. 'Biosecurity' was circulated once for comment.

Discussion

The Code Commission reviewed the report of the *ad hoc* Group and considered the updated draft Chapter 4.X. 'Biosecurity' and made amendments, where relevant, to ensure consistency within this chapter and throughout the *Terrestrial Code*.

The Code Commission discussed some of the terms used in this chapter, including some associated Glossary definitions. The Commission noted that some terms such as 'risk' and 'hazard' are defined terms in the Glossary as they have specific meanings in the *Terrestrial Code* and agreed that these terms should not be used in this chapter where the proposed meaning was different. Consequently, the Commission made relevant amendments throughout the draft chapter to avoid this issue.

The Code Commission noted that there was no explanation of the relationship between the transmission pathways listed in Article 4.X.7., and the components of biosecurity listed in Article 4.X.8. and agreed that the chapter should include text explaining how the components of biosecurity address the various transmission pathways. The Commission had not enough time to modify the text during its meeting, and requested the Secretariat to consult with experts, as needed, to address this concern and propose an additional text for its February 2025 meeting.

The Commission noted that the *ad hoc* Group on Biosecurity also provided suggestions for possible revisions to Chapter 4.14. 'General recommendations for disinfection and disinsection'. The Commission agreed to discuss this topic at a future meeting.

The Code Commission acknowledged that many changes have been made to the revised Chapter 4.X. during the period of revision. For this meeting report, the Commission agreed to provide for ease of reference an Annex 7 showing changes made since the draft was circulated in September 2023, while the revised Chapter 4.X. 'Biosecurity' is presented in a clean version as Annex 8 for comments and will be proposed for adoption at the 92nd General Session in May 2025.

6.4. Introduction to the recommendations for animal welfare (Chapter 7.1.)

Comments were received from Australia, Canada, Mexico, Japan, New Caledonia, New Zealand, Norway, Switzerland, Thailand, United Kingdom, USA, EU, and the International Coalition for Animal Welfare (ICFAW).

Background

In February 2022, the Code Commission agreed to consider a comment to include the 'five domains' concept in Chapter 7.7. 'Dog population management' and requested that the Secretariat and the WOAH Animal Welfare Collaborating Centres (AWCC) prepare a background document for its consideration.

In September 2022, the Commission reviewed the background document and noted that the 'five domains' as an animal welfare concept is recognised internationally, and it may be relevant to include it in Chapter 7.1. 'Introduction to the recommendations for animal welfare' rather than Chapter 7.7. The Commission agreed that given this was still a relatively new concept, it should develop a document to explain the concept to Members and how it is linked to the concept of 'five freedoms' currently used in the Code. The Commission requested the Secretariat to prepare a draft text for inclusion in Chapter 7.1. in consultation with the AWCCs.

At its September 2023 and February 2024 meetings, the Code Commission considered comments received, proposed amendments and circulated the revised chapter for comments.

The revised Chapter 7.1.was circulated twice for comment.

Discussion

The Code Commission considered comments received on the revised Chapter 7.1. 'Introduction to the recommendations for animal welfare' that was circulated in its February 2024 meeting report and amended the text as relevant.

The Commission's responses to comments received are presented in Annex 3.

The revised Chapter 7.1. 'Introduction to the recommendations for animal welfare' is presented as Annex 9 for comments and will be proposed for adoption at the 92nd General Session in May 2025.

6.5. Infection with Nipah virus (new Chapter 8.Y.)

Comments were received from Australia, Mexico, New Caledonia, New Zealand, Switzerland, the USA, and the EU.

Background

At its February 2022 meeting, the Code Commission was informed that in September 2021 the Scientific Commission had endorsed the draft case definition developed by subject matter experts for Nipah virus encephalitis. The Code Commission reviewed the experts' reports and the Scientific Commission's opinion and agreed that the rationale provided for the case definition was not sufficient to support commencing the work to develop a single-article chapter.

In February 2023, following the Code Commission's request, and after consultation with the Biological Standards Commission, the Scientific Commission amended the draft case definition and forwarded it to the Code Commission for consideration.

At its September 2023 meeting, the Code Commission agreed to draft a new Chapter 8.Y. 'Infection with Nipah virus', consisting of a single article for the general provisions, including the definition of its occurrence. The Code Commission also agreed to include an option for seroconversion only (i.e., without any further conditions) in the proposed point 3 of Article 8.Y.1., based on the opinions of the Scientific Commission and the Biological Standards Commission. Regarding the name of the listed disease in Chapter 1.3., the Code Commission agreed to amend it from 'Nipah virus encephalitis' to 'Infection with Nipah virus' and moved from Article 1.3.5. (diseases of Suidae) to Article 1.3.1. (diseases of multiple species), and to propose these amendments to Chapter 1.3. closer to the adoption of the new draft Chapter 8.Y.

At its February 2024 meeting, the Commission noted that pigs and horses are the species considered to play a significant role in the epidemiology of the disease, which was aligned with the *Terrestrial Manual*. However, the Commission added a text to clarify that the Nipah virus can infect a wide range of species but pigs and horses are the only species that play a significant role in the epidemiology of the disease.

The new Chapter 8.Y. was circulated twice for comment.

Discussion

The Code Commission considered comments received on the new Chapter 8.Y. 'Infection with Nipah virus' that was circulated in its February 2024 meeting report and amended the text as relevant and to align with conventions of the *Terrestrial Code*.

The Commission's responses to comments received are presented in Annex 3. The Code Commission agreed to add a new definition of seroconversion in the Glossary of the *Terrestrial Code* to align with the *Terrestrial Manual* and requested the Secretariat to prepare a draft definition for consideration at its next meeting, in consultation with the Biological Standards Commission.

The new Chapter 8.Y. 'Infection with Nipah virus' is presented as Annex 10 for comments and will be proposed for adoption at the 92nd General Session in May 2025.

6.6. Infection with *Mycoplasma mycoides* subsp. *Mycoides* SC (contagious bovine pleuropneumonia) (Chapter 11.5.)

Comments were received from China (People's Republic of), New Caledonia, Switzerland, the EU and the WRO.

Background

At its September 2018 meeting, the Code Commission agreed to review Chapter 11.5. 'Infection with *Mycoplasma mycoides* subsp. *Mycoides SC* (Contagious bovine pleuropneumonia)' (CBPP) to harmonise the provisions for official recognition and maintenance of free status, and endorsement and maintenance of official control programmes with other disease-specific chapters with official recognition of status and endorsement of control programmes.

At its September 2022 meeting, the Code Commission considered the amendments proposed by the Secretariat for harmonisation, as well as other changes that had been proposed by the *ad hoc* Group on CBPP in October 2015 and considered by the Scientific Commission at its February 2016 meeting. The Code Commission reviewed all proposals and introduced additional amendments for clarity and consistency with other chapters and circulated the revised chapter for comments.

At its February 2024 meeting, the Code Commission considered all comments received and requested that the Secretariat forward some specific comments to the Scientific Commission for advice.

Acknowledging the agreement between the Bureaux of the Code Commission and the Scientific Commission regarding the impact that the potential adoption of the revised Chapter 11.5. would have on the procedure for annual reconfirmation for maintenance of the officially recognised status of CBPP of Members and the related administrative work for both Members and WOAH, the Code Commission agreed not to propose the chapter for adoption at the 91st General Session but rather to consider this chapter at its September 2024 meeting. The Commission requested the Secretariat to undertake a review of possible consequences of the procedure in collaboration with the Scientific Commission.

The revised Chapter 11.5. was circulated three times for comment.

Discussion

The Code Commission reviewed comments received on Chapter 11.5. 'Infection with *Mycoplasma Mycoides* subsp. *Mycoides* (CBPP)' that was circulated in its September 2023 meeting report. The Commission's responses to comments received are presented as part of Annex 3.

The Code Commission also considered advice from the Scientific Commission and agreed that there was not enough scientific evidence to change the case definition regarding the role of small ruminants.

The Code Commission amended the text, as relevant, to harmonise with other chapters and to align with the conventions of the *Terrestrial Code*.

The revised Chapter 11.5. 'Infection with *Mycoplasma mycoides* subsp. *Mycoides* SC (contagious bovine pleuropneumonia)' is presented as Annex 11 for comments and will be proposed for adoption at the 92nd General Session in May 2025.

6.7. Infection with bovine pestiviruses (bovine viral diarrhoea) (new Chapter 11.X.)

Comments were received from Australia, Switzerland, the UK, the USA and the EU.

Background

At its September 2022 meeting, the Code Commission agreed to add the development of a new Chapter 11.X. 'Infection with bovine pestiviruses (bovine viral diarrhoea)' to its work programme and circulated a proposed new chapter, consisting of one single article for the general provisions, including the definition of its occurrence, based on a case definition endorsed by the Scientific Commission, to clarify and facilitate notification of cases by WOAH Members.

At its September 2023 meeting, the Code Commission agreed to amend the disease name in Article 1.3.2. to 'Infection with bovine pestiviruses (Bovine viral diarrhoea)' and to circulate the amended article for comment.

At its February 2024 meeting, the Code Commission considered the comments received and made amendments, as relevant. The Commission agreed that proposed amendments to the pathogenic agents should not be finalised until the adoption of the proposed revised Chapter 3.4.7. 'Bovine viral diarrhoea' of the *Terrestrial Manual* at the 91st General Session. The Commission agreed not to propose this chapter for adoption at the 91st General Session but rather to wait until after the *Terrestrial Manual* chapter had been adopted.

The new Chapter 11.X. was circulated four times for comment.

Discussion

The Code Commission considered the comments received for the new Chapter 11.X. 'Infection with bovine pestiviruses (Bovine viral diarrhoea)' that was circulated in its September 2023 meeting report and amended the text, as relevant. The Commission's responses to comments received are presented as part of Annex 3.

The Code Commission was informed that the revised Chapter 3.4.7. 'Bovine viral diarrhoea' of the *Terrestrial Manual* was adopted at the 91st General Session in May 2024 and proceeded with its planned review of relevant text in Article 11.X.1.

The new Chapter 11.X. 'Infection with bovine pestiviruses (bovine viral diarrhoea)' is presented as Annex 12 for comments and will be proposed for adoption at the 92nd General Session in May 2025.

6.8. Infection with African horse sickness virus (Chapter 12.1.)

Comments were received from Australia, China (People's Republic of), South Africa, Switzerland, the EU and the WRO.

Background

At its February 2021 meeting, the Code Commission agreed to review Chapter 12.1. 'Infection with African horse sickness virus', to harmonise the provisions for official recognition and maintenance of free status, and endorsement and maintenance of official control programmes with other disease-specific chapters with official recognition of status.

At its September 2022 meeting, the Code Commission reviewed the amendments proposed by the Secretariat for harmonisation, as well as other changes that had been proposed by the *ad hoc* Group in December 2016 and considered by the Scientific Commission in February 2021, and amended the draft chapter, as relevant, and circulated the revised text for comments.

At its February 2024 meeting, acknowledging the agreement between the Bureaux of the Code Commission and the Scientific Commission regarding the impact that the potential adoption of the revised Chapter 12.1. would have on the procedure of annual reconfirmation for maintenance of the officially recognised status of AHS of Members and the related administrative work for both Members and WOAH, the Code Commission agreed not to propose the chapter for adoption at the 91st General Session but rather to consider this chapter at its September 2024 meeting. The Commission requested the Secretariat to undertake a review of possible consequences on the procedure.

The revised Chapter 12.1. was circulated three times for comment.

Discussion

The Code Commission considered comments received for the revised Chapter 12.1. 'Infection with African horse sickness virus' and amended the text as relevant and to align with conventions of the *Terrestrial Code*. The Commission's responses to comments received are presented as part of Annex 3.

After a thorough review of the revised draft text, the Commission also proposed the following amendments.

Article 12.1.1.

The Code Commission agreed to delete the seventh paragraph which states 'all countries of zones adjacent to a country or zone not having free status should determine their AHSV status from an ongoing surveillance programme', as it was already covered in Article 12.1.2. point 1(e).

Article 12.1.1bis.

In point 6, in response to the Scientific Commission's advice that the methods of sterilisation and filtration of 'sterile filtered horse serum' needed to be specified due to the lack of standardised processes (e.g. variations in pore size) across the world, the Code Commission recalled the previous discussion at the September 2023 meeting and agreed not to add 'sterile filtered horse serum' to the list of safe commodities and to consult further advice from experts. In accordance with Chapter 2.2., a safe commodity should be a recognised standalone commodity with standardised production parameters, which may include unspecified treatments that render it safe as regards relevant listed diseases.

The revised Chapter 12.1. 'Infection with African horse sickness virus' is presented as Annex 13 for comments and will be proposed for adoption at the 92nd General Session in May 2025.

6.9. Infection with *Trypanosoma equiperdum* (dourine) (Chapter 12.3.)

Comments were received from Australia, Mexico, New Caledonia, New Zealand, Switzerland, the USA, the EU and the WRO.

Background

The Code Commission and the Scientific Commission had agreed that three separate chapters on animal trypanosomes with different coverage of trypanosome species and animal hosts should be developed.

Between 2015 and 2018, a draft new Chapter 8.Z. 'Infection with *Trypanosoma evansi* (Surra)' and a revised Chapter 12.3. 'Dourine' were developed, circulated for comments and extensively discussed, but due to the need to clarify the scope of these chapters in terms of host species and pathogenic agents, in February 2018 both Commissions agreed to put Chapters 8.Z. and 12.3. on hold and to progress work on Chapter 8.19. 'Infection with *Trypanosoma brucei, T. congolense, T. simiae* and *T. vivax'*, which was adopted in May 2021. Both Commissions had also agreed that, notwithstanding diagnostic issues, the scope of the new Chapter 8.Z. should address surra of multiple species including horses and that the scope of Chapter 12.3. should remain as dourine of equids. The Commissions agreed that work on these two chapters should recommence after the adoption of the new Chapter 8.19.

The *ad hoc* Group was convened in July 2023 to draft a revised Chapter 12.3, in line with the approach used for the draft Chapter 8.Z. 'Infection with *Trypanosoma evansi* (Surra).

At its February 2024 meeting, the Code Commission considered the *ad hoc* Group's report and the advice of the Scientific Commission together with the draft revised Chapter 12.3. 'Infection with *Trypanosoma equiperdum* (dourine)' and made amendments, as relevant.

The revised Chapter 12.3. was circulated once for comments.

Discussion

The Code Commission considered the comments received for the revised Chapter 12.3. 'Infection with *Trypanosoma equiperdum* (dourine)' that was circulated in its February 2024 meeting report and amended the text, as relevant. The Commission's responses to comments received are presented as part of Annex 3.

The Commission considered the comments and the opinion of the Scientific Commission on animal hosts to be targeted for this disease and agreed to replace the term 'equids' with all targeted species for clarification. The Commission replaced 'equids' with 'animal hosts' throughout this chapter, excluding specific recommendations in relation to horses. The Commission reminded Members that the scientific names of the species are provided in the revised User's Guide so there was a need to define them in disease-specific chapters (see Item 6.2.). In addition, the Commission agreed to also include 'hinnies' (the hybrid of a male horse and a female donkey) in this chapter and the revised User's Guide.

The revised Chapter 12.3. 'Infection with *Trypanosoma equiperdum* (Dourine)' is presented as Annex 14 for comments and will be proposed for adoption at the 92nd General Session in May 2025

7. Texts circulated for comments

The Code Commission discussed the following new or revised texts and circulated them for comments.

7.1. Glossary

'***Border post', 'Container', 'Point of exit', 'Point of entry', 'Quarantine station' and 'Transit country'***

Background

At its September 2021 meeting, the Code Commission agreed to revise the Chapters 5.4. to 5.7. and the *ad hoc* Group convened several times to review and draft the new Chapters 5.4. to 5.7. The *ad hoc* Group also proposed the development of a new Glossary definition ('point of exit') and the revision of the associated Glossary definitions ('border post', 'quarantine station', 'container' and 'vehicle/vessel') in conjunction with the revision of these chapters. In September 2023, the Commission agreed with the proposed developed and revised definitions and circulated them for comments. Comments received were addressed by the Code Commission in February 2024, and by the *ad hoc* Group at its April 2024 meeting.

For additional background information refer to the April 2024 *ad hoc* Group report and item 7.3. of this report.

Discussion

The Code Commission reviewed the April 2024 report of the *ad hoc* Group and considered the Glossary definitions for *"Border post', 'Container', 'Point of exit', 'Point of entry', 'Quarantine station'*, and '*Transit country'*, in connection with the ongoing revision of Chapters 5.4. to 5.7. (See item 7.3. of this report.)

The Glossary definitions for '*Border post', 'Container', 'Point of exit', 'Point of entry', 'Quarantine station',* and *'Transit country'* are presented as Annex 15 for comments.

'*Disinfection*' and '*Pathogenic agent*'

Background

At its September 2023 meeting, the Commission in response to comments received for the draft Chapter 4.X. 'Biosecurity' agreed to include the revision of the Glossary definition for 'disinfection' in its work programme.

In addition, the Code Commission considered the comment received for draft Chapter 4.X. 'Biosecurity' in terms of replacement of 'pathogenic agents' with 'hazards'. The Commission noted that the term 'hazard' is defined, but it is not appropriate as a replacement because it also includes chemical and physical agents which are not in the scope of the term 'biosecurity'. The Commission agreed to add to its work programme the consideration for the development of a definition for 'pathogenic agent'.

Discussion

The Code Commission considered the proposed Glossary definition for 'disinfection' drafted by the *ad hoc* Group on Biosecurity, in conjunction with the opinion of the *ad hoc* Group on Revision of Chapters 5.4. to 5.7. The Commission agreed with the proposed revision of 'disinfection' and made amendments for clarification.

The Code Commission considered the proposed new Glossary definition for 'pathogenic agent' drafted by the *ad hoc* Group on Biosecurity. The Commission agreed with the need for a proposed new definition for 'pathogenic agent' and made amendments for clarification.

The Glossary definitions for 'Disinfection' and 'Pathogenic agent' are presented as part of Annex 15 for comments.

'*Isolation*'

Background

At its February 2024 meeting, in the revision of current Chapters 5.4. to 5.7., the Code Commission agreed to add the development of a Glossary definition for 'isolation' in its work programme. The Commission requested the *ad hoc* Group on the Revision of Chapters 5.4. to 5.7. and the *ad hoc* Group on Biosecurity to draft a new Glossary definition for 'isolation'.

Discussion

The Code Commission considered the proposed new Glossary definition for 'isolation' drafted by the a*d hoc* Group on Revision of Chapters 5.4. to 5.7., in conjunction with the opinion of the *ad hoc* Group on Biosecurity. The Commission made minor amendments to the proposed new definition for clarity.

The Glossary definition for 'Isolation' is presented as part of Annex 15 for comments.

7.2. Procedures for official recognition of animal health status, endorsement of an official control programme, and publication of a self-declaration of animal health status, by WOAH. (Chapter 1.6.)

Background

At its September 2022 meeting, the Code Commission considered a request from a Member to amend Chapter 5.8. 'International transfer and laboratory containment of animal pathogenic agents', and to improve clarity as to whether Members can hold pathogenic agents in laboratories without affecting their animal health status. The Code Commission noted that in addition to Chapter 5.8., references relevant to recommendations for laboratories were also included in Chapter 3.2., Chapter 3.4, and Chapters 1.7. to 1.12. in the *Terrestrial Code* and Chapters 1.1.3. and 1.1.4. of the *Terrestrial Manual*. The Code Commission agreed that this specific request should be addressed in the context of official status recognition by amending Chapter 1.6.

At its February 2023 meeting, the Code Commission agreed to develop a new Article 1.6.4. to clarify that holding a pathogenic agent in an approved laboratory with an appropriate level of containment and biosecurity in accordance with the *Terrestrial Manual* for diagnostic reference and other purposes such as vaccine or antigen banks will not impact the animal health status of a free country or zone. The Commission also agreed to cover in the same article other similar provisions currently included in other horizontal chapters and requested the opinion of the Scientific Commission on this proposal. The Commission also agreed to cover in the same article other similar provisions currently included in other horizontal chapters and requested the opinion of the Scientific Commission on this proposal.

At its February 2024 meeting, the Code Commission considered the feedback from the Scientific Commission and agreed to include in its work programme the revision of the Glossary definition for 'laboratory', in consultation with the Biological Standards Commission. It was limited to facilities for diagnostic purposes, and it was relevant to also consider approved facilities used for other purposes other than diagnoses, such as research on pathogenic agents, vaccine development and manufacturing, animal experiments or challenging animals by exposure to pathogenic agents to produce biological products.

The Code Commission also noted that this chapter was closely linked with the revised draft of Chapters 5.4 to 5.7. and of the new draft Chapter 4.X. 'Biosecurity', therefore it requested the opinion of the respective *ad hoc* Groups on this proposal before progressing further.

Discussion

The Code Commission considered the opinions of the two *ad hoc* Groups and made some revisions to the draft Article 1.6.4. The Commission used the term 'quarantine centre' instead of 'quarantine station' given that there is an ongoing proposal to revise the Glossary term from 'quarantine station' to 'quarantine centre'. The Commission also noted the need to progress the work on the definition for 'laboratory' and requested the Secretariat to progress this work in coordination with the Biological Standards Commission, as appropriate.

The Code Commission also discussed possible amendments to the sixth paragraph of Article 1.6.1.to address a potential future removal of Chapters 1.7. to 1.12. from the Code (refer to Item 3.1.). These amendments will be further discussed in February 2025 after receiving input from the Scientific Commission.

The revised Chapter 1.6. 'Procedures for official recognition of animal health status, endorsement of an official control programme, and publication of a self-declaration of animal health status, by WOAH' is presented as Annex 16 for comments.

7.3. Measures and procedures applicable during 'exportation', 'transit' and 'importation' (Chapters 5.4. to 5.7.)

Comments on revised Chapters 5.4. and 5.6. were received for the Commission's February 2024 meeting, from Argentina, Australia, Canada, China (People's Republic of), Japan, New Caledonia, Norway, Switzerland, AU-IBAR and the EU. Comments on the associated Glossary definitions were received from Argentina, China (People's Republic of), New Caledonia, Switzerland and the EU. Members are invited to refer to the February 2024 Code Commission meeting report and the *ad hoc* report to see how their comments were addressed.

Background

At its September 2017 meeting, the Code Commission agreed to include a review of Section 5. 'Trade measures, import/export procedures and veterinary certification', on its work programme to better support Members in managing the risks of introduction of diseases through the importation of commodities. At its September 2021 meeting, the Commission reviewed the current chapters of Section 5 and agreed that the revision of Chapters 5.4. to 5.7. should be given priority.

At its February 2022 meeting, the Code Commission requested that an *ad hoc* Group be convened to progress this work and discussed several points that it considered important to include in the draft Terms of Reference for the *ad hoc* Group and encouraged Members to submit comments on these points.

At its September 2022 meeting, the Code Commission considered comments received and finalised the Terms of Reference for the *ad hoc* Group.

At its February 2023 meeting, the Code Commission considered the *ad hoc* Group report and agreed with the *ad hoc* Group's proposal to replace the four current chapters (Chapters 5.4., 5.5., 5.6. and 5.7.) with three new chapters that will provide recommendations on measures and procedures that are applicable during 'exportation', 'transit' and 'importation', respectively. The Commission also agreed with the proposal to develop a fourth chapter to address key requirements (e.g., border control/inspection posts, and quarantine facilities).

In its September 2023 meeting, the Code Commission considered the *ad hoc* Group's report and the draft new Chapter 5.4. 'Measures and procedures applicable in the exportation of commodities', Chapter 5.6. 'Measures and procedures applicable in the importation of commodities' and associated

Glossary definitions. The Code Commission circulated the draft new Chapters 5.4. and 5.6. and revised and new Glossary definitions for comments and requested that the *ad hoc* Group be reconvened to complete drafting the remaining texts.

At its February 2024 meeting, the Code Commission considered the comments received and the report of the meeting of the *ad hoc* Group held in November 2023, together with the proposed draft revised Chapters 5.5. and 5.7. prepared by the *ad hoc* Group. The Commission requested that the *ad hoc* Group be reconvened to undertake further revision of the texts in response to the comments received. The Commission considered all the comments and provided guidance on key areas for the *ad hoc* Group, which met again in April 2024.

Discussion

The Code Commission considered the report of the April 2024 meeting of the *ad hoc* Group on Revision of Chapters 5.4. to 5.7. of the *Terrestrial Code*.

The Code Commission reviewed the draft revised Chapters 5.4. to 5.7. The *ad hoc* Group had addressed the comments forwarded from the Commission's September 2023 meeting and had considered the Commission's guidance, and made amendments, as relevant. The Commission reminded Members to refer to the November 2023 and April 2024 reports of the *ad hoc* Group meetings, in conjunction with this report for the explanation of the revisions of Chapters 5.5. and 5.7.

The Commission considered the request from the *ad hoc* Group regarding the usage of the term 'disinsection' and agreed to use 'disinfection' instead of 'disinsection' throughout the draft chapters. The Commission noted that this issue will be further considered in conjunction with the revision of Chapter 4.14. 'General recommendations on disinfection and disinsection' which is included in its work programme.

The Commission did not agree with the proposal from the *ad hoc* Group to use the term 'contingency plan' instead of 'emergency plan' given that 'emergency plan' and 'contingency plan' may be interpreted differently by Members. The Commission agreed not to use a specific name for the plan and amended the title of Articles 5.4.5., 5.6.5. and 5.7.8. to 'Planning for unexpected events' in draft chapters to avoid misunderstanding.

The Commission reviewed the revised Glossary definitions for 'border post', 'point of exit' and 'quarantine station'. The Commission made some amendments to the proposed texts for clarification. The Commission also reviewed and agreed with the new Glossary definition for 'point of entry' and revised Glossary definitions for 'transit country' which were initially proposed by the *ad hoc* Group in its November 2023 meeting.

The Commission noted that the revision of Glossary definitions for 'container' and 'vessel/vehicle' is being considered by the *ad hoc* Group addressing chapters on animal welfare during transport in the *Terrestrial Code* (see item 4.1.8.). The Commission agreed with the revised definition for 'vessel/vehicle' proposed by the *ad hoc* Group and replaced the term 'vessel/vehicle' with the new draft term 'means of transport' throughout the draft chapters. The new proposals on the Glossary definitions for 'disinfection' and 'isolation' were considered with the development of Chapter 4.X. on biosecurity (see item 6.3. of this report).

The Commission considered the recommendation of the *ad hoc* Group to incorporate language regarding the rights and responsibilities of transit countries into Chapter 5.1. 'General obligations related to certification' and the development of the introductory chapter of Section 5. The Commission requested that the Secretariat add these actions to the Terms of Reference of the *ad hoc* Group that will be convened to review Chapter 5.1. (see item 4.1.7.).

The revised Chapters 5.4.'Measures and procedures applicable to the exportation of commodities' and 5.6. 'Measures and procedures applicable to the importation of commodities' and the new Chapters 5.5. 'Measures and procedures applicable to the transit of commodities' and 5.7. 'Border inspection posts and quarantine centres' are presented as Annex 17, Annex 18, Annex 19 and Annex 20, respectively, for comments.

The revised Glossary definitions of 'border post', 'container', 'quarantine station', 'transit country' and 'vehicle/vessel', and the new Glossary definitions for 'point of entry' and 'point of exit' are presented as part of Annex 15 for comments.

7.4. Infection with foot and mouth disease virus, recommendations for international trade of fetal bovine serum (Article 8.8.33bis of Chapter 8.8.)

Background

In September 2022, during the revision of Chapter 8.8. 'Infection with foot and mouth disease virus', the Code Commission addressed a comment requesting the addition of 'gamma irradiated foetal bovine serum' to the list of safe commodities and requested the Secretariat to consult the industry on whether the proposal referred to standardised protocols.

In February 2023, the Code Commission was informed that the industry had encountered difficulties in the international trade of 'fetal bovine serum' due to different sanitary measures requested by countries, which included limitations or heterogenous requirements to trade from FMD-infected countries, and that 'gamma irradiation' was not a specific step of the standardized manufacturing process for the commodity, but rather a measure being specifically applied to address potential risks of transmission of FMDV and other pathogenic agents. The Commission agreed on the potential value of providing recommendations for the safe trade of 'fetal bovine serum' in the *Terrestrial Code* but considered that it was too close to adoption to propose a new draft article and requested the Secretariat, in consultation with experts, to propose the draft article.

In September 2023, the Code Commission reviewed the information provided by the industry to support the drafting of a new article on recommendations for the safe trade of 'fetal bovine serum' and agreed to consider a new draft article once the proposed revised chapter has been adopted.

Discussion

The Code Commission reviewed the evidence provided by the industry and the Secretariat and agreed not to include this commodity as a safe commodity in Article 8.8.2., and drafted a new Article 8.8.33bis. 'Recommendations for importation of fetal bovine serum from countries or zones infected with FMDV' and agreed to circulate it for comments.

Article 8.8.33bis. of Chapter 8.8. 'Infection with foot and mouth disease virus', is presented as Annex 21, for comments.

7.5. New World screwworm (Cochliomyia hominivorax) and Old World screwworm (Chrysomya bezziana) (new Article 8.13.1bis. of Chapter 8.13.)

Background

In February 2024, the Code Commission considered a proposal from the Scientific Commission to amend Chapter 8.13. 'New World screwworm (*Cochliomyia hominivorax*) and Old World screwworm (*Chrysomya bezziana*)', to incorporate a draft case definition for New World Screwworm and Old World Screwworm that had been developed by subject-matter experts and endorsed by the Scientific Commission at its September 2023 meeting.

The Code Commission considered the draft case definition and agreed to include this item in its work programme and requested that the Scientific Commission clarify some points on the epidemiological significance of animal hosts, notably birds, and provide its opinion on whether to develop separate disease-specific chapters, before progressing this work.

Discussion

The Code Commission considered the opinion of the Scientific Commission and agreed to draft a new Article 8.13.1bis. on general provisions, including the definition of the disease and its occurrence, and to maintain a single chapter to address both New and Old World screwworms.

The Commission, in agreement with the Scientific Commission, agreed to include 'birds' as animal hosts. The Commission highlighted that this would mean that cases in birds will have to be notified to WOAH and clarified that no changes are needed in recommendations for the current Article 8.13.1, which remains for domestic and wild mammals.

The Commission agreed to amend the name of the listed diseases in Chapter 1.3. from 'New World screwworm (*Cochliomyia hominivorax*)' to 'Infestation with C*ochliomyia hominivorax* (New World screwworm)', and from 'Old World screwworm (*Chrysomya bezziana*)' to 'Infestation with *Chrysomya bezziana* (Old World screwworm)' and to amend the title of Chapter 8.13. accordingly. The Commission agreed to propose these amendments to Chapter 1.3. closer to the adoption of the new proposed Article 8.13.1bis.

The new Article 8.13.1bis. of Chapter 8.13. is presented as Annex 22 for comments.

7.6. Infection with Crimean-Congo haemorrhagic fever virus (new Chapter 8.X.)

Background

In February 2016, the Code Commission agreed to include the development of a disease-specific chapter on Crimean-Congo haemorrhagic fever (CCHF) in its work programme, in response to a Member comment.

In February 2022, in response to a comment to develop a new chapter for CCHF as it is a high priority zoonotic disease in Asia and Africa, the Code Commission agreed to initiate this work once a draft case definition was developed by the Scientific Commission and recognised this item as priority.

At its February 2024 meeting, the Code Commission was informed that the Scientific Commission, at its September 2023 meeting, had approved a draft case definition for infection with Crimean-Congo haemorrhagic fever virus, and in the absence of a *Terrestrial Code* chapter it had been posted on the WOAH website to facilitate Members notification. The Commission was also informed that the corresponding Chapter 3.1.5. 'Crimean-Congo haemorrhagic fever' of the *Terrestrial Manual* has been revised and would be proposed for adoption at the 91st General Session in May 2024, and agreed to postpone this work until after the adoption of the updated Chapter 3.1.5. of the *Terrestrial Manual*.

Discussion

The Code Commission was informed that the revised Chapter 3.1.5. 'Crimean-Congo haemorrhagic fever' of the *Terrestrial Manual* was adopted at the 91st General Session in May 2024 and proceeded with its planned development of Article 8.X.1.

The Code Commission agreed to develop a new Chapter 8.X. 'Infection with Crimean-Congo haemorrhagic fever virus', consisting of one single article for the general provisions, including the definition of the disease and of its occurrence, based on the case definition that had been reviewed by the Scientific Commission at its September 2023 meeting.

The Commission highlighted that the main objective of this chapter was to support notification by Members due to the public health risks associated with this disease. The Commission noted that, while it considered that it was not relevant to provide recommendations for international trade or animal health status, it may be relevant to consider developing recommendations for Veterinary Services' activities to prevent the spread of the disease to humans, such as precautions at slaughterhouses or when working with animals or animal products in infected areas, and encouraged Members to consider this proposal and provide comments on its relevance.

The Commission agreed to amend the name of the listed disease in Chapter 1.3. to 'Infection with Crimean-Congo haemorrhagic fever virus'. The Commission agreed to propose these amendments to Chapter 1.3. closer to the proposal for adoption of the new draft Chapter 8.X.

The new Chapter 8.X. 'Infection with Crimean-Congo haemorrhagic fever virus', is presented as Annex 23 for comments.

7.7. Infection with avian metapneumovirus (Turkey rhinotracheitis) (new Chapter 10.X.)

Background

At its February 2023 meeting, the Code Commission was informed that the Scientific Commission had endorsed a draft case definition for turkey rhinotracheitis that had been developed by subject-matter experts. The Commission considered the draft case definition and requested that the Scientific Commission clarify some points, notably on epidemiologically significant animal hosts.

The Code Commission agreed that once these points have been clarified it would develop a new article for Chapter 10.X. to address general provisions including the case definition.

Discussion

The Code Commission was informed that the Scientific Commission considered that the epidemiologically significant animal hosts are 'poultry' and that other bird populations that are not 'poultry', including wild birds, do not play a significant role in the epidemiology of this disease.

The Code Commission was also informed that the Scientific Commission had amended the draft case definition, taking into consideration the opinions of the Biological Standards Commission and expert comments.

The Code Commission agreed to change the priority order to 'priority 2' and drafted a new chapter consisting of a single article for the general provisions, including the definition of the disease and its occurrence.

The Code Commission also agreed to use 'Infection with avian metapneumovirus (turkey rhinotracheitis and swollen head syndrome of chickens)' as the title for the new chapter and to revise the name of the listed disease in Article 1.3.3. accordingly, but not to circulate the revised Article 1.3.3. until after considering the comments on the proposed new chapter.

The proposed new Chapter 10.X. 'Infection with avian metapneumovirus (Turkey rhinotracheitis and swollen head syndrome of chicken)' is presented as Annex 24 for comments.

7.8. Equine encephalomyelitis (Eastern and Western) (Chapter 12.4.)

Background

In September 2022, the Code Commission agreed to include the revision of Chapter 8.10. 'Japanese encephalitis' in its work programme in conjunction with the revisions of Chapter 12.4. 'Equine encephalomyelitis (Eastern and Western)' and Chapter 12.11. 'Venezuelan equine encephalomyelitis'.

At its February 2024 meeting, the Code Commission considered the conclusions of the Scientific Commission provided in its September 2023 report on the assessment of these three diseases and agreed that they meet the listing criteria of Chapter 1.2. 'Criteria for the inclusion of diseases, infections and infestations in the WOAH list' of the *Terrestrial Code*. The Code Commission requested the Secretariat convene an *ad hoc* Group to revise chapters on equine encephalitides of the *Terrestrial Code* and to report back at its September 2024 meeting, which met in June 2024.

Discussion

The Code Commission considered the report of the June 2024 meeting of the *ad hoc* Group on the Revision of chapters on equine encephalitides of the *Terrestrial Code* together with the opinion of the Scientific Commission at its September 2024 meeting.

The Commission reviewed the proposed draft Chapter 12.4. 'Infection with eastern equine encephalitis virus (eastern equine encephalomyelitis) and infection with western equine encephalitis virus (western equine encephalomyelitis)' and amended text for clarity and consistency. The Commission reminded Members to refer to the June 2024 report of the *ad hoc* Group, in conjunction with this report for further explanation of the draft Chapter 12.4.

The Commission agreed to keep EEE and WEE under the same listed disease and chapter, although they are caused by distinct pathogenic agents and do not have the same epidemiology, to avoid duplication of recommendations.

The Commission considered the animal hosts for these diseases and agreed to use 'equids', as described in the User's Guide being revised. The Commission agreed with the *ad hoc* Group in that equids are dead-end hosts acting as sentinel animals for these diseases, and thus it was important to notify and undertake surveillance in equid populations to mitigate the animal and public health risks linked with the transmission of the virus by wild animal hosts. The Commission did not agree with the *ad hoc* Group to include the incubation period for these diseases. The Commission explained that this information is needed whenever the chapter requires recommendations for isolation or quarantine, other mitigating measures, or recovery of status. As this chapter does not include the relevant articles, the Commission removed the text on the incubation period.

The Commission agreed with the *ad hoc* Group on the list of safe commodities. As equids themselves and all products derived from equids are considered safe commodities, the Commission replaced the list with 'equids and their products'.

The Commission did not agree to include articles for country or zone freedom from these diseases or for recovery of free status, nor recommendations for the importation of horses. The Commission explained that these articles are not needed for a disease-specific chapter if international trade of equid commodities has no impact on the spread of the disease, given all commodities are considered safe commodities. The Commission reminded Members that if no specific article is included in the chapter, as indicated in the User's Guide, the relevant recommendations in horizontal chapters of the *Terrestrial Code* would apply.

The Commission considered the necessity of an article on surveillance even though this chapter does not include provisions on free status. The Commission agreed with the *ad hoc* Group to include an article on principles of surveillance, for the reasons explained above and made amendments to clarify the objective of such surveillance, including the necessity as an early warning system.

Due to the extensive changes proposed, the Commission agreed to circulate the proposed text as a clean new chapter that, if adopted, would replace the current Chapter 12.4.

The revised Chapter 12.4. 'Infection with eastern equine encephalitis virus (eastern equine encephalomyelitis) and infection with western equine encephalitis virus (western equine encephalomyelitis)' is presented as Annex 25 for comments.

8. Updates on WOAH initiatives relevant to the Code Commission

8.1. Transparency of the WOAH process for the elaboration of Standards

Background

The former WOAH Director General had agreed to implement a stepwise approach to improve the transparency of the WOAH process for the elaboration of Standards. This will include the publication of comments of Members considered by the Specialist Commissions and their responses, as well as the evolution of the report formats of the Aquatic Animals Commission, the Code Commission and the Biological Standards Commission. This aligns with the 7th Strategic Plan, and this proposal was discussed and supported by the Presidents of the three Commissions at a meeting after the 90th General Session in May 2023.

This process also aims to ensure that Members can gain a better understanding of the complexity and range of opinions, as well as of Commission discussions and decisions, and that this will result in a better understanding of Members' concerns and should also improve the quality of the comments received.

This would be a progressive process, having started in March/April 2024 with the publication only on the Delegates' website of comments considered on new and revised standards during the February 2024 meetings of the respective Commissions.

Discussion

The Secretariat updated the Code Commission on the progress that had been made to improve the transparency of the WOAH process for the elaboration of Standards, in particular the publication of comments submitted by the Members and partners.

The Secretariat reminded the Commission that this is a progressive process, that was started at the February 2024 meeting. The next process will be the publication on the Delegates' website and the WOAH public website of comments considered on new and revised standards during the September 2024 Commission meetings and their responses. This process takes a stepwise approach and includes an evolution of the Commission reports towards transparency of comments considered and Commission responses. The Commission agreed that Commission responses to comments would be provided in Annex 3 of the report, in the language of that report (English, French or Spanish). However, the comments themselves and their associated rationale would be provided throughout Annex 3 in the language in which they were submitted.

8.2. WOAH Global Animal Welfare Strategy

Background

As part of the ongoing implementation of the WOAH Global Animal Welfare Strategy (GAWS), a two-year work plan has been developed. This work plan includes activities that address the four pillars of the Strategy: 'Development of animal welfare standards', 'Capacity building activities', 'Implementation of animal welfare standards and policies' and 'Communication with governments and the public'.

Discussion

The Secretariat provided an update of relevant activities of the GAWS work plan, specifically the ones related to the pillar on 'Communication with government and the public'. The Secretariat informed the Commission of the next Global Animal Welfare Forum 'Exploring how WOAH Animal Welfare Collaborating Centres can support Members in improving animal welfare'' which will take place in Merida, Mexico on 28-29 October 2024. The objective of this Forum is to work together to develop a work plan on how WOAH's Collaborating Centres can best support Members in animal welfare with respect to the implementation of WOAH animal welfare standards. The Secretariat reported that approximately 40 participants will be invited including selected Delegates and Focal Points from each region, Regional Commission Presidents, representatives from AW Collaborating Centres and

International Organisations with collaboration agreements. The Commission was also informed that the Forum will precede another event organised by the Americas Collaborating Centre, 'The Triennial animal welfare research meeting of the Americas'. The Commission noted this update.

8.3. *Terrestrial Code* content standardisation

8.3.1. Framework for Terrestrial Code Standards

Background

In February 2021, the Code Commission agreed to develop a framework for *Terrestrial Code* Standards that would serve as a guide to ensure a consistent approach when undertaking work on the development or revision of a *Terrestrial Code* chapter. Noting the differences in the objectives and structure of the chapters within Volume I and Volume II of the *Terrestrial Code*, and within the different sections of Volume I, the Commission requested the Secretariat to begin by working on the content of disease-specific chapters, i.e. Volume II.

Since then, the Code Commission, in collaboration with the Secretariat, developed a detailed framework for structuring disease-specific chapters in the *Terrestrial Code*. This document, created in consultation with the Scientific Commission and the Biological Standards Commission, provides conventions for terminology and chapter structure, including a detailed explanation of each component, and the key references to other parts of the Code and to the *Terrestrial Manual*.

In February 2024, the Commission agreed to a first edition of the document and requested that it be shared with the other Specialist Commissions and be used in upcoming chapter revisions, with feedback provided to the Commission.

Discussion

The Secretariat provided feedback to the Code Commission on the experience from the use of the Framework with different *ad hoc* Groups since the last meeting and reported positive feedback from the other Specialist Commissions.

The Code Commission reviewed several points that had been identified during this work that would require follow-up to progress in the definition of a harmonised approach. The Commission highlighted the importance of the approach to animal hosts (see item 4.1.1. of this report), which was one of the main issues identified, as well as the progress on the definition of clearer rules of the management of commodity names and the related articles (see item 8.3.2. of this report). The Commission noted that there were some other points to be addressed and requested the Secretariat to incorporate these new developments in a new edition of the Framework for consideration at its next meeting.

The Code Commission also noted several remaining issues related to provisions on zones and animal health status, which should be discussed as part of the upcoming work on the implementation of zoning (see item 4.1.5. of this report).

The Code Commission reiterated the value of this living document and nominated a member to continue working in between sessions with the Secretariat to continue improving it.

The Commission requested the Secretariat to report back on the progress of work at its next meeting.

8.3.2. Commodities Registry

Background

At its September 2021 meeting, the Code Commission agreed on an internal procedure (SOP) to manage commodities' names and their listing as safe commodities in *Terrestrial Code* chapters. Since then, the Commission worked with the Secretariat to develop a consolidated approach to managing commodities' names.

In September 2023, the Code Commission discussed a set of rules and a categorised tree, considering the World Customs Organization (WCO) Harmonized Commodity Description and Coding System (HS), to achieve consistency in the naming of commodities in the context of the WOAH internal SOP. The Commission agreed with the proposed approach, provided feedback to the Secretariat and noted that this would be a continuous work aiming at progressively developing a standardised approach to be integrated within the framework for *Terrestrial Code* Standards. The Code Commission noted that there was a need to consider some groups of commodities such as 'dairy commodities', 'egg commodities' or commodities associated with 'rendering' to clarify the standard terminology and associated industrial processes and requested the Secretariat to continue developing a standardised approach in collaboration with relevant partner organisations and report back at a future meeting.

In February 2024, the Commission was informed that this had been a critical input for the development of the new WOAH Standards online navigation tool (see item 8.4. of this report) and that the project had provided additional insights to progress this work on commodities.

Discussion

The Secretariat informed the Commission that the work to develop the WOAH Standards online navigation tool had provided additional insights to progress this work on commodities and provided a revised version of the rules and a categorised tree for commodities' names to be used in the *Terrestrial Code*. The Commission commended the work done by the Secretariat and the Commission members involved and agreed with the proposed documents, noting that there is still work ahead to progressively harmonise current content.

The Commission requested the Secretariat to incorporate the SOP and the rules used to categorise commodities as well as the categorised tree for naming commodities within the Framework for *Terrestrial Code* standards and start using it in the next drafting work. The Commission nominated a member to continue working with the Secretariat in streamlining these tools.

With regards to the clarification of some commodity groups, the Commission considered a set of documents provided by the World Renderers Organisation (WRO), that presented standardized definitions for the most significant and commonly traded rendered products. The Commission thanked the WRO for the valuable contribution and agreed to consider 'protein meal' and 'rendered fats' in some of the chapters discussed at this meeting. The Commission requested the Secretariat to seek some additional inputs on this proposal to ensure that it reflected standardised protocols.

The Commission requested the Secretariat to report back on the progress of work at its next meeting.

8.4. WOAH Standards Navigation Tool

The Code Commission was updated on the progress of the WOAH Standards Online navigation tool project, which is an innovative project aimed at providing users with streamlined access and navigation of WOAH Standards.

The project will deliver two new user interfaces, on the WOAH Website:

- Navigation and search tool; this interface will provide a guided navigation experience that will allow users to navigate through the WOAH Codes and Manuals.

- Recommendations for safe international trade by commodity; this interface will enable users to easily visualise recommendations for safe international trade by commodity through a comprehensive filtering system.

WOAH Headquarters informed the Commission that the project was progressing steadily, with most of the external features already completed, as well as the digitalisation of the content of the WOAH *Terrestrial* and *Aquatic Codes* and *Manuals*.

The Code Commission was also informed that the project was at the final stages of the development of the 'internal' interface for the management of Standards, which will enable WOAH staff to efficiently manage and update WOAH International Standards.

The Commission praised the progress of the project and reiterated its utmost importance for WOAH Members and requested the Secretariat to report back on the progress of work at its next meeting.

8.5. WOAH Observatory

Representatives of the WOAH Observatory informed the Code Commission of their ongoing activities. The Observatory routinely produces monitoring reports every 5 years to evaluate the implementation of WOAH standards by Members, using data from the World Animal Health Information System, Performance of Veterinary Services, and other internal sources as well as external sources such as the World Trade Organization. The Observatory also informed the Commission about three thematic studies that are in progress. Data for thematic studies come from responses to the questionnaires sent to Members on specific topics. These thematic studies are in progress:

1. Zoning – Part 2

2. Compartments

3. Animal welfare during transport by land and sea.

The second report from the thematic study on zoning is focused on determining factors associated with the acceptance of zones by trading partners. The report is anticipated in 2025. In addition to the Part 2 report, the WOAH Secretariat is planning a Forum on zoning for 2025 which was recommended in the Zoning Part 1 report. The Code Commission expressed interest in the preliminary findings of the Zoning Part 2 analysis, emphasised the role of risk-based international veterinary certification in acceptance of zoning by trading partners, and noted the possibility for that information to be incorporated into the programme of the Forum on zoning. The Commission noted that Zoning Part 2 analysis and outcomes from WOAH Forum on zoning would be useful inputs to be considered for the development of the new Chapter on "Implementation of Zoning".

8.6. WOAH Science System

The Code Commission reviewed the document 'The Science System of the World Organization for Animal Health' which was shared for its information. The Commission noted that the document shows how research information flows from researchers to WOAH, where it is evaluated, and then it is incorporated into policy changes if applicable. The Commission appreciated the information regarding the role of Working Groups, Specialist Commissions, Reference Laboratories, *ad hoc* Groups, and Collaborating Centres to ensure that WOAH is using the most relevant scientific information to inform policy decisions.

8.7. WOAH activities on substandard and falsified veterinary products

The Code Commission was updated about the main activities and plans of WOAH Headquarters within the Substandard and Falsified Veterinary Products Programme, developed following the outcomes of the 2nd Global OIE Conference on AMR.

This programme includes the development of a reporting system of falsified or substandard veterinary products in the animal sector, circulating within and between countries. The Commission was informed that, whilst there are some Members voluntarily contributing, some Members have suggested that more guidance should be provided within WOAH international standards in this regard.

The Commission's opinion was sought on the relevance and pertinence to further develop WOAH international standards on this topic, such as definitions for substandard and falsified veterinary products, as well as further clarifications on what it is expected to report and its modality. The Commission was informed that the same discussion was to be had with the other Specialist Commissions, as the consideration should cover all WOAH Standards.

The Code Commission thanked representatives of the Substandard and Falsified Veterinary Products Programme for the information provided and acknowledged the progress of the work. The Commission highlighted that before developing new standards, the scope and objective of such new developments should be very clear. The Commission noted, for example, that one goal could be to support Members in implementing post-marketing surveillance of veterinary medicinal products quality and enhance collaboration with relevant stakeholders (inspectors, customs, law enforcement). The Commission highlighted that some provisions already existed in Chapter 3.2. 'Quality of Veterinary Services', 3.4. 'Veterinary Legislation', and Chapter 4.18. 'Vaccination', and noted that further inclusion of management of veterinary medicinal products quality post-marketing in the *Terrestrial Code* could begin in Section 6, which already covers antimicrobial agents, with potential amendments to Section 3. Definitions may be added later if necessary.

The Code Commission highlighted the need to address this topic in close coordination with the Biological Standards Commission to consider potential revisions to the *Terrestrial Manual* if needed.

The Commission agreed to follow up the discussion with more concrete proposals at the next meeting in February 2025 based on the feedback from the other Specialist Commissions.

9. Updates on the other standard-setting bodies and international organisations

The Code Commission was updated on the work of other standard-setting bodies and international organisations relevant to its work.

9.1. Update on Codex's works

The Secretariat updated the Code Commission on relevant Codex Alimentarius work during the past year (September 2023 to August 2024).

The Commission noted that the Codex Committee of Food Hygiene agreed to establish an electronic working group to prepare the proposed draft revision of the 'Guidelines for the Control of Campylobacter and Salmonella in Chicken Meat' (CXG 78-2011). The Commission noted that this guideline includes references to Chapters 6.5. and 6.6. of the *Terrestrial Code* and requested the Secretariat to continue good coordination with this work and provide an update on the progress at its next meeting, if relevant.

The Commission noted that the Codex Committee on Food Import and Export Inspection and Certification Systems approved new work on reviewing and updating the 'Principles for traceability/product tracing as a tool within a food inspection and certification system' (CXG 60-2006). The Commission requested that the Secretariat provide an update on the progress of this work at its future meeting, in particular on the coordination needs between the two organisations.

9.2. Update on One Health Global Coordination

The Code Commission was updated on the ongoing activities undertaken at WOAH to ensure global coordination of One Health activities, notably since its last meeting in February 2024.

The Code Commission was informed of the current activities conducted under the 'Quadripartite", coordination action between the Food and Agriculture Organization of the United Nations (FAO), United Nations Environment Programme (UNEP), World Health Organization (WHO) and WOAH.

Also, the Commission was informed that in June 2024, the WHO World Health Assembly, adopted a package of amendments to the International Health Regulation (IHR), and WHO was still working to negotiate a new international agreement to strengthen global pandemic prevention.

The Commission discussed different aspects of this work and agreed with the importance of ensuring good coordination of these activities between international organisations, as well as promoting the practical implementation of the 'One Health approach', emphasising that the ongoing discussions should be an opportunity to reinforce effective coordination between the human, animal and environmental sectors.

The Commission highlighted that Veterinary Services play a critical role in the surveillance, detection, prevention, control and eradication of animal diseases, including zoonoses and emerging diseases. The Commission reminded that the 'One Health approach' is incorporated into the *Terrestrial Code*, not only because it addresses directly animal diseases and zoonoses, but also because the mitigation of human health risks is at the core of many of the recommended measures, as it is an essential part of the role of Veterinary Services.

The Commission reiterated its previous position that it would be important to ensure that key aspects of these standards for both organisations are well coordinated and expressed support for this effort.

9.3. Update on IATA collaboration

Background

WOAH has been a member of the International Air Transport Association (IATA) Live Animal and Perishable Board (LAPB) since 2006 and has had a Collaboration Agreement with IATA since 2008.

The Terrestrial Code Chapter 7.4. 'Transport of animals by air' and the IATA Live Animal Regulations (LAR) Chapter 10 share similar content and both organisations cross-reference each other's. However, the process and frequency of revision of the two texts differ, so alignment cannot always be guaranteed.

Discussion

The Secretariat informed the Commission that during the 56th meeting of the LAPB, WOAH provided an update on the status of the revision of the three chapters on the transport of animals in the *Terrestrial Code*. The Secretariat met several times with the Special Cargo Operations, Safety and Security team of IATA to exchange views on the options to collaborate during the revision of the WOAH Chapter 7.4. Transport of animals by air, to which IATA committed to contribute. The Commission requested the Secretariat to continue collaborating with the IATA throughout the revision of chapters on transport.

9.4. Update on collaboration with private sector/industry organisations

The Code Commission appreciated the active contribution and engagement of private sector/industry organisations that have signed a cooperation agreement with WOAH.

The Code Commission especially thanked the World Renderers Organization (WRO), the International Horse Sports Confederation (IHSC), and the International Egg Commission (IEC) for their contribution to the work items discussed at this meeting. The Commission's considerations of the specific comments and contributions are captured under the specific items of this report.

The Code Commission reminded that international organisations representing the private sector or industry had been contributing to the work of the Code Commission through the Secretariat by providing information on relevant industry practices and processes from a global perspective, beyond differences in national regulatory frameworks.

The Commission encouraged the Secretariat to continue the ongoing efforts to liaise with partner organisations to actively engage in fostering an active communication, to promote proactive and sustainable participation in WOAH standards-setting activities.

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…/Annexes

Annex 1. Adopted Agenda

MEETING OF THE WOAH TERRESTRIAL ANIMAL HEALTH STANDARDS COMMISSION

Paris, 9 to 19 September 2024

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1. **Welcome**
   - **1.1.** Deputy Director General
   - **1.2.** Director General
2. **Adoption of agenda**
3. **Cooperation with other Specialist Commissions**
   - **3.1.** Scientific Commission for Animal Diseases
     - **3.1.1.** SOP for listing decision for pathogenic agents
     - **3.1.2.** SOP for determining whether a disease should be considered as emerging
     - **3.1.3.** Case definition
     - **3.1.4.** Removal of questionnaire chapters (Chapters 1.7. to 1.12.)
   - **3.2.** Biological Standards Commission
     - **3.2.1.** Biological Standards Commission's recommendations to the *Terrestrial Code* (following *Manual* updates proposed for adoption)
   - **3.3.** Aquatic Animals Commission
4. **Code Commission's work programme not including texts proposed for comments or adoption**
   - **4.1. Ongoing work items (not in order of priority)**
     - **4.1.1.** Animal hosts to be targeted by WOAH Standards for a listed disease (in collaboration with SCAD and BSC)
     - **4.1.2.** Wildlife health
     - **4.1.3.** New chapter on emergency management
     - **4.1.4.** Revision of Chapter 1.6. Procedures for official recognition of animal health status, endorsement of an official control programme, and publication of a self-declaration of animal health status, by WOAH
     - **4.1.5.** Revision of Chapter 4.4. Zoning and compartmentalisation and New chapter on implementation of zoning
     - **4.1.6.** Revision of Chapter 4.7. Collection and processing of bovine, small ruminant and porcine semen
     - **4.1.7.** New chapter on biosecurity (Chapter 4.X.) and associated Glossary definitions (including revision of 'disinfection' and pathogenic agent')
     - **4.1.8.** Revision of Chapters 5.4. to 5.7. and associated Glossary definitions (including development of 'isolation')
     - **4.1.9.** Revision of chapters on certification procedures (Chapters 5.2. and 5.10.)

4.1.10. Revision of chapters on the welfare of animals during transport by land, sea and air (Chapters 7.2., 7.3. and 7.4.)

4.1.11. Revision of chapters on equine encephalitides (Chapters 8.10. Japanese encephalitis, 12.4. Equine encephalitis (Eastern and Western) and 12.11. Venezuelan equine encephalomyelitis)

4.1.12. New chapter on Infection with avian metapneumovirus (Turkey rhinotracheitis) (Chapter 10.X.)

4.1.13. Infection with *Mycoplasma mycoides* subsp. *Mycoides* SC (contagious bovine pleuropneumonia) (Chapter 11.5.)

4.1.14. Infection with bovine pestiviruses (bovine viral diarrhoea) (New Chapter 11.X.)

4.1.15. Infection with African horse sickness virus (Chapter 12.1.)

4.1.16. Revision of Chapter 14.8. Scrapie

4.1.17. Revision of Chapter 14.9. Sheep pox and goat pox

4.1.18. Development of new chapter on Crimean-Congo haemorrhagic fever

4.1.19. Revision of Glossary definition for 'poultry'

4.1.20. Chapter 5.12. Model passport for international movement of competition horses

4.2. Items under consideration for inclusion in work programme

4.2.1. Chapter 8.4. Infection with *Brucella abortus*, *B. melitensis* and *B. suis*

4.2.2. Revision of Chapter 8.8. Infection with foot and mouth disease virus (article with provision for safe trade of fetal bovine serum)

4.3. New proposals and requests for inclusion in work programme

4.3.1. New requests from Members and International Organisations

4.3.1.1. Revision of Chapter 8.18. Infection with *Trichinella* spp.

4.3.1.2. Development of guidelines on vaccine cold chains

4.3.1.3. New definitions for 'Control', 'Elimination' and 'Extinction', and revision of definition for 'Eradication'

4.3.2. Other requests

4.3.2.1. Potential work on AMR Chapters following adoption of Chapter 6.10.

4.3.2.2. Tularemia

4.3.2.3. Revision of Chapter 14.7. Infection with peste des petits ruminants virus (Proposed draft article on importation of small ruminant from countries or zones infected with PPRV destined for slaughter)

4.3.2.4. Chapter on HPAI

4.3.2.5. Revision of Chapter 11.9. Infection with lumpy skin disease virus

4.4. Prioritisation of items in work programme

5. Follow-up of chapters recently adopted (if any)

5.1. Chapter 7.5. Animal Welfare during slaughter (points under study), Article 7.5.30., Point 4).

5.2. Recommendations for importation of horns

5.3. Revision of Chapter 13.2. Rabbit haemorrhagic disease

5.4. Consistency revision of Chapter14.7. Infection with peste des petits ruminants virus (followed by adoption of FMD chapter)

6. Texts circulated for comments

6.1. In February 2024 meeting report

6.1.1. User's guide

6.1.2. Introduction to the recommendations for animal welfare (Chapter 7.1.)

6.1.3. Animal welfare at the time of killing (Articles 7.6.1. to 7.6.8. of Chapter 7.6.)

6.1.4. Infection with Nipah virus (new Chapter 8.Y.)

6.1.5. Infection with *Trypanosoma equiperdum* (dourine) (Chapter 12.3.)

7. Updates on WOAH initiatives relevant to the Code Commission

7.1. WOAH Global Animal welfare strategy (Forum)

7.2. *Terrestrial Code* data standardisation

7.2.1. Framework for *Terrestrial Code* standards

7.2.2. Commodities

7.2.2.1. Registry development follow-up

7.2.2.2. Rendered products

7.3. WOAH Standards Online Navigation Tool

7.4. Transparency of the WOAH process for the elaboration of Standards

7.5. WOAH Observatory

7.6. WOAH activities on substandard and falsified veterinary products

7.7. WOAH Science System

8. Updates on the other standard-setting bodies and international organisations

8.1. Update on Codex's works (CCFH (campylobacter in poultry meat), CCFICs)

8.2. Update on One Health Global Coordination

8.3. Update on IATA collaboration

8.4. Collaboration with private sector/industry organisations

8.4.1. Collaboration with WRO

8.4.2. Collaboration with IHSC

9. Meeting review

10. Date of next meeting

Annex 2. List of Participants

MEETING OF THE WOAH TERRESTRIAL ANIMAL HEALTH STANDARDS COMMISSION

Paris, 9 to 19 September 2024

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MEMBERS OF THE COMMISSION

Dr Etienne Bonbon
(President)
Seconded National Expert
European Commission
Brussels
BELGIUM

Dr Gaston Maria Funes
(Vice-President)
Counsellor for Agricultural Affairs,
Embassy of Argentina to the European Commission
Brussels,
BELGIUM

Dr Kiyokazu Murai
(Vice-President)
Ministry of Agriculture, Forestry and Fisheries
Tokyo,
JAPAN

Dr Caroline Dubé
(member)
National Manager,
Animal Health Risk Assessment and Intelligence Section,
Canadian Food Inspection Agency
CANADA

Dr Salah Hammami
(member)
Epidemiologist and virologist,
Full professor
National School of Veterinary Medicine
Sidi Thabet
TUNISIA

Dr John Stratton
(member)
Director,
Animal Biosecurity Branch,
Biosecurity Animal Division,
Department of Agriculture, Fisheries and Forestry
AUSTRALIA

WOAH HEADQUARTERS

Dr Gillian Mylrea
Head
Standards Department

Dr Francisco D'Alessio
Deputy Head
Standards Department

Dr Leopoldo Stuardo
Scientific Coordinator
Standards Department

Dr Joyce Bowling-Heyward
Chargée de Mission
Standards Department

Dr Su Youn Park
Chargée de mission
Standards Department

Dr Akinobu Kawamura
Chargée de mission
Standards Department

Annex 3

Comment	TAHSC response
Category: general A Member suggests that clarity is added to the User's Guide regarding the WOAH Terrestrial Code Glossary. Member has on several occasions received concerns that the Glossary definitions do not apply to a broader context. The objective of the Glossary is to provide definitions of key terms that require precise interpretation for the purpose of their use in the WOAH Terrestrial Code. The terms within the Glossary are not intended to be interpreted outside of the WOAH Terrestrial Code. Definitions are expected to be as concise as possible and should not contain unnecessary descriptive detail or further elaborations beyond what is necessary to define the term. Further descriptive detail or explanation that may be necessary for the implementation of a standard are normally provided within relevant chapters.	Agreed to add new text to the User's Guide, in point B.1, to clarify that the Glossary definitions are aimed only for the purposes of the *Terrestrial Code* and do not apply to a broader context.
Category: general La Membre s'interroge sur la raison pour laquelle dans ce chapitre le principe de mettre en italique les termes du glossaire n'est pas appliqué.	The Commission explained that this is an editorial decision.
Category: general A Member forwards its thanks to the Code Commission for this revision, and supports the changes suggested.	Noted.
Category: general A Member supports the proposed changes to this chapter.	Noted.
Category: general The Member thanks the Code Commission and in general supports this revised User's Guide. The clarification on the meaning of terms often used in the Code is very welcome (e.g. 'ruminants', 'bovids', 'Bovidae', 'bovines').	Noted.

USER'S GUIDE

A. Introduction

1) The WOAH *Terrestrial Animal Health Code* (hereafter referred to as the *Terrestrial Code*) establishes standards for the improvement of terrestrial animal health and welfare and veterinary public health worldwide. The purpose of this guide is to advise the Veterinary Authorities of WOAH Member Countries on how to use the *Terrestrial Code*.

2) Veterinary Authorities should use the standards in the *Terrestrial Code* to set up measures providing for early detection, internal reporting, notification, control or eradication of pathogenic agents, including zoonotic ones, in terrestrial animals (mammals, birds, reptiles and bees) and preventing their spread via international trade in animals and animal products, while avoiding unjustified sanitary barriers to trade.

Reference	Comment	TAHSC response
A_1	**Category:** addition **Proposed amended text:** Veterinary Authorities should use the standards in the *Terrestrial Code* to set up: i) measures providing for early detection, internal reporting, notification, control or eradication of pathogenic agents, including zoonotic ones, in terrestrial animals (mammals, birds, reptiles and bees) and preventing their spread via international trade in animals and animal products, while avoiding unjustified sanitary barriers to trade, and ii) procedures for establishing and recognising animal health status. **Rationale:** This addition is suggested as this is an important function for the Terrestrial Code chapters.	Agreed with the rationale, however the text was amended differently to add a reference to the establishment and recognition of animal health status, an important use of the *Terrestrial Code* chapters by Veterinary Authorities.

3) WOAH standards are based on the most recent scientific and technical information. Correctly applied, they protect animal health and welfare and veterinary public health during production and trade in animals and animal products, and in the use of animals.

4) The absence of chapters, articles or recommendations on particular pathogenic agents or commodities does not preclude the application of appropriate sanitary measures by the Veterinary Authorities, provided they are based on risk analyses conducted in accordance with the *Terrestrial Code*.

5) The year that a chapter was first adopted and the year of its last revision are noted at the end of each chapter.

6) The complete text of the *Terrestrial Code* is available on WOAH Web site and individual chapters may be downloaded from: https://www.woah.org/.

B. Terrestrial Code content

1) Key terms and expressions used in more than one chapter in the *Terrestrial Code* are defined in the Glossary, in the case where common dictionary definitions are not deemed to be adequate. The reader should be aware of the definitions given in the Glossary when reading and using the *Terrestrial Code*. Defined terms appear in italics. In the on-line version of the *Terrestrial Code*, a hyperlink leads to the relevant definition.

2) The term "(under study)" is found in some rare instances, with reference to an article or part of an article. This means that this part of the text has not been adopted by the World Assembly of Delegates and the particular provisions are thus not part of the *Terrestrial Code*.

3) The standards in the chapters of Section 1 are designed for the implementation of measures for the diagnosis, surveillance and notification of diseases, infections and infestations. The standards include procedures for notification to WOAH and procedures for the recognition of the animal health status of a country, zone or compartment.

4) The standards in Section 2 are designed to guide the importing country in conducting import risk analysis in the absence of WOAH recommendations on particular pathogenic agents or commodities. The importing country should also use these standards to justify import measures which are more stringent than existing WOAH standards.

5) The standards in the chapters of Section 3 are designed for the establishment, maintenance and evaluation of Veterinary Services, including veterinary legislation and communication. These standards are intended to assist the Veterinary Services and Veterinary Authority of Member Countries to meet their objectives of improving terrestrial animal health and welfare and veterinary public health, as well as to establish and maintain confidence in their international veterinary certificates.

6) The standards in the chapters of Section 4 are designed for the implementation of measures for the prevention and control of pathogenic agents. Measures in this section include animal identification, traceability, zoning, compartmentalisation, disposal of dead animals, disinfection, disinsection and general hygiene precautions. Some chapters address the specific sanitary measures to be applied for the collection and processing of semen and embryos of animals.

7) The standards in the chapters of Section 5 are designed for the implementation of general sanitary measures for trade. They address veterinary certification and the measures applicable by the exporting, transit and importing countries. A range of model veterinary certificates is provided to facilitate consistent documentation in international trade.

8) The standards in the chapters of Section 6 are designed for the implementation of preventive measures in animal production systems. These measures are intended to assist Member Countries in meeting their veterinary public health objectives. They include ante- and post-mortem inspection, control of hazards in feed, biosecurity at the animal production level, and the control of antimicrobial resistance in animals.

9) The standards in the chapters of Section 7 are designed for the implementation of animal welfare measures. The standards cover production, transport, and slaughter or killing, as well as the animal welfare aspects of free-roaming dog population control and the use of animals in research and education.

10) The standards in each of the chapters of Sections 8 to 16, i.e. disease-specific chapters, are designed mainly to prevent the pathogenic agents of WOAH listed diseases~~, infections or infestations~~ from being introduced into an importing country or from spreading within a country. Some chapters include specific measures to prevent and control the infections of global concern. Sections 8 to 16 each relate to the host species of the pathogenic agent: multiple species or species of Apinae, Aves, Bovinae, Equidae, Leporidae, Caprinae, Suidae and Camelidae. Although WOAH aims to include a chapter for each WOAH listed disease, not all WOAH listed diseases have been covered yet by a specific chapter. This is work in progress, depending on available scientific knowledge and the priorities set by the World Assembly of Delegates.

Reference	Comment	TAHSC response
B_1	**Category:** deletion **Proposed amended text:** The standards in each of the chapters of Sections 8 to 16, i.e. disease-specific chapters, are designed ~~mainly~~ to prevent the pathogenic agents of WOAH listed diseases~~, infections or infestations~~ from being introduced into an importing country or from spreading within a country. **Rationale:** Member would like clarification around why the word "mainly" has been added here, and what is adding; we would suggest deletion there isn't any narrative here on what else the Chapter is designed to do if not prevent intro or spread of disease.	Agreed. The Commission deleted that word and listed the specific objective of the provisions in disease-specific chapters.

~~The standards take into account the nature of the traded commodity, the animal health status of the exporting country, zone or compartment, and the risk measures applicable to each commodity.~~

A disease-specific chapter covers some or all of the following components:

- Chapter title and number;
- Article on general provisions, including definition~~s~~ of the disease and the animal hosts that play a significant role in the epidemiology of the disease, and definition of its occurrence ('case definition')~~, and the animal hosts that play a significant role in the epidemiology of the disease~~;

Reference	Comment	TAHSC response
B_2	**Category:** change **Proposed amended text:** *un article comportant des ~~dispositions~~ considérations générales, incluant ~~laes~~ définition~~s~~ de la maladie et les espèces hôtes ~~animaux~~ qui jouent un rôle significatif ….”* **Rationale:** Au deuxième point de la liste à puces après le point B.10), il est proposé de modifier 2 termes pour uniformiser par rapport à ce qui figure habituellement dans le Code Terrestre :	Comment on the French version. Agreed with the first editorial amendment, and amended the text to use "animaux hôtes".
B_3	**Category:** addition **Proposed amended text:** • An introductory a~~A~~rticle on general provisions, including definition of the disease and the animal hosts that play a significant role in the epidemiology of the disease, and definition of its occurrence (‘case definition’); **Rationale:** This suggested if for clarity to indicate that this refers to Article 1 of each chapter.	Agreed.

- Article on safe commodities;
- Articles on provisions for animal health status applied to countries, zones, compartments or herds/flocks;
- Articles on recommendations for safe trade of commodities;
- Articles on inactivation of the pathogenic agents present in specific animal products, materials or fomites; and
- Articles on surveillance of the disease.

Not all disease-specific chapters include all these components and some chapters may include only one ~~the first~~ article on the definition of occurrence for the purpose of notification to WOAH. Each chapter includes only those provisions considered, at the time of adoption, relevant to address WOAH Members’ needs with regards to the specific disease; and that are supported by sound scientific and technical knowledge.

Reference	Comment	TAHSC response
B_4	**Category:** general **Rationale:** We support the acknowledgement in this text that, in alignment with the SPS Agreement, the WOAH standards are not arbitrary but are based on scientific principles and evidence.	Noted.

The recommendations in these chapters that are related to international trade ~~These standards~~ assume that the pathogenic agent is either not present in the importing country or is the subject of a control or eradication programme. ~~Sections 8 to 16 each relate to the host species of the pathogenic agent: multiple species or species of Apinae, Aves, Bovinae, Equidae, Leporidae, Caprinae, Suidae and Camelidae. Some chapters include specific measures to prevent and control the infections of global concern. Although WOAH aims to include a chapter for each WOAH listed disease, not all WOAH listed diseases have been covered yet by a specific chapter. This is work in progress, depending on available scientific knowledge and the priorities set by the World Assembly of Delegates.~~ The sanitary measures recommended in the standards take into account the nature of the moved or traded commodity, the animal health status of the exporting country, zone or compartment of origin, and the risk mitigation measures applicable to each commodity.

C. Specific issues

1) Notification

Chapter 1.1. describes Member Countries' obligations under Organic Statutes of the Office International des Epizooties. Listed and emerging diseases, as prescribed in Chapter 1.1., are compulsorily notifiable. Member Countries are encouraged to also provide information to WOAH on other animal health events of epidemiological significance.

Chapter 1.2. describes the criteria for the inclusion of an infection or infestation in the WOAH List and Chapter 1.3. gives the current list. Diseases are divided into nine categories based on the host species of the aetiological agents.

Reference	Comment	TAHSC response
C_1	**Category:** addition **Proposed amended text:** *" Le chapitre 1.2. présente les critères d'inclusion d'une maladie, d'une infection ou d'une infestation dans la liste de l'OMSA…"* **Rationale:** Au 2ème alinéa du point C.1), il est proposé d'ajouter "d'une maladie" dans les critères d'inclusion du chapitre 1.2, pour reprendre les 3 termes utilisés dans le titre de ce chapitre, et uniformiser par rapport à la rédaction du reste du guide :	Agreed with the proposal to add 'disease' for alignment with Chapter 1.3.

2) Diagnostic tests and vaccines

It is recommended that specified diagnostic tests and vaccines in *Terrestrial Code* chapters be used with a reference to the relevant section in the WOAH *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals* (hereafter referred to as the *Terrestrial Manual*). Experts responsible for facilities used for disease diagnosis and vaccine production should be fully conversant with the standards in the *Terrestrial Manual*.

3) Freedom from a disease, infection or infestation

Article 1.4.6. provides general principles for declaring a country or zone free from a disease, infection or infestation~~.~~ ~~This article applies when there are no~~ and may be complemented by specific requirements in the listed disease-specific chapter~~s~~.

Reference	Comment	TAHSC response
C_2	**Category:** general **Rationale:** We support the increased clarity provided by this change, and its alignment with previous advice from the Code Commission; for example, within the minutes of the Joint meeting being the Scientific Commission and the Code Commission in Annex III of the 2014 OIE Terrestrial Animal Health Standards Commission February report.	Noted.

4) Prevention and control

Chapters 4.4. and 4.5. describe the measures that should be implemented to establish zones and compartments. Zoning and compartmentalisation should be considered as some of the tools used to control diseases and to facilitate safe trade.

Chapters 4.6. to 4.12. describe the measures which should be implemented during collection and processing of semen and embryos of animals, including micromanipulation and cloning, in order to prevent animal health risks, especially when trading these commodities. Although the measures relate principally to WOAH listed diseases or infections, general

standards apply to all infectious disease risks. Moreover, in Chapter 4.8. diseases that are not listed are marked as such but are included for the information of Member Countries.

Chapter 4.15. addresses the specific issue of the control of bee diseases and some of its trade implications. This chapter should be read in conjunction with the specific bee disease chapters in Section 9.

Chapter 6.5. is designed for the implementation of general biosecurity measures in intensive poultry production. Chapters 6.6., 6.13. and 6.14. provide recommendations for some specific on-farm prevention and control plans for the unlisted foodborne pathogenic agent *Salmonella* as part of the Veterinary Services mission to prevent, eliminate or control food safety hazards in animal production.

Reference	Comment	TAHSC response
C_3	**Category:** deletion and change **Proposed amended text:** *"Le chapitre 6.5. énonce des mesures générales de sécurité biologique dans le cadre de la production ~~intensive~~ de volailles."* *"Les chapitres 6.6., 6.13. et 6.14. présentent des recommandations pour certains plans précis de prévention et de maîtrise de l'agent pathogène non listé d'origine alimentaire Salmonella, ~~à la ferme~~ dans les élevages de volailles et les systèmes de production commerciale de bovins et de porcs, dans le cadre de la mission confiée aux Services vétérinaires relative à la prévention, à l'élimination et à la maîtrise des dangers pour la sécurité sanitaire des aliments en production animale."* **Rationale:** Au 4ème paragraphe du point C.4) il est proposé de supprimer le terme "intensive" qualifiant la production de volailles car ce terme n'est pas indiqué au chapitre 6.5 auquel il est fait référence : Dans ce même paragraphe, il est également proposé de remplacer l'expression "à la ferme" qui est trop vague, par des termes plus précis, adaptés aux espèces concernées :	Agreed to add a reference to Salmonella in poultry, bovine and pig production systems to align with the text of other relevant chapters of the Code, and to make editorial amendments in the French version.

Chapter 6.12. deals specifically with the zoonotic risk associated with the movements of non-human primates and gives standards for certification, transportation and import conditions for these animals.

5) Trade requirements

Animal health measures related to international trade should be based on WOAH standards. A Member Country may authorise the importation of animals or animal products into its territory under conditions different from those recommended by the *Terrestrial Code*. To scientifically justify more stringent measures, the importing country should conduct a risk analysis in accordance with WOAH standards, as described in Chapter 2.1. Members of the WTO should refer to the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).

Chapters 5.1. to 5.3. describe the general obligations and ethical responsibilities of importing and exporting countries in international trade. Veterinary Authorities and all veterinarians directly involved in international trade should be familiar with these chapters. Chapter 5.3. also describes the WOAH informal procedure for dispute mediation.

WOAH aims to include an article listing the commodities that are considered safe for trade without the need for risk mitigation measures specifically directed against a particular listed disease, infection or infestation, regardless of the status of the country or zone of origin for the agent in question, at the beginning of each listed disease-specific chapter in Sections 8 to 16. This is work in progress and some chapters do not yet contain articles listing safe commodities. When a list of safe commodities is present in a chapter, importing countries should not apply trade restrictions to such commodities with respect to the agent in question. Chapter 2.2. describes the criteria used to assess the safety of commodities.

6) International veterinary certificates

An international veterinary certificate is an official document that the Veterinary Authority of an exporting country issues in accordance with Chapters 5.1. and 5.2. It lists animal health requirements and, where appropriate, public health requirements for the exported commodity. The quality of the exporting country's Veterinary Services is essential in providing assurances to trading partners regarding the safety of exported animals and products. This includes the Veterinary Authority's ethical approach to the provision of veterinary certificates and their history in meeting their notification obligations.

International veterinary certificates underpin international trade and provide assurances to the importing country regarding the health status of the animals and products imported. The measures prescribed should take into account the health status of both exporting and importing countries, and zones or compartments within them, and be based upon the standards in the *Terrestrial Code*.

The following steps should be taken when drafting international veterinary certificates:

a) identify the diseases, infections or infestations from which the importing country is justified in seeking protection because of its own health status. Importing countries should not impose measures in regards to diseases that occur in their own territory but are not subject to official control programmes;

b) for commodities capable of transmitting these diseases, infections or infestations through international trade, the importing country should apply the relevant articles in the listed disease-specific chapters. The application of the articles should be adapted to the disease status of the country, zone or compartment of origin. Such status should be established according to Article 1.4.6. except when articles of the relevant listed disease chapter specify otherwise;

c) when preparing international veterinary certificates, the importing country should endeavour to use terms and expressions in accordance with the definitions given in the Glossary. International veterinary certificates should be kept as simple as possible and should be clearly worded, to avoid misunderstanding of the importing country's requirements;

d) Chapters 5.10. to 5.13. provide, as further guidance to Member Countries, model certificates that should be used as a baseline.

7) Guidance notes for importers and exporters

It is recommended that Veterinary Authorities prepare “guidance notes” to assist importers and exporters understand trade requirements. These notes should identify and explain the trade conditions, including the measures to be applied before and after export and during transport and unloading, and the relevant legal obligations and operational procedures. The guidance notes should advise on all details to be included in the health certification accompanying the consignment to its destination. Exporters should also be reminded of the International Air Transport Association rules governing air transport of animals and animal products.

[…]

D. Name of animal species

In the *Terrestrial Code*, common terms (in bold in the table below) referring to animals are based on scientific names as shown below.

Reference	Comment	TAHSC response
D_1	**Category:** general **Proposed amended text:** **Rationale** Dans le tableau des noms des espèces animales : - Concernant les zèbres, il est indiqué qu'il s'agit des animaux uniquement du sous-genre Hippotigris, mais selon la bibliographie consultée, il existe également un zèbre appartenant au sous genre des Dolichohippus (Equus grevyi : zèbre de Grévy ou Impérial).	Not agreed, as the text presented in the table refers to a newer more recent zoological classification.
D_2	**Category:** addition. **Proposed amended text:** Including animals of Genus: • 'Camelus' • 'Lama' • 'Vicugna' '**dromedary camels**' means *Camelus dromedarius*. '**bactrian camels**' means *Camelus bactrianus*. '**alpacas**' means *Lama guanicoe pacos*. ~~'**llamas**' means *Lama guanicoe glama*.~~ '**New World camelids**' means animals of Genus ~~alpacas and~~ Lamas and Vicugna. **Rationale:** Member believes the term "alpaca" needs to be reinserted and included as a defined term in its own right owing to its significant popularity and universal recognition of its existence as a subs species. Omitting to include the term in the glossary would be remiss and cause confusion by its absence. **Supporting evidence:** not relevant.	Agreed. Amended the text in a different manner to maintain a reference to the vernacular names of animals in the genus Lamas.

	Higher level terms	Terms based on Order or Sub-order	Terms based on Family	Terms based on Sub-Family	Terms based on Tribe		Terms based on Genus
	Class 'Insecta'	-	Family 'Apidae'	Sub-Family 'Apinae' '**bees**' means animals of Sub-Family 'Apinae'	Including animals of Tribe: • 'Apini'		Including animals of Genus: • 'Apis' '**honey bees**' means animals of Genus Apis.
					Including animals of Tribe: • 'Bombini'		Including animals of Genus: • 'Bombus' '**bumble bees**' means animals of Genus Bombus.
					Including animals of Tribe: • 'Meliponini' '**stingless bees**' means animals for Tribe 'Meliponini'		-
	Class 'Aves' '**avian**' means animals of class Aves	Order 'Galliformes'	-	-	-		Including animals of Genus: • 'Gallus' • 'Meleagris' etc. '**chicken**' means *Gallus gallus domesticus*. '**turkey**' means *Meleagris gallopavo*.

		Order 'Anseriformes'	-	-	-		Including animals of Genus: • 'Anser' • 'Branta' • 'Anas' etc. '**geese**' means animals of Genera Anser and Branta. '**ducks**' means *Anas platyrhynchos*. ('**domestic ducks**' means *Anas platyrhynchos domesticus*.)
	'**mammals**' means animals of Class 'Mammalia' '**ungulates**' means animals of Order 'Artiodactyla' (even-toed ungulates) and Order 'Perissodactyla' (odd-toed ungulates) '**artiodactyls**' means animals of Order 'Artiodactyla'	'**ruminants**' means animals of Sub-order 'Ruminantia'	'**bovids**' means animals of Family 'Bovidae'	'**bovines**' means animals of Sub-Family 'Bovinae'	-		Including animals of Genus: • 'Bos' • 'Bubalus' • 'Bison' • 'Syncerus' etc.
				'**caprines**' means animals of Sub-Family 'Caprinae'	-		Including animals of Genus: • 'Ovis' • 'Capra', etc. '**sheep**' means *Ovis aries*. '**goats**' means *Capra hircus* (domestic goats) and *Capra aegagrus* (wild goats).
				Sub-Family 'Antilopinae'	-		Including animals of Genus: • 'Gazella' • 'Antilope' • 'Dibatag', etc.

	(even-toed ungulates)		'**cervids**' means animals of Family 'Cervidae'	Sub-Family 'Cervinae'	-		Including animals of Genus: • 'Cervus' • 'Dama', etc.
				Sub-Family 'Capreolinae'	-		Including animals of Genus: • 'Capreolus' • 'Odocoileus' • 'Rangifer', etc.
		Sub-Order 'Suina'	'**suids**' means animals of Family 'Suidae'	-	-		Including animals of Genus: • 'Sus' • 'Phacochoerus' • 'Hylochoerus', etc. '**pigs**' means *Sus scrofa* (domestic and wild) .
		Sub-Order 'Tylopoda'	'**camelids**' means animals of Family 'Camelidae'	Sub-Family 'Camelinae'	-		Including animals of Genus: • 'Camelus' • 'Lama' • 'Vicugna' '**dromedary camels**' means *Camelus dromedarius*. '**bactrian camels**' means *Camelus bactrianus*. ~~'**alpacas**' means *Lama guanicoe pacos*.~~ ~~'**llamas**' means *Lama guanicoe glama*~~. '**New World camelids**' means animals of Genus ~~alpacas and~~ Lama~~s~~ and Vicugna.

		Sub-Order 'Hippomorpha'	'**equids**' means animals of Family 'Equidae'	'**equines**' means animals of Sub-Family 'Equinae'	-		Including animals of only Genus 'Equus' '**horses**' means *Equus ferus caballus*. '**donkeys**' means *Equus africanus asinus*. '**mules**' means *Equus africanus asinus* (male) × *Equus ferus caballus* (female). '**zebras**' means animals of subgenus Hippotigris.
		'**lagomorphs**' means animals of Order 'Lagomorpha'	'**leporids**' means animals of Family 'Leporidae'	-	-		Including animals of Genus: • 'Oryctolagus' • 'Lepus' • 'Sylvilagus' '**rabbits**' means animals of Genus Oryctolagus'. '**hares**' means animals of Genus Lepus. '**European hares**' means *Lepus europaeus*.
		'**carnivores**' means animals of Order 'Carnivora'	'**canids**' means animals of Family 'Canidae'	Sub-Family 'Caninae'	-		Including animals of Genus: • 'Canis' '**dogs**' means *Canis lupus familiaris*.
			'**felids**' means animals of Family 'Felidae'	-	-		Including animals of Genus: • 'Felis' '**cats**' means *Felis catus*.

			Family 'Mustelidae'				Including animals of Genus: • 'Mustela' '**ferrets**' means *Mustela furo*.
		'**rodents**' means animals of Family 'Rodentia'	-	-	-		-
		'**bats**' means of animals of Order 'Chiroptera'	-	-	-		-
		'**non-human primates**' means animals of Order 'Primates' except for humans (Genus 'Homo')	-	-	-		-

In each chapter of the *Terrestrial Code*, scientific names of the animals are provided when the vernacular names used in the chapter do not include all the species as described in this table, e.g. 'bovines (*Bos indicus*, *B. taurus*, *B. grunniens, Bubalus bubalis* and *Syncerus caffer*)', which in that example does not include animals of genus bison, or when the list of animals is very long, e.g. 'animals of the families *Suidae* and *Cervidae*, the subfamilies *bovinae*, *caprinae* and *antilopinae* of the family *Bovidae*, and *Camelus bactrianus*'.

Reference	Comment	TAHSC response
7.1._1	**Category** (general) A Member thanks the Code Commission and supports this revised chapter. The Member has two more comments.	Noted.
7.1._2	**Category** (general) A Member acknowledges that the 'Five Domains' model, as explained in Annex 27 of the Report of the Meeting of the WOAH TAHSC/February 2024, is a well-established framework for the systematic evaluation of animal welfare. However, there remains a lack of clarity regarding what are required for each domain in the draft chapter. As noted on the WOAH website, the concept of "animal welfare" is gaining increasing attention from civil society, suggesting that it has not yet been universally accepted as a sound science. The Member asserts that detailed clarifications for each domain are essential to facilitate widespread acceptance among Member Countries, thereby enabling the effective incorporation of the 'Five Domains' into the chapter.	Noted. The Code Commission will endeavour to be as clear as possible to avoid future confusion.
7.1._3	**Category** (general) A Member supports the suggested revision of this chapter, and welcomes the clarifications in the wording used.	Noted.
7.1._4	**Category** (general) A Member supports the comments made by the other Members	Noted.
7.1._5	**Category** (general) The expert group agreed with the approach, which appears to adequately cover all animals including wild animals. No additional comments.	Noted.

CHAPTER 7.1.

INTRODUCTION TO THE RECOMMENDATIONS FOR ANIMAL WELFARE

Article 7.1.1.

General considerations

Animal welfare means the physical and mental state of an *animal* in relation to the conditions in which it lives and dies.

Reference	Comment	TAHSC response
7.1.1._1	**Category: deletion** *Animal welfare* means the physical and mental state of an *animal* ~~in relation to the conditions in which it lives and dies~~. **Rationale:** The meaning of the second part of the sentence is unclear and unnecessary. Keeping only the first part of the definition improves clarity and succinctness.	Did not agree as the current wording is consistent with the language used in the Five Domains and the Five Freedoms. It is important to acknowledge that welfare relates to both life and death; the conditions in which an animal lives and dies are the key indicator of its welfare and are part of the Glossary definition of animal welfare.

An *animal* experiences good welfare if the *animal* is healthy, comfortable, well nourished, safe, is not suffering ~~severely or for a long time~~ from avoidable unpleasant states such as pain, fear and *distress*, and is able to express behaviours that are important for its physical and mental state.

Reference	Comment	TAHSC response
7.1.1._2	**Category: deletion** An *animal* experiences good welfare if the *animal* is healthy, comfortable, well nourished, safe, ~~is not suffering severely or for a long time from avoidable unpleasant states such as pain, fear and *distress*,~~ and is able to express behaviours that are important for its physical and mental state. Negative affective states should be minimized by the avoidance of pain, fear, and *distress*. Good *animal welfare* is not only about avoiding negative experiences for *animals*, but also providing them with positive experiences. **Rationale:** To better align language with the Five Domains Model, which addresses the importance of providing positive experiences, not only minimizing negative experiences. **Reference provided:** Mellor, D. J., Beausoleil, N. J. Extending the 'Five domains' model for animal welfare assessment to incorporate positive welfare states. Anim. Welf. 2015, 24, 241–253. doi: 10.7120/09627286.24.3.241.	Did not agree with the first addition of 'Negative affective states should be minimized by the avoidance of pain, fear and distress', as this part of the chapter does not include recommendations. Agreed with the second proposed addition but amended to 'Good animal welfare is not only about avoiding negative experiences for animals, but also providing them with opportunities to have positive experiences' and moved to the above paragraph.

7.1.1._3	**Category: deletion** An *animal* experiences good welfare if the *animal* is healthy, comfortable, well nourished, safe, is not suffering from unpleasant states such as pain~~,~~ and fear ~~and *distress*~~, and is able to express behaviours that are important for its physical and mental state. **Rationale:** Distress has no primary quality (unlike pain, thirst, boredom, frustration). An animal may experience distress because of pain, fear, frustration, discomfort etc, but without knowing the underlying cause, distress in and of itself cannot be alleviated. Suggest deleting 'distress' here.	Did not agree as distress is defined as a state, therefore may be avoidable and is used in other chapters of the Code.

7.1.1_4	**Category: addition /deletion** "Il ne doit pas ressentir ~~des émotions désagréables~~ des états d'inconfort ~~affectifs déplaisants~~ évitable~~s~~, tel~~le~~s que douleur, peur ou détresse, ~~d'une manière grave ou depuis longtemps~~ et doit pouvoir exprimer les comportements naturels essentiels pour son état physique et mental. **Rationale:** Article 7.1.1 au second alinéa, l'expression "ressentir des états affectifs déplaisants" ne semble pas appropriée en français : on ne ressent pas un état, on est dans un état. Proposition de la Nouvelle-Calédonie : "Il ne doit pas ressentir des émotions désagréables des états d'inconfort affectifs déplaisants évitables, telles que douleur, peur ou détresse, d'une manière grave ou depuis longtemps et doit pouvoir exprimer les comportements naturels essentiels pour son état physique et mental.	Did not agree but replaced the word 'ressentir' with 'souffrir', in the French version.

7.1.1._5	**Category: deletion** A Member proposes deleting the word "avoidable": An *animal* experiences good welfare if the *animal* is healthy, comfortable, well nourished, safe, is not suffering ~~severely or for a long time~~ from ~~avoidable~~ unpleasant states such as pain, fear and *distress*, and is able to express behaviours that are important for its physical and mental state. **Rationale:** The addition of "avoidable" suggests that where unpleasant states such as pain, fear and distress are unavoidable they do not have an impact on an animal's welfare. The word "avoidable" may have been inserted to indicate that farmers cannot be held responsible for unavoidable unpleasant states. However, this section of Article 7.1.1 is not concerned with apportioning responsibility for an animal's suffering of unpleasant states. Its aim is to provide an objective understanding of what is meant by "good welfare". It makes it clear that an animal does not experience good welfare if it is suffering from unpleasant states and does not as currently written (i.e. without the insertion of "avoidable") suggest	Agreed to delete due to potential misinterpretation, which could be detrimental to animal welfare. The Code Commission wished to note that unpleasant states may occur, such as hunger, without necessarily leading to suffering. Completely eliminating those natural states would be impossible and may not be synonymous with good welfare, minimising suffering is therefore most important.

	that the animal experiences good welfare if the unpleasant state in question could not have been avoided. The proposed amendment has the effect of stating that unpleasant states such as pain, fear and distress do not have a detrimental effect on an animal's welfare if they could not have been avoided. This is clearly not the case; unpleasant states have an adverse impact on an animal's welfare whether or not they are avoidable. Accordingly, the proposed addition of "avoidable" should be removed.	

7.1.1._6	**Category: deletion** A Member proposes deleting the word "avoidable": An *animal* experiences good welfare if the *animal* is healthy, comfortable, well nourished, safe, is not suffering ~~severely or for a long time~~ from ~~avoidable~~ unpleasant states such as pain, fear and *distress*, and is able to express behaviours that are important for its physical and mental state. **Rationale:** According to the Code Commission, "avoidable" was added "to reinforce the idea of minimising any negative experience". This gives room to the interpretation, that good welfare is present as long as a business operator makes a "best effort" to minimise negative experience. However, this is not necessarily true, e.g. negative experience is unavoidable in pigs/poultry stunned with CO2/waterbath or in animals with diseases/injuries incurred despite an operator's best effort. The addition of "avoidable" and the reasoning also contradict Mellor 2016 (https://doi.org/10.3390/ani6030021, p. 15): "Animal welfare is a state that is subjectively experienced by an animal; it is a state within the animal." Last and not the least the deletion of "avoidable" will make the whole sentence more straight forward and easy to understand without opening a room for wider or even misinterpretation of the whole concept.	Agreed, comment addressed as for comment (7.1.1._5).

7.1.1._7	**Category: deletion** An *animal* experiences good welfare if the *animal* is healthy, comfortable, well nourished, safe, is not suffering ~~severely or for a long time~~ from ~~avoidable~~ unpleasant states such as pain, fear and *distress*, and is able to express behaviours that are important for its physical and mental state. **Rationale:** We appreciate the deletion of 'severely or for a long time' as per our comment in Nov 2023, however the addition of "avoidable" is unnecessary. Unpleasant states such as pain, fear and distress affect animal welfare irrespective of whether the suffering is avoidable or not. Whilst some welfare legislation or standards may include the word "avoidable" to indicate that in animal production is not always possible to avoid unpleasant states this paragraph relates to general considerations and as such it must reflect science-based facts related to animal welfare rather than potential welfare outcomes that can be achieved within a given production system. Its aim is to provide an objective understanding of what is meant by "good welfare". It makes it clear that an animal does not experience good welfare if it is suffering from unpleasant states and does not as currently written (i.e. without the insertion of "avoidable") suggest that the animal experiences good welfare if the unpleasant state in question could not have been avoided. **Supporting evidence:** There are no literature references supporting causality between avoidable/unavoidable unpleasant stimuli. Sample references reviewed submitted previously support this. More can be provided on request. Stress and Animal Welfare by Donald Broom and Ken G. Johnson. D.M. Broom, K.G. Johnson Springer: Berlin, Germany. 2019. Veissier I, Boissy A. Stress and welfare: two complementary concepts that are intrinsically related to the animal's point of view. Physiol Behav. 2007 Oct 22;92(3):429-33. doi: 10.1016/j.physbeh.2006.11.008. Epub 2006 Dec 19. PMID: 17182067. Englund MD, Cronin KA. Choice, control, and animal welfare: definitions and essential inquiries to advance animal welfare science. Front Vet Sci. 2023 Aug 2;10:1250251. doi: 10.3389/fvets.2023.1250251. PMID: 37601746; PMCID: PMC10433213. Williams LA. From human wellbeing to animal welfare. Neurosci Biobehav Rev. 2021 Dec;131:941-952. doi: 10.1016/j.neubiorev.2021.09.014. Epub 2021 Sep 9. PMID: 34509514. Martinez J, von Nolting C. Review: "Animal welfare" - A European concept. Animal. 2023 Aug;17 Suppl 4:100839. doi: 10.1016/j.animal.2023.100839. PMID: 37793710.	Agreed, comment addressed above as for comment (7.1.1._5).

	Reimert I, Webb LE, van Marwijk MA, Bolhuis JE. Review: Towards an integrated concept of animal welfare. Animal. 2023 Aug;17 Suppl 4:100838. doi: 10.1016/j.animal.2023.100838. Epub 2023 Aug 19. PMID: 37612226. Comin M, Barbieri S, Minero M, Dalla Costa E. The Feasibility of Animal-Based Indicators of Consciousness and Unconsciousness for Stunning in Sheep: A Systematic Review. Animals (Basel). 2023 Apr 18;13(8):1395. doi: 10.3390/ani13081395. PMID: 37106956; PMCID: PMC10134993. Brscic M, Contiero B, Magrin L, Riuzzi G, Gottardo F. The Use of the General Animal-Based Measures Codified Terms in the Scientific Literature on Farm Animal Welfare. Front Vet Sci. 2021 Jun 4;8:634498. doi: 10.3389/fvets.2021.634498. PMID: 34150878; PMCID: PMC8212950. Edwards KL, Edes AN, Brown JL. Stress, Well-Being and Reproductive Success. Adv Exp Med Biol. 2019;1200:91-162. doi: 10.1007/978-3-030-23633-5_5. PMID: 31471796. Tatemoto P, Broom DM, Zanella AJ. Changes in Stereotypies: Effects over Time and over Generations. Animals (Basel). 2022 Sep 20;12(19):2504. doi: 10.3390/ani12192504. PMID: 36230246; PMCID: PMC9559266..	

Good *animal welfare* requires disease prevention and appropriate veterinary care, shelter, management and nutrition, a stimulating and safe environment, humane handling and humane *slaughter* or *killing*. Good animal welfare is not only about avoiding negative experiences to *animals*, but also providing them with positive experiences. While *animal welfare* refers to the state of the *animal*, the treatment that an *animal* receives is covered by other terms such as animal care, animal husbandry, and humane treatment.

7.1.1._8	**Category: deletion** Good *animal welfare* requires disease prevention and appropriate veterinary care, shelter, management and nutrition, a stimulating and safe environment, humane handling and humane *slaughter* or *killing*. Good animal welfare is not only about avoiding negative experiences to *animals*, but also providing them with opportunities to have positive experiences. While *animal welfare* refers to the state of the *animal*, the treatment that an *animal* receives is covered by other terms such as animal care, animal husbandry, and humane treatment. **Rationale:** Suggested addition for accuracy.	Agreed for clarity.

7.1.1._9	**Category: addition** Good *animal welfare* requires disease prevention and appropriate veterinary care, shelter, management and nutrition, a stimulating and safe environment, with sufficient space that allows for locomotion, exploration, and thermoregulation behaviours, humane handling and humane *slaughter* or *killing*. Good animal welfare is not only about avoiding negative experiences to *animals*, but also providing them with positive experiences. While *animal welfare* refers to the state of the *animal*, the treatment that an *animal* receives is covered by other terms such as animal care, animal husbandry, and humane treatment. **Rationale:** To meet the five freedoms or five domains, it is essential that the space should not only be stimulating but also adequate for animals to perform their natural behaviors, such as moving around, turning, climbing (depending on the species), to be considered in a good state of animal welfare. **Supporting evidence:** Mellor, D.J.; Beausoleil, N.J.; Littlewood, K.E.; McLean, A.N.; McGreevy, P.D.; Jones, B.; Wilkins, C. The 2020 Five Domains Model: Including Human–Animal Interactions in Assessments of Animal Welfare. Animals 2020, 10, 1870. https://doi.org/10.3390/ani10101870 Mellor, D.J. Moving beyond the "Five Freedoms" by Updating the "Five Provisions" and Introducing Aligned "Animal Welfare Aims". Animals 2016, 6, 59. https://doi.org/10.3390/ani6100059 Marek Špinka, How important is natural behaviour in animal farming systems?,	Partially agree as this is already covered by 'stimulating and safe environment', but added the word 'comfortable' after 'stimulating' (see below comment 7.1.1._10).

7.1.1._10	**Category: addition / deletion** Good *animal welfare* for animals in the care of humans, requires disease prevention and appropriate veterinary care, shelter, management and nutrition, a stimulating, comfortable and safe environment, humane handling and a humane ~~*slaughter or killing*~~ death. Good animal welfare is not only about avoiding negative experiences to *animals*, but also providing them with positive experiences. While *animal welfare* refers to the state of the *animal*, the treatment that an *animal* receives is covered by other terms such as animal care, animal husbandry, and humane treatment. **Rationale:** It is likely that some wild animals experience good welfare without human intervention. Comfort is also a requirement for good welfare. A humane death can occur that is not slaughter or killing, e.g. an instantaneous death from natural causes.	Did not agree with the first proposed addition as it does not provide any additional clarity; this Chapter only refers to animals under human care. Agreed with the addition of 'comfortable'. Did not agree with the addition of 'death', as 'slaughter or killing' better reflects the potential impact of human actions on animal welfare.

7.1.1._11	**Category : Addition** Un buen *bienestar animal* requiere prevenir enfermedades, recibir un cuidado veterinario, refugio, manejo y nutrición apropiados, un entorno estimulante, seguro y con el espacio suficiente que le permita realizar conductas de locomoción, exploración y termorregulación, entre otras, en medida de lo posible y ser objeto de una manipulación correcta y de un *sacrificio* o *matanza* humanitarios. Un buen *bienestar animal* no consiste únicamente en evitarle a los animales experiencias negativas, sino también en procurarles experiencias positivas. **Rationale:** Para que se cumplan las 5 libertades o 5 dominios es importante considerar que el espacio no solo debe tener cosas estimulantes, sino que tenga el espacio adecuado para poder realizar las conductas naturales de los animales como moverse, darse la vuelta, trepar (según la especie) para considerarse en Bienestar. **Evidencia documentada, si corresponde:** Mellor, D.J.; Beausoleil, N.J.; Littlewood, K.E.; McLean, A.N.; McGreevy, P.D.; Jones, B.; Wilkins, C. The 2020 Five Domains Model: Including Human–Animal Interactions in Assessments of Animal Welfare. Animals 2020, 10, 1870. https://doi.org/10.3390/ani10101870 Mellor, D.J. Moving beyond the "Five Freedoms" by Updating the "Five Provisions" and Introducing Aligned "Animal Welfare Aims". Animals 2016, 6, 59. https://doi.org/10.3390/ani6100059 Marek Špinka, How important is natural behaviour in animal farming systems?, Applied Animal Behaviour Science, Volume 100, Issues 1–2, 2006, Pages 117-128, ISSN 0168-1591, https://doi.org/10.1016/j.applanim.2006.04.006. Mellor, D.J. Updating Animal Welfare Thinking: Moving beyond the "Five Freedoms" towards "A Life Worth Living". Animals 2016, 6, 21. https://doi.org/10.3390/ani6030021	Agreed, comment addressed above (7.1.1._9).

Article 7.1.2.

Guiding principles for animal welfare

1) ~~That t~~There is a critical relationship between animal health and *animal welfare*.

2) ~~That~~ While the ~~internationally recognised~~ "five freedoms" (freedom from hunger, thirst and malnutrition; freedom from fear and *distress*; freedom from physical and thermal discomfort; freedom from pain, injury and disease; and freedom to express normal patterns of behaviour) provide valuable guidance in *animal welfare*~~.~~, the 'five domains' (nutrition, environment, health, ~~behavioural interactions~~ behaviour, and mental state) support the systematic scientific assessment of *animal welfare*.

7.1.2._1	**Category: deletion/addition** While the~~.~~"five freedoms" (freedom from hunger, thirst and malnutrition; freedom from fear and *distress*; freedom from physical and thermal discomfort; freedom from pain, injury and disease; and freedom to express normal patterns of behaviour) provide valuable guidance in *animal welfare*~~.~~, the 'five domains' (nutrition, environment, health, behavioural interactions ~~behaviour~~, and mental state) support the systematic scientific assessment of *animal welfare*. **Rationale:** Behavioural interactions' should be retained. This is so named because there are 3 dimensions to this, according to the Five Domains Model. These are: animals interacting with other animals, with their environment, and with humans. This should be retained to be congruent with the most recent version of the Five Domains model.	Did not agree as 'behaviour' includes 'behavioural interactions'.

3) ~~That t~~The ~~internationally recognised~~ "three Rs" (reduction in numbers of *animals*, refinement of experimental methods and replacement of *animals* with non-animal techniques) provide valuable guidance for the use of *animals* in science.

7.1.2_2	**Category: addition** 3~~) That t~~The ~~internationally recognised~~ "three Rs" (reduction in numbers of *animals*, refinement of experimental methods and replacement of *animals* with non-animal techniques) provide valuable guidance for the use of *animals* in science and teaching. **Rationale:** The use of animals in teaching and training can cause animal harm, suffering or poor welfare. For example, veterinary or agriculture students learning how to restrain livestock and perform painful husbandry procedures such as horn removal could cause pain and psychological distress for the animals involved. Therefore, the use of animals in teaching should always be guided by the three Rs.	Agreed with the rationale, however the text was amended using the title of Chapter 7.8. 'Use of animal in research and education'.

7.1.2._3	**Category: addition** 3) ~~That t~~The ~~internationally recognised~~ "three Rs" (reduction in numbers of *animals*, refinement of experimental methods and replacement of *animals* with non-animal techniques) provide valuable guidance for the use of *animals* in science and education. **Rationale:** The 3 R's are an important component in veterinary medical education curriculums as well as some animal science education.	Agreed, comment addressed above with comment 7.1.2._2.

7.1.2._4	**Category: addition and deletion** 3) ~~Que l~~Las «tres erres» ~~mundialmente reconocidas~~ (reducción del número de *animales*, refinación de los métodos experimentales y reemplazo de los *animales* por ~~técnicas sin animales~~) métodos alternativos son pautas que deben regir la utilización de *animales* por la ciencia **Rationale:** No rationale	Did not agree, as 'Replacement' is widely used and corresponds to avoiding using animals or substituting them.

4) ~~That~~ tThe scientific assessment of *animal welfare* involves diverse elements which need to be considered together, and that selecting and weighing these elements often involves value-based assumptions which should be made as explicit as possible.

7.1.2._5	**Category: addition/deletion** 4) ~~That~~ tThe scientific assessment of *animal welfare* involves diverse elements ~~which~~ that need to be considered together, and ~~that~~ selecting and weighing these elements often involves value-based assumptions which should be made as explicit as possible. **Rationale:** Edits are suggested here to improve readability and clarity.	Agreed.

5) ~~That~~ tThe use of *animals* in agriculture, education and research, and for companionship, recreation and entertainment, makes a major contribution to the wellbeing of people.

7.1.2._6	**Category: addition/deletion** 5) ~~That~~ tThe use of *animals* in agriculture, education and research, and for companionship, recreation and entertainment, makes ~~, recreation and entertainment, makes is~~ a major ~~contributor~~ contribution to the wellbeing of people. **Rationale:** Edits are suggested here to improve readability and clarity.	Did not agree as the proposed texts do not provide any additional clarity.

7.1.2._7	**Category: addition** 5) The use of *animals* in agriculture, education and research, and for companionship, recreation ~~and~~ entertainment and exhibition, makes a major contribution to the wellbeing of people. **Rationale:** A suggested addition	Did not agree as no rationale was provided and the suggestion is already covered by 'entertainment'.

7.1.2._8	**Category: general** A member requests some additional clarity on some of the uses proposed in Article 7.1.2.5, specifically that recreation and entertainment be further defined. **Rationale:** Member believes that WOAH needs to clearly define the parameters around using animals for entertainment and recreation. The range of uses within 'recreation and entertainment' is broad as recreation and entertainment can mean different things to different people. The impacts on animal welfare can be varied from beneficial (dog agility) to detrimental (cock or dog fighting) and this clarity should be incorporated into the standards.	Noted.

7.1.2_9	**Category: addition** 5) ~~That~~ tThe use of *animals* in agriculture, education and research, and for companionship, recreation, culture and livelihoods and entertainment, makes a major contribution to the wellbeing of all people. **Rationale:** Changes suggested to acknowledge the use of animals includes cultural, spiritual and livelihood considerations. For example, the significance and meaning of animals in Australian indigenous communities and the benefits of animal companionship. **Supporting evidence:** Mellor, D.J., Beausoleil, N.J., Littlewood, K.E., McLean, A.N., McGreevy, P.D., Jones, B. and Wilkins, C., 2020. The 2020 five domains model: Including human–animal interactions in assessments of animal welfare. Animals, 10(10), p.1870. Riley, T., Anderson, N. E., Lovett, R., Meredith, A., Cumming, B., & Thandrayen, J. 2021. One health in indigenous communities: a critical review of the evidence. International Journal of Environmental Research and Public Health, 18(21), 11303. IPBES (2022). Summary for Policymakers of the Thematic Assessment Report on the Sustainable Use of Wild Species of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Fromentin, J.M., Emery, M.R., Donaldson, J., Danner, M.C., Hallosserie, A., Kieling, D., Balachander, G., Barron, E.S., Chaudhary, R.P., Gasalla, M., Halmy, M., Hicks, C., Park, M.S., Parlee, B.,Rice, J., Ticktin, T., and Tittensor, D. (eds.). IPBES secretariat, Bonn, Germany. https://doi.org/10.5281/zenodo.6425599	Agreed to include 'culture'. Did not agree to include 'livelihoods' as this is covered by 'wellbeing'.

7.1.2._10	**Category: editorial** 5) ~~Que e~~El empleo de *animales* en la agricultura, la educación, la investigación, para compañía, recreo y espectáculos contribuye de manera decisiva al bienestar de las personas, siempre y cuando no se normalice la violencia hacia los animales. **Rationale:** Cuando se daña a los animales por placer y esto se vuelve un espectáculo la violencia hacia los animales se normaliza, lo que normaliza otro tipo de violencia que lejos de contribuir al bienestar de las personas las pone en riesgo al desarrollarse en ambientes violentos. **Supporting evidence** ARLUKE, A., LEVIN, J., LUKE, C., & ASCIONE, F. (1999). The Relationship of Animal Abuse to Violence and Other Forms of Antisocial Behavior. Journal of Interpersonal Violence, 14(9), 963-975. https://doi.org/10.1177/088626099014009004 Flynn, Clifton P. 2011. Examining the links between animal abuse and human violence. Crime, Law and Social Change, 453 – 468 Vol-55. https://doi.org/10.1007/s10611-011-9297-2 Cudworth, E. (2015). Killing Animals: Sociology, Species Relations and Institutionalized Violence. The Sociological Review, 63(1), 1-18. https://doi.org/10.1111/1467-954X.12222 Lockwood R. Animal Cruelty and Societal Violence. In Child Abuse, Domestic Violence, and Animal Abuse: Linking the Circles of Compassion For Prevention and Intervention (New Directions in the Human-Animal Bond). Ed. Phil Arkow and Frank R. Ascione. 1998. https://books.google.es/books?hl=es&lr=&id=DzqUJ0l42T0C&oi=fnd&pg=PA3&dq=link+between+animal+violence+and+violence+society+&ots=dANBu5HKnl&sig=CuD7gPlxC4gfl99g8-8-qam-A78#v=onepage&q=link%20between%20animal%20violence%20and%20violence%20society&f=false	Agreed, comment addressed above as for comments 7.1.2._6 and 7.1.2_.7.

6) ~~That t~~The use of *animals* carries with it an ethical responsibility to ensure the welfare of such *animals* to the greatest extent practicable.

7.1.2._11	**Category: addition/deletion** 6) ~~That~~ ~~t~~The use of *animals* carries with it an ethical responsibility to ~~ensure~~ optimize the welfare of such *animals* to the greatest extent practicable. **Rationale:** Suggest “optimize” to convey the need to strive for provision of the best state of welfare of animals in any given environment.	Agreed.

7.1.2._12	**Category: addition** 6) ~~That~~ tThe use of *animals* carries with it an ethical responsibility to ensure good ~~the~~ welfare for of such *animals* to the greatest extent practicable. **Rationale:** Welfare is often understood to be able to range from very poor to excellent, so a descriptor for welfare should be specified under the responsibility.	Agreed, comment addressed above (7.1.2._11).

7.1.2._13	**Category: addition** **6)** ~~Que e~~El empleo de *animales* conlleva la responsabilidad ética de velar por su bienestar en la mayor medida posible, favoreciendo experiencias positivas, y minimizando o evitando experiencias negativas que causen dolor y/o sufrimiento. **Rationale:** No	Agreed, comment addressed above (7.1.1._2).

7) ~~That~~ iImprovements in farm *animal welfare* can ~~often~~ improve productivity and food safety, and hence lead to economic benefits.

8) ~~That~~ tThe equivalent welfare outcomes based on performance criteria, rather than identical systems based on design criteria, ~~be~~ are the basis for comparison of *animal welfare* standards and recommendations.

Article 7.1.3.

Scientific basis for recommendations

1) Welfare is a broad term which includes the many elements that contribute to an *animal*'s quality of life, including its physical and mental states ~~those referred to in the "five freedoms" listedabove~~.

7.1.3._1	**Category: addition/deletion** 1) Welfare is a broad term which includes ~~the many~~ numerous elements that contribute to an *animal*'s quality of life, including its physical and mental states ~~those referred to in the "five freedoms" listed above~~. **Rationale:** No	Did not agree, there was no rationale provided and the paragraph was deleted, as per 7.1.3._2.

7.1.3._2	**Category: deletion** ~~1) Welfare is a broad term which includes the many elements that contribute to an *animal*'s quality of life, including its physical and mental states those referred to in the "five freedoms" listed above.~~ **Rationale:** As already defined in Article 7.1.1, welfare is an animal's physical and mental state. Quality of life is often used as a synonym for animal welfare. 1) is unnecessary as it is covered adequately.	Agreed.

2) The scientific assessment of *animal welfare* has ~~progressed rapidly in recent years and~~ formeds the basis of the recommendations of the *Terrestrial Code* for animal welfare. Welfare assessment can be either at a point in time or over a period of time such as a lifetime. There is value in using the 'five freedoms' and 'five domains' models. The 'five domains' model allows consideration to be given to both the degree and cumulation of positive and negative experiences over the duration of the animal's life.

7.1.3._3	**Category: addition/deletion** 2) The scientific assessment of *animal welfare* ~~has progressed rapidly in recent years and formeds~~ forms the basis of the recommendations ~~of~~ in the *Terrestrial Code* for animal welfare. Welfare assessment can be either at a point in time or over a period of time such as a lifetime. There is value in using both the 'five freedoms' and 'five domains' models. In contrast to the 'five freedoms,' the ~~The~~ 'five domains' model allows consideration ~~to be given to~~ of both the degree and cumulation of positive and negative experiences over the duration of the animal's life. **Rationale:** Providing clarity around how one model might allow a more comprehensive scientific assessment than the other.	Agreed to amend the text in multiple places for clarity and consistency. Did not agree with the addition of the words 'In contrast to the five freedoms' the..', as both the 'five freedoms' and the 'five domains' are complementary to each other.

7.1.3_4	**Category: addition / deletion** "L'évaluation du bien-être peut porter sur une période plus ou moins longue de la vie de l'animal. ~~soit sur un moment précis de la vie soit sur un laps de temps tel que toute la durée de la vie.~~" **Rationale:** L'expression "sur un laps de temps tel que toute la durée de la vie" ne semble pas appropriée en français.	Agreed.

3) Some measures of *animal welfare* involve assessing the degree of impaired functioning associated with injury, disease and malnutrition. Other measures provide information on *animals*' needs and positive or negative affective states ~~such as hunger, pain and fear~~, often by measuring the strength of *animals*' preferences, motivations and aversions. Others assess the physiological, behavioural and immunological changes or effects that *animals* show in response to various challenges.

4) Such measures can lead to criteria and indicators that help to evaluate how different methods of managing *animals* influence their welfare.

Article 7.1.4.

Guiding principles for the use of measures to assess animal welfare

~~1) the OIE~~ WOAH *animal welfare* standards ~~to be applicable globally, they should~~ emphasise the ~~favourable~~ consequences that any treatments on *animals* may have on their welfare and ~~they should be applicable globally, outcomes for the *animals*, although, in some circumstances, it~~ may include recommendations on ~~be necessary to recommend~~ specific conditions of the *animals*' environment and management~~. Outcomes are generally measured by assessing the extent to which *animals* experience the "five freedoms" described in Article 7.1.2.~~

2) For each principle listed in Article 7.1.5., the most relevant criteria (or measur~~able~~s), ideally comprising animal-based measures, defined as an evaluation of a response of an *animal* or as an effect on an *animal* used to assess its welfare, should be included in the standard. Any given animal-based measure ~~may~~ should be linked to one or more of these ~~than one~~ principles.

3) Recommendations should, whenever possible, define explicit targets or thresholds that should be met for animal-based measures. Such target values should be based on relevant science and experience of experts.

4) In addition to animal-based measures, ~~one may use~~ resource-based measures, defined as an evaluation of a feature of the environment in which the *animal* is kept or to which is exposed and management-based measures, defined as an evaluation of what the *animal handler* does, and with which management processes or tools, may be used. ~~may be used and~~ The use of any of these three types of measures should be defined on the basis of science and expert experience showing that a welfare outcome is clearly linked to an *animal* as well as to a resource or ~~to~~ a management procedure.

7.1.4_1	**Category: addition /deletion** 4) ~~In addition to~~ ~~While~~ animal-based measures are preferable, if they cannot be defined, ~~one may use~~ resource-based measures, defined as an evaluation of a feature of the environment in which the *animal* is kept or to which it is exposed and management-based measures, defined as an evaluation of what the *animal handler* does, and with which management processes or tools, may be used. ~~may be used and~~ The use of any of these three types of measures should be defined on the basis of science and expert experience showing that a welfare outcome is clearly linked to an *animal* as well as to a resource or ~~to~~ a management procedure. **Rationale:** To emphasise that the ideal measures are animal based and an attempt to define animal-based measures should occur prior to utilizing resource or management based measures.	Did not agree, this is addressed in Article 7. 1. 2 and animal-based measures should always be used. Resource-based measures are not a replacement for animal-based measures.

5) ~~Users of the standard~~ ~~Members should select~~ T~~t~~he most ~~appropriate animal-based~~ relevant measures from among those listed in the standards should be selected for ~~their~~ a given farming system or environment~~, from among those listed in the standard~~. Welfare ~~O~~outcomes can be measured by an assessment of individuals or *animal* groups, or a representative sample of those, using data from *establishments*, transport or *slaughterhouses/abattoirs*. *Competent Authorities* should collect all data relevant ~~for the users~~ to set target and threshold values.

6) Whatever the basis of the measure, if welfare outcomes are unsatisfactory, ~~users~~ ~~Members~~ relevant ~~should consider what~~ changes to resources or management ~~are necessary~~ should be applied to improve the welfare outcomes.

Article 7.1.5.

General principles for the welfare of animals in livestock production systems

1) Genetic selection should always take into account the health and welfare of *animals*.

7.1.5_2	**Category: addition/deletion** 1) Genetic selection should always prioritise ~~take into account~~ the health and welfare of *animals*. **Rationale:** The health and welfare of animals should be prioritised in breeding practices. Other interests like economics or aesthetics can often take precedence in decisions around genetic selection, at the expense of animal welfare. Selective breeding for production improvements should not come at the expense of maintaining or improving welfare.	Did not agree as prioritisation of welfare is dependent on the situation.

2) *Animals* chosen for introduction into new environments should be suited to the local ~~climate~~ conditions, including their adaptability ~~and able to adapt~~ to local climate, diseases~~, parasites~~ and nutrition.

7.1.5._3	**Category: change** *Animals* chosen for introduction into new environments should be suited to the local climate conditions, including their adaptability and able to adapt to local climate, ~~diseases,~~ parasites pathogens and nutrition. **Rationale:** Animals are susceptible to all pathogens, including parasites, hence inserting the term 'pathogens' ensures adaptability to all is considered. **Supporting evidence:** not relevant.	Did not agree as parasites and pathogens are covered by disease (see report of TAHSC meeting February 2024).

7.1.5._4	**Category: general** An International Organisation fully supports the proposed new wording on 'climate', as fitness for climate is a key factor in animal welfare and animal welfare potential (see heat stress among cattle imported from temperate climates in Taiwan). **Rationale:** Not relevant	Noted.

3) The physical environment, including the substrate (walking surface, resting surface, etc.), should be suited to the species so as to minimise risk of injury and transmission of diseases ~~or parasites~~ to *animals*.

7.1.5._5	**Comment** A Member proposes rephrasing paragraph 3 as follows: The physical environment, including the substrate (walking surface, resting surface, etc.), should be suited to the ~~species~~ *animals* so as to minimise risk of injury and transmission of diseases ~~or parasites to *animals*~~. **Rationale:** Species" is too narrow because animals of the same species may have varying or different needs and necessities depending, among others, on the purpose of keeping, age and physiologic or health status (e.g. new-born/hatched animals different from growing or adult animals)	Agreed with rationale but text was amended differently to include 'animal species'.

7.1.5._6	**Category: change** 3) The physical environment, including the substrate (walking surface, resting surface, etc.), should be suited to the species so as to minimise risk of injury and transmission of pathogens ~~diseases~~ ~~or parasites~~ to animals. **Rationale:** Animals are susceptible to all pathogens, including parasites, hence inserting the term 'pathogens' ensures risk of transmission is minimised for all pathogens, not just bacteria/viruses. **Supporting evidence:** not relevant.	Comment addressed above (7.1.5._3).

4) The physical environment should allow comfortable ~~resting,~~ and safe resting and ~~comfortable~~ movement including normal

postural changes, and the opportunity to perform ~~types of~~ natural behaviours that *animals* are motivated to perform.

7.1.5._7	**Category: change** 4) The physical environment should allow comfortable ~~resting,~~ and safe resting and ~~comfortable~~ movement including normal postural changes, and the opportunity to perform ~~types of~~ ~~natural~~ normal patterns of behaviours that animals are motivated to perform **Rationale:** Consistency with language used in 7.1.2 (2) where there is a reference to normal patterns of behavior. **Supporting evidence:** not relevant.	Agreed.

7.1.5._8	**Category: editorial** 4) El entorno físico deberá permitir un descanso ~~confortable,~~ y movimientos seguros y cómodos, incluyendo los cambios en las posturas normales, así como permitir que los *animales* muestren ~~un~~ comportamientos naturales que están motivados para realizar, en la medida de lo posible **Rationale:** Para evitar que cualquier persona pueda decir que no se pudo evitar el uso de métodos dolorosos o que no se disponía de los métodos necesarios para evitarlo. Es necesario que no exista flexibilidad en este tema **Supporting evidence:** Vanda, C.B. y Téllez, E. (2019). Los animales ¿objetos de explotación o seres sintientes? Protrepsis, Revista de Filosofía, 8 (16), 7-24. Páginas específicas: 14 y 15 Taylor, O. W. (2011). Respect for Nature: A Theory of Environmental Ethics. 25th Anniversary Edition. Princeton University Press. Página específica: 280 Elzanowski A. (1998). En Bekoff M. (ed.). Encyclopedia of animal rights and animal welfare. Greensood Press. 446 pp. Páginas específicas: 311-312	Did not agree as the proposed wording is too vague and does not correspond to the language used in the Code.

5) Social grouping of *animals* should be managed to ~~allow~~ promote positive social behaviour and minimise injury, *distress* and chronic fear.

7.1.5._9	**Category: deletion/addition** 5) Social grouping of *animals* should be managed to ~~promote~~ allow positive social behaviour and minimise injury, distress and chronic fear. **Rationale:** Member believes that "positive social behavior" should be naturally expressed, and that promoting specific behaviors intentionally by some factors or actions contradicts the principles of animal welfare. Thus, the original wording, "allow," is deemed more appropriate in this context.	Did not agree as this chapter is referring to animals under human care, for which 'promote' is more relevant. The term 'promote' is also used in other animal welfare chapters.

7.1.5._10	**Category: additions** 5) Social grouping of *animals* should be managed to promote positive social behaviour and minimise negative affective states such as injury and chronic fear. **Rationale:** Suggested addition for accuracy.	Did not agree as an injury is not an 'affective state'.

6) For housed *animals*, air quality, air flow, temperature and humidity should not be ~~aversive~~ detrimental and should support good animal health and welfare ~~and not be aversive~~. Where and when extreme weather conditions occur, *animals* should not be prevented from using their natural methods of thermo-regulation.

7.1.5._11	**Category: addition /deletion** 6) For housed *animals*, air quality, air flow, temperature and humidity should be appropriate for the species, thus supporting ~~not be aversive detrimental and should support~~ good animal health and welfare ~~and not be aversive~~. Where and when extreme weather conditions occur, *animals* should not be prevented from using their natural methods of thermo-regulation. **Rationale:** Edits are suggested here to improve readability and clarity.	Did not agree as the proposed amendments did not provide additional value.

7.1.5._12	**Category: addition** 6) For housed animals, air quality, air flow, temperature and humidity should not be aversive nor detrimental and should support good animal health and welfare ~~and not be aversive~~. Where and when extreme weather conditions occur, animals should not be prevented from using their natural methods of thermo-regulation. **Rationale:** Whilst we appreciate that the definition of detrimental means 'causing harm or damage' and that this is wider than aversive, some dictionaries define 'harm' as 'physical injury or damage' which may cause confusion. It is scientifically well documented that certain levels of gas such as ammonia, although not causing direct physical injury/damage do affect the wellbeing of the animals and they are indeed aversive to them. Retaining aversive ensures clarity around non-physical harms. **Supporting evidence:** Cador, C., Pol, F., Hamoniaux, M., Dorenlor, V., Eveno, E., Guyomarc'h, C., & Rose, N. (2014). Risk factors associated with leg disorders of gestating sows in different group-housing systems: a cross-sectional study in 108 farrow-to-finish farms in France. Preventive veterinary medicine, 116(1-2), 102-110. Jones, J. B., Burgess, L. R., Webster, A. J. F., & Wathes, C. M. (1996). Behavioural responses of pigs to atmospheric ammonia in a chronic choice test. Animal Science, 63(3), 437-445. Kim, K. Y., Ko, H. J., Kim, H. T., Kim, C. N., & Byeon, S. H. (2008). Association between pig activity and environmental factors in pig confinement buildings. Australian Journal of Experimental Agriculture, 48(5), 680-686. O'Connor, E. A., Parker, M. O., McLeman, M. A., Demmers, T. G., Lowe, J. C., Cui, L., ... & Abeyesinghe, S. M. (2010). The impact of chronic environmental stressors on growing pigs, Sus scrofa (Part 1): stress physiology, production and play behaviour. Animal, 4(11), 1899-1909. Parker, M. O., O'Connor, E. A., McLeman, M. A., Demmers, T. G. M., Lowe, J. C., Owen, R. C., ... & Abeyesinghe, S. M. (2010). The	Did not agree as 'aversive' is considered a reaction rather than a consequence.

	impact of chronic environmental stressors on growing pigs, Sus scrofa (Part 2): social behaviour. animal, 4(11), 1910-1921. Scollo, A., Gottardo, F., Contiero, B., & Edwards, S. A. (2017). A cross-sectional study for predicting tail biting risk in pig farms using classification and regression tree analysis. Preventive veterinary medicine, 146, 114-120. Von Borell, E., Eslinger, K. M., Schnitz, A. L., Zhao, Y., & Mitloehner, F. M. (2007). Acute and prolonged effects of ammonia on hematological variables, stress responses, performance, and behavior of nursery pigs. Journal of swine health and production, 15(3), 137-145. Wathes, C. M., Jones, J. B., Kristensen, H. H., Jones, E. K. M. and Webster, A. J. F. 2002. Aversion of pigs and domestic fowl to atmospheric ammonia. Trans. ASAE 45: 16051610. Wathes, C.M.; Demmers, T.G.M.; Xin, H. Ammonia Concentrations and Emissions in Livestock Production Facilities: Guidelines and Limits in the USA and UK. In Proceedings of the American Society of Agricultural Engineers (ASAE) Annual International Meeting; ASAE: St. Joseph, MI, 2003; Paper 034112. David, B., Mejdell, C., Michel, V., Lund, V. and Moe, R.O., 2015. Air quality in alternative housing systems may have an impact on laying hen welfare. Part II—Ammonia. Animals, 5(3), pp.886-896.	

7.1.5._13	**Category: additions** 6) For housed *animals*, air quality, air flow, temperature and humidity should not be detrimental and should support good animal health and thus welfare. Where and when extreme weather conditions occur, *animals* should not be prevented from using their natural methods of thermo-regulation. **Rationale:** Suggested addition for accuracy.	Did not agree as, although good welfare implies good health, it is possible to have good health without good welfare.

7.1.5._14	**Change** 6) For housed animals, air quality, ~~air flow~~ ventilation, temperature and humidity should not be ~~aversive~~ detrimental and should support good animal health and welfare ~~and not be aversive~~. Where and when extreme weather conditions occur, animals should not be prevented from using their natural methods of thermo-regulation. **Rationale:** We are of the view that the meaning of term “ventilation” is broader than term “air flow” used in the article and other WOAH Terrestrial Code chapters on animal welfare in Section 7 always refer to “ventilation” when giving details of requirements on environment management; therefore, we would like to suggest WOAH to replace “air flow” with "ventilation" in Article 7.1.5 point 6). **Supporting evidence:** not relevant	Did not agree as, although good ventilation provides air flow, it is the air flow that supports good welfare.

7) *Animals* should have access to sufficient *feed* and water, suited to the *animals*' age and needs, to maintain normal health and performance ~~productivity~~ and to prevent severe or prolonged hunger and~~,~~ thirst, malnutrition and ~~or~~ dehydration.

7.1.5._15	**Category: addition** 7) *Animals* should have access to sufficient *feed* and water, suited to the *animals*' age and needs, to maintain normal health, behaviour and performance productivity and to prevent severe or prolonged hunger and, thirst, malnutrition and or dehydration. **Rationale:** Normal behaviours are impacted by feeding and feeding techniques (as per Mellor 2020, 2015). Mellor, D.J., Hunt, S. and Gusset, M., 2015. Caring for wildlife: The world zoo and aquarium animal welfare strategy. WAZA Executive Office: Gland, Switzerland. https://www.waza.org/wp-content/uploads/2019/03/WAZA-Animal-Welfare-Strategy-2015_Portrait.pdf Mellor, D. J., Beausoleil, N. J., Littlewood, K. E., McLean, A. N., McGreevy, P. D., Jones, B., & Wilkins, C. (2020). The 2020 five domains model: Including human–animal interactions in assessments of animal welfare. Animals, 10(10), 1870.	Agreed.

8) Diseases ~~and parasites~~ should be prevented and controlled as much as possible through good management practices and *biosecurity*. *Animals* with serious health problems should be isolated and treated promptly or killed humanely if treatment is not feasible or recovery is unlikely.

7.1.5._16	**Category: editorial** 8) Las enfermedades ~~y parásitos~~ se deberán evitar y controlar, en la medida de lo posible, a través de buenas prácticas de manejo y *bioseguridad*. Los *animales* con problemas serios de salud deberán aislarse y tratarse de manera rápida o sacrificarse en condiciones adecuadas, evitando en todo momento métodos que generen dolor y sufrimiento, en caso de que no sea viable un tratamiento o si tienen pocas posibilidades de recuperarse. **Rationale:** Para evitar que cualquier persona pueda decir que no se pudo evitar el uso de métodos dolorosos o que no se disponía de los métodos necesarios para evitarlo. Es necesario que no exista flexibilidad en este tema **Supporting evidence:** Vanda, C.B. y Téllez, E. (2019). Los animales ¿objetos de explotación o seres sintientes? Protrepsis, Revista de Filosofía, 8 (16), 7-24. Páginas específicas: 14 y 15 Taylor, O. W. (2011). Respect for Nature: A Theory of Environmental Ethics. 25th Anniversary Edition. Princeton University Press. Página específica: 280 Elzanowski A. (1998). En Bekoff M. (ed.). Encyclopedia of animal rights and animal welfare. Greensood Press. 446 pp. Páginas específicas: 311-312	Did not agree as this is included when discussing humane killing.

9) Alternatives to painful procedures should be used. Where painful procedures cannot be avoided, the ~~resulting~~ pain should be managed to the extent that available methods allow.

7.1.5_17	**Category: addition / deletion** 9) Alternatives to painful procedures should be used whenever possible. Where painful procedures cannot be avoided, ~~the resulting~~ pain should be managed to the extent that available methods allow. Substituting for a less painful method, performing the procedure at a more optimum time in the animals' life, and using local and systemic analgesia are all options that should be considered to mitigate pain associated with painful procedures. **Rationale:** Kleinhenz MD, Viscardi AB, Coetzee JF. Invited review: On-farm pain management of food production animals. Applied Animal Science 2021;37(1):77-87.	Did not agree as this is already included as a recommendation in various animal production systems chapters, such as chapters 7.11. Animal welfare and dairy cattle production systems, 7.12, Welfare of working equids, 7.13 Animal welfare and pig production systems.

7.1.5._18	**Category: editorial** 9) Deberán utilizarse ~~alternativas a los~~ procedimientos que no sean dolorosos, refinando siempre las técnicas y buscando alternativas de manejo que permitan un trato compasivo de los animales. ~~Cuando no se puedan evitar los procedimientos dolorosos, el *dolor* deberá manejarse en la medida en que los métodos disponibles lo permitan.~~ **Rationale:** Para evitar que cualquier persona pueda decir que no se pudo evitar el uso de métodos dolorosos o que no se disponía de los métodos necesarios para evitarlo. Es necesario que no exista flexibilidad en este tema **Supporting evidence:** Vanda, C.B. y Téllez, E. (2019). Los animales ¿objetos de explotación o seres sintientes? Protrepsis, Revista de Filosofía, 8 (16), 7-24. Páginas específicas: 14 y 15 Taylor, O. W. (2011). Respect for Nature: A Theory of Environmental Ethics. 25th Anniversary Edition. Princeton University Press. Página específica: 280 Elzanowski A. (1998). En Bekoff M. (ed.). Encyclopedia of animal rights and animal welfare. Greensood Press. 446 pp. Páginas específicas: 311-312	Did not agree. Refer to 7.1.5._17.

10) The handling of *animals* should foster a positive relationship between humans and *animals* and should not cause injury, panic, lasting fear or avoidable stress.

7.1.5_19	**Category: general** In point 10), wording should clearly indicate if 'handling' encompass catching and transport. **Rationale:** -	Agreed, text amended in Article 7.1.11 to 'owners and animal handlers'.

11) Owners and handlers should have sufficient training, skills and knowledge to ensure that *animals* are treated in accordance with these principles.

7.1.5_20	**Category: editorial** 11) Owners ~~and,~~ handlers, and other animal caretakers should have sufficient training, skills and knowledge to ensure that *animals* are treated in accordance with these principles. **Rationale:** Edits are suggested here to improve clarity.	Agreed, however the text was amended differently. Refer to 7.1.5._19.

7.1.5._21	**Category: deletion/addition** 11) Owners and handlers should have sufficient ~~training~~, skills and knowledge through appropriate trainings to ensure that animals are treated in accordance with these principles. **Rationale:** Since sufficient skills and knowledge can be acquired through appropriate training, Japan believes that "training," "skills," and "knowledge" should not be listed in parallel.	Agreed but amended differently to include 'through appropriate training or experience'.

Reference	Comment	TAHSC response
8.Y._1	**Category:** general A Member supports the comments made by the other.	Noted.
8.Y._2	**Category:** general A Member thanks the Code Commission and in general supports this new chapter. Comments are inserted in the text below.	Noted.

CHAPTER 8.Y.

INFECTION WITH NIPAH VIRUS

Article 8.Y.1.

General provisions

Nipah virus can infect a wide range of species, including humans, but only pigs and horses are considered to play a significant role in the epidemiology of the disease. For the *Terrestrial Code*, *infection* with Nipah virus is defined as an *infection* of pigs and horses ~~and pigs~~ (hereafter 'susceptible animal') with Nipah virus.

Reference	Comment	TAHSC response
8.Y.1._1	**Category:** addition **Proposed amended texts:** Nipah virus can infect a wide range of species, including bats and humans, but only pigs and horses are considered to play a significant role in the epidemiology of the disease in domestic species. Bats [natural hosts are fruit bats (also known as megabats) belonging to the Pteropodidae family] can play a role in the epidemiology of the disease as natural reservoirs from which spillover into domestic species and humans can occur. For the *Terrestrial Code*, *infection* with Nipah virus is defined as an *infection* of pigs and horses ~~and pigs~~ (hereafter 'susceptible animal') with Nipah virus. **Rationale:** A Member suggests the inclusion of bats to acknowledge their role as a natural reservoir host for Nipah virus and the role they play in the epidemiology as sources in spillover events into domestic species and humans. This addition ensures One Health considerations are considered in future versions of the chapter, in particular when drafting text relating to surveillance and management. Management bespoke to bats represents an essential preventive measure to avoid the onset and diffusion of outbreaks, even in countries that have direct/indirect relationships with countries at risk. Inclusion of bats in this way should not impact the purpose of the chapter. Not acknowledging bats is inaccurate and does not align other Quadripartite information, for example, WHO notes that "Nipah virus infection is an emerging bat-borne zoonotic disease transmitted to humans through infected animals (such as bats and pigs) or food contaminated with saliva, urine, and excreta of infected animals." **Supporting evidence:** Bruno L, Nappo MA, Ferrari L, Di Lecce R, Guarnieri C, Cantoni AM, Corradi A. Nipah Virus Disease: Epidemiological, Clinical, Diagnostic and Legislative Aspects of This Unpredictable Emerging Zoonosis. Animals (Basel). 2022 Dec 31;13(1):159. doi: 10.3390/ani13010159. PMID: 36611767; PMCID: PMC9817766. Singh RK, Dhama K, Chakraborty S, Tiwari R, Natesan S, Khandia R, Munjal A, Vora KS, Latheef SK, Karthik K, Singh Malik Y, Singh R, Chaicumpa W, Mourya DT. Nipah virus: epidemiology, pathology, immunobiology and advances in diagnosis, vaccine designing and control strategies - a comprehensive review. Vet Q. 2019 Dec;39(1):26-55. doi: 10.1080/01652176.2019.1580827. PMID: 31006350; PMCID: PMC6830995. WHO: https://www.who.int/emergencies/disease-outbreak-news/item/2023-DON490	**EN** Agreed with the rationale and amended the text to consider the role of fruit bats as a reservoir.

Reference	Comment	TAHSC response
8.Y.1._2	**Category:** editorial **Proposed amended texts:** El virus Nipah puede infectar a un amplio rango de especies, incluyendo a los seres humanos, aunque sólo los cerdos y los caballos se consideran que tienen un ~~rol~~ papel significativo en la epidemiología de la enfermedad **Rationale:** El nombre correcto del agente patógeno es Nipah. "rol" es un anglisismo. "Papel" es más recomendable en la lengua castellana (español).	**EN** Agreed.
8.Y.1._3	**Category:** addition **Proposed amended text:** Nipah virus can infect a wide range of species, including humans, but amongst domestic species only pigs and horses are considered to play a significant role in the epidemiology of the disease. The species with the most significant epidemiological role are the reservoir hosts, *Pteropus spp* bats. Bats are the main cause of spillover human infections. For the *Terrestrial Code*, *infection* with Nipah virus is defined as an *infection* of pigs and horses (hereafter 'susceptible animal') with Nipah virus. **Rationale:** The species with the most significant epidemiological role are the reservoir hosts, *Pteropus spp* bats. Bats are the main cause of spillover human infections. **Supporting evidence:** Ang, B S P, Lim, T C C, & Wang, L (2018) Nipah virus infection. Journal of Clinical Microbiology, 56(6): 1-10. doi:10.1128/jcm.01875-17 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5971524/	**EN** Agreed, comment addressed above (8.Y.1._1).
8.Y.1._4	**Category:** addition **Proposed amended texts:** Nipah virus can infect a wide range of species, including humans, fruit bats, pigs, horses, dogs, and cats. ~~but o~~Only fruit bats, pigs and horses are ~~considered~~ known to play a significant role in the epidemiology of the disease. For the *Terrestrial Code*, *infection* with Nipah virus is defined as an *infection* of pigs and horses ~~and pigs~~ (hereafter 'susceptible animal') with Nipah virus. **Rationale:** Other species (besides pigs and horses) meeting the criteria in this chapter should be included. As stated in the article referenced below, transmission can be between species as well as within species. WOAH should consider reporting any detection (cat, dog, livestock) until more is known about this virus and the risk of both inter- and intra- species transmission. We also recommend that WOAH expand on the meaning of "play a significant role in the epidemiology of the disease in livestock". The potential for inter- and intra- species transmission among these species should be clearly stated.	**EN** Agreed, comment addressed above (8.Y.1._1).

Reference	Comment	TAHSC response
	Supporting evidence: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9817766/ "Natural infection in domestic animals has been described in farming pigs, horses, and domestic and feral cats. Natural NiV transmission can be intra-specific (pig-to-pig, human-to-human) and inter-specific (flying bat-to-human; pig-to-human and horse-to-human). Ruminants are spillover hosts in which NiV infection in the ovi-caprine is ascertained, while bovine is a species considered as NiV-permissive. Dogs are also susceptible to NiV infection, but dogs and cats do not seem to play a zoonotic role [66]. A study on NiV infection in peridomestic and feral cats in the Tioman island (Malaysia) pointed out that natural NiV infection is rare in cats and the zoonotic risk is classified as low [67]." The following provides more information on how fruit bats play the largest role in the epidemiology of this disease: Halsie Donaldson, Daniel Lucey,"Enhancing preparation for large Nipah outbreaks beyond Bangladesh: Preventing a tragedy like Ebola in West Africa", International Journal of Infectious Diseases, Volume 72, 2018, Pages 69-72, ISSN 1201-9712, https://doi.org/10.1016/j.ijid.2018.05.015. The following references describe inter- and intra-species transmissions and their importance. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9817766/ https://www.cfsph.iastate.edu/Factsheets/pdfs/nipah.pdf and, Ching PK, de los Reyes VC, Sucaldito MN, Tayag E, Columna-Vingno AB, Malbas FF Jr, Bolo GC Jr, Sejvar JJ, Eagles D, Playford G, Dueger E, Kaku Y, Morikawa S, Kuroda M, Marsh GA, McCullough S, Foxwell AR. Outbreak of henipavirus infection, Philippines, 2014. Emerg Infect Dis. 2015 Feb;21(2):328-31. doi: 10.3201/eid2102.141433.	
8.Y.1._5	**Category:** general **Proposed texts:** not suitable **Rationale:** Fruit bats are the reservoir and there has been direct transmission from bats to people vis bat saliva. Dogs, cats, and goats have also been infected.	**EN** Agreed, comment addressed above (8.Y.1._1).

The following defines the occurrence of *infection* with Nipah virus:

1) Nipah virus has been isolated and identified as such in a sample from a susceptible animal; or

2) antigen or nucleic acid specific to Nipah virus has been detected in a sample from a susceptible animal showing clinical signs or pathological lesions consistent with *infection* with Nipah virus, epidemiologically linked to a confirmed or suspected *case*, or giving cause for suspicion of previous association or contact with Nipah virus; or

3) seroconversion specific to Nipah virus, which is not the consequence of *vaccination*, has been detected in a susceptible animal; or

Reference	Comment	TAHSC response
8.Y.1._6	**Category:** deletion **Proposed texts:** ~~3) seroconversion specific to Nipah virus, which is not the consequence of *vaccination*, has been detected in a susceptible animal; or~~ **Rationale:** A Member thanks the Code Commission for considering previous comments on this point. It also seeks assessments of the points expressed below. Point 3 appears not to be in line with other case definitions where the presence of antibodies should be epidemiologically linked to other disease occurrences or suspicious. It is important that the general approach to case definitions (occurrence of infection) follow a similar approach throughout the Code. It is also important that the competent authority balances the information it has received with the ongoing epidemiological information before an outbreak is confirmed. Keeping point 3) above would imply that the competent authority cannot factor in the epidemiological situation. Therefore the proposed approach is not clear and it is proposed to delete point 3):	**EN** Did not agree, comment was addressed previously in the February 2024 meeting report.

4) antibodies specific to Nipah virus, which are not the consequence of *vaccination*, have been detected in a sample from a susceptible animal epidemiologically linked to a confirmed or suspected *case*, or giving cause for suspicion of previous association or contact with Nipah virus.

Reference	Comment	TAHSC response
8.Y.1._7	**Category:** deletion **Proposed texts:** *"4) la détection des anticorps spécifiques du virus Nipah ne résultant pas de la vaccination dans un prélèvement effectué sur un animal sensible ayant un lien épidémiologique avec un cas confirmé ou une suspicion de cas, ou encore à l'égard duquel il existe des raisons de suspecter un lien ou un contact antérieurs avec le virus Nipah."* **Rationale:** Quel est l'intérêt du point 4) par rapport au point 3) ? En effet une séroconversion spécifique, mentionnée au 3) correspond à l'apparition d'anticorps spécifiques, mis en évidence suite à un prélèvement, mentionné au 4). Le seul ajout correspond au fait qu'en 4) le prélèvement doit être réalisé sur un animal ayant un lien épidémiologique avec un cas confirmé ou une suspicion de cas, ou encore à l'égard duquel il existe des raisons de suspecter un lien ou un contact antérieurs avec le virus Nipah, mais le 3) n'apportant aucune précision sur l'animal concerné, le cas du 4) est déjà compris dans le 3) ? La Nouvelle-Calédonie propose de supprimer le point 4) :	**EN** Did not agree. Point 3) presents seroconversion, which is currently defined in the *Terrestrial Manual*. Seroconversion requires two consecutive tests to show a four-fold rise in antibodies, confirming a case. In point 4), only one sampling is performed for detection of antibodies and as a result, requires additional elements to confirm the case.

Standards for diagnosis and vaccines, as well as information on the epidemiology, are described in the *Terrestrial Manual*.

Reference	Comment	TAHSC response
8.Y.1._8	**Category:** general **Proposed texts:** not suitable **Rationale:** There is no vaccine for Nipah virus.	Agreed, text amended accordingly.

Reference	Comment	TAHSC response
11.5._1	**Category** (general) A Member supports the proposed changes to this chapter.	Noted.
11.5._2	**Category** (general) A Member supports the proposed changes to this chapter and thanks the Code Commission for considering the other Members' suggestions.	Noted.

CHAPTER 11.5.

INFECTION WITH *MYCOPLASMA MYCOIDES* SUBSP. *MYCOIDES* ~~*SC*~~ (CONTAGIOUS BOVINE PLEUROPNEUMONIA)

Article 11.5.1.

General provisions

~~1) For the purposes of this chapter, susceptible *animals* means domestic bovines (*Bos indicus, B. taurus, B. grunniens* and *Bubalus bubalis).*~~

~~1~~21) For the purposes of the *Terrestrial Code*, ~~the *incubation period* for~~ contagious bovine pleuropneumonia (CBPP) ~~shall be six months.~~

~~For the purpose of this chapter,~~ is defined as an ~~*animal*~~ *infection*~~ed~~ of ~~susceptible animals~~ bovines (*Bos indicus, B. taurus, B. grunniens* and *Bubalus bubalis*) with *Mycoplasma mycoides* subspecies *mycoides* ~~SC~~ (*Mmm* ~~SC~~)~~, and freedom from CBPP means freedom from *Mmm SC infection.*~~

~~For the purpose of this chapter, susceptible *animals* include bovids (*Bos indicus, B. taurus* and *B. grunniens*) and water buffaloes (*Bubalus bubalis)*~~

Reference	Comment	TAHSC response
11.5.1._1	**Category** (change and addition) ~~1~~21) For the purposes of the *Terrestrial Code*, ~~the *incubation period* for~~ contagious bovine pleuropneumonia (CBPP) ~~shall be six months.~~ ~~For the purpose of this chapter,~~ is defined as an ~~*animal*~~ *infection*~~ed~~ of susceptible animals ~~susceptible animals bovines (*Bos indicus, B. taurus, B. grunniens* and *Bubalus bubalis)~~ with *Mycoplasma mycoides* subspecies *mycoides* ~~SC~~ (*Mmm* ~~SC~~)~~, and freedom from CBPP means freedom from *Mmm SC infection.*~~ For the purpose of this chapter, susceptible animals include bovids (Bos indicus, B. taurus and B. grunniens , and Bubalus bubalis) and small ruminants. **Rationale** Literature has shown that the pathogen was isolated from small ruminants such as goats and sheep and the small ruminants have lung lesions, indicating that the pathogen may infect small ruminants	Did not agree, in agreement with the Scientific Commission, isolating a pathogen does not necessarily mean that the species is susceptible or epidemiologically significant in the role of transmission.

	and may infect cattle through carrying and contact [1]. Isolation of the pathogen has also been reported in sheep from Iran and India. **Supporting evidence** [1] African Journal of Biotechnology. Volume 11 , Issue . 2012.Isolates of Mycoplasma mycoides subspecies mycoides SC in small ruminants in Sahel zone of Nigeria and its implications on disease control.	

23) ~~For the purposes of *international trade*~~This chapter deals not only with the occurrence of clinical signs caused by *Mmm*~~SC~~, but also with the presence of *infection* with *Mmm*~~SC~~ in the absence of clinical signs.

34) The following defines the occurrence of *infection* with *Mmm*~~SC~~ ~~*infection*~~:

~~1~~a) *Mmm*~~SC~~ has been isolated and identified as such in ~~from an *animal*, embryos, oocytes or semen~~ a sample from a ~~susceptible animal~~ bovine~~; or~~; or

~~2~~b) ~~*Mmm* deoxyribo~~nucleic acid specific to *Mmm* has been detected in a sample from a ~~susceptible animal~~ bovine showing pathological lesions consistent with an *infection* with *Mmm*~~SC~~, ~~and~~ or epidemiologically link~~s~~ed to a confirmed *case*~~.~~; or

c) antibodies specific to *Mmm*~~SC~~ ~~antigens~~, which are not the consequence of *vaccination*, have been detected in a sample from a ~~susceptible animal~~ bovine showing pathological lesions consistent with an *infection* with *Mmm*, ~~and~~ or epidemiologically link~~s~~ed to a confirmed *case*~~or *Mmm*SC deoxyribonucleic acid have been identified in one or more animals showing pathological lesions consistent with *infection* with *Mmm*SC with or without clinical signs, and epidemiological links to a confirmed *outbreak* of CBPP in susceptible *animals*~~.

45) For ~~T~~the purposes of the *Terrestrial Code*, the *incubation period* shall be six months.

~~When authorising import or transit of the *commodities* listed in this chapter, with the exception of those listed in Article 11.5.2., *Veterinary Authorities* should require the conditions prescribed in this chapter relevant to the CBPP status of the domestic bovids and water buffalo population of the *exporting country*, *zone* or *compartment*.~~

56) Standards for diagnosis ~~diagnostic tests~~ and vaccines, as well as information on the epidemiology, are described in the *Terrestrial Manual*.

Article 11.5.2.

Safe commodities

When authorising the importation or transit of the following *commodities*, *Veterinary Authorities* should not require any CBPP-related conditions, regardless of the ~~CBPP~~ *animal health status* of ~~the domestic bovids~~ ~~bovine~~ ~~and water buffalo population of~~ the *exporting country*, *zone* or *compartment*:

1) *milk* and *milk products*;

2) hides and skins;

3) *meat* and *meat products* (excluding lung).

Reference	Comment	TAHSC response
11.5.2._1	**Category** (addition) 4) Protein meals and rendered fats **Rationale**	Agreed.

	An organisation understands that there is no risk of transboundary transmission of Mycoplasma mycoides subsp. Mycoides (CBP) through rendered products, for the following reasons: • Mycoplasma spp. are fragile organisms with a short lifespan in the environment, and it is believed that indirect transmission is not significant in the epidemiology of this illness. • Meat and meat products are considered safe trade commodities, indicating that this Mycoplasma mycoides subsp. Mycoides will not survive, even in an unheated product. • The rendering manufacturing process achieves Mycoplasma spp virus deactivation with an F0 value of 3 or above (≥85°C for rendered fats; ≥80°C and 30 minutes for protein meals). • In accordance with the scientific literature, Mycoplasma mycoides subsp. Mycoides is primarily transmitted by direct contact and aerosolized droplets. However, the organisation is not aware of any scientific report indicating the possibility of transmission through feed. Therefore, there will not be any rendered products. Having said that, the organisation also requests the Code Commission to include all animal rendered products (including protein meals and rendered fats) in the safe commodity list of the CBP chapter.	

Article 11.5.3.

Country or zone free from CBPP ~~free country or zone~~

A country or *zone* may be considered free from CBPP when the relevant provisions in point 2 of Article 1.4.6. have been complied with, and when within the proposed free country or *zone* for at least the past 24 months:

1) there has been no *case* of *infection* with *Mmm*;

2) the *Veterinary Authority* has current knowledge of, and authority over, all *herds* of ~~susceptible animals~~ bovines;

3) appropriate *surveillance* has been implemented in accordance with:

   a) Article 1.4.6. where historical freedom can be demonstrated; or

   b) Articles 11.5.13. and 11.5.14. where historical freedom cannot be demonstrated;

4) measures to prevent the introduction of the *infection* have been in place: in particular, the importations or movements of bovine *commodities* into the country or *zone* have been carried out in accordance with this chapter and other relevant chapters of the *Terrestrial Code*;

Reference	Comment	TAHSC response
11.5.3._1	**Category** (addition) 4) measures to prevent the introduction of the *infection* have been in place: in particular, the importations or movements of bovine and small ruminant *commodities* into the country or *zone* have been carried out in accordance with this chapter and other relevant chapters of the *Terrestrial Code*; **Rationale** (same as above) Literature has shown that the pathogen was isolated from small ruminants such as goats and sheep and the small ruminants have lung lesions, indicating that the pathogen may infect small ruminants	Did not agree, in agreement with the Scientific Commission. See comment 11.5.1._1 above.

	and may infect cattle through carrying and contact [1]. Isolation of the pathogen has also been reported in sheep from Iran and India.	

5) no *vaccination* or treatment against CBPP has been carried out;

6) no animal vaccinated or treated against CBPP ~~have~~ has been introduced ~~since the cessation of *vaccination*~~.

~~To qualify for inclusion in the existing list of CBPP free countries and *zones*, a Member Country should:~~

~~1) have a record of regular and prompt animal disease reporting;~~

~~2) send a declaration to WOAH stating that:~~

~~a) there has been no *outbreak* of CBPP during the past 24 months;~~

~~b) no evidence of CBPP *infection* has been found during the past 24 months;~~

~~c) no *vaccination* against CBPP has been carried out during the past 24 months,~~

~~and supply documented evidence that *surveillance* for CBPP in accordance with this chapter is in operation and that regulatory measures for the prevention and control of CBPP have been implemented;~~

~~3) not have imported since the cessation of *vaccination* any animals vaccinated against CBPP.~~

The country or *zone* will be included in the list of countries or *zones* free from CBPP in accordance with Chapter 1.6. ~~only after the submitted evidence has been accepted by WOAH~~.

Retention on the list requires annual reconfirmation of compliance with all points above and the ~~relevant~~ provisions under point 4 of Article 1.4.6. ~~that the information in points 2 *a)*, 2 *b)*, 2 *c)* and 3 above be re-submitted annually and~~ Documented evidence should be resubmitted annually for points 1 to 4 above. Any changes in the epidemiological situation or other significant events should be ~~reported~~ notified to WOAH in accordance with ~~the requirements in~~ Chapter 1.1.

Article 11.5.4~~6~~.

Compartment free from CBPP ~~free compartment~~

~~The bilateral recognition of a CBPP free *compartment* should follow the principles laid down in this chapter and in Chapters 4.3. and 4.4.~~

A *compartment* free from CBPP can be established in any country or *zone*. In defining such a *compartment*,the principles of Chapters 4.4. and 4.5. should be followed. ~~Susceptible animals~~ Bovines in the *compartment* should be separated from any other ~~susceptible animals~~ bovines by the effective application of a *biosecurity plan*.

A Member Country wishing to establish a *compartment* free from CBPP should:

1) have a record of regular and prompt animal disease reporting and, if not free, have an *official control programme* and a *surveillance* system for CBPP in place in accordance with Articles 11.5.13. and 11.5.14. that allows knowledge of the prevalence, distribution and characteristics of CBPP in the country or *zone*;

2) declare for the free *compartment* that:

~~a) there has been no *case* of CBPP during the past 24 months;~~

~~b~~a) no *infection* with *Mmm* has been detected during the past 24 months;

~~c~~b) *vaccination* against CBPP is prohibited;

~~dc~~) no animal vaccinated or treated against CBPP within the past 24 months is in the *compartment*;

~~ed~~) animals, semen and embryos may only enter the *compartment* in accordance with relevant articles in this chapter;

~~fe~~) documented evidence shows that *surveillance* in accordance with Articles 11.5.13. and 11.5.14. is in operation;

~~gf~~) an *animal identification* and *traceability* system in accordance with Chapters 4.1. and 4.2. is in place;

Reference	**Comment**	TAHSC response
11.5.4._1	**Category** (general) concernant la suppression du a) car déjà couvert par le point b), on remarque que la même présentation avait été faite lors de la modification du chapitre sur la PPR **Supporting evidence** 14.7.4.2. envoyer une déclaration par laquelle il atteste : a) qu'il n'y a eu aucun foyer de peste des petits ruminants au cours des 24 derniers mois ; b) qu'aucun signe probant d'infection par le virus de la peste des petits ruminants n'a été constaté au cours des 24 derniers mois ;	Noted.

3) describe in detail:

a) the animal *subpopulation* in the *compartment*;

b) the *biosecurity plan* to mitigate the risks identified by the *surveillance* carried out in accordance with point 1 notably to prevent the aerosol transmission of CBPP.

The *compartment* should be approved by the *Veterinary Authority*.

Article 11.5.5.

Country ~~of~~ or zone infected with *Mmm* ~~CBPP infected country or zone~~

A country or *zone* shall be considered as infected with *Mmm* ~~W~~when the requirements for acceptance as a ~~CBPP free~~ country or *zone* free from CBPP are not fulfilled~~, a country or *zone* shall be considered as infected~~.

Article 11.5.5bis.

Establishment of a containment zone within a country or zone previously free from CBPP

In the event of *outbreaks* of ~~CBPP *infection*~~ with *Mmm* within a country or *zone* previously free from CBPP, including within a *protection zone*, a *containment zone*, which includes all epidemiologically linked *outbreaks*, ~~can~~ may be established, in accordance with Article 4.4.7., to minimise the impact on the rest of the country or *zone*.

For this to be achieved and for the Member Country to take full advantage of this process, the *Veterinary Authority* should submit as soon as possible to WOAH, in addition to the requirements of Article 4.4.7., ~~in support of the application,~~ documented evidence that:

1) on suspicion, a ~~strict~~ standstill has been imposed on the suspected *establishments*, and ~~in the country or *zone* animal movement control has been imposed and~~ effective controls on the movement of animals and other relevant *commodities* are in place in the country or *zone*;

2) the *infection* has been confirmed and notified in accordance with Chapter 1.1.;

32) on confirmation, ~~an~~ the ~~additional~~ standstill and movement ~~of susceptible animals has been imposed~~ controls described in point 1 have been reinforced ~~in the entire *containment zone* and the movement controls described in point 1 have been reinforced~~;

43) epidemiological investigations into the likely source of the *outbreaks* have been carried out;

54) a *slaughter* policy, with or without the use of emergency *vaccination*, has been applied;

65) *surveillance* in accordance with Articles 11.5.13. and 11.5.14. is in place in the *containment zone* and in the rest of the country or *zone*;

76) measures that prevent the spread of CBPP to the rest of the country or *zone*, taking into consideration physical and geographical barriers, are in place.

The free status of the areas outside the *containment zone* is suspended while the *containment zone* is being established. The free status of these areas ~~outside the *containment zone*~~ may be reinstated irrespective of the provisions of Article 11.5.4., once the *containment zone* has been approved by WOAH as complying with Article 4.4.7. and points 1 to ~~6~~ 7 above.

In the event of recurrence of *infection* with *Mmm* in the *containment zone*, established in accordance with point 4(a) of Article 4.4.7., the approval of the *containment zone* is withdrawn and the ~~CBPP~~ free status of the whole country or *zone* is suspended until the relevant requirements of Article 11.5.46. are fulfilled.

In the event of occurrence of *infection* with *Mmm* in the outer zone of a *containment zone* established in accordance with point 4(b) of Article 4.4.7., the approval of the *containment zone* is withdrawn and the free status of the whole country or *zone* is suspended until the relevant requirements of Article 11.5.46. are fulfilled.

The recovery of the ~~CBPP~~ free status of the *containment zone* should follow the provisions of Article 11.5.~~4~~6.

Article 11.5.64.

Recovery of free status

Should an *outbreak* of CBPP occur in a previously free country or zone, its status may be recovered when *surveillance* in accordance with Articles 11.5.13. and 11.5.14. has been carried out with negative results, and 12 months after:

1) the *disinfection* of the last affected *establishment*, provided that a *slaughter* policy without *vaccination* has been implemented; or

2) the *disinfection* of the last affected *establishment* and the *slaughter* of all vaccinated animals, provided that a *slaughter* policy with emergency *vaccination* and *slaughter* of vaccinated animals has been implemented.

~~When a CBPP *outbreak* occurs in a CBPP free country or *zone*, one of the following waiting periods is required to regain the status of CBPP free country or *zone*:~~

~~1) 12 months after the last *case* where a *stamping-out* policy and serological *surveillance* and strict movement control are applied in accordance with this chapter;~~

~~2) if *vaccination* was used, 12 months after the *slaughter* of the last vaccinated *animal*.~~

~~1) 12 months after the *slaughter* of the last *case* where a *slaughter* policy, without emergency *vaccination*, and *surveillance* are applied in accordance with Articles 11.5.13. and 11.5.14.; or~~

~~2) 12 months after the *slaughter* of the last *case* and of all vaccinated animals, whichever occurred last, where a *slaughter* policy, emergency *vaccination* and *surveillance* in accordance with Articles 11.5.13. and 11.5.14. are applied.~~

The country or *zone* will regain the status of CBPP free country or *zone* only after the submitted evidence, based on the provisions of Chapter 1.10., has been accepted by WOAH.

Where a ~~*stamping-out*~~ *slaughter* policy is not practised, the above waiting periods do not apply but Article 11.5.3. applies.

Article 11.5.7.

Recommendations for importation of ~~susceptible animals~~ bovines from ~~CBPP free~~ countries, ~~or~~ zones, or compartments free from CBPP ~~free compartments~~

~~For domestic bovids and water buffaloes~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the animals:

1) showed no clinical sign of CBPP on the day of shipment;

2) were kept in a CBPP free country, *zone* or *compartment* since birth or for at least the past six months.

Article 11.5.8.

Recommendations for importation of ~~susceptible animals~~ bovines from ~~CBPP infected~~ countries or zones infected with *Mmm* for immediate slaughter

~~For domestic bovids and water buffaloes for slaughter~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the animals:

1) showed no clinical sign of CBPP on the day of shipment;

2) originate from an *establishment* in which *surveillance* in accordance with Articles 11.5.13. and 11.5.14. demonstrates that ~~where~~ no *case* of CBPP ~~had~~ has occurred ~~was officially reported for~~ during the past six months; and

3) are transported ~~directly~~ under the supervision of the *Veterinary Authority* in a *vehicle/vessel*, which was subjected to *disinfection* before loading, directly from the *establishment* of origin to the ~~*slaughterhouse/abattoir*~~ *place of shipment* ~~in sealed *vehicles*~~ without coming into contact with other ~~susceptible animals~~ bovines.

Reference	Comment	TAHSC response
11.5.8._1	**Category** (addition) 3) are transported ~~directly~~ under the supervision of the *Veterinary Authority* in a *vehicle/vessel*, which was subjected to *disinfection* before loading, directly from the *establishment* of origin to the ~~*slaughterhouse/abattoir*~~ *place of shipment* ~~in sealed *vehicles*~~ without coming into contact with other ~~susceptible animals~~ susceptible animals~~bovines~~. **Rationale** (same as above) Literature has shown that the pathogen was isolated from small ruminants such as goats and sheep and the small ruminants have lung lesions, indicating that the pathogen may infect small ruminants and may infect cattle through carrying and contact [1]. Isolation of the pathogen has also been reported in sheep from Iran and India.	Did not agree, in agreement with the Scientific Commission. See above comment 11.5.1._1

Article 11.5.9.

Recommendations for importation of bovine semen from ~~CBPP free~~ countries, ~~or~~ zones, or compartments free from CBPP ~~free compartments~~

~~For bovine semen~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1) the donor animals:

a) showed no clinical sign of CBPP on the day of collection of the semen;

b) were kept in a CBPP free country, *zone* or *compartment* since birth or for at least the past six months;

2) the semen was collected, processed and stored in accordance with Chapters 4.6. and 4.7.

Article 11.5.10.

Recommendations for importation of bovine semen from ~~CBPP infected~~ countries or zones infected with *Mmm*

~~For bovine semen~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1) the donor animals:

a) were kept since birth, or for the past six months, in an *establishment* in which *surveillance* in accordance with Articles 11.5.13. and 11.5.14. demonstrates that no *case* of *infection* with *Mmm* has occurred during that period;

~~a~~b) showed no clinical sign of CBPP on the day of collection of the semen;

~~b~~c) were subjected to ~~the complement fixation~~ a serological test for CBPP with negative results, on two occasions, with an interval of not less than 21 days and not more than 30 days between ~~each~~ tests, the second test being performed within 14 days prior to collection;

Reference	Comment	TAHSC response
11.5.10._1	**Category:** general c) ont fait l'objet d'une recherche de la péripneumonie contagieuse bovine au moyen de deux épreuves ~~de fixation du complément~~ sérologiques effectuées avec un intervalle minimal de 21 jours et maximal de 30 jours entre ~~chaque~~ les prélèvements ~~épreuves~~ dont les résultats se sont révélés négatifs, le second prélèvement ~~la seconde épreuve~~ ayant été réalisé~~e~~ pendant les 14 jours ayant précédé le prélèvement de la semence ; **Rationale** Article 11.5.10.1)c) et 11.5.12.1)c) indiquer que l'intervalle est entre les prélèvements et non les épreuves (c'est en effet la date de réalisation du prélèvement sanguin qui compte et non la réalisation de l'analyse qui peut-être différée)	Agreed, text amended differently.

~~c~~d) were isolated from other ~~domestic bovids and water buffaloes~~ ~~susceptible animals~~ bovines that did not meet the same health requirements from the day of the first ~~the complement fixation~~ serological test until collection;

~~d) were kept since birth, or for the past six months, in an *establishment* in which *surveillance* in accordance with Articles 11.5.13. and 11.5.14. demonstrates that where no case of CBPP was reported had occurred during that period. , and that the *establishment* was not situated in a CBPP infected *zone*;~~

e) AND EITHER:

i) have not been vaccinated against CBPP;

OR

ii) were vaccinated ~~using a vaccine complying with the standards described in the *Terrestrial Manual*~~ not more than four months prior to collection; in this case, the condition laid down in point (~~b~~c) above is not required;

2) the semen:

a) was collected, processed and stored in accordance with Chapters 4.~~5~~6. and 4.~~6~~7.;

b) was subjected to a test for the ~~identification~~ detection of the agent.

Article 11.5.11.

Recommendations for importation of *in vivo* derived or *in vitro* produced oocytes or embryos of ~~susceptible animals~~ bovines from ~~CBPP free~~ countries, ~~or~~ zones~~,~~ or compartments free from CBPP ~~free compartments~~

~~For *in vivo* derived or *in vitro* produced oocytes or embryos of domestic bovids and water buffaloes~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1) the donor animals:

a) showed no clinical sign of CBPP on the day of collection of the oocytes or embryos;

b) were kept in a ~~CBPP free~~ country, *zone* or *compartment* free from CBPP since birth or for at least the past six months;

2) the oocytes were fertilised with semen meeting the conditions of Articles 11.5.9. or 11.5.10.;

3) the oocytes or embryos were collected, processed and stored in accordance with Chapters 4.8., 4.9. and 4.10., as relevant.

Article 11.5.12.

Recommendations for importation of *in vivo* derived or *in vitro* produced oocytes or embryos of ~~susceptible animals~~ bovines from ~~CBPP infected~~ countries or zones infected with *Mmm*

~~For *in vivo* derived or *in vitro* produced oocytes or embryos of domestic bovids and water buffaloes~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1) the donor animals:

a) were kept since birth, or for the past six months, in an *establishment* in which *surveillance* in accordance with Articles 11.5.13. and 11.5.14. demonstrates that no *case* of *infection* with *Mmm* has occurred during that period;

~~a~~b) showed no clinical sign of CBPP on the day of collection of the embryos or oocytes;

~~b~~c) were subjected to ~~the complement fixation~~ a serological test for CBPP with negative results, on two occasions, with an interval of not less than 21 days and not more than 30 days between ~~each~~ tests, the second test being performed within 14 days prior to collection;

Reference	Comment	TAHSC response
11.5.12._1	**Category** (change) c) ont fait l'objet d'une recherche de la péripneumonie contagieuse bovine au moyen de deux épreuves ~~de fixation du complément~~ sérologiques effectuées avec un intervalle minimal de 21 jours et maximal de 30 jours entre ~~chaque~~ les prélèvements ~~épreuves~~ dont les résultats se sont révélés négatifs, le second prélèvement ~~la seconde épreuve~~ ayant été réalisé~~e~~ pendant les 14 jours ayant précédé le prélèvement de la semence ;	Agreed, text amended differently.

	Rationale Article 11.5.10.1)c) et 11.5.12.1)c) indiquer que l'intervalle est entre les prélèvements et non les épreuves (c'est en effet la date de réalisation du prélèvement sanguin qui compte et non la réalisation de l'analyse qui peut-être différée)	

~~c~~d) were isolated from other ~~domestic bovids and water buffaloes~~ bovines that did not meet the same health requirements from the day of the first ~~the complement fixation~~ serological test until collection;

~~d) were kept since birth, or for the past six months, in an *establishment* in which *surveillance* in accordance with Articles 11.5.13. and 11.5.14. demonstrates that where no *case* of CBPP was reported had occurred during that period, and that the *establishment* was not situated in a CBPP infected *zone*;~~

e) AND EITHER:

i) have not been vaccinated against CBPP;

OR

ii) were vaccinated ~~using a vaccine complying with the standards described in the *Terrestrial Manual*~~ not more than four months prior to collection; in this case, the condition laid down in point (~~b~~c) above is not required;

2) the oocytes were fertilised with semen meeting the conditions of Articles 11.5.9. ~~and~~ or 11.5.10.;

3) the oocytes or embryos were collected, processed and stored in accordance with Chapters 4.8., 4.9. and 4.10., as relevant.

Article 11.5.13.

~~Introduction to surveillance~~ General principles of surveillance

Surveillance aims at identifying *infection* in bovines. Articles 11.5.13. ~~to~~ and 11.5.~~17~~14. define the principles and provide a guide for the *surveillance* of CBPP in accordance with Chapter 1.4. notably point ~~2(b)~~ 3 of Article 1.4.3. concerning quality assurance. They are applicable to Member Countries seeking establishment ~~of freedom from CBPP. Guidance is provided for Member Countries seeking reestablishment~~, maintenance or recovery of freedom from CBPP ~~for~~ at the ~~entire~~ country, ~~or for a~~ *zone*~~, following an *outbreak*~~ or *compartment* level or seeking endorsement by WOAH of their *official control programme* for CBPP, in accordance with Article 11.5.13. ~~*Surveillance* aims at identifying *infection* in bovines susceptible species as indicated in Article 11.5.1.~~

1. Early detection

A *surveillance* system for early detection should be in place in accordance with Chapter 1.4. under the responsibility of the *Veterinary Authority*.

2. Demonstration of freedom

The impact and epidemiology of CBPP differ widely in different regions of the world and therefore it is impossible to provide specific recommendations for all situations. *Surveillance* strategies employed for demonstrating freedom from CBPP at an acceptable level of confidence should be adapted to the local situation. It is incumbent upon the applicant Member Country to submit a dossier to WOAH in support of its application that not only explains the epidemiology of CBPP in the region concerned but also demonstrates how all the risk factors are managed. This should include provision of science ~~scientifically~~ based supporting data. Therefore, ~~T~~there is ~~therefore~~ considerable latitude available to Member Countries to provide a well-reasoned argument to prove that the absence of ~~CBPP~~ *infection* with *Mmm* is assured at an acceptable level of confidence.

Surveillance for CBPP should be in the form of a continuing programme designed to establish that the whole territory or part of it is free from CBPP ~~*infection*~~.

A Member Country wishing to substantiate freedom from CBPP should demonstrate absence of *infection* with *Mmm* in bovines.

~~Article 11.5.14.~~

~~General conditions and methods for surveillance~~

3. WOAH endorsed official control programme

Surveillance strategies employed in support of a WOAH endorsed *official control programme* should demonstrate evidence of the effectiveness of any control strategy used and of the ability to rapidly detect all *outbreaks* of *infection* with *Mmm* ~~CBPP~~.

Considerable latitude exists for Member Countries to design and implement *surveillance* to establish that the whole country or a *zone* is free from CBPP and to understand the epidemiology of CBPP as part of the *official control programme*.

The Member Country should submit an application ~~dossier~~ to WOAH ~~in~~ supported by a dossier ~~of its application~~ that explains the epidemiology of CBPP in the region concerned and demonstrates how all the risk factors are identified and managed. This should include provision of ~~scientifically~~ science-based supporting data.

The entire investigative process should be documented within the *surveillance* programme. All the epidemiological information should be substantiated, and the results should be collated in the final report.

~~The entire investigative process should be documented within the *surveillance* system in accordance with Chapter 1.4. should be under the responsibility of the Veterinary Authority. A procedure should be in place for the rapid collection and transport of samples from suspect cases of CBPP to a laboratory for CBPP diagnoses.~~

~~2)~~ ~~The CBPP *surveillance* programme.should:~~

~~a)~~ ~~include an early warning system throughout the production, marketing and processing chain for reporting suspicious cases. Farmers and workers (such as community animal health workers) who have day-to-day contact with livestock, *meat* inspectors as well as *laboratory* diagnosticians, should report promptly any suspicion of CBPP. They should be integrated directly or indirectly (e.g. through private *veterinarians* or *veterinary para-professionals*) into the *surveillance* system. All suspect cases of CBPP should be investigated immediately. Where suspicion cannot be resolved by the epidemiological and clinical investigation, samples should be taken and submitted to a *laboratory*. This requires that sampling kits information should be substantiated, and other equipment are available for those responsible for *surveillance*. Personnel responsible for *surveillance* should be able to call for assistance from a team with expertise in CBPP diagnosis and control;~~

~~b)~~ ~~implement, when relevant, regular and frequent clinical inspection and testing of high risk groups of *animals*, such as those adjacent to a CBPP infected country or *zone* (for example, areas of transhumant production systems);~~

~~c)~~ ~~take into consideration additional factors such as animal movement, different production systems, geographical and socio-economic factors that may influence the risk of *disease* occurrence.~~

~~An effective *surveillance* system will periodically identify suspicious cases that require follow-up and investigation to confirm or exclude that the cause of the condition is CBPP. The rate at which such suspicious cases are likely to occur will differ between epidemiological situations and cannot therefore be predicted reliably. Applications for freedom from CBPP *infection* should, in consequence, provide details of the occurrence of suspicious cases and how they were investigated and dealt with. This should include the results of *laboratory* testing and the control measures to which the *animals* concerned were subjected during the investigation (quarantine, movement stand-still orders, etc.). should be collated in the final report.~~

~~Article 11.5.15.~~

4. Surveillance strategies

~~1.~~ ~~Introduction~~

~~The target population for *surveillance* aimed at identifying *disease* and *infection* should cover all the susceptible species (*Bos taurus*, *B. indicus*, *B. grunniens* and *Bubalusbubalis*) within the country or *zone*.~~

~~Given the limitations of the diagnostic tools available,~~ ~~t~~The interpretation of serological *surveillance* results should be at the *herd* level rather than at the individual animal level.

Randomised *surveillance* may not be the preferred approach given the epidemiology of the disease (usually uneven distribution and potential for occult foci of *infection* in small populations) and the limited sensitivity and specificity of currently available tests. ~~Targeted~~ Risk-based *surveillance* (e.g. based on the increased likelihood of *infection* in particular localities or species, focusing on *slaughter* findings, and active clinical *surveillance*) may be the most appropriate strategy. The applicant Member Country should justify the *surveillance* strategy chosen as adequate to detect the presence of ~~CBPP~~ *infection* with *Mmm* in accordance with Chapter 1.4. ~~and the epidemiological situation.~~

~~Targeted~~ Risk-based *surveillance* may involve testing of the entire target subpopulation or a sample from it. In the latter case the sampling strategy should incorporate an epidemiologically appropriate design prevalence. The sample size selected for testing should be large enough to detect *infection* if it were to occur at a predetermined minimum rate. The sample size and expected disease prevalence determine the level of confidence in the results of the survey. The applicant Member Country should justify the choice of design prevalence and confidence level based on the objectives of *surveillance* and the epidemiological situation, in accordance with Chapter 1.4. Selection of the design prevalence in particular should be clearly based on the prevailing or historical epidemiological situation.

Regular and frequent clinical inspection and testing of high-risk groups of *animals*, such as those adjacent to a country or *zone* infected with *Mmm* (for example, areas of transhumant production systems), should be implemented when relevant.

Additional factors such as animal movement, different production systems, geographical and socio-economic factors that may influence the risk of disease introduction and occurrence should be taken into consideration.

Irrespective of the survey design selected, the sensitivity and specificity of the diagnostic tests employed are key factors in the design, sample size determination and interpretation of the results obtained. ~~Ideally, the sensitivity and specificity of the tests used should be validated.~~

5. Follow-up of suspected cases and interpretation of results

An effective *surveillance* system will identify suspected *cases* that require immediate follow-up and investigation to confirm or exclude that the cause of the condition is an *infection* with *Mmm*. Samples should be taken and submitted for diagnostic testing, unless the suspected *case* can be confirmed or ruled out by epidemiological and clinical investigation. Details of the occurrence of suspected *cases* and how they were investigated and dealt with should be documented. This should include the results of diagnostic testing and the measures applied to the animals concerned during the investigation.

~~Irrespective of~~ ~~t~~The surveillance ~~system employed,the~~ design should anticipate the occurrence of false positive *laboratory* results ~~reactions~~. If the characteristics of the testing system are known, the rate at which these false positives are likely to occur can be calculated in advance. There should be an effective procedure for following-up positives to ~~ultimately~~ determine, with a high level of confidence, whether or not they are indicative of *infection* ~~or not~~. This should involve ~~follow-up with~~ supplementary tests~~, clinical~~ and follow-up investigation ~~and post-mortem examination in~~ to collect diagnostic material from the original ~~sampling~~ *epidemiological unit* ~~as well as~~ and *herds* which may be epidemiologically linked to it.

Laboratory results should be examined in the context of the epidemiological situation.

Article 11.5.14.

Methods of surveillance

1. Clinical surveillance

Clinical *surveillance* aims at detecting clinical signs of CBPP in a *herd* by ~~close~~ a thorough physical examination of ~~susceptible *animals*~~ bovines. Clinical inspection is an important component of CBPP *surveillance* contributing to reaching the desired level of confidence of detection of disease if a sufficiently large number of ~~clinically susceptible *animals*~~ bovines ~~is~~ are examined.

~~Clinical *surveillance* and *laboratory* testing should always be applied in series to clarify the status of CBPP suspects detected by either of these complementary diagnostic approaches. *Laboratory* testing and post-mortem examination may contribute to confirm clinical suspicion, while clinical *surveillance* may contribute to confirmation of positive serology. Any sampling unit within which suspicious *animals* are detected should be classified as infected until contrary evidence is produced.~~

~~3~~2. Pathological surveillance

Systematic pathological *surveillance* for CBPP is the most effective approach and should be conducted at ~~*slaughterhouses/abattoirs* and other~~ *slaughter* ~~facilities~~. Suspect pathological findings should be confirmed by agent identification. Training courses for *slaughter* personnel and *meat* inspectors are highly recommended.

~~4.~~ ~~Serological~~ 3. Laboratory testing

Serological *surveillance* is not the preferred strategy for CBPP. However, in the framework of epidemiological investigations, serological testing may be used.

The limitations of available serological tests for CBPP make the interpretation of results difficult and useful only at the *herd* level. Positive findings should be followed up by clinical and pathological investigations and agent identification.

Clustering of seropositive reactions should be expected in CBPP ~~*infections*~~ and is usually accompanied by clinical signs. As clustering may signal field strain *infection*, the investigation of all instances should be incorporated into the *surveillance* strategy.

Following the identification of a CBPP infected *herd*, contact *herds* should be tested serologically. Repeated testing may be necessary to reach an acceptable level of confidence in *herd* classification.

~~5. Agent surveillance~~

Agent *surveillance* should be conducted to ~~follow up and~~ confirm or exclude *infection* with *Mmm*. ~~suspect *cases*. Isolates should be typed to confirm *Mmm*SC.~~

~~Article 11.5.16.~~

~~Countries or zones applying for recognition of freedom from CBPP~~

~~In addition to the general conditions described in this chapter, a Member Country applying for recognition of CBPP freedom for the country or a *zone* should provide evidence for the existence of an effective *surveillance* programme. The strategy and design of the *surveillance* programme depend on the prevailing epidemiological circumstances and should be planned and implemented in accordance with general conditions and methods in this chapter, to demonstrate absence of CBPP *infection*, during the preceding 24 months in susceptible populations. This requires the support of a national or other *laboratory* able to undertake identification of CBPP *infection*.~~

~~Article 11.5.17.~~

~~Countries or zones re-applying for recognition of freedom from CBPP following an outbreak~~

~~In addition to the general conditions described in this chapter, a Member Country re-applying for recognition of country or *zone* freedom from CBPP should show evidence of an active *surveillance* programme for CBPP, following the recommendations of this chapter.~~

~~Two strategies are recognised by WOAH in a programme to eradicate CBPP *infection* following an *outbreak*:~~

~~1) *slaughter* of all clinically affected and in contact susceptible animals;~~

~~2) *vaccination* used without subsequent *slaughter* of vaccinated animals.~~

~~The time periods before which an application can be made for re-instatement of freedom from CBPP depends on which of these alternatives is followed. The time periods are prescribed in Article 11.5.4.~~

Article 11.5.15~~18~~.

WOAH endorsed official control programme for CBPP

~~The overall objective of a WOAH endorsed *official control programme* for CBPP is for Member Countries to progressively improve their situation and eventually attain CBPP free status. The *official control programme* should be applicable to the entire country even if certain measures are directed towards defined subpopulations.~~

A Member Country~~ies~~ may, on a voluntary basis, apply for endorsement of ~~their~~ its *official control programme* for CBPP in accordance with Chapter 1.6., when ~~they have~~ it has implemented measures in accordance with this article.

For an *official control programme* for CBPP to be endorsed by WOAH, the Member Country should provide a detailed *official control programme* for the control and eventual eradication of CBPP in the country or *zone*. This document should address and provide documented evidence on the following:

1) epidemiology:

   a) the detailed epidemiological situation of CBPP in the country, highlighting the current knowledge and gaps;

   b) the main production systems and movement patterns of ~~susceptible animals~~ bovines and their products within and into the country and, where applicable, the specific *zone*;

2) surveillance and diagnostic capabilities:

   a) CBPP *surveillance* in place, in accordance with Chapter 1.4. and Articles 11.5.13. and 11.5.14.;

   b) diagnostic capability and procedures, including regular submission of samples to a laboratory that performs diagnostic testing and further characterisation of strains in accordance with the *Terrestrial Manual* including procedures to isolate and identify *Mmm*;

3) vaccination (if practised as part of the *official control programme* for CBPP):

   a) *vaccination* is in accordance with Chapter 4.18. and compulsory in the target *population*;

   b) detailed information on *vaccination* campaigns, in particular:

      i) the strategy that is adopted for the *vaccination* campaign;

      ii) target *populations* for *vaccination*;

      iii) target geographical area for *vaccination*;

      iv) monitoring of *vaccination* coverage, including serological monitoring of population immunity;

      v) the strategy to identify vaccinated animals;

      vi) technical specification of the vaccines used and description of the vaccine licensing procedures in place;

      vii) use of vaccines fully compliant with the standards and methods described in the *Terrestrial Manual*;

      viii) the proposed strategy and work plan including the timeline for transition to the cessation of *vaccination*;

4) the measures implemented to prevent the introduction of the pathogenic agent and to ensure the rapid detection of all CBPP *outbreaks*;

5) an emergency preparedness plan and an emergency response plan to be implemented in case of CBPP *outbreaks*;

6) work plan and timelines of the *official control programme*;

7) performance indicators for assessing the effectiveness of the control measures to be implemented;

8) monitoring, evaluation and review of the *official control programme* to demonstrate the effectiveness of the strategies.

1) have a record of regular and prompt animal disease reporting in accordance with the requirements in Chapter 1.1.;

2) submit documented evidence of the capacity of *Veterinary Services* to control CBPP; this evidence can be provided by countries following the WOAH PVS Pathway;

3) submit a detailed plan of the programme to control and eventually eradicate CBPP in the country or *zone* including:

   a) the timeline;

   b) the performance indicators for assessing the efficacy of the control measures to be implemented;

   c) submit documentation indicating that the *official control programme* for CBPP has been implemented and is applicable to the entire territory;

4) submit a dossier on the epidemiology of CBPP in the country describing the following:

   a) the general epidemiology in the country highlighting the current knowledge and gaps;

   b) the measures to prevent introduction of *infection*, the rapid detection of, and response to, all CBPP *outbreaks* in order to reduce the incidence of CBPP *outbreaks* and to eliminate CBPP in at least one *zone* in the country;

   c) the main livestock production systems and movement patterns of CBPP susceptible animals and their products within and into the country;

5) submit evidence that CBPP *surveillance* is in place,

   a) taking into account provisions in Chapter 1.4. and the provisions on *surveillance* of this chapter;

   b) have diagnostic capability and procedures, including regular submission of samples to a *laboratory* that carries out diagnosis and further characterisation of strains in accordance with the *Terrestrial Manual* including procedures to isolate and identify *M. mycoides* subsp. *mycoides* SC as opposed to *M. mycoides* subsp. *mycoides* LC;

6) where *vaccination* is practised as a part of the *official control programme* for CBPP, provide:

   a) evidence (such as copies of legislation) that *vaccination* of selected populations is compulsory;

   b) detailed information on *vaccination* campaigns, in particular on:

      i) target populations for *vaccination*;

      ii) monitoring of *vaccination* coverage;

      iii) technical specification of the vaccines used and description of the licensing procedures in place;

      iv) the proposed timeline and strategy for the cessation of *vaccination*;

7) provide an emergency preparedness and contingency response plan to be implemented in case of CBPP *outbreaks*.

The Member Country's *official control programme* for CBPP will be included in the list of programmes endorsed by WOAH only after the submitted evidence has been accepted by WOAH.

The country will be included in the list of countries having a WOAH endorsed *official control programme* for CBPP in accordance with Chapter 1.6.

Retention on the list requires an annual update on the progress of the *official control programme* and information on significant changes concerning the points above. Changes in the epidemiological situation and other significant events should be reported to WOAH in accordance with the requirements in Chapter 1.1.

~~WOAH may withdraw the endorsement of the *official control programme* if there is evidence of:~~

- ~~non-compliance with the timelines or performance indicators of the programme; or~~
- ~~significant problems with the performance of the *Veterinary Services*; or~~
- ~~an increase in the incidence of CBPP that cannot be addressed by the programme.~~

Reference	Comment	TAHSC response
11.X._1	**Category** (general) A Member generally supports the proposed changes to this chapter and has two comments to add.	Noted.
11.X._2	**Category** (general) A Member cannot support the currently proposed case definition and seeks its re-evaluation. Important comments are inserted in the text below.	Noted.

CHAPTER 11.X.

INFECTION WITH BOVINE PESTIVIRUSES (BOVINE VIRAL DIARRHOEA)

Article 11.X.1.

General provisions

For the purposes of the *Terrestrial Code*, bovine viral diarrhoea is defined as an *infection* of bovines (*Bos taurus*, *B. indicus* and *Bubalus bubalis*) ~~(herafter 'susceptible animals')~~ with bovine viral diarrhoea virus type 1 (pestivirus A), type 2 (pestivirus B), ~~and~~ or type 3 (pestivirus H) (here~~in~~after 'bovine pestiviruses').

Reference	Comment	TAHSC response
11.X.1._1	**Category** (editorial) For the purposes of the *Terrestrial Code*, bovine viral diarrhoea is defined as an *infection* of bovines (*Bos taurus*, *B. indicus* and *Bubalus bubalis*) ~~(herafter 'susceptible animals')~~ with bovine viral diarrhoea virus type 1 (~~pestivirus A~~ *Pestivirus bovis*), type 2 (~~pestivirus B~~ *Pestivirus tauri*), ~~and~~ or type 3 (~~pestivirus H~~ *Pestivirus brazilense*) (here~~in~~after 'bovine pestiviruses'). **Rationale** In November 2022, the International Committee on Taxonomy of Viruses (ICTV) revised the species names for bovine pestiviruses by adopting the binomial species names. This is a result of the March 2021 International Code of Virus Classification and Nomenclature (ICVCN) publication, the ICTV ratified TaxoProp 2018.001G.R.binomial_species, which requires all species names to follow a new codified rule: "A species name shall consist of only two distinct word components separated by a space. The first word component shall begin with a capital letter and be identical in spelling to the name of the genus to which the species belongs. The second word component shall not contain any suffixes specific for taxa of higher ranks. The entire species name (both word components) shall be italicized." **Supporting evidence** https://ictv.global/taxonomy/taxondetails?taxnode_id=202203153&taxon_name=Pestivirus%20bovis	Agreed.

11.X.1._2	**Category** (editorial) The taxonomy of pestiviruses was revised by the International Committee on Taxonomy of Viruses (ICTV) and should be updated accordingly (Genus: Pestivirus | ICTV).	Agreed.
11.X.1._3	**Category** (addition) For the purposes of the *Terrestrial Code*, bovine viral diarrhoea is defined as an *infection* of bovines (*Bos taurus*, *B. indicus* and *Bubalus bubalis*) ~~(herafter 'susceptible animals')~~ with bovine viral diarrhoea virus type 1 (also known as *Pestivirus bovis* or pestivirus A), type 2 (also known as *Pestivirus tauri* or pestivirus B), ~~and~~ or type 3 (known as *Pestivirus brazilense* or pestivirus H or Hobi-like pestivirus) (here~~in~~after 'bovine pestiviruses'). **Rationale** The description of the virus should be the same in the case definition of the code and in the updated manual chapter. The manual has been updated to include ICTV official designation (Simmonds etal., 2017). It is important to be consistent and take the recommendation of the recent scientific literatures (e.g. postel ., etal 2021) to avoid confusion with the use of different description of the same BVDV type. **Supporting evidence** Simmonds P, Becher P, Bukh J, Gould EA, Meyers G, Monath T, Muerhoff S, Pletnev A, Rico-Hesse R, Smith DB, Stapleton JT, Ictv Report Consortium. ICTV Virus Taxonomy Profile: Flaviviridae. J Gen Virol. 2017 Jan;98(1):2-3. doi: 10.1099/jgv.0.000672. PMID: 28218572; PMCID: PMC5370391. Postel, A.; Smith, D.B.; Becher, P. Proposed Update to the Taxonomy of Pestiviruses: Eight Additional Species within the Genus Pestivirus, Family Flaviviridae. Viruses 2021, 13, 1542. https://doi.org/10.3390/v13081542 bovine viral diarrhoea virus type 1 (pestivirus A), type 2 (pestivirus B), type 3 (pestivirus H) Postel, A.; Smith, D.B.; Becher, P. Proposed Update to the Taxonomy of Pestiviruses: Eight Additional Species within the Genus Pestivirus, Family Flaviviridae. Viruses 2021, 13, 1542. https://doi.org/10.3390/v13081542	Agreed.
11.X.1._4	**Category** (editorial) For the purposes of the *Terrestrial Code*, bovine viral diarrhoea is defined as an *infection* of bovines (*Bos taurus*, *B. indicus* and *Bubalus bubalis*) ~~(herafter 'susceptible animals')~~ with bovine viral diarrhoea virus type 1 (pestivirus bovis~~A~~), type 2 (pestivirus tauri~~B~~), ~~and~~ or type 3 (pestivirus brazilense~~H~~) (here~~in~~after 'bovine pestiviruses'). **Rationale** The taxonomy of pestiviruses was revised by the International Committee on Taxonomy of Viruses (ICTV) and should be updated accordingly.	Agreed.

The following defines the occurrence of *infection* with bovine pestiviruses:

1) bovine pestivirus, excluding vaccine strains, has been isolated and identified as such in a sample from a ~~susceptible animal~~ bovine; or

2) antigen or ~~ribo~~nucleic acid specific to bovine pestivirus, excluding vaccine strains, has been detected in a sample from a ~~susceptible animal~~ bovine.

Reference	Comment	TAHSC response
11.X.1._5	**Category** (addition) 3) antibodies to bovine pestiviruses, that are not a consequence of vaccination, have been detected in a sample from a susceptible animal showing clinical signs consistent with bovine viral diarrhoea, or epidemiologically linked to a confirmed or suspected case of bovine viral diarrhoea. **Rationale and comments** The Member thanks the Code Commission for considering the case definition in the September and February 2023 meetings as well as in the September 2021 meeting. The Member takes note of the expert opinion reported in these reports. However, this case definition would not allow to consider as an outbreak the case when animals (maybe even sentinel animals) seroconverted to BVD. Bearing in mind the more labour intensive surveillance required to identify antigen or nucleic acid, having in place serosurveillance appears fully justified. The Member therefore needs to reiterate its earlier comment. The Member suggests adding a point 3. In addition, to make the Article work correctly, we should add "; or" at the end of point 2 so that the case definition is met when fulfilling either point 1) or 2) or 3).	Did not agree, the comment was addressed previously in February 2024 report. In agreement with the SCAD and the BSC, the Commission highlighted that as persistently infected animals do not usually have antibodies or clinical signs, and recovered or vaccinated seropositive animals are unlikely to be infectious, the presence of antibodies is not suitable for confirming a case of bovine viral diarrhoea.

Standards for diagnosis ~~diagnostic tests~~ and vaccines, as well as information on the epidemiology, are described in the *Terrestrial Manual*.

Reference	Comment	TAHSC response
12.1._1	**Category** (general) A Member supports the proposed changes to this chapter.	Noted.
12.1._2	**Category** (general) A Member thanks the Code Commission for this revision and supports the proposed changes to this chapter.	Noted.

CHAPTER 12.1.

INFECTION WITH AFRICAN HORSE SICKNESS VIRUS

Article 12.1.1.

General provisions

For the purposes of the *Terrestrial Code*, African horse sickness (AHS) is defined as an *infection* of equids with African horse sickness virus (AHSV).

The following defines the occurrence of an *infection* with AHSV:

1) AHSV has been isolated and identified as such in a sample from an equid ~~or a product derived from that equid~~; or

2) ~~antigen or ribo~~nucleic acid specific to AHSV has been ~~identified~~ detected in a sample~~s~~ from an equid showing clinical signs or pathological lesions consistent with AHS, or epidemiologically linked to a confirmed or suspected ~~or confirmed~~ *case*; or

3) ~~serological evidence of active *infection* with AHSV by detection of~~ seroconversion ~~due to recent exposure to~~ ~~with production of antibodies against structural or nonstructural proteins of AHSV~~, ~~that are~~ which is not ~~a~~ the consequence of *vaccination*, ~~have~~ has been ~~identified~~ detected in a ~~paired samples from~~ an equid ~~that either~~ show~~s~~ing clinical signs or pathological lesions consistent with AHS, or ~~is~~ epidemiologically linked to a confirmed or suspected ~~or confirmed~~ *case*.

For the purposes of the *Terrestrial Code*, the *infective period* for AHS is 40 days~~ for domestic horses. Although critical information is lacking for some species, this chapter applies to all Equidae.~~.

All countries or *zones* adjacent to a country or *zone* not having free status should determine their AHSV status from an ongoing *surveillance* programme. ~~Throughout the chapter, *surveillance* is in all cases understood as being conducted as described in Articles 12.1.11. to 12.1.13.~~

Standards for diagnosis ~~diagnostic tests~~ and vaccines, as well as information on the epidemiology, are described in the *Terrestrial Manual*.

Article 12.1.1bis.

Safe commodities

When authorising the importation or transit of the following *commodities*, *Veterinary Authorities* should not require any AHS-related conditions regardless of the *animal health status* of the *exporting country* or *zone*:

1) *milk* and *milk products*;

2) *meat* and *meat products;*

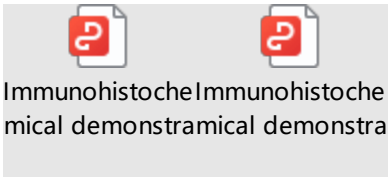
3) hides and skins;

4) hooves;

5) gelatine and collagen;

6) sterile filtered horse serum;

Reference	Comment	TAHSC response
12.1.1._1	**Category** (deletion) ~~2) *meat* and *meat products;*~~ **Rationale** It is noted in the Code Commission Report that evidence of infection with African horse sickness virus has been demonstrated in canids by ingestion of infected horse meat. The epidemiological impact of canine infection with AHSV is currently not well known. There remains potential that infected meat could play a role in virus transmission via infected canines. PH inactivation is considered insufficient to assure that transmission cannot occur. References: O'Dell et al; 2018; Clinical presentation and pathology of suspected vector transmitted African horse sickness in South African domestic dogs from 2006 to 2017; The Veterinary Record; 182 (25); 715. doi: 10.1136/vr.104611 Oura; 2018; A possible role for domestic dogs in the spread of African horse sickness virus; The Veterinary Record; 182 (25); 713-714. doi: 10.1136/vr.k2641	Did not agree, as meat and meat products meet the criteria for a safe commodity for this vector borne disease of equids. The Commission asked the secretariate to investigate the potential role of dogs in the epidemiology of the disease.
12.1.1._2	**Category** (deletion) ~~3) hides and skins;~~ **Rationale:** A Member doesn't recommend to take the hides and skins as safe commodities for African Horse Sickness. The reasons are as blow: 1.African Horse Sickness virus may be carried in the skin. It has been found that African Horse Sickness virus can exist in the capillaries of the skin [1,2]. 2.African Horse Sickness virus is difficult to kill. The virus is relatively heat-resistant and has strong resistance to the environment. It can survive for 37 days at 37℃. If the skin is used to make food, like donkey hide glue, a traditional Member's food, it can't be processed with acid or alkali, but is simply processed with salt. The virus can't be effectively killed in such conditions. 3.African Horse Sickness virus is at high risk of spreading. After importing the skin containing the pathogen, the virus can	Did not agree, as they meet the criteria for a safe commodity. Refer to the September 2023 Code Commission report.

	be transmitted by insect vector or dogs at the skin processing plant, causing high risk of spreading. [1]Wohlsein, P., Pohlenz, J. F., Davidson, F. L., Salt, J. S., & Hamblin, C. (1997). Immunohistochemical demonstration of African horse sickness viral antigen in formalin-fixed equine tissues. Veterinary pathology, 34(6), 568–574. [2]Wohlsein, P., Pohlenz, J. F., Salt, J. S., & Hamblin, C. (1998). Immunohistochemical demonstration of African horse sickness viral antigen in tissues of experimentally infected equines. Archives of virology. Supplementum, 14, 57–65. **Supporting evidence:**  Immunohistoche mical demonstra Immunohistoche mical demonstra	
12.1.1._3	**Category** (addition) 7) Protein meals and rendered fats **Rationale** Since the sole known transmission vectors of African Horse Sickness Virus (AHSV) are biological vectors, specifically *Culicoides spp* and, eventually, mosquitoes *(Culex, Anopheles*, and *Aedes spp*), ticks (*Hyalomma, Rhipicephalus*), and possibly biting flies (*Stomoxys* and *Tabanus*), the International Ogranisation understands that there is no risk of transboundary transmission of AHSV through rendered products. This understanding is supported by the scientific literature, which indicates that AHSV is not transmitted orally. Having said that, the International Organisation requests the Code Commission to include all animal rendered products (protein meals and rendered fats) in the safe commodity list of the AHSV Chapter.	Agreed, as protein meal is defined in the Glossary, the protocols for production of protein meal and rendered fats are standardized and AHS is a vector borne disease of equids.

Article 12.1.2.

~~AHS free c~~Country or zone free from AHS

~~1)~~ A country or *zone* may be considered free from AHS when the relevant provisions in point 2(a) of Article 1.4.6. have been complied with, and when within the ~~proposed free~~ country or *zone*: ~~*infection* with AHSV is notifiable in the whole country, systematic *vaccination* is prohibited, importation of equids and their semen, oocytes or embryos are carried out in accordance with this chapter, and either:~~

1) for at least the past 24 months:

a) the *Veterinary Authority* has current knowledge of, and authority over, all domestic and *captive wild* equids in the country or *zone;*

b) the *Veterinary Authority* has current knowledge of the distribution, habitat and indication of disease occurrence through passive *surveillance* of *wild* and *feral* equids in the country or *zone;*

c) ~~either:~~

i) there has been no *case* of *infection* with AHSV ~~and the country or *zone* is not adjacent to an infected country or *zone*; or~~

~~ii) a *surveillance* programme has demonstrated no evidence of *Culicoides* in accordance with Chapter 1.5.;~~

d) appropriate *surveillance* has been implemented in accordance with:

i) point 2(b) of Article 1.4.6. where historical freedom can be demonstrated; or

ii) Articles 12.1.11. to 12.1.13. where historical freedom cannot be demonstrated; ~~or~~

~~iii) Chapter 1.5. where a *surveillance* programme has demonstrated no evidence of *Culicoides*.~~

e) if adjacent to an infected country or *zone*, includes an area in which *surveillance* is conducted in accordance with Articles 12.1.11. to 12.1.13.;

f) measures to prevent the introduction of the *infection* have been in place: in particular, the importations or movements of *commodities* into the country or zone have been carried out in accordance with this chapter and other relevant chapters of the *Terrestrial Code*;

2) no systematic *vaccination* against AHS has been carried out for at least the past 12 months.

~~a) historical freedom as described in Chapter 1.4. has demonstrated no evidence of AHSV in the country or *zone*; or~~

~~b) the country or *zone* has not reported any *case* of AHS for at least two years and is not adjacent to an infected country or *zone*; or~~

~~c) a *surveillance* programme has demonstrated no evidence of AHSV in the country or *zone* for at least two years; or~~

~~d) the country or *zone* has not reported any *case* of AHS for at least 40 days and a *surveillance* programme has demonstrated no evidence of *Culicoides* for at least two years in the country or *zone*.~~

~~2) An AHS free country or *zone* which is adjacent to an infected country or *zone* should include a *zone* in which *surveillance* is conducted in accordance with Articles 12.1.11. to 12.1.13., as relevant.~~

~~3) An AHS free country or *zone* will not lose its free status through the importation of seropositive or vaccinated equids and their semen, oocytes or embryos from infected countries or *zones*, provided these imports are carried out in accordance with this chapter.~~

~~4) To qualify for inclusion in the list of AHS free countries or *zones*, a Member Country should:~~

~~a) have a record of regular and prompt animal disease reporting;~~

~~b) send a declaration to the OIE stating:~~

~~i) the section under point 1) on which the application is based;~~

~~ii) no routine *vaccination* against AHS has been carried out during the past year in the country or *zone*;~~

~~iii) equids are imported in accordance with this chapter;~~

~~c) supply documented evidence that:~~

~~i) *surveillance* in accordance with Articles 12.1.11. to 12.1.13. is applied, unless historically free in accordance with Article 1.4.6.;~~

~~ii) regulatory measures for the early detection, prevention and control of *infection* with AHSV have been implemented.~~

~~5) The Member Country will be included in the list only after the submitted evidence has been accepted by the OIE.~~

The country or *zone* will be included in the list of countries or *zones* free from AHS in accordance with Chapter 1.6.

Retention on the list requires annual reconfirmation of compliance with all points above and ~~relevant~~ provisions under point 4 of Article 1.4.6. ~~that the information in points 4 b) ii) and iii) and 4 c) above be annually re-submitted and~~ Documented evidence should be resubmitted annually for point 1 above. Any changes in the epidemiological situation or other significant events should be ~~reported~~ notified to WOAH in accordance with ~~the requirements in~~ Chapter 1.1.~~, and in particular, formally state that:~~

~~a) there has been no *outbreak* of AHS during the past year in the country or *zone*;~~

~~b) no evidence of *infection* with AHSV has been found during the past year in the country or *zone*.~~

Article 12.1.3.

~~AHS infected c~~Country or zone infected with AHSV

A country or *zone* shall be considered as infected with AHSV ~~For the purposes of this chapter, an AHS infected country or *zone* is one that does not fulfil~~ when the requirements for acceptance as a country or *zone* free from AHS are not fulfilled ~~to qualify as AHS free~~.

Article 12.1.4.

Establishment of a containment zone within a ~~an AHS free~~ country or zone previously free from AHS

In the event of ~~limited~~ *outbreaks* of AHS within a~~n AHS free~~ country or *zone* previously free from AHS, including within a *protection zone*, a ~~single~~ *containment zone*, which includes all epidemiologically linked *outbreaks*, ~~can~~ may be established, in accordance with Article 4.4.7., ~~for the purpose of~~ to minimise~~ing~~ the impact on the ~~entire~~ rest of the country or *zone*. ~~Such a *zone* should include all *cases* and can be established within a *protection zone*.~~

Reference	Comment	TAHSC response
12.1.4._1	**Category** (change) In the event of ~~limited~~ limited *outbreaks* of AHS within a~~n AHS free~~ country or *zone* previously free from AHS, including within a *protection zone*, a ~~single~~ single *containment zone*, which includes all epidemiologically linked *outbreaks*, ~~can~~ may be established, in accordance with Article 4.4.7., ~~for the purpose of~~ to minimise~~ing~~ the impact on the ~~entire~~ rest of the country or *zone*. ~~Such a *zone* should include all *cases* and can be established within a *protection zone*.~~ **Rationale** When there is a large-scale outbreak of African horse fever or a multi-point outbreak, it's not recommended to establish a control zone, and it's recommended to cancel the disease-free status of the member. The Member's free status can only be maintained through the establishment of a containment zone if the outbreak is limited in scope.	Did not agree, and referred to past reports on harmonisation with other disease-specific chapters. Text was slightly amended for clarity.

For this to be achieved and for the Member Country to take full advantage of this process, the *Veterinary Authority* should ~~provide~~ submit as soon as possible to WOAH, in addition to the requirements of Article 4.4.7., ~~in support of the application,~~ documented evidence that:

1) the *outbreaks* have been contained ~~are limited~~ based on the following factors:

a) ~~immediately on suspicion, a rapid response has been implemented, including *notification* reporting, standstill of movements of equids and effective controls of the movements of equine *commodities* has been made~~on suspicion, a standstill has been imposed on the suspected *establishments* and effective controls on the movement of animals and other *commodities* are in place in the country or *zone*;

Reference	Comment	TAHSC response
12.1.4._2	**Category** (change) a) ~~immediately on suspicion, a rapid response has been implemented, including *notification* reporting, standstill of movements of equids and effective controls of the movements of equine *commodities* has been made~~on suspicion, a standstill has been imposed on the suspected *establishments* and effective controls on the movement of equids ~~animals~~ and ~~other~~ any equids-related *commodities* are in place in the country or *zone*; **Rationale** This article focuses on the appropriateness of using "animals and other commodities". The current consensus is that AHSV primarily infects equids (horses, donkeys, mules, and zebras). Although there are very few reports of dogs, elephants, and camels being infected with AHSV, there is a lack of follow-up studies, and there is no evidence that dogs, elephants, and camels infected with AHSV are transmissible to other animals. Therefore, the use of "animals and other commodities" here will increase the number of animals to be contained in AHS outbreaks and increase the workload and difficulty of outbreak control. It is proposed to change the "animals and other commodities" to "equids and any any equids-related commodities", which is a more precise terminology and will facilitate the accurate identification and elimination of infected animals and their associated commodities in the event of an AHS outbreak. **Supporting evidence** [1]Disease card: african horse sickness https://www.woah.org/app/uploads/2021/03/african-horse-sickness.pdf [2] Wilson A, Mellor PS, Szmaragd C, Mertens PP.2009. Adaptive strategies of African horse sickness virus to facilitate vector transmission. Vet Res 40:16. [3] Zientara S, Weyer CT, Lecollinet S.2015. African horse sickness. Rev Sci Tech 34:315-27. [4] Carpenter S, Mellor PS, Fall AG, Garros C, Venter GJ.2017. African Horse Sickness Virus: History, Transmission, and Current Status. Annu Rev Entomol 62:343-358.	Agreed.

b) the *infection* has been confirmed and notified in accordance with Chapter 1.1.;

c~~b~~) ~~standstill of movements of equids has been imposed, and effective controls on the movement of equids and their products specified in this chapter are in place~~on confirmation, the standstill and movement controls described in point ~~1~~(a) have been reinforced;

~~c) epidemiological investigation (trace-back, trace-forward) has been completed;~~

c~~d~~) ~~the *infection* has been confirmed and notified in accordance with Chapter 1.1;~~

de) epidemiological investigations ~~on~~ into the likely source of the *outbreak* have been carried out;

~~f) all *cases* have been shown to be epidemiologically linked;~~

eg) no new *cases* have been found in the *containment zone* within a minimum of two *infective periods* as defined in Article 12.1.1.;

~~2) the equids within the *containment zone* are clearly identifiable as belonging to the *containment zone*;~~

2) increased passive and targeted *surveillance* in accordance with Articles 12.1.11. to 12.1.13. in the rest of the country or *zone* has not detected any evidence of *infection*;

3) ~~animal health~~ measures are in place to effectively prevent the spread of AHSV *infection* to the rest of the country or *zone*, taking into consideration the establishment of a *protection zone* within the *containment zone*, the seasonal *vector* conditions and existing physical, geographical and ecological barriers;

4) ongoing *surveillance* in accordance with Articles 12.1.11. to 12.1.13. is in place in the *containment zone*.

~~The free status of the areas outside the *containment zone* is suspended while the *containment zone* is being established in accordance with points 1) to 5) above.~~ The free status of the areas ~~of~~ outside the *containment zone* is suspended while the *containment zone* is being established. The free status of these areas ~~outside the *containment zone*~~ may be reinstated irrespective of Article 12.1.5. once the *containment zone* has been approved ~~is recognised~~ by ~~the~~ WOAH as complying with points 1 to 4 above.

In the event of the recurrence of ~~AHSV~~ *infection* with AHSV in the *containment zone*, established in accordance with point 4(a) of Article 4.4.7., the approval of the *containment zone* is withdrawn and the ~~AHS~~ free status of the whole country or *zone* is suspended until the relevant requirements of Article 12.1.5. are fulfilled.

In the event of occurrence of *infection* with AHSV in the outer zone of a *containment zone* established in accordance with point 4(b) of Article 4.4.7., the approval of the *containment zone* is withdrawn and the free status of the whole country or *zone* is suspended until the relevant requirements of Article 12.1.5. are fulfilled.

The recovery of the ~~AHS~~ free status of the *containment zone* should follow Article 12.1.5.

Article 12.1.5.

Recovery of free status

~~To regain free status when an AHS *outbreak* occurs in a country or *zone* previously free, Article 12.1.2. applies, irrespective of whether emergency *vaccination* has been applied or not.~~

Should an *outbreak* of AHS occur in a previously free country or *zone*, its status may be recovered in accordance with Article 12.1.2., irrespective of whether emergency *vaccination* has been applied or not.

The AHS free status of the country or *zone* will be reinstated only after the submitted evidence has been accepted by ~~the~~ WOAH.

Article 12.1.6.

Recommendations for importation of equids from AHS free countries or zones

~~For equids~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the animals:

1) showed no clinical sign of AHS on the day of shipment;

2) have not been vaccinated against AHS within the last 40 days;

3) were kept in an AHS free country or *zone* since birth or for at least 40 days prior to shipment;

4) either:

   a) did not transit through an infected *zone* during transportation to the *place of shipment*; or

   b) were protected from *Culicoides* attacks at all times when transiting through an infected *zone*.

Article 12.1.7.

Recommendations for importation of equids from AHS infected countries or zones

~~For equids~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the animals:

1) showed no clinical sign of AHS on the day of shipment;

2) have not been vaccinated against AHS within the last 40 days;

3) were held in isolation in a *vector*-protected *establishment*:

   a) for a period of at least 28 days and a serological test to detect antibodies against ~~the~~ AHSV ~~group~~, was carried out with a negative result on a blood sample collected at least 28 days after introduction into the *vector*-protected *establishment*; or

   b) for a period of at least 40 days and serological tests to detect antibodies against AHSV were carried out with no significant increase in antibody titre on blood samples collected on two occasions, with an interval of not less than 21 days, the first sample being collected at least 7 days after introduction into the *vector*-protected *establishment*; or

   c) for a period of at least 14 days and a~~n agent identification~~ test for the ~~identification~~ detection of the agent was carried out with a negative result on a blood sample collected not less than 14 days after introduction into the *vector*-protected *establishment*; or

   d) for a period of at least 40 days and were vaccinated, at least 40 days before shipment, against all serotypes whose presence in the source population has been demonstrated through a *surveillance* programme in accordance with Articles 12.1.12. and 12.1.13., and were identified in the accompanying certification as having been vaccinated;

4) were protected from *Culicoides* attacks at all times during transportation (including transportation to and at the *place of shipment*).

Article 12.1.8.

Recommendations for the importation of equine semen

Veterinary Authorities of *importing countries* should require the presentation of an *international veterinary certificate* attesting that the donor animals:

1) showed no clinical sign of AHS on the day of collection of the semen and for the following 40 days;

2) had not been ~~immunised~~ vaccinated against AHS with a live attenuated vaccine within 40 days prior to the day of collection;

3) were either:

a) kept in an AHS free country or *zone* for at least 40 days before commencement of, and during collection of the semen; or

b) kept in an AHS free *vector*-protected *artificial insemination centre* throughout the collection period, and subjected to either:

i) a serological test to detect antibodies against ~~the~~ AHSV ~~group~~, carried out with a negative result on a blood sample collected at least 28 days and not more than 90 days after the last collection of semen; or

ii) ~~agent identification~~ tests for the ~~identification~~ detection of the agent carried out with negative results on blood samples collected at commencement and conclusion of, and at least every seven days, during semen collection for this consignment.

Article 12.1.9.

Recommendations for the importation of *in vivo* derived equine oocytes or embryos

Veterinary Authorities of *importing countries* should require the presentation of an *international veterinary certificate* attesting that:

1) the donor animals:

a) showed no clinical sign of AHS on the day of collection of the oocytes or embryos and for the following 40 days;

b) had not been ~~immunised~~ vaccinated against AHS with a live attenuated vaccine within 40 days prior to the day of collection;

c) were either:

i) kept in an AHS free country or *zone* for at least 40 days before commencement of, and during collection of the oocytes or embryos, or

ii) kept in an AHS free *vector*-protected *collection centre* throughout the collection period, and subjected to either:

– a serological test to detect antibodies against ~~the~~ AHSV ~~group~~ carried out with a negative result on a blood sample collected at least 28 days and not more than 90 days after the last collection of oocytes or embryos; or

– ~~agent identification~~ tests for the ~~identification~~ detection of the agent carried out with negative results on blood samples collected at commencement and conclusion of, and at least every seven days during oocytes or embryos collection for this consignment;

2) the embryos were collected, processed and stored in accordance with Chapters 4.8. and 4.10., as relevant;

3) the semen used to fertilise the oocytes complies at least with the requirements in Article 12.1.8.

Article 12.1.10.

Protecting animals from *Culicoides* attacks

1. Vector-protected establishment or facility

The *establishment* or facility should be approved by the *Veterinary Authority* and the means of protection should at least comprise the following:

a) appropriate physical barriers at entry and exit points, for example double-door entry-exit system;

b) openings of the building are *vector* screened with mesh of appropriate gauge impregnated regularly with an approved insecticide in accordance with the instructions of the manufacturer;

c) *vector surveillance* and control within and around the building;

d) measures to limit or eliminate breeding sites for *vectors* in the vicinity of the *establishment* or facility;

e) ~~S~~standard ~~O~~operating ~~P~~procedure, including description of back-up and alarm systems, for operation of the *establishment* or facility and transport of equids to the place of *loading*.

2. During transportation

When equids are transport~~inged~~ ~~equids~~ through AHS infected countries or *zones*, *Veterinary Authorities* should require that they are ~~strategies to~~ protected ~~animals~~ from *Culicoides* attacks ~~during transport~~, taking into account the local ecology of the *vector*.

a) Transport by ~~road~~ land

Potential *risk management* strategies include a combination of:

i) treating animals with chemical repellents prior to and during transportation, in sanitized *vehicles* treated with appropriate residual contact insecticide;

ii) *loading*, transporting and *unloading* animals at times of low *vector* activity (i.e. bright sunshine and low temperature);

iii) ensuring *vehicles* do not stop en route during dawn or dusk, or overnight, unless the *animals* are held behind insect-proof netting;

iv) darkening the interior of the *vehicle*, for example by covering the roof or sides of *vehicles* with shade cloth;

v) surveillance for *vectors* at common stopping and offloading points to gain information on seasonal variations;

vi) using historical, ongoing or modelling information on AHS to identify low-risk ports and transport routes.

b) Transport by air

Prior to *loading* the equids, the crates, *containers* or jet stalls are sprayed with an insecticide approved in the country of dispatch.

Crates, *containers* or jet stalls in which equids are being transported and the cargo hold of the aircraft should be sprayed with an approved insecticide when the doors have been closed and prior to take off. All possible insect harbourage should be treated. The spray containers should be retained for inspection on arrival.

In addition, during any stopover in countries or *zones* ~~not free from~~ infected with AHSV, prior to the opening of any aircraft door and until all doors are closed, netting of appropriate gauge impregnated with an approved insecticide should be placed over all crates, *containers* or jet stalls.

Article 12.1.11.

Introduction to surveillance

Articles 12.1.11. to 12.1.13. define the principles and provide guidance on *surveillance* for AHS, complementary to Chapter 1.4. and, for *vectors*, complementary to Chapter 1.5.

AHS is a *vector*-borne *infection* transmitted by ~~a limited number of~~ some species of *Culicoides* ~~insects~~. ~~Unlike the related bluetongue virus, AHSV is so far geographically restricted to sub Saharan Africa with periodic excursions into North Africa, southwest Europe, the Middle East and adjacent regions of Asia.~~ An important component of AHSV epidemiology is vectorial capacity which provides a measure of disease *risk* that incorporates *vector* competence, abundance, seasonal incidence, biting rates, survival rates and the extrinsic *incubation period*. ~~However, methods and tools for measuring some of these *vector* factors remain to be developed, particularly in a field context.~~

~~According to this chapter, a~~A Member Country demonstrating freedom from *infection* with AHSV for the entire country or a *zone* should provide evidence for the existence of an effective *surveillance* programme. The strategy and design of the *surveillance* programme will depend on the prevailing epidemiological circumstances and should be planned and implemented in accordance with general conditions and methods described in this chapter. This requires the support of a *laboratory* able to undertake identification of *infection* with AHSV through ~~the virus detection~~ tests for the detection of the agent and antibody detection tests.

Susceptible *captive wild*, *feral* and *wild* equine populations should be included in the *surveillance* programme.

The purpose of *surveillance* is to determine ~~if~~ whether a country or *zone* is free from AHS. *Surveillance* deals not only with the occurrence of clinical signs caused by AHSV, but also with evidence of *infection* with AHSV in the absence of clinical signs.

Article 12.1.12.

General conditions and methods for surveillance

1) A *surveillance* system should be under the responsibility of the *Veterinary Authority*. In particular the following should be in place:

   a) a formal and ongoing system for detecting and investigating *outbreaks* of disease;

   b) a procedure for the rapid collection and transport of samples from suspected cases of AHS to a *laboratory* for diagnosis;

   c) a system for recording, managing and analysing diagnostic, epidemiological and *surveillance* data.

2) In a free country or *zone*, the *surveillance* programme for AHS should include an *early warning system* for reporting suspected cases. Persons who have regular contact with equids, as well as diagnosticians, should report promptly any suspicion of AHS to the *Veterinary Authority*. An effective *surveillance* system will periodically identify suspected cases that require follow-up and investigation to confirm or exclude that the cause of the condition is AHS. The rate at which such suspected cases are likely to occur will differ ~~between~~ among epidemiological situations and cannot therefore be predicted reliably. All suspected cases of AHS should be investigated immediately and samples should be taken and submitted to a *laboratory*. This requires that sampling kits and other equipment be available to those responsible for *surveillance*.

3) In a free country or *zone* ~~bordering~~ adjacent to an infected country or *zone*, *surveillance* ~~based upon~~ taking into account geography, climate, history of infection and other relevant factors should be carried out over an appropriate distance of at least 100 kilometres from the border with the infected country or *zone*; a lesser distance could be acceptable if there are relevant ecological or geographical features likely to interrupt the transmission of AHSV.

4) In an AHS infected country or *zone*, random or targeted serological and virological *surveillance*, appropriate to the epidemiological situation, should be conducted in accordance with Chapter 1.4.

Article 12.1.13.

Surveillance strategies

The target population for *surveillance* aimed at identification of disease or *infection* should cover susceptible equids within the country or *zone*. ~~Active and p~~Passive *surveillance* for *infection* with AHSV should be ongoing in all countries, ~~while active s~~*Surveillance* should be ongoing in countries not having a free status or having identified specific risks of introduction. Surveillance

should be composed of random or targeted approaches using virological, serological and clinical methods appropriate to the epidemiological situation.

A Member Country should justify the *surveillance* strategy chosen as appropriate to detect the presence of *infection* with AHSV in accordance with Chapter 1.4. and the prevailing epidemiological situation. It may, for example, be appropriate to target clinical *surveillance* ~~at particular~~ towards those species most likely to exhibit clinical signs (e.g. horses). Similarly, virological and serological testing may be targeted ~~to~~ towards species that rarely show clinical signs (e.g. donkeys).

In vaccinated populations serological and virological *surveillance* is necessary to detect the AHSV types circulating to ensure that all circulating types are included in the *vaccination* programme.

Serological or virological *surveillance* is also needed to detect subclinical *infections* in free countries or *zones* adjacent to countries or *zones* in which live attenuated AHS vaccines are used.

For random surveys, the design of the sampling strategy should incorporate epidemiologically appropriate design prevalence. The sample size selected for testing should be large enough to detect *infection* if it were to occur at a predetermined minimum rate. The sample size, expected prevalence and diagnostic sensitivity of the tests determine the level of confidence in the results of the survey. The Member Country should justify the choice of design prevalence and confidence level based on the objectives of *surveillance* and the epidemiological situation, in accordance with Chapter 1.4. Selection of the design prevalence~~, in particular,~~ should be based on the prevailing or historical epidemiological situation.

Irrespective of the survey approach selected, the sensitivity and specificity of the diagnostic tests employed are key factors in the design, sample size determination and interpretation of the results obtained. Ideally, the sensitivity and specificity of the tests used should be validated for the *vaccination* or *infection* history and the different species in the target population.

Irrespective of the testing system employed, *surveillance* system design should anticipate the occurrence of false positive reactions. If the characteristics of the testing system are known, the rate at which these false positives are likely to occur can be calculated in advance. There should be an effective procedure for following up positives to ultimately determine with a high level of confidence, whether they are indicative of *infection* or not. This should involve both supplementary tests and follow-up investigation to collect diagnostic material from the original sampling unit as well as those which may be epidemiologically linked to it.

The principles for *surveillance* for disease or *infection* are technically well defined. *Surveillance* programmes to prove the absence of AHSV *infection* or transmission, should be carefully designed to avoid producing results that are insufficiently reliable to be accepted by WOAH for official recognition of status. The design of any *surveillance* programme, therefore, requires inputs from professionals competent and experienced in this field.

1. Clinical surveillance

   Clinical *surveillance* aims at the detection of clinical signs of AHS in equids particularly during a newly introduced *infection*. In horses, clinical signs may include pyrexia, oedema, hyperaemia of mucous membranes and dyspnoea.

   Suspected cases detected by clinical *surveillance* should always be confirmed by *laboratory* testing.

2. Serological surveillance

   Serological *surveillance* of equine populations is an important tool to confirm absence of AHSV transmission in a country or *zone*. The species tested should reflect the local epidemiology of *infection* with AHSV, and the equine species available. Surveillance plans should include consideration of species that display clinical signs less commonly, such as donkeys or zebra. Management variables that may reduce the likelihood of *infection*, such as the use of insecticides and animal housing, should be taken into account when selecting equids to be included in the *surveillance* system.

   Samples should be examined for antibodies against AHSV. Positive AHSV antibody tests results can have four possible causes:

   a) natural *infection* with AHSV;

   b) *vaccination* against AHS;

c) maternal antibodies;

d) lack of specificity of the test.

Sera collected for other purposes may be used for AHSV *surveillance*. However, the principles of survey design described in these recommendations and the requirements for a statistically valid survey for the presence of *infection* with AHSV should not be compromised.

The results of random or targeted serological surveys are important in providing reliable evidence that no *infection* with AHSV is present in a country or *zone*. It is, therefore, essential that the survey is thoroughly documented. It is critical to interpret the results in light of the movement history of the animals being sampled.

Serological *surveillance* in a free *zone* should target those areas that are at highest risk of AHSV transmission, based on the results of previous *surveillance* and other information. This will usually be towards the boundaries of the free *zone*. In view of the epidemiology of AHSV, either random or targeted sampling is suitable to select *herds* or animals for testing.

~~Serological *surveillance* in a free country or *zone* should be carried out over an appropriate distance from the border with an infected country or *zone*, based upon geography, climate, history of *infection* and other relevant factors. The *surveillance* should be carried out over a distance of at least 100 kilometres from the border with that country or *zone*, but a lesser distance could be acceptable if there are relevant ecological or geographical features likely to interrupt the transmission of AHSV. An AHS free country or *zone* may be protected from an adjacent infected country or *zone* by a *protection zone*.~~

Serological *surveillance* ~~in infected *zones*~~ will ~~identify changes in~~ support the definition of the boundaries~~y~~ of ~~the~~ an *infected zone*, and can also be used to identify the AHSV types circulating. In view of the epidemiology of *infection* with AHSV, either random or targeted sampling is suitable.

3. Virological surveillance

Isolation and genetic analysis of AHSV from a proportion of infected animals is beneficial in terms of providing information on serotype and genetic characteristics of the viruses concerned.

Virological *surveillance* can be conducted:

a) to identify virus transmission in ~~at~~ at-risk populations;

b) to confirm clinically suspected cases;

c) to follow up positive serological results;

d) to better characterise the genotype of circulating virus in a country or *zone*.

4. Sentinel animals

Sentinel animals are a form of targeted *surveillance* with a prospective study design. They comprise groups of unexposed equids that have not been vaccinated and are managed at fixed locations and observed and tested regularly to detect new *infections* with AHSV.

The primary purpose of a sentinel equid programme is to detect *infections* with AHSV occurring at a particular place, for instance sentinel groups may be located on the boundaries of infected *zones* to detect changes in distribution of AHSV. In addition, sentinel equid programmes allow the timing and dynamics of *infections* to be observed.

A sentinel equid programme should use animals of known source and history of exposure, control management variables such as use of insecticides and animal housing (depending on the epidemiology of AHSV in the area under consideration), and be flexible in its design in terms of sampling frequency and choice of tests.

Care is necessary in choosing the sites for the sentinel groups. The aim is to maximise the chance of detecting AHSV activity at the geographical location for which the sentinel site acts as a sampling point. The effect of secondary factors that may influence events at each location, such as climate, may also be analysed. To avoid confounding factors sentinel groups should comprise animals selected to be of similar age and susceptibility to *infection* with AHSV. The only feature distinguishing groups of sentinels should be their geographical location. Sera from sentinel animal programmes should be stored methodically in a serum bank to allow retrospective studies to be conducted in the event of new serotypes being isolated.

The frequency of sampling should reflect the equine species used and the reason for choosing the sampling site. In endemic areas virus isolation will allow monitoring of the serotypes and genotypes of AHSV circulating during each time period. The borders between infected and non-infected areas can be defined by serological detection of *infection*. Monthly sampling intervals are frequently used. Sentinels in declared free *zones* add to confidence that *infections* with AHSV are not occurring unobserved. Here sampling prior to and after the possible period of transmission is sufficient.

Definitive information on AHSV circulating in a country or *zone* is provided by isolation and identification of the viruses. If virus isolation is required sentinels should be sampled at sufficiently frequent intervals to ensure that some samples are collected during the period of viraemia.

5. Vector surveillance

AHSV is transmitted between equine hosts by species of *Culicoides* which vary across the world. It is therefore important to be able to identify potential *vector* species accurately although many such species are closely related and difficult to differentiate with certainty.

Vector surveillance is aimed at demonstrating the absence of *vectors* or defining high, medium and low-risk areas and local details of seasonality by determining the various species present in an area, and their respective seasonal occurrence, and abundance. *Vector surveillance* has particular relevance to potential areas of spread. Long term *surveillance* can also be used to assess *vector* abatement measures or to confirm continued absence of *vectors*.

The most effective way of gathering this information should take account of the biology and behavioural characteristics of the local *vector* species of *Culicoides* and may include the use of Onderstepoort-type light traps or similar, operated from dusk to dawn in locations adjacent to equids.

Vector surveillance should be based on scientific sampling techniques. The choice of the number and types of traps to be used in *vector surveillance* and the frequency of their use should take into account the size and ecological characteristics of the area to be surveyed.

The operation of *vector surveillance* sites at the same locations as sentinel animals is advisable.

The use of a *vector surveillance* system to detect the presence of circulating viruses is not recommended as a routine procedure ~~as~~ because the typically low *vector infection* rates mean that such detections can be rare. Animal-based *surveillance* strategies are preferred to detect virus transmission.

Reference	Comment	TAHSC response
12.3._1	**Category:** general **Proposed amended text:** not suitable **Rationale:** A Member supports the comments made by the other Member.	Noted
12.3._2	**Category:** general **Proposed amended text:** Not suitable **Rationale:** The Member thanks the Code Commission and in general supports this new chapter. Comments are inserted in the text below.	Noted

Annex 26

CHAPTER 12.3.

INFECTION WITH *TRYPANOSOMA EQUIPERDUM* (DOURINE)

Article 12.3.1.

General provisions

Dourine is a disease of equids caused by *Trypanosoma equiperdum* of the subgenus *Trypanozoon* mainly transmitted directly from animal to animal during coitus. It may also be transmitted vertically and iatrogenically. Dourine may manifest in acute, chronic or clinically inapparent forms.

After a transient blood multiplication, *T. equiperdum* invades tissues, especially genital organs and may also invade the nervous system.

Reference	Comment	TAHSC response
12.3.1._1	**Category:** deletion **Proposed amended text:** ~~After a transient blood multiplication, *T. equiperdum* invades tissues, especially genital organs and may also invade the nervous system.~~ **Rationale:** This sentence does not seem necessary in the context of the Code as it does not contribute to the disease definition, at-risk commodities, or risk management measures.	Did not agree as the Commission considered important to justify the measures applied to manage this disease. Made amendments for clarification.

For the purposes of the *Terrestrial Code*, dourine is defined as an *infection* of domestic and *captive wild* equids with *T. equiperdum*.

Reference	Comment	TAHSC response

12.3.1._2	**Category:** general **Rationale:** As far as we are aware, dourine is a disease of horses (*Equus caballus*) donkeys (*Equus asinus*) and their crosses (whether domestic or wild), and not of other equids. Please could the Scientific Commission share the information demonstrating that other equids play a significant role in the epidemiology?	Agreed and modified the animal hosts.

The following defines the occurrence of infection with *Trypanosoma equiperdum*:

1) Trypanosomes with *Trypanozoon* morphology have been observed in a sample from an domestic and *captive wild* equids showing clinical signs consistent with dourine and linked to a suspected *case* of *infection* with *T. equiperdum* or found in an area where surra is not known to occur; or

Reference	Comment	TAHSC response
12.3.1._3	**Category:** editorial **Proposed amended text:** Trypanosomes with *Trypanozoon* morphology have been observed in a sample from ~~an~~ domestic ~~and~~ or *captive wild* equid~~s~~ showing clinical signs consistent with dourine and linked to a suspected *case* of *infection* with *T. equiperdum* or found in an area where surra is not known to occur; or **Rationale:** Clarity.	Agreed and modified the animal hosts
12.3.1._4	**Category:** general **Proposed amended text:** Not suitable **Rationale:** Considering that there can be chronic, subclinical carriers of *T. equiperdum*, it seems possible that an equid could test positive for dourine without any proof that it was in contact with a confirmed case. Advice from the OIE in 2021 (https://www.woah.org/app/uploads/2021/06/cd-t-equiperdumdourine-20210205-final.pdf) is that a case should be linked to a confirmed case OR the analysis of the epidemiological context supports infection with *T. equiperdum*.	Did not agree. The link is needed to confirm a case for which diagnosis is complex. The 'epidemiological context' is too vague. The first option in the text provides clearer context.

2) trypanosomes with *Trypanozoon* morphology have been observed in a sample from an domestic and *captive wild* equids epidemiologically linked to a confirmed *case* of *infection* with *T. equiperdum*; or

Reference	Comment	TAHSC response
12.3.1._5	**Category:** deletion and addition **Proposed amended text:** *1) l'observation de trypanosomes dotés d'une morphologie de Trypanozoon dans un prélèvement effectué sur un équidé domestique ou sauvage captif présentant des signes cliniques qui évoquent la dourine ~~et ayant un lien avec une suspicion de cas d'infection à T. equiperdum ou~~ trouvé dans une zone dans laquelle la présence du Surra n'est pas connue, ou* *2) l'observation de trypanosomes dotés d'une morphologie de Trypanozoon dans un prélèvement effectué sur un équidé domestique ou sauvage captif ayant un lien épidémiologique avec un cas confirmé d'infection à T. equiperdum et présentant des signes cliniques qui évoquent la dourine, ou* **Rationale :** Concernant la définition de cas, par rapport à ce qui est indiqué dans le rapport : "le groupe a proposé que, pour être considéré comme un cas, l'équidé concerné doive également présenter des signes cliniques compatibles avec la dourine. Nonobstant, si aucun lien épidémiologique avec un cas confirmé ou avec un cas suspect ne peut être établi, le groupe a proposé, pour éviter toute confusion avec le surra, d'ajouter que le cas doit provenir d'une zone où le surra n'a pas été signalé." Et l'observation de signes cliniques compatibles avec la dourine n'est-elle pas nécessaire, même s'il y a un lien épidémiologique avec un cas ?	Did not agree. The link is needed to confirm a case for which diagnosis is complicated.

3) nucleic acid specific to *Trypanozoon* has been detected in a sample from an equid epidemiologically linked to a confirmed *case* of *infection* with *T. equiperdum* ; or

Reference	Comment	TAHSC response
12.3.1._6	**Category:** addition **Proposed amended text:** *"3) la détection de l'acide nucléique propre à Trypanozoon dans un prélèvement effectué sur un équidé domestique ou sauvage captif ayant un lien épidémiologique avec un cas confirmé d'infection à T. equiperdum, ou"* **Rationale** Par ailleurs, au 3) de cette définition de cas, n'est pas précisé "domestique ou sauvage captif" après équidés, alors que cela est précisé partout ailleurs :	Agreed, comment addressed above with a change in the animal host definition.

4) antibodies have been detected in a sample from an domestic and *captive wild* equids epidemiologically linked to a confirmed *case* of *infection* with *T. equiperdum*.

Reference	Comment	TAHSC response

12.3.1._7	**Category:** change **Proposed amended text:** For the purposes of the *Terrestrial Code*, dourine is defined as an *infection* of domestic, feral and ~~*captive* *wild~~ equids (including *captive wild* equids) with *T. equiperdum*. The following defines the occurrence of infection with *Trypanosoma equiperdum*: 1) Trypanosomes with *Trypanozoon* morphology have been observed in a sample from ~~an~~ domestic, feral ~~and~~or ~~*captive* *wild~~ equids (including *captive wild* equids) showing clinical signs consistent with dourine and linked to a suspected *case* of *infection* with *T. equiperdum* or found in an area where surra is not known to occur; or 2) trypanosomes with *Trypanozoon* morphology have been observed in a sample from ~~an~~ domestic, feral ~~and~~or ~~*captive* *wild~~ equids (including *captive wild* equids) epidemiologically linked to a confirmed *case* of *infection* with *T. equiperdum*; or 3) (…) 4) antibodies have been detected in a sample from ~~an~~ domestic, feral ~~and~~or ~~*captive* *wild~~ equids (including *captive wild* equids) epidemiologically linked to a confirmed *case* of *infection* with *T. equiperdum*. **Rationale:** Where sexual contact exists, the venereal route is a potential route of infection with Trypanosoma equiperdum (Fanda, 2023 ; Yune et el, 2017). The ad hoc working group states that venereal transmission is a negligible pathway for the transmission of Trypanosoma equiperdum between domestic and wild equids – i.e. indicating that the ad hoc group considers that domestic and wild equids will not have sexual contact. Wild and feral equids are susceptible to infection with Trypanosoma equiperdum (Gizaw et al, 2017; Yasine et al, 2018). In countries and regions where dourine is endemic, wild, or feral equids are likely to play a role in maintaining dourine in the population. In addition, the separation of domestic and wild equids varies globally. Factors such as geography, cultural values, use of equids in production and wild animal control systems may impact the ability of domestic and wild equids to have direct, sexual contact. For instance, in endemic countries domestic and wild equids graze extensively over shared areas (Clausen et al, 2003). The opportunity for sexual contact between domestic and wild or feral equids cannot be ruled out. There is also research which indicates that wildlife play an important role in the transmission of disease and should be factored into biosecurity measures to facilitate international trade (Smith et al, 2017). A Member proposes that wild and feral equids be included in the definition	Not agreed as the feral animal hosts do not play a significant role in the epidemiology of the disease. (See SCAD report)

	of infection with this agent and that countries be required to report cases of dourine if identified in wild or feral equids. **Supporting evidence:** Fanda, Y. S. (2023). A review on Epidemiology of Trypanosoma equiperdum (dourine) infection in equines. Int. J. Adv. Res. Biol. Sci, 10(9), 51-54. Yune, N., Biratu, G., & Asefa, G. (2017). Dourine (trypanosoma equiperdium infection): a review with special attention to Ethiopia. European Journal of Biological Sciences, 9(2), 93-100 Clausen PH, Chuluun S, Sodnomdarjaa R, Greiner M, Noeckler K, Staak C, Zessin KH, Schein E. (2003). A field study to estimate the prevalence of Trypanosoma equiperdum in Mongolian horses. Veterinary Parasitology, 115(1):9-18. Smith KM, Machalaba CM, Jones H, Cáceres P, Popovic M, Olival KJ, Ben Jebara K, Karesh WB. (2017) Wildlife hosts for OIE-Listed diseases: considerations regarding global wildlife trade and host-pathogen relationships. Vet Med Sci. 3(2):71-81. Yasine A, Ashenafi, H, Merga B, Soom A, Duchateau L, Goddeeris B & Govaere J. (2018). Trypanosoma equiperdum in the horse - A neglected threat?. Vlaams Diergeneeskundig Tijdschrift. 87. 66-75. Gizaw Y., Megersa, M., Fayera, T. (2017). Dourine: a neglected disease of equids. Tropical animal health and production 49, 887-897.	

12.3.1._8	**Category:** editorial **Proposed amended text:** 1) Trypanosomes with *Trypanozoon* morphology have been observed in a sample from a~~n~~ domestic and/or *captive wild* equid~~s~~ showing clinical signs consistent with dourine and either a) linked to a suspected *case* of *infection* with *T. equiperdum* or b) found in an area where surra is not known to occur; or 2) trypanosomes with *Trypanozoon* morphology have been observed in a sample from a~~n~~ domestic and/or *captive wild* equid~~s~~ epidemiologically linked to a confirmed *case* of *infection* with *T. equiperdum*; or 3) (…) 4) antibodies have been detected in a sample from a~~n~~ domestic and/or *captive wild* equid~~s~~ epidemiologically linked to a confirmed *case* of *infection* with *T. equiperdum*. **Rationale:** For clarify of meaning.	Agreed, text amended in multiple places for consistency, with a change in the animal host definition.

For the purposes of the *Terrestrial Code,* the *incubation period* of *infection* with *T. equiperdum* shall be six months. *Infective period* shall be lifelong.

Reference	Comment	TAHSC response
12.3.1._9	**Category:** general **Proposed amended text:** Not suitable **Rationale:** We noticed that the chapters on surra and dourine provide different incubation period for both diseases, even if both are caused by trypanosomes. In addition, incubation period for infection with T. brucei, *T. congolense*, *T. simiae* and *T. vivax* is set out for 90 days in Chapter 8.19., the same as for surra. Therefore, we suggest to review and consider an alignment, either to 90 days as for surra and infection with *T. brucei*, *T. congolense*, *T. simiae* and *T. vivax,* or six months as for dourine, for all trypanosomosis. The rationale is the lack of a specific test for differentiation of trypanosomes.	Agreed

For the purposes of this chapter, a temporary importation of horses refers to the introduction of horses into a country or *zone*, for a defined period of time, not exceeding 90 days, during which the *risk* of transmission of the *infection* is mitigated through specific measures under the supervision of the *Veterinary Authority.* Temporarily imported horses are re-exported at the end of this period. The duration of the temporary importation period and the destination after this period, as well as the conditions required to leave the country or *zone,* should be defined in advance.

Standards for diagnosis and information on the epidemiology are described in the *Terrestrial Manual*.

Article 12.3.2.

Safe commodities

When authorising the import or transit of the following *commodities*, *Veterinary Authorities* should not require dourine-related conditions regardless of the *animal health status* of the *exporting country* or *zone*:

1) pasteurised *milk* and pasteurised *milk products*;

2) hair, wool and fibre;

3) gelatine and collagen;

4) hooves;

Reference	Comment	TAHSC response
12.3.2._1	**Category:** deletion and change **Proposed amended text:** 2) pelo, ~~lana y fibra~~; 4) ~~pezuñas;~~ cascos **Rationale:** Los equinos no tienen lana ni fibra. El término correcto es casco, no pezuña.	Agreed
12.3.2._2	**Category:** addition (translated) **Proposed amended text:** *4) Cornes, sabots et onglons ;* **Rationale:** Au point 4) de l'article 12.3.2, il est proposé d'ajouter les cornes et onglons comme dans le chapitre sur le Surra :	Did not agree. Equids have no horns or claws.

5) *meat* from animals that have been slaughtered in a *slaughterhouse/abattoir* and have been subjected to ante- and post-mortem inspections with favourable results;

6) *meat products*;

7) hides and skins (except raw);

8) embryos or oocytes collected, processed, and stored in accordance with Chapters 4.8. to 4.10.;

Reference	Comment	TAHSC response

12.3.2._3	**Category:** deletion **Proposed amended text:** ~~embryos or oocytes collected, processed, and stored in accordance with Chapters 4.8. to 4.10.;~~ **Rationale:** The Member risk analysis for equine germplasm found insufficient evidence to determine that embryos were safe.	Did not agree, and the Commission requested the supporting evidence of the risk analysis, which may lead to conclusions that are only valid for a specific country.

9) *protein meal.*

Reference	Comment	TAHSC response

12.3.2._4	**Category:** addition **Proposed amended text:** *10) Rendered fats;* *11) Functional Blood Proteins*. **Rationale:** Protein meal, rendered fats and functional blood products are highly processed products, that can be included at the safe trade commodities article 12.3.2. **Supporting evidence:** WRO Report  WRO_Report Literature  ABRA_2019.pdf  ARA_2017.pdf  Jones_Ibarra_etall_2017.pdf  KalmarID_CayAB_&_TignonM_2018.pdf  Kinley_2009.pdf  Leaphart_etall_2012.pdf  McIlmoyle_2004.pdf  Meeker_2006.pdf  Meeker_Meisinger_2015.pdf  NRA_2015.pdf  NZFSA_2009_1.pdf  NZFSA_2009_2.pdf  PISC_2017.pdf  Ramirez-Hernandez A_InestrozaB_ParksA  USDA_2020_SafeMinimum Internal Te  WRO_2013_GHR.pdf  WRO_2013_HACCP.pdf	Agreed with 'rendered fats' Did not agree with 'functional blood proteins', as it is considered as meat products in accordance with the Glossary definition. Need assessment by experts to define if these manufacturing processes are globally standardised.

Article 12.3.3.

Country or zone free from dourine

A country or *zone* may be considered free from *infection* with *T. equiperdum* when:

1) the *infection* is notifiable in the entire country for at least the past two years;

2) measures to prevent the introduction of the *infection* have been in place; in particular, the importations or movements of equids and other *commodities* into the country or *zone* have been carried out in accordance with this chapter and other relevant chapters of the *Terrestrial Code*;

3) and either:

a) the relevant provisions in point 2 b of Article 1.4.6. have been complied with; or

Reference	Comment	TAHSC response
12.3.3._1	**Category:** change (translated) **Proposed amended text:** *a) Le pays ou la zone est historiquement indemne selon les dispositions ~~pertinentes~~ du point 2b) de l'article 1.4.6. ~~ont été respectées~~, ou* **Rationale:** Au point 3)a) de l'article 12.3.3 il est proposé de mettre la phrase au présent et de préciser qu'il s'agit du statut historiquement indemne (comme dans le chapitre sur le Surra article 8.Z.3.3)a)) :	Agreed

b) for at least the past two years, there has been no *case* in the country or *zone* and *surveillance* in accordance with Articles 12.3.11. to 12.3.14. has been in place in the entire country.

Reference	Comment	TAHSC response
12.3.3._2	**Category:** general **Proposed amended text:** Not suitable **Rationale:** Article 12.3.3. could be interpreted to denote that countries must continue to maintain surveillance in accordance with 12.3.11 to 12.3.14 even after successfully meeting all of Article 12.3.3. requirements, including demonstrating the elimination of infection within the whole country for two years. Can the Code Commission confirm that once the requirements listed under Article 12.3.3. are met, a country may utilise Article 1.4.6. point 4 of the Code?	Agreed, text added for clarification.

12.3.3._3	**Category:** addition **Proposed amended text:** Article 12.3.3. Country or zone free from dourine A country or *zone* may be considered free from *infection* with *T. equiperdum* when the following are met: 1) (…) 2) measures to prevent the introduction of the *infection* have been in place for at least the past two years; in particular, the importations or movements of equids and other *commodities* into the country or *zone* have been carried out in accordance with this chapter and other relevant chapters of the *Terrestrial Code*; **Rationale:** The suggested additional text in point 2) provides clarity that measures to prevent the introduction or reintroduction of *T. equiperdum* should be in place in parallel with the other measures listed.	Noted, comment addressed above.
12.3.3._4	**Category:** editorial **Proposed amended text:** Article 12.3.3. Country or zone free from dourine A country or *zone* may be considered free from *infection* with *T. equiperdum* when the following are met: Either: 1) the provisions in point 2 b of Article 1.4.6. have been complied with; or 2) for the past two years: a) the infection is notifiable in the entire country; b) measures to prevent the introduction of the infection have been in place; in particular, the importations or movements of equids and other commodities into the country or zone have been carried out in accordance with this chapter and other relevant chapters of the Terrestrial Code; c) and there has been no case in the country or zone; and d) surveillance in accordance with Articles 12.3.11. to 12.3.14. has been in place in the entire country. **Rationale:** As an alternative to the above changes, to increase the clarity of the Article, a Member suggests an alternative arrangement of Article 12.3.3 ’s text.	Noted, comment addressed above.

Article 12.3.4.

Compartment free from dourine

The establishment and bilateral recognition of a *compartment* free from *infection* with *T. equiperdum* should follow the provisions laid down in this chapter and in Chapters 4.4. and 4.5.

Reference	Comment	TAHSC response
12.3.4._1	**Category:** addition **Proposed amended text:** *"Les équidés maintenus dans le compartiment indemne doivent être protégés contre la transmission par voies iatrogène et vénérienne."* **Rationale:** A l'article 12.3.4, ne convient-il pas de préciser comme à l'article 8.Z.4 sur le surra :	Did not agree, considered as obvious for a venereal disease.

Article 12.3.5.

Recovery of free status

Should a *case* of *infection* with *T. equiperdum* occur in a previously free country or *zone*, its status may be recovered after the following:

1) all infected equids have been either isolated and slaughtered, or killed and appropriately disposed of;

2) equids which have been in contact with infected equids were tested and all positive equids were isolated and slaughtered, or killed and appropriately disposed of; and,

Reference	Comment	TAHSC response
12.3.5._1	**Category:** addition **Proposed amended text:** 2) equids which have been in contact with infected equids were tested ~~and,~~ allowing for time for seroconversion, and all positive equids were isolated and slaughtered, or killed and appropriately disposed of; and, **Rationale:** The testing of in contact horses needs to be timed to allow for possible seroconversion.	Did not agree, covered by point 3) of this article.

3) For six months after the last *case* was slaughtered or killed:

a) the equids in contact have undergone monthly repeated serological and agent detection tests with negative results in both tests;

b) *surveillance* in accordance with Articles 12.3.11. to 12.3.14. has been carried out with negative results;

c) appropriate *biosecurity* has been in place

Otherwise, Article 12.3.3. applies.

Article 12.3.6.

Recommendations for importation of equids from countries, zones or compartments free from dourine

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the equids:

1) showed no clinical signs of *infection* with *T. equiperdum* on the day of shipment;

Reference	Comment	TAHSC response
12.3.6._1	**Category:** editorial **Proposed amended text:** *"1) ne présentaient aucun signe clinique de dourine ~~d'infection à T. equiperdum~~ le jour de leur chargement ;"* **Rationale:** Même s'il est entendu que "dourine" et "infection à T. equiperdum" sont utilisés indifféremment dans le chapitre, il semble préférable d'uniformiser la rédaction des articles 12.3.6 et suivants (comme cela a été fait dans le chapitre Surra pour les articles 8.Z.6 et suivants) :	Agreed

2) were kept since birth or at least six months prior to shipment in the free country, *zone* or *compartment* of origin or were imported from a free country, *zone* or *compartment*.

Reference	Comment	TAHSC response
12.3.6._2	**Category:** general **Proposed amended text:** Not suitable **Rationale:** We suggest to revise the residency period of equids prior to shipment in a country, zone or compartment of origin in line with a decision taken for the length of the incubation period for dourine, as indicated in the comment to Article 12.3.1.	Agreed.

Article 12.3.7.

Recommendations for importation of equids from countries, zones or compartments not free from dourine

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the equids:

1) showed no clinical signs of dourine on the day of shipment;

2) for at least 45 days prior to shipment were not used for breeding (including artificial insemination, semen collection, use as teasers) and did not have any direct or indirect sexual contact with other horses; and

Reference	Comment	TAHSC response
12.3.7._1	**Category:** general **Proposed amended text:** Not suitable **Rationale:** Should this say equids to be consistent?	Agreed.

3) during this period, all equids from the same group were subjected to an antibody detection test on samples taken on two occasions, with an interval of 30 days, with negative results.

Article 12.3.8.

Recommendations for the temporary importation of horses

When importing on a temporary basis for purposes other than breeding and rearing horses that do not comply with the recommendations in Article 12.3.6. or Article 12.3.7., *Veterinary Authorities* should:

Reference	Comment	TAHSC response
12.3.8._1	**Category:** editorial **Proposed amended text:** When importing horses that do not comply with the recommendations in Article 12.3.6. or Article 12.3.7 on a temporary basis for purposes other than breeding and rearing, Veterinary Authorities should: **Rationale:** Rewording suggested for clarity.	Did not agree, but amended for consistency with the other chapters.

1) require:

   a) that the horses be accompanied by a passport in accordance with the model contained in Chapter 5.12. or be individually identified as belonging to a high health status *subpopulation* as defined in Chapter 4.17.;

   b) the presentation of an *international veterinary certificate* attesting that the horses:

      i) showed no clinical sign of infection with *T. equiperdum* on the days of shipments;

Reference	Comment	TAHSC response
12.3.8._2	**Category:** editorial **Proposed amended text:** *"i) ~~n'ont présenté~~ ne présentaient aucun signe clinique de dourine ~~d'infection à T. equiperdum~~ le jour du chargement ;"* **Rationale:** Même s'il est entendu que "dourine" et "infection à T. equiperdum" sont utilisés indifféremment dans le chapitre, il semble préférable d'uniformiser la rédaction des articles	Did not agree, comment addressed above.

	12.3.6 et suivants (comme cela a été fait dans le chapitre Surra pour les articles 8.Z.6 et suivants) :	

ii) if not belonging to a high health status *subpopulation,* were negative in an antibody detection test within 15 days prior to departure from the country of origin ;

Reference	Comment	TAHSC response
12.3.8._3	**Category:** addition **Proposed amended text:** iii) were not used for breeding in the 30 days prior to testing and prior to departure; **Rationale:** This is to ensure an infection event (mating) does not occur prior to testing or departure. **Supporting evidence:** (Desquesnes M, Sazmand A, Gonzatti M, et al. Diagnosis of animal trypanosomoses: proper use of current tools and future prospects. *Parasite Vectors*. 2022;15:235. doi:10.1186/s13071-022-05352-1)	Did not agree, as the current text covers the proposed point.

c) the duration of the temporary importation period, the destination after this period, and the conditions required to leave the country or *zone* be defined;

2) ensure that during their stay in the country or *zone*, the horses:

a) are not used for breeding (including artificial insemination, semen collection, use as teasers) and do not have any direct or indirect sexual contact with other horses;

b) are not subjected to any practice that may represent a risk of transmission of *infection* with *T. equiperdum.*

Reference	Comment	TAHSC response

12.3.8._4	**Category:** deletion **Proposed amended text:** ~~Recommendations for the temporary importation of horses~~ ~~When importing on a temporary basis for purposes other than breeding and rearing horses that do not comply with the recommendations in Article 12.3.6. or Article 12.3.7., *Veterinary Authorities* should:~~ ~~1) require:~~ ~~a) that the horses be accompanied by a passport in accordance with the model contained in Chapter 5.12. or be individually identified as belonging to a high health status *subpopulation* as defined in Chapter 4.17.;~~ ~~b) the presentation of an *international veterinary certificate* attesting that the horses:~~ ~~i) showed no clinical sign of infection with *T. equiperdum* on the days of shipments;~~ ~~ii) if not belonging to a high health status *subpopulation*, were negative in an antibody detection test within 15 days prior to departure from the country of origin ;~~ ~~c) the duration of the temporary importation period, the destination after this period, and the conditions required to leave the country or *zone* be defined;~~ ~~2) ensure that during their stay in the country or *zone*, the horses:~~ ~~a) are not used for breeding (including artificial insemination, semen collection, use as teasers) and do not have any direct or indirect sexual contact with other horses;~~ ~~b) are not subjected to any practice that may represent a risk of transmission of *infection* with *T. equiperdum*.~~ **Rationale:** A Member proposes removing the section titled 'Recommendations for the temporary importation of horses'. The provisions of this section should apply specifically to high health status horses that are imported for competitions only. Six diseases of importance are associated with high health status horses – African horse sickness, glanders, equine influenza, equine infectious anaemia, equine piroplasmosis and Venezuelan equine encephalomyelitis (WOAH, 2021). Application of high health, high performance (HHP) standard biosecurity measures and health management practices are sufficient. Dourine is not a disease of concern as breeding is not permitted in this subpopulation and therefore the risk of transmission within and from these horses is extremely low (WOAH, 2021). The standard HHP biosecurity measures make Article 12.3.8 unnecessary. Retaining the Article may make the Code more complex than it needs to be and could lead to confusion.	Did not agree, this article is not only for high health status subpopulation. Text amended for clarification.

	Supporting evidence: WOAH (2021). High health, high performance (HHP) horses: risk mitigation strategies and establishment of specific health requirements. WOAH. Available from: https://www.woah.org/app/uploads/2021/03/hhpriskmitigation.pdf	

12.3.8._5	**Category:** general **Proposed amended text:** Not suitable **Rationale:** The highlighted text is not clear. The Code or Manual do not indicate how iatrogenic or other means of transmission can occur. Iatrogenic through artificial breeding practices is covered in a) above. Other means that "may represent a risk of transmission" are subjective unless they are clearly defined. According to the WOAH principles on risk analysis, it is not sufficient to describe a possible risk. If there is a risk, it needs to be qualified/quantified to justify that risk mitigation is necessary. This measure implies that we should take measures against undefined possible risks.	Did not agree. This article for temporary importation should include generic risk mitigation measures in the importing country, depending on the situation and use of the horses.

Article 12.3.9.

Recommendations for importation of semen from countries, zones or compartments free from dourine

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1) the donor males:

   a) showed no clinical signs of *infection* with *T. equiperdum* on the day of collection of the semen;

   b) were kept for the six months prior to semen collection in a country, zone or compartment free from dourine;

Reference	Comment	TAHSC response
12.3.9._1	**Category:** editorial **Proposed amended text:** a*) ~~n'ont présenté~~ ne présentaient aucun signe clinique de dourine ~~d'infection à T. equiperdum~~ le jour de la collecte de la semence ;* **Rationale:** Même s'il est entendu que "dourine" et "infection à T. equiperdum" sont utilisés indifféremment dans le chapitre, il semble préférable d'uniformiser la rédaction des articles 12.3.6 et suivants (comme cela a été fait dans le chapitre Surra pour les articles 8.Z.6 et suivants) :	Did not agree, comment addressed above.

2) the semen was collected, processed and stored in a *semen collection centre* accordance with Chapters 4.6. and 4.7.

Article 12.3.10.

Recommendations for importation of semen from countries or zones not free from dourine

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1) the donor males:

a) have been kept for at least six months prior to semen collection in an *establishment* in which *surveillance* in accordance with Articles 12.3.11. to 12.3. 14. demonstrates that no *case* had occurred during that period;

b) showed no clinical sign of *infection* with *T. equiperdum* during that period;

Reference	Comment	TAHSC response
12.3.10._1	**Category:** editorial **Proposed amended text:** "b) *n'ont présenté aucun signe clinique de dourine ~~d'infection à T. equiperdum~~ pendant cette même période ;"* **Rationale:** Même s'il est entendu que "dourine" et "infection à T. equiperdum" sont utilisés indifféremment dans le chapitre, il semble préférable d'uniformiser la rédaction des articles 12.3.6 et suivants (comme cela a été fait dans le chapitre Surra pour les articles 8.Z.6 et suivants) :	Agreed and consistency with surra chapter applied throughout the text.

c) were subjected to an antibody detection test on a blood sample taken on two occasions, with an interval of 30 days, with negative results;

Reference	Comment	TAHSC response
12.3.10._2	**Category:** general **Proposed amended text:** Not suitable **Rationale:** Should it be added that the stallion should not have been mated with any other horse or collected until it had returned the 2 consecutive negative tests? Although it is in a centre that had no reported cases, this could represent a loophole where infection could be introduced in the centre if the introduced horses are mated before their testing regime is complete.	Noted, amended for clarification.

2) the semen was collected, processed and stored in a *semen collection centre* accordance with Chapters 4.6. and 4.7.

Article 12.3.11.

Introduction to surveillance

Articles 12.3.11. to 12.3.14. define the principles and provide guidance on *surveillance* for *infection* with *T. equiperdum*, complementary to Chapter 1.4.

The purpose of *surveillance* could be the demonstration of the absence of *infection*, the early detection of *cases*, or the measurement and monitoring of the *prevalence* and distribution of the *infection* in a country, *zone* or *compartment*.

The most important component of the epidemiology of dourine is sexual transmission, therefore sexually mature equids are considered the target population. Notwithstanding, iatrogenic transmission should also be considered.

The impact and epidemiology of dourine widely differs between different regions of the world, and between different type of animal production systems. For instance considering the presence or absence of other trypanosomes and therefore, it is not appropriate to provide specific recommendations for all situations. Member Countries should provide scientific data explaining the epidemiology of the disease in the country or *zone* concerned, such as host susceptibility (e.g. horse, donkey, mule) and co-infections with other *Trypanosom*a spp., and adapt the *surveillance* strategies for defining their status to the local conditions. There is considerable latitude available to Member Countries to justify their status at an acceptable level of confidence.

Article 12.3.12.

Principles of surveillance for dourine

The following principles are complementary to Chapter 1.4. and should be applied by Member Countries seeking to achieve and demonstrate freedom from infection as well as being part for *official control programme* in countries where the disease is endemic.

In countries where other trypanosomes infection occur in equids, the diagnosis of dourine is challenging because the clinical signs are not pathognomonic, and diagnostic methods are not species specific. As a consequence it is difficult to perform differential diagnosis between *Trypanosoma equiperdum* and other Trypanozoon infections.

Reference	Comment	TAHSC response
12.3.12._1	**Category:** editorial **Proposed amended text:** Not suitable **Rationale:** Grammatical suggestion: trypanosome infections or trypanosoma infections or trypanosomial infections.	Agreed.
12.3.12._2	**Category:** addition **Proposed amended text:** In countries where other trypanosomes infection occur in equids, the diagnosis of dourine is challenging because the clinical signs are not pathognomonic, and diagnostic methods are not pathogenic species specific. As a consequence it is difficult to perform differential diagnosis between *Trypanosoma equiperdum* and other Trypanozoon infections. **Rationale:** Not all species of Trypanosomes are pathogenic and the diagnostic methods available cannot differentiate between those pathogenic species; therefore, the diagnostic methods are not “pathogenic species specific.” As an example of the use of the term “pathogenic species”, note the last paragraph of the section on Microbiology: “https://www.uptodate.com/contents/leptospirosis-epidemiology-microbiology-clinical-manifestations-and-diagnosis That paragraph reads: “Whole-genome sequencing of strains of the pathogenic species L. interrogans and L. borgpetersenii, and of the saprophytic species L. biflexa, has identified a series of genes possibly related to adhesion, invasion, and hematological findings in hosts.”	Agreed.

Surveillance for *infection* with *Trypanosoma equiperdum* should encompass not only clinical signs and relevant sampling and testing, but also information on animal husbandry practices and epidemiological context, including sexual contacts, breeding history of the equid, international and other animal movements, contact patterns, presence of other trypanosomes, and *vectors* (biting flies including tsetse flies). The *Veterinary Services* should implement programmes to raise awareness among farmers, owners, breeders and workers, who have day to day contact with equids, as well as *veterinarians*, *veterinary paraprofessionals* and diagnosticians. Those persons should observe and report promptly any suspicion of dourine to the *Veterinary Services*.

Under the responsibility of the *Veterinary Authority*, Member Countries should have in place a *surveillance* system in accordance with the Chapter 1.4. and, in particular:

Reference	Comment	TAHSC response
12.3.12._3	**Category:** editorial **Proposed amended text:** Under the responsibility of the *Veterinary Authority*, Member Countries should have in place a *surveillance* system in accordance with ~~the~~ Chapter 1.4. and, in particular: **Rationale:** Clarity	Agreed.

- the formal and ongoing system for detecting and investigating *cases* should include all suspicions of *infection* with Trypanosomes;
- the procedure for the rapid collection and transport of samples from suspected *cases* to a *laboratory* for diagnosis should include the relevant types and methods of sampling for dourine as described in the *Terrestrial Manual*;
- the *laboratory* is approved for diagnosis of dourine.

Special attention is to be made to low susceptible animals such as donkeys and mules that can act as healthy carriers and reservoir of *Trypanosoma equiperdum.*

Reference	Comment	TAHSC response
12.3.12._4	**Category:** editorial **Proposed amended text:** Special attention is to be made to ~~low susceptible~~ animals that are more resistant such as donkeys and mules that can act as healthy carriers and reservoir of *Trypanosoma equiperdum.* **Rationale:** 'Low susceptible animals' is not grammatically correct – the Manual refers to donkeys and mules being more resistant.	Agreed.

Article 12.3.13.

Surveillance for early warning of dourine

1) An ongoing *surveillance* programme for dourine should be in place and be designed to detect the presence of dourine in the country or *zone* in a timely manner.

2) The dourine *surveillance* programme should include the following.

a) An *early warning system* for reporting suspected animals described in Article 12.3.12., in accordance with Article 1.4.5.

b) Implementation, as relevant, of regular and frequent clinical inspection of individual equids at risk of dourine that could, for instance, include equids that were imported from countries not free from dourine.

Article 12.3.14.

Surveillance for demonstrating freedom from dourine

1. Requirements for declaring freedom of the entire country, a *zone* or a *compartment* from dourine

Transparency in the application of different methodologies is essential to ensure consistency in decision-making, ease of understanding, fairness and rationality. The assumptions made, the uncertainties, and the effect of these on the interpretation of the results, should be documented.

The design of the *surveillance* programme will depend on the epidemiological circumstances and it should be planned and implemented in accordance with this chapter and Article 1.4.6. This requires the availability of demographic data on the equids population and the support of a *laboratory* able to undertake identification of dourine through parasite detection and antibody tests.

Data from different *surveillance* activities can be included to increase the sensitivity of the *surveillance* system. If this is to be done, data from structured (e.g. surveys and active *surveillance*) and non-structured (e.g. passive *surveillance*) sources should be combined.

The *surveillance* programme should include *surveillance* of different equids subpopulations (e.g. thoroughbred, saddle horses (riding horses), working horses, ponies, donkeys, mules).

Documentation of freedom from dourine should provide details of the equids population, the occurrence of suspected *cases* and how they were investigated and dealt with. This should include the results of *laboratory* testing and the *biosecurity* and control measures to which the animals concerned were subjected during the investigation.

In order to maintain freedom of an establishment within an infected country or zone and to demonstrate no case has occurred, passive surveillance relying on clinical observation alone is insufficient. Depending on the prevailing epidemiological situation and assessed risk for the introduction of *T.equiperdum*, samples should also be collected on a routine basis for parasite detection and antibody tests. There should also be systematic screening of horses that are introduced into the establishment for the absence of dourine.

2. Additional requirements for recovery of free status

In addition to the general conditions described in this chapter, a Member Country seeking recovery of country or *zone* free status, including a *containment zone* established in accordance with Article 4.4.7., should show evidence of an active *surveillance* programme (clinical inspection and serological surveillance) to demonstrate absence of dourine.

Populations under this *surveillance* programme should include:

1) *establishments* in the proximity of the *outbreak*;

2) *establishments* epidemiologically linked to the *outbreak*;

3) *animals* moved from or used to re-populate affected *establishments*.

Annex 5

GLOSSARY

BIOSECURITY

means a set of management, behavioural and physical measures designed to reduce the likelihood ~~*risk*~~ of entry of pathogenic agents into a given *population* and the exposure of *animals* to these pathogenic agents ~~introduction, establishment and spread of pathogenic agents~~animal diseases, *infections* or *infestations* in order to avoid their establishment and spread within and from ~~and within an animal~~ that *population*.

BIOSECURITY PLAN

means a ~~plan~~ document or series of documents that identify~~ies~~ potential sources and pathways ~~and factors~~ for entry of pathogenic agents into a given *population,* and the exposure of animals and factors for the transmission of these pathogenic agents ~~the introduction, establishment and spread of pathogenic agents disease in a *zone* or *compartment*~~, and describe~~s~~ the corresponding *biosecurity* ~~measures~~ to be implemented and the mechanisms to evaluate its performance and to update it ~~which are being or will be applied to mitigate the disease *risks*, if applicable, in accordance with the recommendations in the *Terrestrial Code*~~.

SWILL

means food scraps or food waste~~,~~ that contain or have been in contact with *animal products*~~,~~ and ~~which~~ may be used as *feed*.

Annex 4

WORK PROGRAMME FOR
THE TERRESTRIAL ANIMAL HEALTH STANDARDS COMMISSION

Chapter	Issues	Summary of the work	Status - September 2024		Priority order *
			Stage of consideration	Remarks (Month when draft text first circulated for comment /# of rounds for comment) or last TAHSC report reference	
General	Wildlife Health	Overarching consideration on how wildlife animal health is addressed in the *Terrestrial Code*	Preliminary discussions	Noted in Sep 2024 TAHSC report	2
	New chapter on emergency management	Develop a new chapter and potentially modify the existing chapters	Expert consultation	Noted in Sep 2024 TAHSC report	2
	Commodities	Consideration to determine whether several types of highly processed products (such as blood meal, dried plasma, rendered fats, and hydrolysed protein) have a globally standardised production process and meet criteria to be considered safe commodities as regards specific diseases. Pet-food: Consider the inclusion of 'extruded dry pet food' and 'heat-treated meat products in a hermetically sealed container with an F0 value of 3 or above' in the list	Preparatory work	Noted in Sep 2024 TAHSC report Noted in Sep 2022 TAHSC report (pet-food commodities)	2

		of safe commodities of chapters (when revised).			
Use of terms	Use of terms: animal health status	- Consider the need to revise definition to incorporate 'herd', and avoid restrictive wording - Possible revision of the Glossary definition - Review use of the terms across the *Code* for consistency	Preparatory work	Refer to Feb 2020 TAHSC report	1
	Use of terms: notify / notifiable disease / report / reportable disease	Review use of the terms across the *Code* for consistency. Develop a policy for their use	Preparatory work	Refer to Feb 2019 TAHSC report	2
User's guide	Revision of the Users' guide (standing item)	Partial revision - to provide more explanation on disease-specific chapters - to develop a new point on terms referring to animals used in the *Terrestrial Code* - work on introduction	Circulated for comments and work in parallel	Noted in Sep 2024 TAHSC report (Sep 2023/3)	1
Glossary	1. New definition for 'swill', definitions for 'biosecurity' and 'biosecurity plan' 2. New definitions for 'isolation' and 'pathogenic agent', and definition for 'disinfection'	Swill: Review use of the term across the *Code*. Develop a policy for its use and consider developing a definition. (connected to biosecurity work)	Circulated for comments	1. Noted in Sep 2024 TAHSC report (Sep 2023/2) 2. Noted in Sep 2024 TAHSC report (Sep 2024/1)	1
	1. New definition for 'point of exit' and definitions for 'border post' and 'quarantine station' 2. New definition for 'point of entry' and definition for 'transit country'	Review as a part of the work to revise Chs 5.4. to 5.7.	Circulated for comments	1. Noted in Sep 2024 TAHSC report (Sep 2023/2) 2. Noted in Sep 2024 TAHSC report (Sep 2024/1)	1
	New definition for 'veterinary medical use'	Move the definition from Ch 6.9.	Pending the work of AMRWG	Noted in Sep 2023 TAHSC report	3

	Definition of 'poultry'	(Not defined yet, related to revision of chapters in Section 10)	Preparatory work	Noted in Sep 2024 TAHSC report	1
	Definition for 'laboratory'	Revision of definition	Expert consultation	Noted in Feb 2024 TAHSC report	2
	New definition for 'suspected case'	Develop a new definition	Expert consultation	Noted in Feb 2024 TAHSC report	2
Section 1					
1.1.	Notification of diseases and provision of epidemiological information	identification of the first step	Not started	Refer to Sep 2024 TAHSC report	2
1.6.	Procedures for official recognition of animal health status, endorsement of an official control programme, and publication of a self-declaration of animal health status, by WOAH	Partial revision: - New article to improve clarity on the ability for Members to hold pathogenic agents within laboratories without affecting their animal health status. - introduce the possibility to host the questionnaires on the web.	Circulated for comments	Noted in Sep 2024 TAHSC report (Feb 2023/1)	2
1.7.-1.12	Status Questionnaires	Deletion of chapters, to move their content to the WOAH Website	Preparatory work	Noted in Sep 2024 TAHSC report	2
Section 4					
4.4., 4.Y.	Zoning and compartmentalisation and new chapter on implementation of zoning	To address necessary points, as relevant, with the development of new Ch 4.4. and develop a full new chapter (taskforce by SCAD and TAHSC to work on this issue)	Preparatory work	Noted in Sep 2024 TAHSC report	1

4.7.	Collection and processing of bovine, small ruminant and porcine semen	Comprehensive revision of chapter	Expert consultation	Refer to Sep 2024 TAHSC report	1
4.8.	Collection and processing of *in vivo* derived embryos from livestock and equids	Consider potential amendments as a consequence of the changes in the IETS Manual	Preparatory work	Pending progress of data collection	2
4.9.	Collection and processing of oocytes and *in vitro* produced embryos from livestock and horses	Consider potential amendments as a consequence of the changes in the IETS Manual	Preparatory work	Pending progress of data collection	2
4.13.	Disposal of dead animals	Consider including all potentially contaminated wastes/products/fomites	Preparatory work	Refer to Feb 2022 TAHSC report	2
4.14.	General recommendations on disinfection and disinsection	Comprehensive revision of chapter Consider question from AHG on biosecurity	Preparatory work	Refer to Feb 2022 TAHSC report	2
4.X.	New chapter on biosecurity	Develop a new chapter	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2023/2)	1
Section 5					
General	Revision of Section 5 Trade measures, import/export procedures and veterinary certification (especially Chs 5.4. to 5.7.)	Comprehensive revision of Chs 5.4., 5.5., 5.6. and 5.7.	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2023/2 for Chs 5.4. and 5.6., Sep 2024/1 for Chs 5.5. and 5.7.)	1
5.X.	Development of introductory chapter	New introductory chapter for Section 5	Preparatory work	Noted in Sep 2024 TAHSC report	3
5.1., 5.2., 5.10.	Certification procedures	Partial revision to review provisions on electronic certification and check model of certificate	Expert consultation	Refer to Sep 2024 TAHSC report	2

5.8.	International transfer and laboratory containment of animal pathogenic agents	- Consider impact of holding PA in labs (and research facilities) - Align with corresponding *Manual* chapter (categories of PA) - Potential link with work with Nagoya protocol	Preparatory work Pending update of Manual Chapter 1.1.3	Noted in Sep 2023 TAHSC report	3
5.12.	Model passport for international movement of competition horses	Update the relevant chapters on equine diseases to take into account proposals made by the AHG on HHP Horses Veterinary Certificates	Preparatory work	Noted in Sep 2024 TAHSC report	2
Section 6					
6.8.	Harmonisaiton of national antimicrobial resistance surveillance and monitoring programmes	Inclusion of definitions for monitoring and surveillance, as well as for active and passive surveillance and integrated surveillance	Expert consultation	Noted in Sep 2024 TAHSC report	2
6.12.	Zoonoses transmissible from non-human primates	Consider possible inclusion of SARS-CoV-2 in this chapter, possible inclusion of Macacine Herpesvirus 1 and the revision of test schedule and animal species to be tested for tuberculosis (Origin Member requests)	Not started	Refer to Feb 2022 TAHSC report	4
Section 7					
7.1.	Introduction to the recommendations for animal welfare	Partial revision - to include 'five domains' concept - to clarify the meaning of the terms 'animal-based', 'resource-based' and 'management-based' measures etc.	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2023/3)	1

7.2., 7.3., 7.4.	Transport of animals by land, sea and air	Comprehensive revision of chapters	Expert consultation	Noted in Sep 2024 TAHSC report	1
7.6.	Killing of animals for disease control purposes	- Comprehensive revision of chapter	- Partial revision: Expert consultation - Comprehensive revision: Expert consultation	Refer to Sep 2024 TAHSC report (Feb 2024/1)	1
Section 8					
8.4.	Infection with Brucella abortus, B. melitensis and B. suis	Revision of provisions for free status	Not started	Noted in Sep 2024 TAHSC	3
8.8.	Infection with foot and mouth disease virus	Partial revision: development of an article with provision for safe trade of fetal bovine serum	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2024/1)	3
		Partial revision: consideration of recommendations for import of 'horns'	Expert consultation	Noted in Sep 2024 TAHSC report	3
8.10.	Japanese encephalitis	Comprehensive revision of chapter (related to works on Chs 8.21., 12.4. and 12.11.)	Expert consultation	Noted in Sep 2024 TAHSC report	2
8.11.	Infection with *Mycobacterium tuberculosis* complex	Partial revision - to add recommendations for camelids and goats - to clarify point 1(b) of Article 8.11.4.	Not started	Refer to Feb 2022 TAHSC report	3
8.13.	New world screwworm and old world screwworm	Partial revision (case definition)	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2024/1)	3

8.15.	Infection with rabies virus	Partial revision - to add recommendations on wildlife-mediated rabies	Preparatory work	Refer to Sep 2022 TAHSC report	3
8.18.	Infection with Trichinella spp.	Consider the role and risks associated with different animal hosts	Not started	Noted in Sep 2024 TAHSC report	4
8.20.	Tularemia	Partial revision (case definition)	Preparatory work	Noted in Sep 2024 TAHSC report	3
8.21.	West Nile fever	Comprehensive revision of chapter (related to works on Chs 8.10., 12.4. and 12.11.)	Expert consultation	Noted in Feb 2024 TAHSC report	2
8.X.	New Chapter on Crimean-Congo haemorrhagic fever	Develop a new chapter (case definition)	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2024/1)	2
		Consider need to develop recommendations for prevention.	Preparatory work	Noted in Sep 2024 TAHSC report	2
8.Y.	New Chapter on Infection with Nipah virus	Develop a new chapter (case definition)	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2023/3)	2
Section 10					
General	Overall consideration of Section 10 Aves	Consider approach to risk management recommendations for different production sectors, species, commodities, structure of chapter (following latest adopted HAPI) across different diseases.	Preparatory work	Noted in Sep 2023 TAHSC report	3
10.2.	Avian infectious bronchitis	Review trade articles for clarity.	Preparatory work	Noted in Sep 2023 TAHSC report	3

10.3.	Avian infectious laryngotracheitis	Consider amendments to ensure alignment with recently revised *Manual* chapter	Not started	Noted in Sep 2023 TAHSC report	3
10.5.	Infection with *Mycoplasma gallisepticum* (Avian mycoplasmosis)	Full update of the chapter (content and structure) based on the recent update of the *Manual* Chapter. Consider inclusion of *M. synoviae* into a single chapter (and listed disease).	Preparatory work	Noted in Sep 2023 TAHSC report	3
10.9.	Infection with Newcastle disease virus	Revision to align with recent revision of Ch 10.4.	Not started	Noted in Sep 2023 TAHSC report	3
10.X.	Infection with avian metapneumovirus (Turkey rhinotracheitis and swollen head syndrome of chicken)	Develop a new chapter (case definition)	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2024/1)	2
Section 11					
11.5.	Infection with *Mycoplasma mycoides* subsp. *mycoides* SC (Contagious bovine pleuropneumonia)	Harmonisation of chapters with official status recognition	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2022/4)	1
11.11.	Trichomonosis	Comprehensive revision of chapter	Not started	Refer to Feb 2022 TAHSC report (Sep 2020/2)	3
11.X.	New Chapter on Infection with bovine pestivirus (bovine viral diarrhoea)	Develop a new chapter (case definition)	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2022/5)	1
Section 12					
12.1.	African horse sickness	Harmonisation of chapters with official status recognition Proposals from AHG on AHS and SCAD	Circulated for comments	Noted in Sept 2024 TAHSC report (Sep 2022/4)	1

12.3.	Dourine	Comprehensive revision of chapter	Circulated for comments	Refer to Sep 2024 TAHSC report (Feb 2024/2)	2
12.4.	Equine encephalomyelitis (Eastern and Western)	Comprehensive revision of chapter (related to works on Chs 8.10., 8.21. and 12.11.)	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2024/1)	2
12.8.	Infection with equid herpesvirus-1 (Equine rhinopneumonitis)	For consistency of disease name	Preparatory work	Noted in Feb 2024 TAHSC report Manual chapter adopted at the last GS	3
12.11.	Venezuelan equine encephalomyelitis	Comprehensive revision of chapter (related to works on Chs 8.10., 8.21. and 12.4.)	Expert consultation	Noted in Sep 2024 TAHSC report	2
Section 13					
13.2.	Rabbit haemorrhagic disease	Comprehensive revision of chapter	Preparatory work	Noted in Sep 2023 TAHSC report	3
Section 14					
14.7.	Infection with peste des petits ruminants virus	Partial revision: - Reconsider susceptible animals targeted in the chapter (wild animals, pigs) - Review Article 14.7.19. and Article 14.7.25 to remove reference to Chapter 8.8. - New article on recommendations for importation of animals for direct slaughter - Apply new drafting conventions	Preparatory work	Noted in Sep 2024 TAHSC report	2
14.8.	Scrapie	Comprehensive revision of chapter	Expert consultation	Noted in Sep 2024 TAHSC report	2

14.9.	Sheep pox and goat pox	Comprehensive revision of chapter	Expert consultation	Noted in Sep 2024 TAHSC report	3

*** Description of the consequence of priority order**	
1	- ***active work for the TAHSC*** - ***identified as the priority to progress as soon as possible*** - ***to be put forward for next meeting agenda***
2	- ***active work for the TAHSC*** - ***progression as time and resources allow*** - ***to be included in next meeting agenda***
3	- ***not immediate work for the TAHSC*** - ***possible progression if time, resources allow*** - ***needs to progress before consideration for next meeting agenda***
4	- ***not active*** - ***not to be immediately started***
List of abbreviations	
AHG	***Ad hoc* Group**
BSC	**Biological Standards Commission**
Ch	**Chapter**
HQ	**WOAH Headquarters**
IETS	**International Embryo Technology Society**
SCAD	**Scientific Commission for Animal Diseases**
TAHSC	**Terrestrial Animal Health Standard Commission**

GLOSSARY

BORDER INSPECTION POST

means any ~~airport, or any port, railway station or road check point~~ ~~international~~ *point of entry* for *commodities* ~~open to *international trade* of *commodities*~~, and associated facilities, where ~~import~~ ~~veterinary~~official inspection~~s can be~~ is performed by *Veterinary Services*.

CONTAINER

means a non-self-propelled receptable or other rigid structure ~~for holding *animals*~~ to ~~carry~~ hold *commodities* during transportation ~~a journey by one or several means of transport~~.

DISINFECTION

means an action ~~the application, after thorough cleansing, of procedures~~ intended to inactivate or destroy pathogenic agents on potentially contaminated objects. ~~the infectious or parasitic agents of animal diseases, including zoonoses; this applies to premises, *vehicles* and different objects which may have been directly or indirectly contaminated.~~

ISOLATION

means the placement of an *animal* or a group of *animals* separated from other animals under appropriate *biosecurity*.

PATHOGENIC AGENT

means a biological agent that causes, or contributes to, the development of a disease in *animals*.

POINT OF ENTRY

means any point at which *commodities* enter the territory of a country.

POINT OF EXIT

means any point from where *commodities* leave the territory of a country ~~*the exporting* country~~.

QUARANTINE ~~STATION~~ CENTRE

means an *establishment* under the control of the *Veterinary Authority* where *animals* are maintained in isolation for observation, and if appropriate testing and treatment, during a specified length of time under *biosecurity* to prevent ~~with no direct or indirect~~ ~~ensure no contact with other *animals* and *vectors* when relevant, to ensure so that there is no transmission~~entry of specified pathogenic agents ~~outside~~ into ~~n~~or escape out of the *establishment* ~~while the *animals* are undergoing observation for a specified length of time and, if appropriate, testing or treatment~~.

TRANSIT COUNTRY

means a country through which *commodities* destined for another country ~~an *importing country*~~ are transported or in which they make a stopover ~~is made at a *border post*~~.

~~VEHICLE/VESSEL~~MEANS OF TRANSPORT

means ~~any means of conveyance including~~ a train, truck, trailer, aircraft or ~~ship~~vessel that is used for ~~carrying~~transporting ~~animals~~ *commodities*.

CHAPTER 1.6.

PROCEDURES FOR OFFICIAL RECOGNITION OF ANIMAL HEALTH STATUS, ENDORSEMENT OF AN OFFICIAL CONTROL PROGRAMME, AND PUBLICATION OF A SELF-DECLARATION OF ANIMAL HEALTH STATUS, BY WOAH

Article 1.6.1.

Application for official recognition of animal health status and endorsement of an official control programme by WOAH

A Member Country may request:

1) official recognition of *animal health status* by WOAH of:

   a) freedom of a country or *zone* from African horse sickness (AHS);

   b) risk status of a country or *zone* with regard to bovine spongiform encephalopathy (BSE);

   c) freedom of a country or *zone* from classical swine fever (CSF);

   d) freedom of a country or *zone* from contagious bovine pleuropneumonia (CBPP);

   e) freedom of a country or *zone* from foot and mouth disease (FMD), where *vaccination* is either practised or not practised;

   f) freedom of a country or *zone* from peste des petits ruminants (PPR);

2) endorsement by WOAH of:

   a) an *official control programme* for CBPP;

   b) an *official* control *programme* for FMD;

   c) an *official* control *programme* for PPR;

   d) an *official* control *programme* for dog-mediated rabies.

WOAH does not grant official recognition of *animal health status* or endorsement of an *official control programme* for diseases other than those listed under points 1 and 2 above.

The Member Country should present documentation setting out the compliance of their *Veterinary Services* with the provisions of Chapters 1.1., 1.4., 3.2., 3.3. and 4.4. of the *Terrestrial Code*, when relevant, and with the provisions of the relevant disease-specific chapters in the *Terrestrial Code* and the *Terrestrial Manual*.

When requesting official recognition of *animal health status* or endorsement by WOAH of an *official control programme*, the Member Country should follow the Standard Operating Procedures (available on the WOAH

website) and submit to WOAH a dossier providing the information requested in the following chapters (as appropriate): 1.7. (for AHS), 1.8. (for BSE), 1.9. (for CSF), 1.10. (for CBPP), 1.11. (for FMD) or 1.12. (for PPR).

The WOAH framework for the official recognition of *animal health status*, the endorsement of *official control programmes*, and their maintenance is described in relevant Resolutions adopted by the World Assembly of WOAH Delegates.

The country or the *zone* will be included in the relevant lists of official *animal health status* or endorsed *official control programmes* only after the evidence submitted has been adopted by the World Assembly of WOAH Delegates.

When a Member Country requests official recognition of *animal health status* for a *zone*, the geographical boundaries of the proposed *zone* should be clearly defined. When applying for recognition of a free *zone* that is adjacent to another *zone* of the same status, it should be stated whether the new *zone* is being merged or kept separate. If the proposed *zone* remains separate, details should be provided of the control of the movement of relevant *commodities* between the *zones* in accordance with Chapter 4.4.

The overall objective of the WOAH endorsed *official control programmes* is for Member Countries to progressively improve their animal health situation and eventually attain official recognition of *animal health status* or in the case of dog-mediated rabies to make a self-declaration as a free country or *zone*. The *official control programme* should be applicable to the entire country even if certain measures are directed towards defined *zones*.

Article 1.6.2.

Maintenance of official recognition of animal health status and endorsement of an official control programme by WOAH

Retention on the lists of countries and *zones* having an official *animal health status* or of countries having an endorsed *official control programme* requires that the information in relevant chapters be re-submitted annually and that changes in the epidemiological situation or other significant events be notified to WOAH in accordance with the requirements in Chapter 1.1.

Non-compliance with the requirements for the maintenance of *animal health status* results in the suspension of that status. Within 24 months of suspension, except otherwise stated in the disease-specific chapter, a Member Country may apply for the recovery of a previously recognised status, following the provisions of the relevant disease-specific chapter. When the status has not been recovered within the specified period of its suspension, it is withdrawn and the Member Country should reapply following the procedure for the application for official recognition of *animal health status*.

WOAH may withdraw the endorsement of an *official control programme* if there is evidence of:

– non-compliance with the timelines or performance indicators of the programme; or

– significant problems with the quality of the *Veterinary Services* as described in Section 3 of the *Terrestrial Code*; or

– an increase in the *incidence* or distribution of the disease that cannot be addressed by the programme.

Article 1.6.3.

Publication by WOAH of a self-declaration of animal health status by a Member Country

A Member Country may make a self-declaration of freedom of a country, *zone* or *compartment* from a WOAH *listed disease* or another animal disease, *infection* or *infestation*. The Member Country may inform WOAH of the claimed status and request publication by WOAH of the self-declaration to inform WOAH Member Countries.

A Member Country requesting the publication of a self-declaration should follow the Standard Operating Procedure (available on the WOAH website) for submission of a self-declaration of *animal health status* and provide documented information on its compliance with the relevant chapters of the *Terrestrial Code*, including:

– evidence that the *infection* or *infestation* is a *notifiable disease* in the entire country;

– history of absence or eradication of the *infection* or *infestation* in the country, *zone* or *compartment*;

– *surveillance* including an *early warning system* for all relevant species in the country, *zone* or *compartment*;

– measures implemented to maintain freedom in the country, *zone* or *compartment*.

The self-declaration may be published only after all the information provided has been received and administrative and technical screening has been performed by WOAH. Publication does not imply endorsement of the claim of freedom by WOAH and does not reflect the official opinion of WOAH. Responsibility for the accuracy of the information contained in a self-declaration lies entirely with the WOAH Delegate of the Member Country concerned.

Except when otherwise provided for in the *listed disease*-specific chapter, an *outbreak* in a Member Country, a *zone* or a *compartment* having a self-declared free status results in the loss of the self-declared free status. A Member Country wishing to reclaim a lost free status should submit a new self-declaration following the procedure described in this article.

WOAH does not publish self-declarations for *listed diseases* in point 1 of Article 1.6.1.

Article 1.6.4.

Specific provisions

The *animal health status* of a *country* or *zone* is not affected by:

– the presence of the disease, infection, or infestation in imported animals in a quarantine centre;

– the importation or the presence of the *pathogenic agent*, or of *commodities* or organisms carrying the *pathogenic agent*, in a *laboratory* or other *approved* facilities with appropriate laboratory biosafety and laboratory biosecurity in accordance with the *Terrestrial Manual*.

This should be supported by evidence of compliance with all relevant standards of the *Terrestrial Code* and *Terrestrial Manual.*

CHAPTER 5.4.

MEASURES AND PROCEDURES APPLICABLE ~~IN~~ TO THE EXPORTATION OF COMMODITIES

Article 5.4.1.

Purpose and scope

This chapter provides general principles for measures and procedures that are applicable ~~in~~ to the exportation of *commodities* to prevent the spread of pathogenic agents through *international trade* of *commodities*, without creating unjustified restrictions, covering from facilities of origin (such as *establishment*, *slaughterhouse*/*abattoir*, *semen collection centre*) to the *point of exit*.

This chapter provides *exporting countries* with recommendations on measures and procedures, and the roles and responsibilities of the *Veterinary Authority* or other relevant *Competent Authorities*~~,~~ and of ~~business operators~~ any natural or legal entity or person responsible for export of *commodities* subject to the provisions of this chapter (hereafter 'operator'), in addition to responsibilities that are described in Article 5.1.3. This chapter provides guidance to ensure the quality and ~~performance~~ implementation of official controls for exportation.

This chapter applies to all *commodities*; some recommendations are specifically addressed to certain ~~of those~~ *commodities*.

Article 5.4.2.

General considerations

The *Veterinary Authority* of the *exporting country* should ~~ensure that~~ make operators aware of the *importing country* requirements, if they are available to the *Veterinary Authority* in accordance with Chapters 5.1. and 5.2. In addition, the *Veterinary Authority* should make operators aware of the process required to meet the conditions of the *international veterinary certificate* including *importing country* requirements. ~~including all information required for the agreed *international veterinary certificate*, in accordance with Article 5.1.1. and Chapter 5.3., are available to exporters.~~

The *Veterinary Authority* ~~of the *exporting country*~~ should be responsible for the implementation ~~performance~~ of official controls in coordination with other relevant *Competent Authorities* in accordance with *veterinary legislation* to ensure that exported *commodities* ~~can be traded safely and~~ meet the ~~requirements of the *importing country*~~ requirements. ~~Its~~ Their legal mandate and responsibilities~~, as described in Article 3.4.5. and 3.4.13.,~~ should include the ~~export~~ official controls ~~activities~~ at any step and the opportunity to request from the operator ~~exporter~~ any necessary information. Where appropriate, the *Veterinary Authority* and other relevant *Competent Authorities* may delegate certain tasks ~~in accordance with point 2 of Article 3.4.5~~. Adequate human, technical, physical and financial resources should be available in the *exporting country* for the *Veterinary Services* to ~~allow those~~effectively implement official controls ~~to be undertaken effectively~~ and to properly apply the certification obligations and procedures laid down in Chapters 5.1. and 5.2., in accordance with the quality principles ~~described~~ in ~~Article~~ Chapter 3.2.~~2.~~

The *Veterinary Authority* should cooperate closely with the customs authority and other authorities of the *exporting country* dealing with exports to ensure that official controls are implement~~performe~~d effectively~~,~~ and ~~to protect~~ maintain ~~the status~~ compliance of the *commodities* with *importing country* requirements ~~without creating unjustified barriers to trade~~. This cooperation should also cover actions to prevent and combat fraud or illegal pathways.

The *Veterinary Authority* should have procedures, as applicable, for certification of the *animal health status* of the country, *zone*, *compartment*, or *herd*/*flock* as well as of the disease situation in *establishments* and other premises

and communicate with the operator ~~exporter~~ regarding any additional documentary evidence that may be required to support such certification.

The *Veterinary Authority* ~~in the *exporting country*~~ should ensure that the applicable certified *animal health status* of the country, *zone*, *compartment*, or *herds*~~*/flock* or *animals*~~, is based on appropriate *surveillance* and reporting in accordance with Chapter 1.4.

The *Veterinary Authority* ~~in the *exporting country*~~ should have procedures for registration and approval of *establishments* of origin, where applicable, and other facilities used for production and handling of consignments, to comply with the ~~agreed~~ *international veterinary certificate*. Operators should not hinder access by the *Veterinary Authority* to the *commodities*, the premises where they are located and the *means* ~~by which they are transported~~ *of transport*. During official controls, operators should assist and cooperate with the *Veterinary* ~~*Authority*~~ *Services* and make available all information concerning the consignment.

The *Veterinary Authority* ~~of the *exporting country*~~ should ensure that appropriate identification of *commodities* is in place to support traceability for the consignment to comply with the ~~agreed~~ *international veterinary certificate*. *Animal identification* should be in accordance with Chapter 4.2. and Chapter 4.3.

Upon request from the *Veterinary Authority* of the *importing country* or from the *Veterinary Authority* of the *transit country*, the *Veterinary Authority* of the *exporting country* should provide additional information on the process to ensure compliance with the conditions included in the ~~agreed~~ *international veterinary certificate*, and undertake investigation and reporting, or~~and~~ give reasonable access for audit in case of repeated non-compliant consignments ~~jeopardising the safety of trade~~. The *Veterinary Authority* of the *exporting country* should ~~take~~ ensure that the ~~appropriate and necessary preventive measures to ensure that the status of the~~ *commodities* remain compliant~~is not jeopardised~~ before and during transport to the *point of exit*. The *exporting country* should suspend the export of a *commodity* when there is reason to believe that it may present a risk for animal and public health or ~~that~~ if it does not comply with the ~~agreed~~ *international veterinary certificate*.

The *Veterinary Authority* of the *exporting country* should promptly communicate to the *Veterinary Authority* of the *importing country*, any change or situation, such as a change of the *animal health status*, that may affect its capacity to ~~fulfil~~ certify the conditions of the ~~agreed~~ *international veterinary certificate*.

The *Veterinary Authority* of the *exporting country* should also inform without delay the *Veterinary Authority* of the *importing country*~~,~~ and, where necessary, the *transit country*~~,~~ in the event that a particular issue such as the occurrence of a *listed disease* or a disease referred to in the *importing country* requirements which may affect~~s~~ ~~the~~ compliance ~~status~~ of a *commodity* which has already left the *exporting country*. This information should be part of the relevant emergency response plan developed in accordance with Chapter 4.19.

In case of *animals*, operators should ensure that *animal welfare* is maintained throughout the export process in accordance with Section 7 as relevant.

The *Veterinary Authority* ~~of the *exporting country*~~ should carry out collaborative activities with other relevant *Competent Authorities*, customs, other authorities and operators, and with *Veterinary Authorities* in other countries, to control the risk posed by the illegal cross-border movement of *commodities*, i.e. the international movement of *commodities* done in a way to expressly and intentionally avoid official controls.

Article 5.4.3.

General principles applicable to procedures for official controls for exportation

1. Preparation for exportation

   Operators~~Exporters~~ should ~~announce~~ inform the *Veterinary Authority* of their intention to ~~the~~ export ~~to the *Veterinary Authority*~~ sufficiently in advance ~~as~~ to meet the~~to~~ conditions of the ~~agreed~~ *international veterinary certificate* and the administrative requirements of the *exporting*, *transit* and *importing countries*.

   Operators~~Exporters~~ should provide to the *Veterinary Authority* the~~as~~ required details of the consignment. The *Veterinary Authority* should outline to the operator~~exporter~~ the procedures, standards and timeframe for preparation of the consignment, and the documentary evidence required to demonstrate compliance with these requirements. Where relevant, the *Veterinary Authority* should identify eligible bodies or officers for the

implementationperformance and certification of procedures specified in the agreed *international veterinary certificate*.

The operatorexporter and the *Veterinary Authority* should coordinate the implementation, and its documentation, of the conditions of the agreed *international veterinary certificate*. Implementation of these conditions and its documentation should be in accordance with the procedures and standards communicated by the *Veterinary Authority* of the *exporting country* and will form the basis upon which the *Official Veterinarian* will issue the *international veterinary certificate* for the consignment.

The *Veterinary Authority* should ensure that the facilities and operational procedures required for isolation of *animals* or processing of products comply with the conditions of the agreed *international veterinary certificate*, which may including include registration, approval, and inspection, in accordance with Chapters 4.6., 4.7. and 5.7. or other relevant chapters of the *Terrestrial Code*.

Testing of *commodities* required to fulfil the conditions of the agreed *international veterinary certificate* should be in accordance with Article 3.2.10. and with the *Terrestrial Manual*. The *Veterinary Authority* should define and communicate to the operatorexporter the procedures for sample collection, identification and submission, the list of *approved laboratories* and the *approved* diagnostic tests.

The *Veterinary Authority* should define and communicate to the operatorexporter the procedures for *vaccination* and treatment if required to fulfil the conditions of the agreed *international veterinary certificate*. The operatorexporter should arrange for *vaccination* or treatment of *animals*, noting timeframes relevant to the scheduled date of exportation. *Vaccination* and treatment of *animals* should use *veterinary medicinal products* registered or allowed in the *exporting country*, in line with the conditions of the agreed *international veterinary certificate*.

The *Veterinary Authority* should define and communicate to the operatorexporter the standards and procedures for *disinfection* of and disinsection elimination of arthropod *vectors* fromof *vehicles*/vesselsthe *means of transport* and *containers* in accordance with Chapter 4.14., if required to fulfil the conditions of the agreed *international veterinary certificate*.

In the case of *animals*, Tthe operatorexporter should also be able to provide to the *Veterinary Authority* a *journey* travel transport plan from the *point of exit* in the *exporting country* to the point of *unloading* in the *importing country*. In the case of animals, it should be in accordance with Chapters 7.2., 7.3. or 7.4.Section 7, and in compliance with *importing country* requirements as relevant.

2. Procedures of exportation

a) Verification and certification

The operatorexporter should cooperate with the *Veterinary Authority* to demonstrate that the conditions of the agreed *international veterinary certificate* have been met and that the consignment is eligible for certification and export. The operatorexporter should provide all documentary evidence of compliance with the *importing country* requirements conditions of the agreed and *international veterinary certificate* as required by the *Veterinary Authority*, including an import permit where appropriate. There should be clear traceability and linkage, at every stage of preparation of animals and *animal product*commodities, to the final consignment presented for export, as relevant to fulfil the conditions of the agreed *international veterinary certificate*.

The *Official Veterinarian* should review the preparation of the export consignment to confirm that *commodities* animals and *animal products* have been clearly identified at every stage of their preparation, that the consignment complies with the conditions of the agreed *international veterinary certificate* and is in accordance with Chapters 5.1. and 5.2. of the *Terrestrial Code*. The *Official Veterinarian* should also review all transport arrangements the *journey* travel plan for the consignments of *animals* to ensure it they support maintainsenance compliance. of the *commodity*'s status and *animal welfare*.

Once satisfied that preparation and *journey* travel planstransport arrangements are appropriate and that the consignment is eligible for certification and export, the *Official Veterinarian* should issue the *international veterinary certificate*.

b) Domestic transportation of commodities

The *Veterinary Authority* should collaborate with other relevant authorities and stakeholders to ensure that management of the consignment ~~pre-export~~ before and during transport is consistent with ~~agreed~~ established processes and standards.

The operator~~exporter~~ should ensure that the assembly, *loading* and crating of *animals* or other *commodities* is appropriate to maintain compliance with the *importing country* requirements~~preserving the status~~ and *animal welfare* of the consignment from the *place of shipment*, including adequate *disinfection* of and ~~disinsection~~ elimination of arthropod *vectors* from~~of~~ the ~~*vehicle/vessel*~~*means of transport* and *container*.

The *Veterinary Authority* in the *exporting country* may require health and welfare inspection of consignments of *animals* at the *point of exit*, which includes the possibility to deny permission to export if concerns are identified.

Article 5.4.4.

Specific recommendations depending on commodities

1. Animals

~~In the case of animals, the *Veterinary Authority* should ensure that *animal welfare* is maintained throughout the whole process of exportation, in accordance with Chapters 7.1., 7.2., 7.3. and 7.4. as relevant.~~

The operator~~exporter~~ should ensure that ~~*vehicles/vessels*~~*means of transport* used for transportation of *animals* throughout the ~~whole~~ export process ~~of exportation~~ undergo adequate *disinfection*, and that measures are implemented to prevent and control vermin such as rodents or arthropods. These measures should be applied before every *loading* of *animals*. ~~*Vehicles/vessels*~~*Means of transport* should contain only *animals* of the same health status except where adequately separated.

Containers should be either new or cleaned and disinfected before every *loading* of *animals*, in accordance with Chapter 4.14.~~, or be for single use~~

The *Veterinary Authority* should ensure that, before leaving the *exporting country*, consignments of *animals* ~~should be~~are subjected to a visual examination, at an appropriate place and time according to the procedures of the *exporting country* and the ~~agreed~~ *international veterinary certificate* ~~and the requirements of the *exporting country*~~. It should be ensured that, from the time of this visual inspection until the time of leaving the *exporting country*, the *animals* in the consignment are not in contact with other *animals* of a different health status.

The *Veterinary Authority* ~~in the *exporting country*~~ may require welfare inspection of consignments of *animals* at the *point of exit*. Such inspections should be supported by *veterinary legislation*, which should also ascribe authority to deny permission to export if *animal welfare* concerns are identified.

2. Germinal products

Consignments of *germinal products* should be packed, dispatched, and transported in a way that preserves the viability and integrity of the products.

Consignments of *hatching eggs* should be dispatched from parental *flocks* that meet the conditions of the ~~agreed~~ *international veterinary certificate*. *Containers* should be either new or cleaned and disinfected before every use, in accordance with Chapter 4.14.

Cryogenic tanks for semen, oocytes or~~,~~ embryos should be dispatched from *semen collection centres* or *collection centres* that meet the conditions of the ~~agreed~~ *international veterinary certificate*. They should be single-use cryogenic tanks or be cleaned and disinfected before use in accordance with Chapter 4.14. and use new liquid nitrogen.

Consignments of semen, oocytes or~~,~~ embryos~~,~~ should be identified in accordance with the relevant recommendations of Chapters 4.6. to 4.11.

The *Veterinary Authority* should ensure that, before leaving the *exporting country*, consignments of *germinal products* ~~be~~are subjected to a visual examination and documentary check and cryogenic tanks for semen, oocytes or~~,~~ embryos ~~be~~are sealed and marked, according to the procedures of the *exporting country* and the ~~agreed~~ *international veterinary certificate* ~~and the requirements of the *exporting country*~~.

3. Animal products

Containers used for transporting *animal products* should be suitable for the type of product, protect the *animal products* from damage or contamination, and fulfil the conditions of the procedures of the *exporting country* and the ~~agreed~~ *international veterinary certificate* ~~and the requirements of the *exporting country*~~.

The *Veterinary Authority* should ensure that adequate measures are taken to clean and, where necessary after cleaning, to disinfect before use, *containers* and *means of transport*~~ation~~ in accordance with Chapter 4.14., particularly when conveying or transporting unpacked materials.

The *Veterinary Authority* should ensure that, before leaving the *exporting country*, consignments of *animal products* ~~should be~~are subjected to a visual examination and documentary check, according to the procedures of the *exporting country* and the ~~agreed~~ *international veterinary certificate* ~~and the requirements of the *exporting country*~~.

Article 5.4.5.

~~Emergency p~~Planning for unexpected events

~~The *Veterinary Authority* should develop a plan to address the occurrence within the *exporting country* after the *commodities* have been exported, of a *listed disease* or a disease referred to in the *importing country* requirements, which may have impacted the status of the exported *commodities*. The *Veterinary Authority* should be guided by *importing country* requirements in implementing the plan.~~

The *Veterinary Authority* should ensure that the operator~~exporter~~ develops a plan to address ~~emergencies~~ unexpected events which may impact the compliance~~status of the *commodities*~~ with *importing country* requirements and *animal welfare* recommendations in Section 7. ~~being exported~~, ~~failure of transport arrangements,~~ The plan should address concerns such as deviation from the *journey* plan, failure to reach the *transit* or *importing country*, or rejection of the consignment by them ~~*transit* or *importing country*~~. The ~~emergency~~ plan may be generic or specific to each consignment. ~~and should focus on preserving the status of the consignment and *animal welfare* in accordance with Chapters 7.2., 7.3. and 7.4.~~

The ~~emergency~~ plan should identify responsibility for development and communication of alternative transport arrangements when necessary. The relevant *Competent Authority* in the *exporting*, *transit* and *importing countries* should be consulted as appropriate by the operator regarding revised transport arrangements to assess the implications for the compliance~~status of the *commodities*~~ with *importing country* requirements and *animal welfare* recommendations. ~~The *Veterinary Authority* in the *exporting country* should be consulted on alternative transport arrangements for consignments of *animals* to ensure that *animal welfare* is preserved.~~

~~The emergency plan should include procedures for managing exported consignments that fail to reach the designated *transit* or *importing countries* or are rejected by them.~~

CHAPTER 5.5.

MEASURES AND PROCEDURES APPLICABLE TO THE TRANSIT OF COMMODITIES

Article 5.5.1.

Purpose and scope

This chapter provides general principles for measures and procedures that are applicable to prevent the spread of pathogenic agents, without creating unjustified restrictions, when *commodities* destined for another country are either making a stopover in, or transported through a *transit country*, covering from the *point of entry* to the *point of exit.*

This chapter provides *transit countries* with recommendations on measures and procedures, and the roles and responsibilities of the *Veterinary Authority* and other relevant *Competent Authorities* and of any natural or legal entity or person responsible for transit of *commodities* subject to the provisions of this chapter (hereafter 'operator'). An international movement of *commodities* may be considered a 'transit' if *commodities* are transported from an *exporting country* through a *transit country* to an *importing country*.The transit period should not exceed the time necessary for transport and logistics, and *commodities* and all relevant conditions as stated in the certificate issued by the *exporting country* should remain unchanged; otherwise the operation should be interpreted as an importation and exportation.

This chapter provides guidance to ensure the quality and implementation of official controls for transit.

Article 5.5.2.

General considerations

The *Veterinary Authority* or other relevant *Competent Authorities* of the *transit country* should ensure that *transit country* requirements and procedures, including a list of the *border inspection posts* designated for the transit of *commodities,* are made available to operators and to the *Veterinary Authority* of the *exporting country*.

A *transit country* may require adequate advance notice or approval regarding the date of entry into and exit from its territory of *commodities*, stating the type of *commodity*, species, quantity, *means of transport* and the *point of entry* or *border inspection post* and *point of exit* to be used.

Operators should be aware of the *transit country* requirements and procedures before shipment, which may include announcing to the *Competent Authorities* of the *transit country* the arrival of consignments at the *point of entry*. Operators should ensure that *commodities* are presented for official controls, including the original official certificates or documents, or digital equivalents, in accordance with *transit country* requirements, and that requirements and procedures defined by the *Competent Authorities* of the *transit country* are met.

Operators should ensure that the *commodities* are separated from other *commodities* in the *transit country*, that all relevant conditions as stated in the certification issued by the *exporting country* remain unchanged, and that any unforeseen unloading of *commodities* in the *transit country* is informed to the *Veterinary Authorities* of the *transit country* and the *importing country*.

In the case of *animals*, operators should ensure that *animal welfare* is maintained throughout the transit process, in accordance with Section 7 as relevant.

Article 5.5.3.

General principles applicable to procedures for official controls for transit

The *Veterinary Authority* or other relevant *Competent Authorities* should implement official inspection based on risk and with appropriate frequency to ensure compliance with the *transit country* requirements. By way of derogation, the *Veterinary Authority* may exempt from inspection *safe commodities* or *commodities* posing a negligible risk and for which inspection is not considered necessary.

A *transit country* may not accept the transit of *commodities* not complying with its requirements.

The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that conditions included in the *international veterinary certificate* at origin are maintained during official controls, stopover, storage and transport, that *biosecurity* is applied to prevent transmission of pathogenic agents throughout the transit process and that unnecessary delays are avoided. Original documentation intended for the *importing country* should remain with the consignment.

Article 5.5.4.

Planning for the unexpected events

The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that the operator develops a plan to address unexpected events which may compromise the compliance of the transited *commodities* with the requirements of the *transit country* or the *importing country*. The plan may be generic, or specific to each consignment, and should focus on preventing the introduction to the *transit country* of a *listed disease* or a disease referred to in the *transit country* requirements, and on ensuring *animal welfare* recommendations in Section 7. The plan should identify responsibilities and include procedures for commodities not complying with the *transit country* requirements.

Article 5.5.5.

General recommendations on measures to address identified informal or illegal movement of commodities at border inspection posts

To control the *risks* posed by informal or illegal cross-border movement at *border inspection posts*, the *Veterinary Authority* or other relevant *Competent Authorities* should coordinate and cooperate with the customs authority as described in Article 5.6.8.

Annex 19

CHAPTER 5.6.

MEASURES AND PROCEDURES APPLICABLE ~~IN~~ TO THE IMPORTATION OF COMMODITIES

Article 5.6.1.

Purpose and scope

This chapter provides general principles for measures and procedures that are applicable to ~~in~~ the importation of *commodities* to prevent the spread of pathogenic agents through *international trade* of *commodities*, without creating unjustified restrictions, covering from ~~the time of~~ arrival at the *point of entry* ~~border of~~in the *importing country* until clearance of *commodities*.

This chapter provides *importing countries* with recommendations on measures and procedures, and the roles and responsibilities of the *Veterinary Authority* and other relevant *Competent Authorities*~~,~~ and of any natural or legal entity or person responsible for import of *commodities* subject to the provisions of this chapter ~~business operators~~(hereafter 'operator'), in addition to responsibilities that are described in Article 5.1.2. This chapter provides guidance to ensure the quality and implementation~~performance~~ of official controls for importation. This chapter not only covers legal importation, but also provides general recommendations for illegal or informal entry of commodities.

~~The *animal health status* of the *importing country* or *zone* is not affected by the presence of disease or infection in imported animals in a *quarantine centre* or at a *border inspection post*.~~

Article 5.6.2.

General considerations

The *Veterinary Authority* or other relevant *Competent Authorities* of the *importing country* should ensure that the *importing country* requirements, which may be included in ~~ing~~ *international veterinary certificates*, ~~and~~ as well as up-to-date information relevant to the import procedures, including a list of the *border inspection posts* designated for the import and transit of those *commodities*, are made available to operators and to the *exporting countries*.

The *Veterinary Authority* or other relevant *Competent Authorities* ~~of the *importing country*~~ should be responsible for the ~~performance~~ implementation of official controls in accordance with *veterinary legislation* to ensure that ~~imported~~ *commodities* can be safely imported. ~~Its~~ Their legal mandate and responsibilities~~, as described in Articles 3.4.5. and 3.4.13.,~~ should include the ~~import~~ official controls ~~activities~~ at any step and the possibility to request from the operator~~importer~~ any necessary information. Where appropriate, the *Veterinary Authority* or other relevant *Competent Authorities* may delegate certain tasks ~~in accordance with point 2 of Article 3.4.5~~. Adequate human, technical, physical and financial resources should be available in the *importing country* for the *Veterinary Services* to effectively implement~~perform~~ official controls ~~inspection~~ in accordance with the quality principles ~~described~~ in ~~Article~~ Chapter 3.2~~.2~~.

An *importing country* may require adequate advance notice or approval regarding the date of entry of *commodities* into its territory ~~of *commodities*~~, stating the type of *commodity*, species, quantity, means of transport and the *border inspection post* to be used.

~~The *Veterinary Authority* or other *Competent Authorities* when relevant, should perform o~~Official inspections should be implemented ~~in accordance with Article 3.2.12.~~ regularly, on a risk basis and with appropriate frequency to ensure compliance with the *importing country* requirements. By way of derogation, the *Veterinary Authority* or other relevant *Competent Authorities* may exempt from the inspection~~,~~ *safe commodities* or *commodities* posing a negligible risk and for which inspection is not considered necessary.

Biosecurity should be applied to prevent transmission of pathogenic agents from *commodities* throughout the import process.

An *importing country* may prohibit the ~~introduction~~ entry into its territory of a consignment of *commodities* not complying with the *importing country* requirements.

Operators~~Importers~~ should be aware of the *importing country* requirements and import procedure before the importation and inform~~announce~~, in advance, to the relevant *Competent Authorities* the arrival of consignments at the *border inspection post*, in accordance with *importing country* requirements. Operators~~Importers~~ should ensure that *commodities* are presented for official controls ~~inspection~~ at the *border inspection post*, together with the original ~~official~~ *international veterinary certificates* or documents, or digital equivalents, which are required to accompany the consignments.

In case of *animals*, operators~~importers~~ should ensure that *animal welfare* is maintained throughout the ~~whole~~ import process ~~of importation,~~ in accordance with ~~Chapters 7.1., 7.2., 7.3. and 7.4.~~Section 7 as relevant.

The *Veterinary Authority* ~~of the *importing country*~~ should carry out collaborative activities with other relevant *Competent Authorities*, customs, other authorities and operators, and with *Veterinary Authorities* in other countries, to control the risk posed by the illegal cross-border movement of *commodities*, i.e. international movement of *commodities* done in a way to expressly and intentionally avoid official controls.

Article 5.6.3.

General principles applicable to procedures for ~~import~~ official controls for importation

Veterinary Authority or other relevant *Competent Authorities* should ~~take~~ control ~~of~~ the imported *commodities* to ~~decide~~ determine whether ~~or not~~ the consignment complies with the *importing country* requirements.

~~Import~~ Official controls should be ~~performed~~ implemented at an appropriate place which might include a *border inspection post*, a point of entry, *quarantine centre*, the place of destination, or premises of the operator responsible for the consignment. The consignment should remain under the control of the *Veterinary Authority* or other relevant *Competent Authorities* until formal clearance.

In case of emergency, ships and aircraft~~s~~ may be granted access to a port or airport ~~which~~ that are not their intended destination. In those cases, they should be subjected to the animal health and *animal welfare* measures which the *Veterinary Authority* or other relevant *Competent Authorities* may consider necessary based on the potential risk.

1. Official inspection

   Where official inspections of *commodities* are ~~performed~~ implemented, they should always include a documentary check and, depending on the risk to human and animal health and *animal welfare,* should also include identity checks and physical inspection~~checks~~*.* When the *Veterinary ~~Authority or other Competent Authorities~~Services* need~~s to have~~ full access to the consignment for the purpose of identity checks or physical inspection, consignments should be partially or fully unloaded from the means of transport.

   a) Documentary check

      A documentary check should be implement~~perform~~ed on all consignments presented for official controls ~~inspection~~ to ensure that they meet the *importing country* requirements.

      A ~~D~~documentary check should include examination of the *international veterinary certificate*, and possibly of laboratory reports or other documents, including those of a commercial nature, which are required to accompany the consignment.

      When implementing~~performing~~ a documentary check, the *Veterinary ~~Authority or other Competent Authorities~~Services* should inspect the required documents, in original or their digital equivalents as agreed between the *importing* and *exporting country*, to ensure that:

      i) the *international veterinary certificate* has been issued by the *Official Veterinarian* of the *exporting country*; complies with relevant principles set out in Article 5.2.3. and corresponds as relevant to the

model ~~established~~ agreed between the *exporting* and ~~by~~ the *importing country* for that *commodity* and intended use~~, based on Chapters 5.10. to 5.13.~~; and

ii) the information contained in the checked documents complies with the *importing country* requirements.

b) Identity check

An i~~i~~dentity check should be implement~~perform~~ed upon arrival of the consignment at the point of inspection, as a visual inspection to verify that the content and the labelling of a consignment, including the identification of *commodities*, seals and means of transport, correspond to the information declared in the *international veterinary certificate* and accompanying documents.

The frequency of identity checks, the quantity of *commodities* to be inspected as well as the criteria for ~~sampling~~ selection for checking should be determined by the *Veterinary Authority* or other relevant *Competent Authorities* ~~of the *importing country*~~ based on *risk assessment*.

c) Physical inspection

Physical inspection should include, as appropriate:

i) clinical examination of ~~an~~ *animals* for evidence of ~~transmissible~~ diseases and *animal welfare* issues

~~ii) and~~ physical checks of *animal products* and *germinal products*,

~~iii) and, as appropriate,~~ checks on packaging and labelling,

iv) checks on the means of transport~~, labelling~~ and temperature records,

~~v) the~~ sampling for analysis, testing or diagnosis, and

vi) any other checks required by the *Veterinary Authority* or other relevant *Competent Authorities* to verify compliance with the *importing country* requirements.

The frequency of physical inspection, the quantity of *commodities* to be inspected as well as the criteria for ~~sampling~~ selection for physical inspection should be determined by the *Veterinary Authority* or other relevant *Competent Authorities* ~~of the *importing country*~~ based on *risk assessment*, and considering the following:~~.~~

i) For a~~A~~nimals

The ~~*Veterinary Authority* or other *Competent Authorities* of the *importing country* should determine the~~ number of *animals* to be clinically examined should be determined in accordance with the overall number of *animals* in the consignment and the declared purpose of the *animals*;~~, which~~ it may be increased if the physical checks carried out have not been satisfactory.

In some cases, such as ~~F~~for *animals* ~~that are not required to be identified individually and animals~~ considered to be dangerous, clinical examination ~~should~~ could consist of observation of the state of health and behaviour of the entire group or of a representative number of *animals*.

If the clinical examination reveals an anomaly, a more thorough clinical examination may be carried out, including sampling and testing, where appropriate.

ii) ~~Germinal~~ For germinal products

~~The *Veterinary Authority* or other *Competent Authorities* should carry out~~ Physical checks of the consignment should be carried out to verify the compliance of labelling and the transport conditions

with *importing country* requirements~~,~~ including, when relevant, temperature records ~~when relevant~~ and the integrity of the seals, packaging material and cryogenic tanks.

~~The *Veterinary Authority* or other *Competent Authorities* of the *importing country* should determine the number of items to be checked, which may be increased if the checks carried out have not been satisfactory.~~

~~The *Veterinary Authority* or other *Competent Authorities* may carry out physical checks to verify that the labelling complies with *importing country* requirements.~~

Physical inspection may include laboratory testing of the *germinal products*.

If the physical checks reveal an anomaly, a more thorough inspection may be carried out.

iii) For ~~A~~animal products

~~The *Veterinary Authority* or other *Competent Authorities* should carry out~~ physical checks of the consignment should be carried out to verify the compliance of labelling and the transport conditions with *importing country* requirements, including temperature records when relevant and the integrity of the packaging material and seals.

~~The *Veterinary Authority* or other *Competent Authorities* may carry out physical checks to verify that the labelling complies with *importing country* requirements.~~

Physical inspection may include sensory examination and laboratory testing of the *animal products*.

If the physical checks reveal an anomaly, a more thorough inspection may be carried out.

2. Sampling and testing

Sampling and testing of imported *commodities* ~~with a view~~ to check~~ing~~ compliance with the ~~health~~ *importing country* requirements ~~laid down in the *international veterinary certificate*~~, may be implement~~perform~~ed following a risk-based sampling plan or upon suspicion of non-compliance resulting from the documentary, identity or physical checks of *commodities*, without creating unjustified barriers to trade. Testing should be implement~~perform~~ed in a~~n *approved*~~ *laboratory*.

The *Veterinary Authority* or other relevant *Competent Authorities* may develop a risk-based sampling plan for imported consignments, that should specify the percentage of consignments to be sampled, taking into account the *animal health status* of the *importing* and *exporting country*, the species concerned, the nature and declared purpose of the *commodities*, the number of incoming consignments and the results of previous sampling.

Where no immediate danger to animal health or public health is suspected from *commodities* sampled in accordance with a sampling plan, a consignment may be released before the results of laboratory tests are available. A traceability system should be in place to recall commodities if needed.

3. Sanitary measures at import

To meet the *importing country* requirements, in addition to the *sanitary measures* implemented in the *exporting countries*, the *Veterinary Authority* or other relevant *Competent Authorities* ~~of *importing country*~~ may require *sanitary measures* to be implemented at importation before release of the *commodities* from official controls. Measures may include *disinfection* of and ~~disinsection~~ elimination of arthropod *vectors* from~~of *vehicles/vessels*~~*means of tranport* and *containers* used in the transportation and *unloading* of *commodities*, in accordance with Chapter 4.14.

In the case of *animals*, measures may include *vaccination*, treatment or isolation. In the case of other *commodities*, measures may include a holding period or the application of physical or chemical treatment.

4. Release of consignments

Based on the implement~~performed~~ ~~import~~ official controls, the *Veterinary Authority* or other relevant *Competent Authorities* ~~of *importing countries*~~ should decide whether the consignment complies with the *importing country* requirements.

When the decision is made that the consignment complies with the *importing country* requirements and has been cleared for release, the *Veterinary Authority* or other relevant *Competent Authorities* should notify the operator~~importer~~ and the information should be made available to the customs authorities.

Article 5.6.4.

Further action for non-compliant commodities

Commodities identified as non-compliant based on the implement~~performed~~ ~~import~~ official controls should not be released by the *Veterinary Authority* or other relevant *Competent Authorities* and should be ~~isolated~~ detained under appropriate conditions including isolation for *animals*, pending further decision ~~by the *Competent Authority*~~.

Depending on the type of *commodity* and the *risk* the *commodity* represents to human and animal health, and environment, or for~~due to~~ *animal welfare* reasons, the *Veterinary Authority* or other relevant *Competent Authorities*~~,~~ should identify the options for the disposition of the *commodities* and notify the operator~~importer~~. Disposition of *commodities* may include:

a) re-dispatching the *commodity* back to the *exporting country* or another country, with the agreement of the receiving *Competent Authority*;

b) subjecting the *commodity* to treatment or to other risk mitigation measures necessary to allow importation;

c) *killing* and disposal of *animals*, or destruction of other *commodities*.

Any action applied to consignments of *animals* should comply with ~~Chapters 7.1. and 7.6.~~the relevant provisions of Section 7.

The *Veterinary Authority* or other relevant *Competent Authorities* of the *importing country* should notify any decision and reasons to refuse entry of a *commodity* to the customs authorities and are encouraged to communicate it to the *Veterinary Authority* of the *exporting country*. Where appropriate, the *Veterinary Authority* of the *exporting country* should be given the opportunity to explain the situation in an attempt to have the consignment released.

Following decisions taken in relation to non-compliant *commodities*, the *Veterinary Authority* or other relevant *Competent Authorities* should supervise the effective disposition of the *commodities* and apply measures to prevent the introduction into the country of *commodities* which have been refused import, and the reuse of the *international veterinary certificate* that accompanied the consignment.

The *Veterinary Authority* or other relevant *Competent Authority* of the *importing country* should inform the *exporting country* of any case of a *listed disease* or disease referred to in the *importing country requirements* in a consignment of *animals*.

Article 5.6.5.

~~Emergency~~P~~p~~lan~~ning for unexpected events

~~The *Veterinary Authority* or other *Competent Authorities* of the *importing country* should develop a plan to address the occurrence, within the *exporting country* after the *commodities* have been exported or within the *transit country* after the *commodities* have transited, of a *listed disease* or a disease referred to in the *importing country* requirements which may have impacted the status of the exported *commodities*.~~

~~The *Veterinary Authority* or other *Competent Authorities* may also develop a plan to address the occurrence of a *listed disease*, or a disease referred to in the *importing country* requirements, within the *importing country* before the animals have been released.~~

The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that the operator~~importer~~ develops a plan to address unexpected events ~~emergencies~~ which may impact the compliance~~status of the *commodities*~~ with

importing country requirements~~being imported, and non-compliant *commodities* described in Article 5.6.4~~. The ~~emergency~~ plan may be generic, or specific to each consignment, and should focus on preventing the introduction to the *importing country* of a *listed disease* or a disease referred to in the *importing country* requirements, and on *animal welfare* recommendations in ~~accordance with~~ Section 7~~Chapters 7.2., 7.3. and 7.4~~. The ~~emergency~~ plan should identify responsibility and include procedures for actions taken for non-compliant *commodities* described in Article 5.6.4.

Article 5.6.6.

General recommendations applicable to ~~vehicles/vessels~~means of transport and containers that transported infected animals

~~*Vehicles/vessels*~~*Means of transport* and *containers* that transported *animals* found to be infected with a pathogenic agent of a *listed disease* or a disease referred to in the *importing country* requirements should be considered ~~as~~ contaminated, and the *Veterinary Authority* or other relevant *Competent Authorities* should apply the following measures as appropriate to the risk:

a) treatment or safe disposal of the litter, forage and any other potentially contaminated material, by its removal from the ~~*vehicles/vessels*~~*means of tranport* and *containers* for immediate transportation to an establishment assigned in advance, where the animal health measures required by the *importing country* should be strictly applied;

b) *disinfection* of all parts of the ~~*vehicles/vessels*~~*means of transport* and *containers* which were used in the transport, feeding, watering, moving and *unloading* of the *animals,* as well as all baggage of travelling attendants, in accordance with Chapter 4.14.;

c) ~~disinsection~~ elimination of arthropod *vectors* from ~~*of vehicles/vessels*~~*means of transport* and *containers* in case of *vector* disease.

Article 5.6.7.

General principles applicable to disposal of international catering waste

International catering waste is a high-risk category of product and should therefore be subject to strict controls to minimise the risk of introduction of pathogenic agents.

The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that all international catering waste entering the country from the international means of transport is handled, collected and disposed of in a way to minimise the risk of introduction of pathogenic agents.

Article 5.6.8.

General recommendations on measures to address identified illegal movement of commodities at border inspection posts

To control the *risks* posed by illegal cross-border movement at *border inspection posts*, the *Veterinary Authority* or other relevant *Competent Authorities* should coordinate and cooperate closely with the customs authority to ensure that the official controls ~~inspection of~~ for *commodities* entering the country are~~is~~ implement~~perform~~ed in accordance with the rules of this chapter and national legislation, including when fraud is suspected.

For that purpose, the *Veterinary Authority* or other relevant *Competent Authorities* should ensure the timely exchange with the customs authority, including via electronic means, of information and decisions made relevant to the organisation and conduct of their respective activities for *commodities* entering the country. The *Veterinary Authority* or other relevant *Competent Authorities* should collaborate with the customs authority to ensure immediate notification to the *Veterinary Authority* or other relevant *Competent Authorities* if ~~of circumstances where a declaration is submitted to the customs authority for~~ a consignment of those categories of *commodities* that should be subject to official ~~inspection~~ control but with no evidence of an official ~~inspection~~ control having been conducted.

The *Veterinary Authority* or other relevant *Competent Authorities*, in collaboration with the customs authorities, should have practical arrangements in place to ensure ~~the~~ implementation of the measures described in Article 5.6.4. in case of detection of illegal cross-border movement of *commodities* at a *border inspection post*.

Article 5.6.9.

General recommendations on measures to address identified informal or illegal movement of commodities outside border inspection posts

To control the *risks* posed by the illegal cross-border movement of *commodities* outside of *border inspection posts*, the *Veterinary Authority* or other relevant *Competent Authorities* should:

1) coordinate with border authorities (police, customs, transport, immigration) to provide technical support for identification of illegal cross border movement of *commodities*;

2) develop and implement practical mechanisms to address informal or illegal cross border movement of *commodities* ~~and implementation thereof~~ in close collaboration with border authorities.

CHAPTER 5.7.

BORDER INSPECTION POSTS AND QUARANTINE CENTRES

Article 5.7.1.

Purpose and scope

This chapter provides recommendations on *border inspection posts* and *quarantine centres* to support effective implementation of measures and procedures applicable to the exportation, transit and importation of *commodities,* in order to prevent the spread of pathogenic agents without creating unjustified trade restrictions.

Quarantine centres may be used for isolation of *animals* either pre-exportation in accordance with disease-specific chapters in the *Terrestrial Code* or post-arrival. The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that the application of *biosecurity* at *quarantine centres* is appropriate to the type of isolation being undertaken, and effectively mitigates risks in accordance with disease-specific chapters of the *Terrestrial Code* (pre-export isolation) or via *risk analysis* (post-arrival quarantine).

Article 5.7.2.

General considerations

Appropriate legislation should be in place, in accordance with Chapter 3.4., to define the facilities, the resourcing and operation of *border inspection posts* and *quarantine centres,* and for their approval.

Material and financial resources should be available at *border inspection posts* and *quarantine centres* as necessary to undertake the relevant functions of the facility while managing official controls, *biosecurity*, health and safety risks and *animal welfare* associated with the type and volume of *commodities* presented for inspection.

Appropriate administration systems should be available to personnel at *border inspection posts* and *quarantine centres* as necessary for the functions of the facility, including record keeping and information and communication technology, to support decision-making and communication.

Biosecurity consistent with Chapter 4.X. is critical to fulfil the functions of *border inspection posts* and *quarantine centres.*

The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that:

– Operations at *border inspection posts* and *quarantine centres* are supported by sufficient authorised personnel who are operating under the principles of Chapter 3.2., appropriately qualified with access to regular training, consistent with the intended use and the type and quantity of *commodities* presented.

– Operational details for *border inspection posts* and *quarantine centres* are made available to operators described in Chapters 5.4., 5.5. or 5.6., including the intended use and the categories of *commodities* for which they are designated, exact locations, contact details, hours of operation, booking requirements and costs.

– Standard Operating Procedures (SOP) are available to personnel at *border inspection posts* and *quarantine centres* describing the procedures undertaken there. Auditable records documenting the performance of these procedures should be kept, including the maintenance of *biosecurity*. Records should include the results of official controls, regular *surveillance* and *monitoring* in the facilities and the surrounding areas.

– *Border inspection posts* and *quarantine centres* have access to *laboratories* and other *approved* service providers with SOPs as necessary to support the implementation of official controls and the measures described in Chapters 5.4., 5.5. and 5.6. consistent with Article 3.2.6.

Article 5.7.3.

Cooperation with other agencies

The *Veterinary Authority* or other relevant *Competent Authorities* should engage with other governmental authorities with responsibilities at international borders in the design and operation of *border inspection posts*, to ensure that official inspection and clearance of transit or import consignments is streamlined where possible. Co-use of facilities and equipment at international borders with other authorities could be considered as long as it does not hinder normal operations described in this chapter. Key principles of the World Trade Organization (WTO) Trade Facilitation Agreement should be considered to facilitate importation and transit of *commodities*.

Article 5.7.4.

Requirements for a border inspection post

Design and operation of a *border inspection post* should be based on *risk analysis* and *biosecurity* including the following:

1) Separation between public areas and restricted areas for inspection of consignments.

2) Perimeter security of restricted areas to prevent entry of unauthorised people and *means of transport*, and unwanted animals, with access control for entry and exit of authorised personnel and *means of transport*.

3) Facilities and equipment suitable for the type and volume of *commodities* presented, necessary for implementation of the official control procedures described in Article 5.6.3, including secure unloading and loading, inspection, sampling and storage or detention of *commodities*, including adequate lighting and temperature control with surfaces appropriate for cleaning and *disinfection*.

4) Facilities and equipment for cleaning and *disinfection* and elimination of arthropod *vectors* of *means of transport* and *containers* that have been used in transportation of *commodities,* consistent with Article 5.6.6.

5) Waste management for restricted areas with storage facilities as necessary, for solid and liquid waste, including discarded *feed,* rejected consignments, dead *animals* and used bedding, with access and secure transportation to facilities for treatment of waste.

Article 5.7.5.

Additional requirements for a border inspection post for animals

In addition to the principles described in Article 5.7.4., a *border inspection post* for consignments of *animals* should be designed and operate in accordance with *animal welfare* principles in Section 7 and should specifically include the following:

1) Separate access to restricted animal inspection areas via road infrastructure, to minimise delays.

2) Facilities necessary for the management of consignments of *animals* according to Article 5.6.3, including containment, feeding, watering, restraint and inspection, consistent with the type and number of *animals* presented.

3) Facilities for temporarily holding *animals*, with adequate space, light, ventilation and separation as appropriate between consignments and species.

Article 5.7.6.

Facilities involved in official inspection other than border inspection post

When the *Veterinary Authority* or other relevant *Competent Authority* defines that official inspection could be implemented at an appropriate place other than a *border inspection post*, the facilities involved should be *approved* following the principles outlined in Articles 5.7.4. and 5.7.5., and the consignment should remain under the control of the *Veterinary Authority* or other relevant *Competent Authorities* until formal clearance.

Article 5.7.7.

Requirements for a quarantine centre

Design and operation of a *quarantine centre* should be based on consideration of the following:

1) The disease situation of the country, *zone* or area surrounding the *quarantine centr*e.

2) Location of facilities at a distance from other *establishments*, sufficient to avoid transmission of diseases of concern.

3) Site topography, to minimise disease risks associated with the flow of contaminated water.

4) Perimeter security to prevent entry of unauthorised people and *means of transport,* and unwanted animals.

5) Controls, including sanitary requirements, for entry and exit of authorised personnel, and the facilities necessary to apply these controls including changing rooms and showers. Controls for exit of authorised personnel may not be necessary for the isolation of *animals* before exportation.

6) Controls, including sanitary requirements, for entry and exit of *means of transport* and equipment, including veterinary instruments and supplies, and the facilities necessary to apply these controls. Controls for exit of *means of transport* and equipment may not be necessary for the isolation of *animals* before exportation.

7) Controls for entry of supplies, including the sources, sanitary status and entry process for *feed* and bedding, and facilities necessary to handle and store these supplies.

8) Facilities and equipment for cleaning and *disinfection*, and removal of arthropod *vectors* including control of waste and effluent, for *means of transport* and *containers* that have been used in transportation of import consignments of *animals*.

9) Waste management. In the case of isolation of *animals* after arrival, waste management should be in accordance with a *biosecurity plan* including storage facilities as necessary, for solid and liquid waste, including discarded *feed*, rejected consignments, dead *animals* and used bedding, with access and secure transportation to facilities for treatment of waste.

10) Facilities for containment and management of consignments of *animals*, including as appropriate to the animal species separation between consignments, *unloading/loading*, housing, yards, restraint, isolation, *vector* control, and for undertaking interventions required by *risk analysis* and/or relevant disease-specific chapters of the *Terrestrial Code*, including sample collection, testing, *vaccination*, treatment and veterinary inspection.

11) Equipment for cleaning and *disinfection* and removal of arthropod *vectors* in the facility between consignments of *animals*.

A *quarantine centre* for isolation of *animals* before exportation should be used to address the specific requirements in disease-specific chapters of the *Terrestrial Code*. Unless specified in those chapters, isolation of *animals* before exportation may be performed in other facilities.

Article 5.7.8.

Planning for unexpected events

The management of consignments at *border inspection posts* and *quarantine centres* that have failed clearance and have thus been refused transit or import is covered in Chapters 5.4. to 5.6.

The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that plans are available to personnel at *border inspection posts* and *quarantine centres* that support responses to foreseeable but uncommon events. The

plans should address communication, *biosecurity*, health and safety, and *animal welfare* in each instance, and may cover:

– Unexpected arrival of *commodities*.

– Evidence of a *listed disease* or a disease included in the *transit* or *importing country* requirements in a consignment of imported or transiting *animals* at a *border inspection post* or *quarantine centre*.

– Veterinary emergency in *animals* at a *border inspection post* or undergoing post-arrival isolation in a *quarantine centre*.

– Escape of *animals*.

– Evidence of *animal products* presenting a risk to animal or public health.

– Natural disasters and interruption of critical services threatening the operation of the *border inspection post* or *quarantine centre*.

CHAPTER 8.8.

INFECTION WITH FOOT AND MOUTH DISEASE VIRUS

[…]

Article 8.8.33bis.

Recommendations for importation of fetal bovine serum from countries or zones infected with FMDV

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that this product has been subjected to:

1) gamma irradiation at a dose of at least 30 kilo Gray (kGy); or

2) an equivalent treatment that has been demonstrated to inactivate FMDV.

[…]

Annex 22

CHAPTER 8.13.

INFESTATION WITH CHRYSOMYA BEZZIANA (OLD WORLD SCREWWORM) AND ~~NEW WORLD SCREWWORM (~~INFESTATION WITH COCHLIOMYIA HOMINIVORAX (NEW WORLD SCREWWORM) ~~AND OLD WORLD SCREWWORM (CHRYSOMYA BEZZIANA)~~

Article 8.13.1.bis

General provisions

New World screwworm and Old World screwworm can infest a wide variety of mammals, including humans and birds.

For the purposes of the *Terrestrial Code*, New World screwworm is defined as an *infestation* of mammals and birds (hereafter 'animal hosts') with *Cochliomyia hominivorax*, and Old World screwworm is defined as an *infestation* of animal hosts with *Chrysomya bezziana*.

The occurrence of *infestation* with *Cochliomyia hominivorax* or *infestation* with *Chrysomya bezziana* is defined by the following: *Cochliomyia hominivorax* or *Chrysomya bezziana* has been observed and identified as such in a sample from an animal host.

Standards for diagnosis and information on the epidemiology are described in the *Terrestrial Manual*.

[…]

CHAPTER 8.X.

INFECTION WITH CRIMEAN-CONGO HAEMORRHAGIC FEVER VIRUS

Article 8.X.1.

General provisions

For the purposes of the *Terrestrial Code,* Crimean-Congo haemorrhagic fever is defined as an *infection* of ruminants, dromedary camels and ostriches (hereafter 'animal hosts') with Crimean-Congo haemorrhagic fever virus (CCHFV).

The following defines the occurrence of *infection* with CCHFV:

1) CCHFV has been isolated and identified as such in a sample from an animal host; or

2) nucleic acid specific to CCHFV has been detected in a sample from an animal host epidemiologically linked to a confirmed or suspected *case,* or to a human infected with CCHFV, or giving cause for suspicion of previous association or contact with CCHFV; or

3) antibodies specific to CCHFV have been detected in a sample from an animal host epidemiologically linked to a confirmed or suspected *case,* or to a human infected with CCHFV, or giving cause for suspicion of previous association or contact with CCHFV.

Standards for diagnosis and information on the epidemiology are described in the *Terrestrial Manual*.

CHAPTER 10.X.

INFECTION WITH AVIAN METAPNEUMOVIRUS (TURKEY RHINOTRACHEITIS AND SWOLLEN HEAD SYNDROME OF CHICKENS)

Article 10.X.1.

General provisions

For the purposes of the *Terrestrial Code*, *infection* with avian metapneumovirus is defined as an *infection* of *poultry* with avian metapneumovirus.

The following defines the occurrence of *infection* with avian metapneumovirus:

1) Avian metapneumovirus has been isolated and identified as such in a sample from *poultry*; or

2) nucleic acid specific to avian metapneumovirus, which is not the consequence of *vaccination*, has been detected in a sample from *poultry*; or

3) seroconversion specific to avian metapneumovirus has been detected in *poultry*; or

4) antibodies specific to avian metapneumovirus, which are not the consequence of *vaccination*, have been detected in a sample from *poultry* showing clinical signs or pathological lesions consistent with *infection* with avian metapneumovirus, or epidemiologically linked to a confirmed or suspected *case*.

Standards for diagnosis and vaccines, as well as information on the epidemiology, are described in the *Terrestrial Manual.*

CHAPTER 12.4.

INFECTION WITH EASTERN EQUINE ENCEPHALITIS VIRUS (EASTERN EQUINE ENCEPHALOMYELITIS) AND INFECTION WITH WESTERN EQUINE ENCEPHALITIS VIRUS (WESTERN EQUINE ENCEPHALOMYELITIS)

Article 12.4.1.

General provisions

Equids are dead-end hosts for eastern equine encephalitis (EEE) and western equine encephalitis (WEE) and therefore, equids and their products do not present a risk of transmission. However, equids are useful sentinels for the early detection of EEE or WEE to mitigate the animal and public health risks of these pathogenic agents.

For the purposes of the *Terrestrial Code*, EEE is defined as an *infection* of equids with eastern equine encephalitis virus (EEEV), and WEE is defined as an *infection* of equids with western equine encephalitis virus (WEEV).

The following defines the occurrence of *infection* with EEEV or *infection* with WEEV:

1) EEEV or WEEV has been isolated and identified as such in a sample from an equid; or

2) nucleic acid or antigen specific to EEEV or WEEV has been detected in a sample from an equid showing clinical signs or pathological lesions consistent with EEE or WEE, or epidemiologically linked to a confirmed or suspected *case*, or giving cause for suspicion of previous association or contact with EEEV or WEEV; or

3) antibodies specific to EEEV or WEEV, which are not the consequence of *vaccination*, have been detected in a sample from an equid showing clinical signs or pathological lesions consistent with EEE or WEE, epidemiologically linked to a confirmed or suspected *case*

Standards for diagnosis and vaccines, as well as information on the epidemiology, are described in the *Terrestrial Manual*.

Article 12.4.2.

Safe commodities

When authorising the importation or transit of equids or their products, *Veterinary Authorities* should not require any EEE- or WEE-related conditions regardless of the *animal health status* of the country or *zone* of origin.

Article 12.4.3.

Surveillance of EEE or WEE

The objective of surveillance of EEE and WEE is for the *Veterinary Authority* to coordinate in a timely manner with public health and other relevant *Competent Authorities* and share information to use the *surveillance* outcomes to prevent animal and human exposure. Although equids are dead-end hosts of EEE and WEE, they act as sentinels for the presence of *infection* with EEEV or WEEV in an area.

Surveillance of EEE or WEE should be carried out in accordance with Chapter 1.4. and with the following recommendations.

Veterinary Authority should develop *early warning systems* to detect VEE and WEE epidemic events, so as to promote awareness campaigns to sensitise the owners and keepers of equids, the *veterinarians* and the public health authorities. In such situations, *surveillance* should be conducted to define the extent of the epidemic area for the purpose of disease prevention and control.

Clinical *surveillance* to detect clinical signs of *infection* with EEEV or WEEV in equids should be the basis of the *early warning system*. Clinical disease in equids is characterised by fever, anorexia, and severe depression. In severe *cases*, it can progress to neurological signs and death. Clinical *surveillance* targeted at neurological signs in equids can provide reinforced evidence of the occurrence of an epidemic. However, clinical signs are not pathognomonic and suspected *cases* detected by clinical *surveillance* should always be confirmed by laboratory testing, taking into account the epidemiological situation. The rate at which such suspected *cases* are likely to occur can differ between epidemiological situations and cannot, therefore, be predicted reliably.

An epidemic should be suspected when ecological conditions favour the breeding of large numbers of mosquito *vectors* with the concurrent or consequent occurrence of an increased number of equids showing clinical signs or pathological lesions consistent with *infection* with EEEV or WEEV, or reports of infection in humans or wild birds. This is especially the case for countries or *zones* infected with EEEV or WEEV, or countries or *zones* adjacent to a country or *zone* in which epidemics have been reported. Ecological conditions can be assessed through sharing and analysis of meteorological data, data on precipitation and water levels, and monitoring of *vector* activity.

Detection of *infection* with EEEV or WEEV in an area is indicative of *vector* activity in this area and is a more sensitive approach to *monitoring* for EEV or WEEV than vector *surveillance*. Findings of EEEV or WEEV in *vectors* is of low sensitivity and, therefore, is not a recommended *surveillance* method.

Annex 6

USER'S GUIDE

A. Introduction

1) The WOAH *Terrestrial Animal Health Code* (hereafter referred to as the *Terrestrial Code*) establishes standards for the improvement of terrestrial animal health and welfare and veterinary public health worldwide. The purpose of this guide is to advise the Veterinary Authorities of WOAH Member Countries on how to use the *Terrestrial Code*.

2) Veterinary Authorities should use the standards in the *Terrestrial Code* *notably* to set up measures providing for early detection, internal reporting, notification, control or eradication of pathogenic agents, including zoonotic ones, in terrestrial animals (mammals, birds, reptiles and bees) and preventing their spread via international trade in animals and animal products, while avoiding unjustified sanitary barriers to trade. These measures may include the establishment and recognition of animal health status applied to countries, zones, compartments or herds/flocks.

3) WOAH standards are based on the most recent scientific and technical information. Correctly applied, they protect animal health and welfare and veterinary public health during production of and trade in ~~animals and animal products~~commodities, and in the use of animals.

4) The absence of chapters, articles or recommendations on particular pathogenic agents, surveillance strategies, animal health status or trade in commodities does not preclude the application of appropriate sanitary measures by the Veterinary Authorities, provided they are based on risk analyses conducted in accordance with the *Terrestrial Code*.

5) The year that a chapter was first adopted and the year of its last revision are noted at the end of each chapter.

6) The complete text of the *Terrestrial Code* is available on WOAH Web site and individual chapters may be downloaded from: https://www.woah.org/.

B. Terrestrial Code content

1) Key terms and expressions that are used in more than one chapter ~~in the *Terrestrial Code*~~ and require precise interpretation for the purposes of the *Terrestrial Code* are defined in the Glossary, in the case where common dictionary definitions are not deemed to be adequate. The reader should be aware of the definitions given in the Glossary when reading and using the *Terrestrial Code*. Defined terms appear in italics. In the on-line version of the *Terrestrial Code*, a hyperlink leads to the relevant definition.

2) The term "(under study)" is found in some rare instances, with reference to an article or part of an article. This means that this part of the text has not been adopted by the World Assembly of Delegates and the particular provisions are thus not part of the *Terrestrial Code*, while they continue to be the subject of specific work, until they are amended or deleted.

3) The standards in the chapters of Section 1 are designed for the implementation of measures for the diagnosis, surveillance and notification of diseases, infections and infestations. The standards include procedures for notification to WOAH and procedures for the recognition of the animal health status of a country, zone or compartment.

4) The standards in Section 2 are designed to guide the importing country in conducting import risk analysis in the absence of WOAH recommendations on particular pathogenic agents or commodities. The importing country should also use these standards to justify import measures which are more stringent than existing WOAH standards.

5) The standards in the chapters of Section 3 are designed for the establishment, maintenance and evaluation of Veterinary Services, including veterinary legislation and communication. These standards are intended to assist

the Veterinary Services and Veterinary Authority of Member Countries to meet their objectives of improving terrestrial animal health and welfare and veterinary public health, as well as to establish and maintain confidence in their international veterinary certificates.

6) The standards in the chapters of Section 4 are designed for the implementation of measures for the prevention and control of pathogenic agents. Measures in this section include animal identification, traceability, zoning, compartmentalisation, disposal of dead animals, disinfection, disinsection and general hygiene precautions. Some chapters address the specific sanitary measures to be applied for the collection and processing of semen and embryos of animals.

7) The standards in the chapters of Section 5 are designed for the implementation of general sanitary measures for trade. They address veterinary certification and the measures applicable by the exporting, transit and importing countries. A range of model veterinary certificates is provided to facilitate consistent documentation in international trade.

8) The standards in the chapters of Section 6 are designed for the implementation of preventive measures in animal production systems. These measures are intended to assist Member Countries in meeting their veterinary public health objectives. They include ante- and post-mortem inspection, control of hazards in feed, biosecurity at the animal production level, and the control of antimicrobial resistance in animals.

9) The standards in the chapters of Section 7 are designed for the implementation of animal welfare measures. The standards cover production, transport, and slaughter or killing, as well as the animal welfare aspects of free-roaming dog population control and the use of animals in research and education.

10) The standards in each of the chapters of Sections 8 to 16, i.e. disease-specific chapters, are designed ~~mainly~~ to ~~prevent the pathogenic agents~~ inform of the occurrence of WOAH listed diseases~~, infections or infestations~~ and to prevent the pathogenic agents from being introduced into an importing country~~, or~~ from spreading within a country or having harmful consequences, while facilitating safe trade. Some chapters include specific measures to prevent and control the infections of global concern. Sections 8 to 16 each relate to the host species of the pathogenic agent: multiple species or species of Apinae, Aves, Bovinae, Equidae, Leporidae, Caprinae, Suidae and Camelidae. Although WOAH aims to include a chapter for each WOAH listed disease, not all WOAH listed diseases have been covered yet by a specific chapter. This is work in progress, depending on available scientific knowledge and the priorities set by the World Assembly of Delegates.

~~The standards take into account the nature of the traded commodity, the animal health status of the exporting country, zone or compartment, and the risk measures applicable to each commodity.~~

A disease-specific chapter covers some or all of the following components:

- Chapter title and number;
- An introductory ~~A~~article ~~on general provisions~~, including definition~~s~~ of the disease and the animal hosts that play a significant role in the epidemiology of the disease, and definition of its occurrence ('case definition')~~, and the animal hosts that play a significant role in the epidemiology of the disease~~;
- Article on safe commodities;
- Articles on provisions for animal health status applied to countries, zones, compartments or herds/flocks;
- Articles on recommendations for safe trade of commodities;
- Articles on inactivation of the pathogenic agents present in specific animal products, materials or fomites; and
- Articles on surveillance of the disease.

Not all disease-specific chapters include all these components and some chapters may include only one ~~the first~~ article on the definition of occurrence for the purpose of notification to WOAH. Each chapter includes only

those provisions considered, at the time of adoption, relevant to address WOAH Members' needs with regards to the specific disease; and that are supported by sound scientific and technical knowledge.

The recommendations in these chapters that are related to international trade ~~These standards~~ assume that the pathogenic agent is either not present in the importing country or is the subject of a control or eradication programme. ~~Sections 8 to 16 each relate to the host species of the pathogenic agent: multiple species or species of Apinae, Aves, Bovinae, Equidae, Leporidae, Caprinae, Suidae and Camelidae. Some chapters include specific measures to prevent and control the infections of global concern. Although WOAH aims to include a chapter for each WOAH listed disease, not all WOAH listed diseases have been covered yet by a specific chapter. This is work in progress, depending on available scientific knowledge and the priorities set by the World Assembly of Delegates.~~ The sanitary measures recommended in the standards take into account the nature of the moved or traded commodity, the animal health status of the exporting country, zone or compartment of origin, and the risk mitigation measures applicable to each commodity.

C. Specific issues

1) Notification

Chapter 1.1. describes Member Countries' obligations under Organic Statutes of the Office International des Epizooties. Listed diseases and emerging diseases, as prescribed in Chapter 1.1., are compulsorily notifiable. Member Countries are encouraged to also provide information to WOAH on other animal health events of epidemiological significance.

Chapter 1.2. describes the criteria for the inclusion of a disease,~~an~~ infection or infestation in the WOAH List and Chapter 1.3. gives the current list. Listed ~~D~~diseases are divided into nine categories based on the host species of the aetiological agents.

2) Diagnostic tests and vaccines

It is recommended that specified diagnostic tests and vaccines in *Terrestrial Code* chapters be used with a reference to the relevant section in the WOAH *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals* (hereafter referred to as the *Terrestrial Manual*). Experts responsible for facilities used for disease diagnosis and vaccine production should be fully conversant with the standards in the *Terrestrial Manual*.

3) Freedom from a disease, infection or infestation

Article 1.4.6. provides general principles for declaring a country or zone free from a disease, infection or infestation~~. This article applies when there are no~~ and may be complemented by specific requirements in the listed disease-specific chapters.

4) Prevention and control

Chapters 4.4. and 4.5. describe the measures that should be implemented to establish zones and compartments. Zoning and compartmentalisation ~~should be considered as some of the~~are important tools to prevent and~~used to~~ control diseases and to facilitate safe trade.

Chapters 4.6. to 4.12. describe the measures which should be implemented during collection and processing of semen and embryos of animals, including micromanipulation and cloning, in order to prevent animal health risks, especially when trading these commodities. Although the measures relate principally to WOAH listed diseases or infections, general standards apply to all infectious disease risks. Moreover, in Chapter 4.8. diseases that are not listed are marked as such but are included for the information of Member Countries.

Chapter 4.15. addresses the specific issue of the prevention and control of bee diseases and some of its trade implications. This chapter should be read in conjunction with the specific bee disease chapters in Section 9.

Chapter 6.5. is designed for the implementation of general biosecurity measures in intensive poultry production. Chapters 6.6., 6.13. and 6.14. provide recommendations for some specific ~~on-farm~~ prevention and control plans for the unlisted foodborne pathogenic agent *Salmonella* in poultry, bovine and pig

production systems as part of the Veterinary Services mission to prevent, eliminate or control food safety hazards in animal production.

Chapter 6.12. deals specifically with the zoonotic risk associated with the movements of non-human primates and gives standards for certification, transportation and import conditions for these animals.

5) Trade requirements

~~Animal health~~Sanitary measures related to international trade should be based on WOAH standards. A Member Country may authorise the importation of animals or animal products into its territory under conditions different from those recommended by the *Terrestrial Code*. To scientifically justify more stringent measures, the importing country should conduct a risk analysis in accordance with WOAH standards, as described in Chapter 2.1. Members of the WTO should refer to the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).

Chapters 5.1. to 5.3. describe the general obligations and ethical responsibilities of importing and exporting countries in international trade. Veterinary Authorities and all veterinarians directly involved in international trade should be familiar with these chapters. Chapter 5.3. also describes the WOAH informal procedure for dispute mediation.

WOAH aims to include an article listing the commodities that are considered safe for trade without the need for risk mitigation measures specifically directed against a particular listed disease, infection or infestation, regardless of the status of the country or zone of origin for the agent in question, at the beginning of each listed disease-specific chapter in Sections 8 to 16. This is work in progress and some chapters do not yet contain articles listing safe commodities. When a list of safe commodities is present in a chapter, importing countries should not apply trade restrictions to such commodities with respect to the agent in question. Chapter 2.2. describes the criteria for inclusion of a ~~used to assess the safety of~~ commodit~~y~~ies in the list of safe commodities of a disease-specific chapter.

6) International veterinary certificates

An international veterinary certificate is an official document that the Veterinary Authority of an exporting country issues in accordance with Chapters 5.1. and 5.2. It lists animal health requirements and, where appropriate, public health requirements for the exported commodity. The quality of the exporting country's Veterinary Services is essential in providing assurances to trading partners regarding the safety of exported animals and products. This includes the Veterinary Authority's ethical approach to the provision of veterinary certificates and their history in meeting their notification obligations.

International veterinary certificates underpin international trade and provide assurances to the importing country regarding the health status of the animals and products imported. The measures prescribed should take into account the animal health status of both exporting and importing countries, and zones, herds/flocks or compartments within them, and be based upon the standards in the *Terrestrial Code*.

The following steps should be taken when drafting international veterinary certificates:

a) identify the diseases, infections or infestations from which the importing country is justified in seeking protection because of its own health status. Importing countries should not impose measures in regards to diseases that occur in their own territory but are not subject to official control programmes;

b) for commodities capable of transmitting these diseases, infections or infestations through international trade, the importing country should apply the relevant articles in the listed disease-specific chapters. The application of the articles should be adapted to the ~~disease~~ animal health status of the country, zone, ~~or~~ compartment or herd/flock of origin. Such status should be established according to Article 1.4.6. except when articles of the relevant listed disease chapter specify otherwise;

c) when preparing international veterinary certificates, the importing country should endeavour to use terms and expressions in accordance with the definitions given in the Glossary. International veterinary certificates should be kept as simple as possible and should be clearly worded, to avoid misunderstanding of the importing country's requirements;

d) Chapters 5.10. to 5.13. provide, as further guidance to Member Countries, model certificates that should be used as a baseline.

7) Guidance notes for importers and exporters

It is recommended that Veterinary Authorities prepare “guidance notes” to assist importers and exporters understand trade requirements. These notes should identify and explain the trade conditions, including the measures to be applied before and after export and during transport and unloading, and the relevant legal obligations and operational procedures. The guidance notes should advise on all details to be included in the health certification accompanying the consignment to its destination. Exporters should also be reminded of the International Air Transport Association rules governing air transport of animals and animal products.

[…]

D. Name of animal species

In the *Terrestrial Code*, common terms (in bold in the table below) referring to animals are based on scientific names as shown below. In each chapter of the *Terrestrial Code*, scientific names of the animals are provided when the vernacular names used in the chapter do not include all the species as described in the table below, e.g. 'bovines (*Bos indicus*, *B. taurus*, *B. grunniens*, *Bubalus bubalis* and *Syncerus caffer*)', which in that example does not include animals of genus bison, or when the list of animals is long, e.g. 'animals of the families *Suidae* and *Cervidae*, the subfamilies *bovinae*, *caprinae* and *antilopinae* of the family *Bovidae*, and *Camelus bactrianus*'.

Higher level terms	Terms based on Order or Sub-order	Terms based on Family	Terms based on Sub-Family	Terms based on Tribe	Terms based on Genus
Class 'Insecta'	-	Family 'Apidae'	Sub-Family 'Apinae' '**bees**' means animals of Sub-Family 'Apinae'	Including animals of Tribe: • 'Apini'	Including animals of Genus: • 'Apis' '**honey bees**' means animals of Genus Apis.
				Including animals of Tribe: • 'Bombini'	Including animals of Genus: • 'Bombus' '**bumble bees**' means animals of Genus Bombus.
				Including animals of Tribe: • 'Meliponini' '**stingless bees**' means animals for Tribe 'Meliponini'	-
Class 'Aves' '**avian**' means animals of class Aves	Order 'Galliformes'	-	-	-	Including animals of Genus: • 'Gallus' • 'Meleagris' etc. '**chicken**' means *Gallus gallus domesticus*. '**turkey**' means *Meleagris gallopavo*.
	Order 'Anseriformes'	-	-	-	Including animals of Genus: • 'Anser' • 'Branta' • 'Anas' etc. '**geese**' means animals of Genera Anser and Branta. '**ducks**' means *Anas platyrhynchos*.

					(‘**domestic ducks**’ means *Anas platyrhynchos domesticus*.)
‘**mammals**’ means animals of Class ‘Mammalia’ ‘**ungulates**’ means animals of Order ‘Artiodactyla’ (even-toed ungulates) and Order ‘Perissodactyla’ (odd-toed ungulates) ‘**artiodactyls**’ means animals of Order ‘Artiodactyla’ (even-toed ungulates)	‘**ruminants**’ means animals of Sub-order ‘Ruminantia’	‘**bovids**’ means animals of Family ‘Bovidae’	‘**bovines**’ means animals of Sub-Family ‘Bovinae’	-	Including animals of Genus: • ‘Bos’ • ‘Bubalus’ • ‘Bison’ • ‘Syncerus’ etc.
			‘**caprines**’ means animals of Sub-Family ‘Caprinae’	-	Including animals of Genus: • ‘Ovis’ • ‘Capra’, etc. ‘**sheep**’ means *Ovis aries*. ‘**goats**’ means *Capra hircus* (domestic goats) and *Capra aegagrus* (wild goats).
			Sub-Family ‘Antilopinae’	-	Including animals of Genus: • ‘Gazella’ • ‘Antilope’ • ‘Dibatag’, etc.
		‘**cervids**’ means animals of Family ‘Cervidae’	Sub-Family ‘Cervinae’	-	Including animals of Genus: • ‘Cervus’ • ‘Dama’, etc.
			Sub-Family ‘Capreolinae’	-	Including animals of Genus: • ‘Capreolus’ • ‘Odocoileus’ • ‘Rangifer’, etc.
	Sub-Order ‘Suina’	‘**suids**’ means animals of Family ‘Suidae’	-	-	Including animals of Genus: • ‘Sus’ • ‘Phacochoerus’ • ‘Hylochoerus’, etc. ‘**pigs**’ means *Sus scrofa* (domestic and wild) .
	Sub-Order ‘Tylopoda’	‘**camelids**’ means animals of Family ‘Camelidae’	Sub-Family ‘Camelinae’	-	Including animals of Genus: • ‘Camelus’ • ‘Lama’ • ‘Vicugna’ ‘**dromedary camels**’ means *Camelus dromedarius*. ‘**bactrian camels**’ means *Camelus bactrianus*. ~~‘**alpacas**’ means *Lama guanicoe pacos*.~~ ~~‘**llamas**’ means *Lama guanicoe glama*~~.

					'**New World camelids**' means animals of Genus ~~alpacas and~~ Lamas~~,~~ (including 'llamas', 'guanacos' and 'alpacas') and Vicugna.
	Sub-Order 'Hippomorpha'	'**equids**' means animals of Family 'Equidae'	'**equines**' means animals of Sub-Family 'Equinae'	-	Including animals of only Genus 'Equus' '**horses**' means *Equus ferus caballus*. '**donkeys**' means *Equus africanus asinus*. '**mules**' means *Equus africanus asinus* (male) × *Equus ferus caballus* (female). '**hinnies**' means *Equus ferus caballus* (male) x *Equus africanus asinus* (female). '**zebras**' means animals of subgenus Hippotigris.
	'**lagomorphs**' means animals of Order 'Lagomorpha'	'**leporids**' means animals of Family 'Leporidae'	-	-	Including animals of Genus: • 'Oryctolagus' • 'Lepus' • 'Sylvilagus' '**rabbits**' means animals of Genus Oryctolagus'. '**hares**' means animals of Genus Lepus. '**European hares**' means *Lepus europaeus*.
	'**carnivores**' means animals of Order 'Carnivora'	'**canids**' means animals of Family 'Canidae'	Sub-Family 'Caninae'	-	Including animals of Genus: • 'Canis' '**dogs**' means *Canis lupus familiaris*.
		'**felids**' means animals of Family 'Felidae'	-	-	Including animals of Genus: • 'Felis' '**cats**' means *Felis catus*.
		Family 'Mustelidae'			Including animals of Genus: • 'Mustela' '**ferrets**' means *Mustela furo*.
	'**rodents**' means animals of ~~Family~~ Order 'Rodentia'	-	-	-	-
	'**bats**' means of animals of Order 'Chiroptera'	-	-	-	-

	‘**non-human primates**’ means animals of Order ‘Primates’ except for humans (Genus ‘Homo’)	-	-	-	-

~~In each chapter of the *Terrestrial Code*, scientific names of the animals are provided when the vernacular names used in the chapter do not include all the species as described in this table, e.g. ‘bovines (*Bos indicus, B. taurus, B. grunniens, Bubalus bubalis* and *Syncerus caffer*)’, which in that example does not include animals of genus bison, or when the list of animals is very long, e.g. ‘animals of the families *Suidae* and *Cervidae*, the subfamilies *bovinae, caprinae* and *antilopinae* of the family *Bovidae*, and *Camelus bactrianus*’.~~

Annex 7

SECTION 4.

DISEASE PREVENTION AND CONTROL

CHAPTER 4.X.

BIOSECURITY

Article 4.X.1.

Introduction

Biosecurity is the cornerstone of health programmes and as such should be implemented to prevent and control diseases in *populations*. In addition to reducing the risk of disease, the benefits of *biosecurity* include a reduced need for *veterinary medicinal products*; reduced *killing* of *animals* for disease control purposes; reduced economic losses; protection of livelihoods; assurance of sustainability of animal production; improved food security and food safety; promotion of animal, human and environmental health, and assurance of safe trade and business continuity.

Article 4.X.2.

Purpose and scope

This chapter provides general principles and recommendations to allow for a consistent approach that could be applied to implement *biosecurity* for a *population* or *subpopulation* irrespective of the settings or scale, such as at country, *zone*, *compartment*, *herd/flock*, farm or non-production establishment level.

The purpose of this chapter is to provide guidance to the *Veterinary Authority* and other relevant actors, as described in Article 4.X.~~1~~5., on the principles, implementation and evaluation of *biosecurity* to support disease prevention and control programmes. The chapter applies to *animals*, their gatherings and husbandry systems, to all components of animal ~~production~~keeping and to the interface between domesticated *animals*, humans and *wildlife*.

More specifically, this chapter aims to:

- describe the general guiding principles of *biosecurity*;
- identify the roles and responsibilities of the different actors in *biosecurity*;
- describe the potential sources and pathways for entry of pathogenic agents into a *population* and the exposure of *animals* and factors for the transmission of pathogenic agents;
- describe the ~~procedures and~~ components of *biosecurity*;
- provide guidance on the design, application, monitoring, evaluation and training with regards to *biosecurity* and *biosecurity plans.*

~~The chapter applies to all *animals* including *wildlife*, to any type of animal gatherings and husbandry systems, to all components of animal production and commercial chains and to the interface between domesticated animals, humans and *wildlife*.~~

The chapter does not apply to laboratories, whose approaches to biosecurity are addressed in the *Terrestrial Manual*.

~~Article 4.X.3.~~

~~**Definitions**~~

~~For the purposes of this chapter:~~

~~**All-in all-out** is the management practice to remove all the *animals* prior to new *animals* entering a shared space with the subsequent cleaning and decontamination of the space where the *animals* are housed to prevent the transmission of pathogenic agents between groups of *animals*.~~

~~**Fomite** is an inanimate object that can carry pathogenic agents.~~

~~**External *biosecurity*** also referred to as bio-exclusion or bio-containment, is a set of measures that aims at preventing pathogenic agents from entering or escaping a *population*.~~

~~**Internal *biosecurity*** also referred to as bio-management, is a set of measures that aims to reduce the spread of pathogenic agents within a *population*.~~

Article 4.X.4~~3~~.

General ~~G~~guiding ~~general~~principles

~~*Biosecurity* aims to reduce the *risk* of introduction, establishment and spread of pathogenic agentsbreak thecycle of *infection* by intervening at their source, during their transmission, or at the susceptible hosts.~~ To achieve the objective of *biosecurity*~~this~~, the following ~~principles~~should be considered:

1) The *population* for which *biosecurity* is to be implemented, including context and size, and its *animal health status*.

~~1) The *animal health status* of athe *population*for which the *biosecurity* is being implemented should be known., to identify where improvements to the animal health and productivity may be required.~~

~~2) *Biosecurity* should be based upon *risk analysis* as described in Chapter 2.1. and be aligned with relevant legislative requirements.~~

~~3) *Risk assessments* applied to *biosecurity* should identify the *hazards* and how and where these pathogenic agents~~ The identification of the *hazards* and from where and h~~H~~ow ~~and where~~ the pathogenic agents ~~are~~ may be introduced, established and spread ~~and established~~ in the *population.*

3) The factors and frequency of events~~certain activities, which~~ that influence the introduction~~entry~~, establishment and spread ~~and establishment~~ of pathogenic agents~~, should be considered in the *risk assessment*~~.

4) ~~*Biosecurity* should be based on~~ Sscientific evidence and proportionality to the *risk*.

5) ~~*Biosecurity* should be~~ Ssustainability~~le~~, adaptability~~le,~~ and monitoring~~ed~~. ~~and subjected to a documented routine and ongoing evaluation and should include long-term planning.~~

6) ~~A *biosecurity plan* is essential for ensuring consistent implementation of *biosecurity*.~~

~~7) *Biosecurity* should be designed to account for~~ H~~h~~uman behaviour to maximise compliance.

7~~8~~) Evaluation of compliance ~~of *biosecurity* should be~~ built into the day-to-day operations.

8~~9~~) ~~The~~ Ssocio-economic impacts of *biosecurity* ~~and the context and size of the *population* to which the *biosecurity* is being appliedshould be considered.~~

9) Impacts on other *populations*~~including *wildlife*,~~ and the environment.

10) A *biosecurity plan* that promotes consistent implementation of *biosecurity*.

11~~10~~) Engagement with, ~~T~~training and awareness of, and communication with, all actors involved in *biosecurity* ~~is essential to successful outcomes~~.

These principles of *biosecurity* apply to any type of activity (intensive, extensive, commercial or non-production); only the measures comprising the *biosecurity* should be adapted to the situation.

Article 4.X.~~5~~4

Roles and responsibilities

The roles and responsibilities of different actors in *biosecurity* should be clearly defined and communicated with consideration made to the context (e.g. country, *zone~~establishment~~*, *compartment* or *establishment* ~~*zone,* country~~ level), scale ~~of operations,~~and type of ~~production~~ operations~~and supply chain~~. Implementation of *biosecurity* requires engagement and collaboration amongst all actors involved.

1) ***Veterinary Authority~~,~~*** or ~~in collaboration with~~ other relevant *Competent Authorities~~,~~* should be responsible for the development and oversight of policy on and legislative frameworks ~~of~~for *biosecurity*. These policies should include the relative contribution and roles of *veterinarians* and *veterinary paraprofessionals* in both the private and public sectors, and provide guidance for the implementation of *biosecurity*. For international trade purposes, the *Veterinary Authority* should have an active role in the ~~development, implementation,~~ enforcement, oversight, and verification of *biosecurity* and *biosecurity plans*.

2) ***Veterinary Services*** should execute and implement policies and legislation on *biosecurity* under the supervision of the *Veterinary Authority~~ies~~* or other relevant *Competent Authorities*.

3) ***Veterinarians*** **and** ***veterinary paraprofessionals*** **and other relevant~~animal health~~ advisors** should give advice ~~to animal breeders, owners, and keepers~~ on *biosecurity* ~~which may include the design,~~ and the ~~and evaluation of *biosecurity* and~~ *biosecurity plans* ~~and training~~. This advice should be aligned with the policies and legislation ~~set by the *Veterinary Authority* or other *Competent Authorities*,~~ where available.

4) ~~**Animal b**~~**Breeders, owners, managers, keepers, transporters, ~~and~~ feed producers and other relevant actors** are responsible for developing, implementing and monitoring *biosecurity* and the *biosecurity plan* and should seek advice from *veterinarians,* ~~and~~ *veterinary paraprofessionals* ~~and~~ or other ~~animal health~~ relevant advisors ~~and are responsible for developing, implementing and monitoring *biosecurity* and the *biosecurity plan*~~.

5) **Training entities** should provide~~should include~~ training in *biosecurity* ~~as part of the standard programmes and the training should be tailored~~ for ~~all~~ relevant actors. Coordination between the *Veterinary Authority*, other relevant *Competent Authorities*, the ~~*V*~~*veterinary* ~~*S*~~*statutory* ~~*B*~~*body* and veterinary educational ~~establishments~~ institutions may be required to ensure biosecurity training delivered to *veterinarians*, *veterinary paraprofessionals* and other relevant advisors meets relevant standards.

6) ~~**Industry groups representing f**~~**Farmer associations**~~**Farmer**~~**, ~~*Veterinary Statutory Body,*~~ veterinary and para-veterinary associations, ~~food companies, live animal transport associations~~ and other relevant ~~other relevant stakeholder~~ associations ~~representatives~~**should advocate and promote *biosecurity* among their members~~, including signposting to relevant training and advice~~.

Article 4.X.~~6~~5.

Potential sources of pathogenic agents

Pathogenic agents can be ~~introduced from and~~ spread through different sources ~~of *infection*~~ which should be considered when implementing *biosecurity* and developing a *biosecurity plan*. The main sources of pathogenic agents to be considered include:

1) *animals,*

2) *germinal products,*

3) secretions and excretions,

4) *animal products,*

5) dead *animals* and parts thereof and afterbirth materials,

6) arthropods such as mosquitoes, midges, flies, lice or ticks,

7) fomites such as peoples' clothing, boots, *vehicle*s, crates, bedding, or ~~general~~farm equipment,

8) *feed* and *feed ingredients* including forage, grazing pastures and swill,

9) water, soil~~, surfaces~~ and air,

10) *biological products,*

11) humans.

Article 4.X.~~7~~6.

Transmission pathways

Transmission of pathogenic agents can occur either through *animal*-to-*animal* contact without an intermediate (direct transmission), or through an intermediate such as fomites, water, *feed*, *animal products*, *germinal products*, *biological products*, humans and animal environment (indirect transmission). Transmission pathways of pathogenic agents should be considered when implementing *biosecurity* or developing a *biosecurity plan.* Transmission pathways are not mutually exclusive and include:

~~1) Direct transmission through *animal* to *animal* contact including their through secretions and excretions without an intermediate. It includes contact between domesticated *animals* and *wildlife*.~~

~~2) Indirect transmission through an intermediate such as fomites, water, *feed*, *germinal products, biological products,* humans and *animal* environment.~~

3) Vertical transmission ~~of pathogenic agents~~ from parents to offspring in ovo, in utero or during birth.

4) Horizontal transmission~~s~~ from one *animal* to another that ~~are~~ is not vertical.

5) Iatrogenic transmission ~~through medical interventions~~.

6) Sexual transmission ~~of pathogenic agents that are shed in~~ through reproductive secretions such as semen and vaginal fluids or transmitted directly between surfaces in contact during mating.

7) Vector-borne transmission via *vectors* including blood-feeding arthropods such as mosquitoes, flies, ticks, fleas and lice. *Vectors* may be mechanical with no biological association between the *vector* and pathogenic agent or biological where the pathogenic agent undergoes a multiplication or a developmental change within the *vector*, necessary for survival, transmission or host *infection*.

8) ~~Airborne or d~~Droplets or airborne transmission of pathogenic agents through particles suspended in the air. Pathogenic agents may travel in particles of multiple size~~ranges~~s (droplets and droplet nuclei) that remain suspended in the air or deposited on surfaces. Airborne transmission may include short or long distances (which may be referred to as aerosol or wind-borne transmission, respectively).

Article 4.X.~~8~~7.

Components of biosecurity

Biosecurity can be applied to any type of *population.* The components of *biosecurity* focus on reducing the risk of transmission of pathogenic agents through interactions with elements outside the *population* (external *biosecurity*) and on reducing risk of transmission of pathogenic agents within the *population* (internal *biosecurity).* All relevant components of *biosecurity* should be applied to address all sources of pathogenic agents, transmission pathways

as well as unexpected ~~*risks*~~ events, and may vary according to the *population*. ~~*Biosecurity* can be divided into: 1) external *biosecurity*, and 2) internal *biosecurity*. External *biosecurity* mainly focuses on interactions with elements outside the *population* (e.g. other farms, other regions) whereas internal *biosecurity* focuses on reducing risk of transmission between elements of the *population*. The distinction between external and internal *biosecurity* is not absolute and can vary depending on the scale considered (e.g. country, region, *herd/flock*).Several components of *biosecurity* may need to be applied to a *population* and *subpopulation* to address all sources of pathogenic agents, transmission pathways, sources of *pathogenic agents* and unexpected *risks*. The components of *biosecurity* should be documented in a *biosecurity plan* when possible.~~

1. Components of external biosecurity may include the following:

   a) Introduction of *animals, animal products* and *germinal products* should be minimised ~~as much as possible~~ and if undertaken, the *animal health status* of the ~~*animal* and their~~ source *population* should be assessed.

   b) Whenever *animals* are introduced into ~~a~~ the *population*, they should go through a~~n~~ monitored isolation period of sufficient length, during which measures may be implemented to mitigate~~minimise~~ the risk of transmission of pathogenic agents.

   c) ~~Direct c~~Contact between *population*s of unknown or different *animal health status* should be avoided through segregation using managerial measures, ~~or~~ physical or natural barriers.

   d) Human access to the *population* should be~~managed~~ controlled. When humans come in contact with~~The contact between humans and *animals*~~, they should ~~be limited where possible but when required~~ take ~~precautionary~~ measures ~~should be used~~ to mitigate~~reduce~~ the *risk* of bi-directional transmission of pathogenic agents, which includes as a minimum ~~such as~~ wearing ~~farm~~ dedicated~~specific~~ clothing and footwear, and hand hygiene.

   e) Equipment used to handle or care for *animals* should not be shared between different *population*s. If shared, equipment should undergo cleaning and *disinfection* before and after use.

   f) Transport vehicles in ~~direct and indirect~~ contact with *animals* or their products should undergo cleaning and *disinfection* before and after use.

   g) *Animal products*, ~~F~~faeces, ~~or~~ manure or waste materials should be handled in a way to mitigate the spread of pathogenic agents.

   h) Dead animals and parts thereof should be handled, ~~and~~ stored and disposed of in a way to mitigate the spread of pathogenic agents and ~~in specific containers, or in designated areas~~ to avoid contact with or attraction of other *animals* ~~in particular *wildlife*~~ and arthropods.

   i) *Feed* should be produced, stored and transported in dedicated equipment to minimise the contact with potential sources of pathogenic agents~~only for the purpose of feeding *animals*~~. Feeding of untreated swill should be avoided. Water should originate from low-risk sources or be treated to remove or inactivate ~~with~~ pathogenic ~~inactivating~~ agents ~~prior to use~~. The safety of the water and *feed* should be checked regularly.

   j) ~~Direct and indirect c~~Contacts between the *population* and pets, birds, rodents, insects and ~~birds,pets,~~ other *wildlife*~~,~~ or pests ~~and the *population*~~ should be avoided using engineering, mechanical or chemical control.

   k) To minimise airborne transmission of pathogenic agents, ~~S~~sufficient distance between *populations* and ~~other~~ possible sources of pathogenic agents should be considered. In some circumstances, air treatments~~air filtration~~ might be considered. ~~when feasible and sufficient distance or other measures cannot be implemented to mitigate the risk of transmission.~~

   l) When cleaning and *disinfection* or other measures are not feasible or effectiveness is undetermined, an additional period of no contact between potential ~~carriers~~ sources of pathogenic agents (e.g. ~~people~~humans, buildings, *vehicles*, equipment, materials, pastures ~~and air spaces~~) and the *population* ~~can~~ may be applied. The effectiveness of this measure will depend on the specific circumstances and should be verified.

2. Components of internal biosecurity

a) ~~Diseased~~ Sick *animals* should be isolated to prevent other *animals* from being exposed. Treatments should be administered safely to avoid iatrogenic transmission.

b) All-in all-out management should be applied to all *animals* kept in the same ~~air~~ space including cleaning and *disinfection* of the space between groups of *animals*.

c) Stocking densities that ~~may~~ result in impaired health through increased transmission rates of pathogenic agents or increased susceptibility to *infection*s should be avoided~~avoidedconsidered inthe risk analysis~~.

d) ~~*Animals* W~~within the *population*, *units* with different characteristics ~~such as age and immune status~~should be kept separately.

e) ~~It is advisable to organise t~~When the management of the *population* involves contact with different *units*, ~~T~~the workflow should be organised ~~according to disease the risk assessed for each animalcategory, starting at~~from the lowest ~~risk~~ to~~and ending with~~ the highest risk of *infection*, considering transmission of pathogenic agents and susceptibility of the *units*. When moving between the *units*, ~~Whenever entering into contact with a new group or new *animal* category, *biosecurity*~~ measures to mitigate transmission of pathogenic agents ~~such as changing footwear and clothing and conductinghand hygiene~~ should be applied~~considered~~. ~~Dedicated equipment or material should be used in each group.~~

f) Cleaning and *disinfection* of the equipment and surfaces should be applied between consecutive groups of *animals*.

Article 4.X.~~9~~8.

Biosecurity plan

A *biosecurity plan* promotes consistent implementation of *biosecurity*, and should balance practicality, cost, regulatory requirements and include necessary provisions for its maintenance. The aim~~purpose~~ of a *biosecurity plan* is to ~~document,~~ organise~~,~~ ~~and~~ structure and document *biosecurity* including its evaluation.

~~A biosecurity plan should balance practicality, cost, and regulatory requirements and include necessary provisions for its maintenance.~~

The *biosecurity plan* should include the following sections:

a) Purpose and scope

This section should provide an overview of the plan, its purpose and scope. In addition, it should outline the goals and objectives of the plan, as well as the *population* characteristics, including animal husbandry systems, and context.

b) Roles and responsibilities

Design, implementation, and monitoring is a shared responsibility. Therefore, it is essential to describe the roles and responsibilities of all actors for ensuring adherence and compliance with *biosecurity*.

c) ~~Hazard i~~Identification of pathogenic agents, sources and transmission pathways~~and risks assessment~~

In addition to the identification of the potential pathogenic agents of concern ~~(i.e. *hazard*s)and their transmission pathways, This~~ this section should include their potential sources and transmission pathways ~~a summary of the relevant parts of *risk assessment*, notably~~the relevant routes of introduction and spread of pathogenic agents ~~and susceptibility of the *units* in the *population*.~~and transmission pathways ~~e.g.~~

d) Description of biosecurity

This section should describe~~outline~~ the relevant components of *biosecurity* ~~measures to reduce the risk of introduction, establishment and spread of pathogenic agents to, within and from the *population*~~ in accordance with Article 4.X.7~~8~~.

It should also include ~~emergency and~~ relevant response procedures for emergencies. ~~animal health events.~~

e) Surveillance ~~Surveillance and monitoring~~ of pathogenic agents

The *biosecurity plan* should include the procedures for ~~*monitoring* and~~ *surveillance* to detect the presence of pathogenic agents in accordance with Chapter 1.4.

f) Communication and reporting

This section should outline the procedures for communicating information about the *biosecurity plan* to all relevant actors. It should also include procedures for reporting incidents and sharing information with relevant authorities.

g) Training and education

This section should outline the training and education needs and identify programmes to ensure all relevant actors are aware of the *biosecurity plan* and clearly understand their roles and responsibilities to implement and maintain the *biosecurity* and the consequences of non-compliance.

h) Supporting documents

This section should outline the standard operating procedures (SOPs), checklists, and record-keeping templates which describe routine management processes and ensure that responsibilities and duties are consistently fulfilled and documented.

i) Evaluation and improvement

This section should describe the procedures for monitoring and evaluation of the *biosecurity plan* and its implementation in accordance with Article 4.X.11~~10~~. ~~*Biosecurity* i~~Incidents and breaches in *biosecurity*, ~~and~~as well as corrective actions taken, should be documented. The *biosecurity plan* should be reviewed and updated regularly to ensure its relevance and effectiveness~~.~~

Article 4.X.~~10~~9.

Training and awareness

1. Training

Regular training on *biosecurity* should be undertaken according to the needs identified and should include all actors. Training should be provided by those with sufficient qualifications and experience. The training should be in line with legislative and policy frameworks. Such training may include:

- Principles of *biosecurity,*
- Sources of pathogenic agents, transmission pathways and relevant factors to susceptibility,
- Components and implementation of ~~*B*~~*biosecurity ~~risk assessment~~,* including emergency planning and response~~and contingency planning~~,
- Monitoring and evaluation of *biosecurity*,
- Purpose, development and implementation of a *biosecurity plan*~~Application and monitoring of*biosecurity*, including emergency response and contingency planning,~~
- ~~*Biosecurity* implementation and evaluation,~~

- ~~Purpose, development, implementation, monitoring and evaluation of a *biosecurity plan*.~~Competency-based training requirements should be identified and documented for each actor. The training achieved should be monitored to ensure the required level of competencies are obtained or maintained.

2. Awareness

All relevant actors described in Article 4.X.4. and ~~T~~the general public, when applicable, ~~and those in industry~~ should be made aware of the importance of *biosecurity* (and the *biosecurity plan* if appropriate) at strategic places (e.g. *border inspection posts*, farm entrances, *markets*) and times (e.g. ~~during~~ disease *outbreaks*, ~~high risk season~~changes in the epidemiological ~~risk~~situation). ~~This~~ Raising awareness may be the responsibility of the *Veterinary Authority*, other relevant ~~*Competent Authorities*~~, *Veterinary Services*, or ~~even~~ producers, ~~farmers~~ and other relevant actors~~stakeholders~~ depending on the context and extent of the *risk.*

Article 4.X.~~11~~10.

Evaluation and improvement

The implementation of *biosecurity,* the compliance with the *biosecurity plan* and the effectiveness of implemented measures should be subjected to evaluation for improvement.

1) The evaluation of implementation should be based on predefined scope and criteria, taking into consideration the expected scale of the operation and the characteristics of the *population* concerned. This will determine at which level of responsibility the evaluation should be conducted, and at which frequency. The frequency should be adapted to changing circumstances such as new *animal health status*, newly identified pathogenic agents ~~*hazards*~~, or changes in epidemiological situation~~*risks*~~, previous evaluations, changes in production or changes in plan. The evaluation should determine the ~~existence and~~ level of implementation of *biosecurity,* through collected evidence that may include documentation of procedures, ~~and~~ other routine records, monitoring technologies, onsite audits as well as interviews with personnel. Based on these findings, the evaluation may allow ~~to~~ the establishment of a risk-based *biosecurity* score as a whole or for each measure.

2) Compliance with the *biosecurity plan* should be evaluated routinely or following a change in epidemiological situation~~risks~~. ~~Compliance should focus on critical control points as identified in the risk assessment and in the *biosecurity plan* itself.~~ Documented evidence of compliance ~~at these critical control points~~ should be collected routinely and ~~should be able to~~ be provided for any evaluation~~, including formal audit~~. ~~This could include checklists for routine procedures, log sheets, records of training and interviews with relevantactors.~~ The evaluation of compliance with~~to~~ the *biosecurity plan* should be executed by an independent party, in accordance with the policies and legislation, where available.~~by an independent party.~~

3) The effectiveness of the *biosecurity plan* should be evaluated routinely or following a change in epidemiological situation~~risks~~, to ensure the *biosecurity plan* is complete, fit for purpose and up to date. The evaluation should be based on animal health or performance data. ~~from within and outside the *population* (such as mortality or morbidity rates related to the targeted hazards, results of laboratory tests on *animals* in the *population*, levels of antimicrobial use, cell count trends), and on animal production performance data (such as milkyield, growth rates, egg production).~~

The outcomes of the evaluations should be communicated to all relevant actors and should inform which risk mitigation or corrective actions are needed so that the *biosecurity plan* can be updated accordingly.

SECTION 4.

DISEASE PREVENTION AND CONTROL

CHAPTER 4.X.

BIOSECURITY

Article 4.X.1.

Introduction

Biosecurity is the cornerstone of health programmes and as such should be implemented to prevent and control diseases in *populations*. In addition to reducing the risk of disease, the benefits of *biosecurity* include a reduced need for *veterinary medicinal products*; reduced *killing* of *animals* for disease control purposes; reduced economic losses; protection of livelihoods; assurance of sustainability of animal production; improved food security and food safety; promotion of animal, human and environmental health, and assurance of safe trade and business continuity.

Article 4.X.2.

Purpose and scope

This chapter provides general principles and recommendations to allow for a consistent approach that could be applied to implement *biosecurity* for a *population* or *subpopulation* irrespective of the settings or scale, such as at country, *zone*, *compartment*, *herd/flock*, farm or non-production establishment level.

The purpose of this chapter is to provide guidance to the *Veterinary Authority* and other relevant actors, as described in Article 4.X.4., on the principles, implementation and evaluation of *biosecurity* to support disease prevention and control programmes. The chapter applies to *animals,* their gatherings and husbandry systems, to all components of animal keeping and to the interface between domesticated *animals*, humans and *wildlife*.

More specifically, this chapter aims to:

- describe the general guiding principles of *biosecurity*;
- identify the roles and responsibilities of the different actors in *biosecurity*;
- describe the potential sources and pathways for entry of pathogenic agents into a *population* and the exposure of *animals* and factors for the transmission of pathogenic agents;
- describe the components of *biosecurity*;
- provide guidance on the design, application, monitoring, evaluation and training with regards to *biosecurity* and *biosecurity plans.*

The chapter does not apply to laboratories, whose approaches to biosecurity are addressed in the *Terrestrial Manual*.

Article 4.X.3.

General guiding principles

To achieve the objective of *biosecurity*, the following should be considered:

1) The *population* for which *biosecurity* is to be implemented, including context and size, and its *animal health status*.

2) The identification of the *hazards* and from where and how the pathogenic agents may be introduced, established and spread in the *population.*

3) The factors and frequency of events that influence the introduction, establishment and spread of pathogenic agents.

4) Scientific evidence and proportionality to the *risk*.

5) Sustainability, adaptability, monitoring.

6) Human behaviour to maximise compliance.

7) Evaluation of compliance built into the day-to-day operations.

8) Socio-economic impacts of *biosecurity*.

9) Impacts on other *populations* and the environment.

10) A *biosecurity plan* that promotes consistent implementation of *biosecurity*.

11) Engagement with, training and awareness of, and communication with, all actors involved in *biosecurity*.

These principles of *biosecurity* apply to any type of activity (intensive, extensive, commercial or non-production); only the measures comprising the *biosecurity* should be adapted to the situation.

Article 4.X.4

Roles and responsibilities

The roles and responsibilities of different actors in *biosecurity* should be clearly defined and communicated with consideration made to the context (e.g. country, *zone, compartment*, *establishment* level), scale and type of operations. Implementation of *biosecurity* requires engagement and collaboration amongst all actors involved.

1) ***Veterinary Authority*** or other relevant *Competent Authorities* should be responsible for the development and oversight of policy on and legislative frameworks for *biosecurity*. These policies should include the relative contribution and roles of *veterinarians* and *veterinary paraprofessionals* in both the private and public sectors, and provide guidance for the implementation of *biosecurity*. For international trade purposes, the *Veterinary Authority* should have an active role in enforcement, oversight, and verification of *biosecurity* and *biosecurity plans*.

2) ***Veterinary Services*** should execute and implement policies and legislation on *biosecurity* under the supervision of the *Veterinary Authority* or other relevant *Competent Authorities.*

3) ***Veterinarians* and *veterinary paraprofessionals* and other relevant advisors** should give advice on *biosecurity* and the *biosecurity plans*. This advice should be aligned with the policies and legislation, where available.

4) **Breeders, owners, managers, keepers, transporters, feed producers and other relevant actors** are responsible for developing, implementing and monitoring *biosecurity* and the *biosecurity plan* and should seek advice from *veterinarians, veterinary paraprofessionals* or other relevant advisors.

5) **Training entities** should provide training in *biosecurity* for relevant actors. Coordination between the *Veterinary Authority*, other relevant *Competent Authorities*, the *veterinary statutory body* and veterinary educational institutions may be required to ensure biosecurity training delivered to *veterinarians*, *veterinary paraprofessionals* and other relevant advisors meets relevant standards.

6) **Farmer associations, veterinary and para-veterinary associations, and other relevant associations** should advocate and promote *biosecurity* among their members.

Article 4.X.5.

Potential sources of pathogenic agents

Pathogenic agents can be spread through different sources which should be considered when implementing *biosecurity* and developing a *biosecurity plan*. The main sources of pathogenic agents to be considered include:

1) *animals,*

2) *germinal products,*

3) secretions and excretions,

4) *animal products,*

5) dead *animals* and parts thereof and afterbirth materials,

6) arthropods such as mosquitoes, midges, flies, lice or ticks,

7) fomites such as peoples' clothing, boots, *vehicle*s, crates, bedding, or farm equipment,

8) *feed* and *feed ingredients* including forage, grazing pastures and swill,

9) water, soil and air,

10) *biological products,*

11) humans.

Article 4.X.6.

Transmission pathways

Transmission of pathogenic agents can occur either through *animal*-to-*animal* contact without an intermediate (direct transmission), or through an intermediate such as fomites, water, *feed*, *animal products*, *germinal products*, *biological products*, humans and animal environment (indirect transmission). Transmission pathways of pathogenic agents should be considered when implementing *biosecurity* or developing a *biosecurity plan.* Transmission pathways are not mutually exclusive and include:

1) Vertical transmission from parents to offspring *in ovo*, *in utero* or during birth.

2) Horizontal transmission from one *animal* to another that is not vertical.

3) Iatrogenic transmission.

4) Sexual transmission through reproductive secretions such as semen and vaginal fluids or transmitted directly between surfaces in contact during mating.

5) Vector-borne transmission via *vectors* including blood-feeding arthropods such as mosquitoes, flies, ticks, fleas and lice. *Vectors* may be mechanical with no biological association between the *vector* and pathogenic agent

or biological where the pathogenic agent undergoes a multiplication or a developmental change within the *vector*, necessary for survival, transmission or host *infection*.

6) Droplets or airborne transmission of pathogenic agents through particles suspended in the air. Pathogenic agents may travel in particles of multiple sizes (droplets and droplet nuclei) that remain suspended in the air or deposited on surfaces. Airborne transmission may include short or long distances (which may be referred to as aerosol or wind-borne transmission, respectively).

Article 4.X.7.

Components of biosecurity

Biosecurity can be applied to any type of *population.* The components of *biosecurity* focus on reducing the risk of transmission of pathogenic agents through interactions with elements outside the *population* (external *biosecurity*) and on reducing risk of transmission of pathogenic agents within the *population* (internal *biosecurity).* All relevant components of *biosecurity* should be applied to address all sources of pathogenic agents, transmission pathways as well as unexpected events, and may vary according to the *population*.

1. Components of external biosecurity may include the following:

   a) Introduction of *animals, animal products* and *germinal products* should be minimised and if undertaken, the *animal health status* of the source *population* should be assessed.

   b) Whenever *animals* are introduced into the *population*, they should go through a monitored isolation period of sufficient length, during which measures may be implemented to mitigate the risk of transmission of pathogenic agents.

   c) Contact between *population*s of unknown or different *animal health status* should be avoided through segregation using managerial measures, physical or natural barriers.

   d) Human access to the *population* should be controlled. When humans come in contact with *animals,* they should take measures to mitigate the *risk* of bi-directional transmission of pathogenic agents, which includes as a minimum wearing dedicated clothing and footwear, and hand hygiene.

   e) Equipment used to handle or care for *animals* should not be shared between different *population*s. If shared, equipment should undergo cleaning and *disinfection* before and after use.

   f) Transport vehicles in contact with *animals* or their products should undergo cleaning and *disinfection* before and after use.

   g) *Animal products*, faeces, manure or waste materials should be handled in a way to mitigate the spread of pathogenic agents.

   h) Dead *animals* and parts thereof should be handled, stored and disposed of in a way to mitigate the spread of pathogenic agents and to avoid contact with or attraction of other *animals* and arthropods.

   i) *Feed* should be produced, stored and transported in dedicated equipment to minimise the contact with potential sources of pathogenic agents. Feeding of untreated swill should be avoided. Water should originate from low-risk sources or be treated to remove or inactivate pathogenic agents. The safety of the water and *feed* should be checked regularly.

   j) Contacts between the *population* and pets, birds, rodents, insects, and other *wildlife* or pests should be avoided using engineering, mechanical or chemical control.

   k) To minimise airborne transmission of pathogenic agents, sufficient distance between *populations* and possible sources of pathogenic agents should be considered. In some circumstances, air treatments might be considered.

l) When cleaning and *disinfection* or other measures are not feasible or effectiveness is undetermined, an additional period of no contact between potential sources of pathogenic agents (e.g. humans, buildings, *vehicles*, equipment, materials, pastures) and the *population* may be applied. The effectiveness of this measure will depend on the specific circumstances and should be verified.

2. Components of internal biosecurity

a) Sick *animals* should be isolated to prevent other *animals* from being exposed. Treatments should be administered safely to avoid iatrogenic transmission.

b) All-in all-out management should be applied to all *animals* kept in the same space including cleaning and *disinfection* of the space between groups of *animals*.

c) Stocking densities that result in impaired health through increased transmission rates of pathogenic agents or increased susceptibility to *infection*s should be avoided.

d) Within the *population*, *units* with different characteristics should be kept separately.

e) When the management of the *population* involves contact with different *units*, the workflow should be organised from the lowest to the highest risk of *infection*, considering transmission of pathogenic agents and susceptibility of the *units*. When moving between the *units*, measures to mitigate transmission of pathogenic agents should be applied.

f) Cleaning and *disinfection* of the equipment and surfaces should be applied between consecutive groups of *animals*.

Article 4.X.8.

Biosecurity plan

A *biosecurity plan* promotes consistent implementation of *biosecurity*, and should balance practicality, cost, regulatory requirements and include necessary provisions for its maintenance. The aim of a *biosecurity plan* is to organise, structure and document *biosecurity* including its evaluation.

The *biosecurity plan* should include the following sections:

a) Purpose and scope

This section should provide an overview of the plan, its purpose and scope. In addition, it should outline the goals and objectives of the plan, as well as the *population* characteristics, including animal husbandry systems, and context.

b) Roles and responsibilities

Design, implementation, and monitoring is a shared responsibility. Therefore, it is essential to describe the roles and responsibilities of all actors for ensuring adherence and compliance with *biosecurity*.

c) Identification of pathogenic agents, sources and transmission pathways

In addition to the identification of the potential pathogenic agents of concern, this section should include their potential sources and transmission pathways.

d) Description of biosecurity

This section should describe the relevant components of *biosecurity* in accordance with Article 4.X.7.

It should also include relevant response procedures for emergencies.

e) Surveillance of pathogenic agents

The *biosecurity plan* should include the procedures for *surveillance* to detect the presence of pathogenic agents in accordance with Chapter 1.4.

f) Communication and reporting

This section should outline the procedures for communicating information about the *biosecurity plan* to all relevant actors. It should also include procedures for reporting incidents and sharing information with relevant authorities.

g) Training and education

This section should outline the training and education needs and identify programmes to ensure all relevant actors are aware of the *biosecurity plan* and clearly understand their roles and responsibilities to implement and maintain the *biosecurity* and the consequences of non-compliance.

h) Supporting documents

This section should outline the standard operating procedures (SOPs), checklists, and record-keeping templates which describe routine management processes and ensure that responsibilities and duties are consistently fulfilled and documented.

i) Evaluation and improvement

This section should describe the procedures for monitoring and evaluation of the *biosecurity plan* and its implementation in accordance with Article 4.X.10. Biosecurity Incidents and breaches in *biosecurity*, as well as corrective actions taken, should be documented. The *biosecurity plan* should be reviewed and updated regularly to ensure its relevance and effectiveness.

Article 4.X.9.

Training and awareness

1. Training

Regular training on *biosecurity* should be undertaken according to the needs identified and should include all actors. Training should be provided by those with sufficient qualifications and experience. The training should be in line with legislative and policy frameworks. Such training may include:

- Principles of *biosecurity,*
- Sources of pathogenic agents, transmission pathways and relevant factors to susceptibility,
- Components and implementation of *biosecurity,* including emergency planning and response,
- Monitoring and evaluation of *biosecurity,*
- Purpose, development and implementation of a *biosecurity plan,*
- Competency-based training requirements should be identified and documented for each actor. The training achieved should be monitored to ensure the required level of competencies are obtained or maintained.

2. Awareness

All relevant actors described in Article 4.X.4. and the general public, when applicable, should be made aware of the importance of *biosecurity* (and the *biosecurity plan* if appropriate) at strategic places (e.g. *border inspection posts*, farm entrances, *markets*) and times (e.g. disease *outbreaks*, changes in the epidemiological situation). Raising awareness may be the responsibility of the *Veterinary Authority,* other relevant *Competent*

Authorities, *Veterinary Services,* or producers, and other relevant actors depending on the context and extent of the *risk.*

Article 4.X.10.

Evaluation and improvement

The implementation of *biosecurity,* the compliance with the *biosecurity plan* and the effectiveness of implemented measures should be subjected to evaluation for improvement.

1) The evaluation of implementation should be based on predefined scope and criteria, taking into consideration the expected scale of the operation and the characteristics of the *population* concerned. This will determine at which level of responsibility the evaluation should be conducted, and at which frequency. The frequency should be adapted to changing circumstances such as new animal health status, newly identified pathogenic agents or changes in epidemiological situation, previous evaluations, changes in production or changes in plan. The evaluation should determine the level of implementation of *biosecurity,* through collected evidence that may include documentation of procedures, other routine records, monitoring technologies, onsite audits as well as interviews with personnel. Based on these findings, the evaluation may allow the establishment of a risk-based *biosecurity* score as a whole or for each measure.

2) Compliance with the *biosecurity plan* should be evaluated routinely or following a change in epidemiological situation. Documented evidence of compliance should be collected routinely and be provided for any evaluation. The evaluation of compliance with the *biosecurity plan* should be executed by an independent party, in accordance with the policies and legislation, where available.

3) The effectiveness of the *biosecurity plan* should be evaluated routinely or following a change in epidemiological situation, to ensure the *biosecurity plan* is complete, fit for purpose and up to date. The evaluation should be based on animal health or performance data. The outcomes of the evaluations should be communicated to all relevant actors and should inform which risk mitigation or corrective actions are needed so that the *biosecurity plan* can be updated accordingly.

Annex 9

CHAPTER 7.1.

INTRODUCTION TO THE RECOMMENDATIONS FOR ANIMAL WELFARE

Article 7.1.1.

General considerations

Animal welfare means the physical and mental state of an *animal* in relation to the conditions in which it lives and dies.

An *animal* experiences good welfare if the *animal* is healthy, comfortable, well nourished, safe, is not suffering ~~severely or for a long time~~ from ~~avoidable~~ unpleasant states such as pain, fear and *distress*, and is able to express behaviours that are important for its physical and mental state. Good *animal welfare* is not only about avoiding negative experiences to *animals*, but also providing them with opportunities to have positive experiences.

Good *animal welfare* requires disease prevention and appropriate veterinary care, shelter, management and nutrition, a stimulating, comfortable and safe environment, humane handling and humane *slaughter* or *killing*. ~~Good animal welfare is not only about avoiding negative experiences to animals, but also providing them with positive experiences.~~ While *animal welfare* refers to the state of the *animal*, the treatment that an *animal* receives is covered by other terms such as animal care, animal husbandry, and humane treatment.

Article 7.1.2.

Guiding principles for animal welfare

1) ~~That~~ tThere is a critical relationship between animal health and *animal welfare*.

2) ~~That~~ While the ~~internationally recognised~~ "five freedoms" (freedom from hunger, thirst and malnutrition; freedom from fear and *distress*; freedom from physical and thermal discomfort; freedom from pain, injury and disease; and freedom to express normal patterns of behaviour) provide valuable guidance in *animal welfare*~~.~~, the 'five domains' (nutrition, environment, health, ~~behavioural interactions~~ behaviour, and mental state) support the systematic scientific assessment of *animal welfare*.

3) ~~That~~ tThe ~~internationally recognised~~ "three Rs" (reduction in numbers of *animals*, refinement of experimental methods and replacement of *animals* with non-animal techniques) provide valuable guidance for the use of *animals* in ~~science~~ research and education.

4) ~~That~~ tThe scientific assessment of *animal welfare* involves diverse elements ~~which~~ that need to be considered together, and ~~that~~ selecting and weighing these elements often involves value-based assumptions which should be made as explicit as possible.

5) ~~That~~ tThe use of *animals* in agriculture, education and research, and for companionship, recreation, culture and entertainment, makes a major contribution to the wellbeing of people.

6) ~~That~~ tThe use of *animals* carries with it an ethical responsibility to ~~ensure~~ optimise the welfare of such *animals* to the greatest extent practicable.

7) ~~That~~ iImprovements in farm *animal welfare* can ~~often~~ improve productivity and food safety, and hence lead to economic benefits.

8) ~~That~~ tThe equivalent welfare outcomes based on performance criteria, rather than identical systems based on design criteria, ~~be~~ are the basis for comparison of *animal welfare* standards and recommendations.

Article 7.1.3.

Scientific basis for recommendations

~~1) Welfare is a broad term which includes the many elements that contribute to an *animal*'s quality of life, including its physical and mental states those referred to in the "five freedoms" listed above.~~

1)~~2)~~ The scientific assessment of *animal welfare* ~~has progressed rapidly in recent years and~~ formeds the basis of the recommendations of the *Terrestrial Code* for animal welfare. Welfare assessment can be either at a point in time or over a period of time such as a lifetime. There is value in using both the 'five freedoms' and 'five domains' models. The 'five domains' model allows consideration ~~to be given to~~ of both the degree and cumulation of positive and negative experiences over the duration of the animal's life.

2)~~3)~~ Some measures of *animal welfare* involve assessing the degree of impaired functioning associated with injury, disease and malnutrition. Other measures provide information on *animals*' needs and positive or negative affective states ~~such as hunger, pain and fear~~, often by measuring the strength of *animals*' preferences, motivations and aversions. Others assess the physiological, behavioural and immunological changes or effects that *animals* show in response to various challenges.

3)~~4)~~ Such measures can lead to criteria and indicators that help to evaluate how different methods of managing *animals* influence their welfare.

Article 7.1.4.

Guiding principles for the use of measures to assess animal welfare

~~1) the OIE~~ WOAH *animal welfare* standards ~~to be applicable globally, they should~~ emphasise the ~~favourable~~ consequences that any treatments on *animals* may have on their welfare and ~~they should be applicable globally. outcomes for the *animals*, although, in some circumstances, it~~ may include recommendations on ~~be necessary to recommend~~ specific conditions of the *animals*' environment and management~~. Outcomes are generally measured by assessing the extent to which *animals* experience the "five freedoms" described in Article 7.1.2.~~

2) For each principle listed in Article 7.1.5., the most relevant criteria (or measur~~able~~s), ideally comprising animal-based measures, defined as an evaluation of a response of an *animal* or as an effect on an *animal* used to assess its welfare, should be included in the standard. Any given animal-based measure ~~may~~ should be linked to one or more of these ~~than one~~ principle~~s~~.

3) Recommendations should, whenever possible, define explicit targets or thresholds that should be met for animal-based measures. Such target values should be based on relevant science and experience of experts.

4) In addition to animal-based measures, ~~one may use~~ resource-based measures, defined as an evaluation of a feature of the environment in which the *animal* is kept or to which is exposed and management-based measures, defined as an evaluation of what the *animal handler* does, and with which management processes or tools, may be used. ~~may be used and~~ The use of any of these three types of measures should be defined on the basis of science and expert experience showing that a welfare outcome is clearly linked to an *animal* as well as to a resource or ~~to~~ a management procedure.

5) ~~Users of the standard~~ ~~Members should select~~Tthe most ~~appropriate animal-based~~ relevant measures from among those listed in the standards should be selected for ~~their~~ a given farming system or environment~~, from among those listed in the standard~~. Welfare ~~O~~outcomes can be measured by an assessment of individuals or *animal* groups, or a representative sample of those, using data from *establishments*, transport or *slaughterhouses/abattoirs*. *Competent Authorities* should collect all data relevant ~~for the users~~ to set target and threshold values.

6) Whatever the basis of the measure, if welfare outcomes are unsatisfactory, ~~users~~ ~~Members~~ relevant ~~should consider what~~ changes to resources or management ~~are necessary~~ should be applied to improve the welfare outcomes.

Article 7.1.5.

General principles for the welfare of animals in livestock production systems

1) Genetic selection should always take into account the health and welfare of *animals*.

2) *Animals* chosen for introduction into new environments should be suited to the local ~~climate~~ conditions, including their adaptability ~~and able to adapt~~ to local climate, diseases~~, parasites~~ and nutrition.

3) The physical environment, including the substrate (walking surface, resting surface, etc.), should be suited to the animal species and categories (such as type of production or life stage) so as to minimise risk of injury and transmission of diseases ~~or parasites~~to ~~*animals*~~.

4) The physical environment should allow comfortable ~~resting,~~ and safe resting and ~~comfortable~~ movement including normal postural changes, and the opportunity to perform ~~types of~~ ~~natural~~ normal patterns of behaviours that *animals* are motivated to perform.

5) Social grouping of *animals* should be managed to ~~allow~~ promote positive social behaviour and minimise injury, *distress* and chronic fear.

6) For housed *animals*, air quality, air flow, temperature and humidity should not be ~~aversive~~ detrimental and should support good animal health and welfare ~~and not be aversive~~. Where and when extreme weather conditions occur, *animals* should not be prevented from using their natural methods of thermo-regulation.

7) *Animals* should have access to sufficient *feed* and water, suited to the *animals*' age and needs, to maintain normal health, behaviour and performance ~~productivity~~ and to prevent severe or prolonged hunger and~~,~~ thirst, malnutrition and ~~or~~ dehydration.

8) Diseases ~~and parasites~~ should be prevented and controlled as much as possible through good management practices and *biosecurity*. *Animals* with serious health problems should be isolated and treated promptly or killed humanely if treatment is not feasible or recovery is unlikely.

9) Alternatives to painful procedures should be used. Where painful procedures cannot be avoided, the ~~resulting~~ pain should be managed to the extent that available methods allow.

10) The handling of *animals* should foster a positive relationship between humans and *animals* and should not cause injury, panic, lasting fear or avoidable stress.

11) Owners and ~~*animal*~~ *handlers* should have sufficient ~~training,~~ skills and knowledge through appropriate training or experience to ensure that *animals* are treated in accordance with these principles.

Annex 10

CHAPTER 8.Y.

INFECTION WITH NIPAH VIRUS

Article 8.Y.1.

General provisions

Nipah virus can infect a wide range of species, including fruit bats (reservoir) and humans, but only domestic pigs and horses are considered to play a significant role in the epidemiology of the disease in the domestic population. For the *Terrestrial Code*, *infection* with Nipah virus is defined as an *infection* of domestic pigs and horses ~~and pigs~~ (hereafter '~~susceptible~~ animal host') with Nipah virus.

The following defines the occurrence of *infection* with Nipah virus:

1) Nipah virus has been isolated and identified as such in a sample from an animal host~~susceptible animal~~; or

2) antigen or nucleic acid specific to Nipah virus has been detected in a sample from an animal host~~susceptible animal~~ showing clinical signs or pathological lesions consistent with *infection* with Nipah virus, epidemiologically linked to a confirmed or suspected *case*, or giving cause for suspicion of previous association or contact with Nipah virus; or

3) seroconversion specific to Nipah virus, ~~which is not the consequence of *vaccination*,~~ has been detected in an animal host~~susceptible animal~~; or

4) antibodies specific to Nipah virus ~~, which are not the consequence of *vaccination*,~~ have been detected in a sample from an animal host~~susceptible animal~~ epidemiologically linked to a confirmed or suspected *case*, or giving cause for suspicion of previous association or contact with Nipah virus.

Standards for diagnosis ~~and vaccines, as well as~~ and information on the epidemiology~~,~~ are described in the *Terrestrial Manual*.

CHAPTER 11.5.

INFECTION WITH *MYCOPLASMA MYCOIDES* SUBSP. *MYCOIDES* ~~SC~~ (CONTAGIOUS BOVINE PLEUROPNEUMONIA)

Article 11.5.1.

General provisions

~~1) For the purposes of this chapter, susceptible *animals* means domestic bovines (*Bos indicus*, *B. taurus*, *B. grunniens* and *Bubalus bubalis).*~~

1~~2~~1) For the purposes of the *Terrestrial Code*, ~~the *incubation period* for~~ contagious bovine pleuropneumonia (CBPP) ~~shall be six months.~~

~~For the purpose of this chapter,~~ is defined as an ~~*animal infection*~~*infection*~~ed~~ of ~~susceptible animals~~ bovines (*Bos indicus*, *B. taurus*, *B. grunniens* and *Bubalus bubalis*) with *Mycoplasma mycoides* subspecies *mycoides* ~~SC~~ (*Mmm* ~~SC~~)~~, and freedom from CBPP means freedom from *Mmm* SC *infection.*~~

~~For the purpose of this chapter, susceptible *animals* include bovids (*Bos indicus*, *B. taurus* and *B. grunniens*) and water buffaloes (*Bubalus bubalis)*~~

2~~3~~) ~~For the purposes of *international trade*t~~This chapter deals not only with the occurrence of clinical signs caused by *Mmm*~~SC~~, but also with the presence of *infection* with *Mmm*~~SC~~ in the absence of clinical signs.

3~~4~~) The following defines the occurrence of *infection* with *Mmm*~~SC~~ ~~*infection*~~:

~~1~~a) *Mmm*~~SC~~ has been isolated and identified as such in ~~from an *animal*, embryos, oocytes or semen~~ a sample from a ~~susceptible animal~~ bovine~~; or~~; or

~~2~~b) ~~*Mmm* deoxyribo~~nucleic acid specific to *Mmm* has been detected in a sample from a ~~susceptible animal~~ bovine showing pathological lesions consistent with an *infection* with *Mmm*~~SC~~, ~~and~~ or epidemiologically link~~s~~ed to a confirmed *case*~~.~~; or

c) antibodies specific to *Mmm*~~SC~~ ~~antigens~~, which are not the consequence of *vaccination*, have been detected in a sample from a ~~susceptible animal~~ bovine showing pathological lesions consistent with an *infection* with *Mmm*, ~~and~~ or epidemiologically link~~s~~ed to a confirmed *case*~~or *Mmm*SC deoxyribonucleic acid have been identified in one or more animals showing pathological lesions consistent with *infection* with *Mmm*SC with or without clinical signs, and epidemiological links to a confirmed *outbreak* of CBPP in susceptible *animals*~~.

4~~5~~) For ~~T~~the purposes of the *Terrestrial Code,* the *incubation period* shall be six months.

~~When authorising import or transit of the *commodities* listed in this chapter, with the exception of those listed in Article 11.5.2., *Veterinary Authorities* should require the conditions prescribed in this chapter relevant to the CBPP status of the domestic bovids and water buffalo population of the *exporting country*, *zone* or *compartment*.~~

5~~6~~) Standards for diagnosis ~~diagnostic tests~~ and vaccines, as well as information on the epidemiology, are described in the *Terrestrial Manual*.

Article 11.5.2.

Safe commodities

When authorising the importation or transit of the following *commodities*, *Veterinary Authorities* should not require any CBPP-related conditions, regardless of the ~~CBPP~~ *animal health status* of ~~the domestic bovids~~ ~~bovine and water buffalo population of~~ the *exporting country*, *zone* or *compartment*:

1) *milk* and *milk products*;

2) hides and skins;

3) *meat* and *meat products* (excluding lung);

4) *protein meal*;

5) rendered fat.

Article 11.5.3.

Country or zone free from CBPP ~~**free country or zone**~~

A country or *zone* may be considered free from CBPP when the relevant provisions in point 2 of Article 1.4.6. have been complied with, and when within the proposed free country or *zone* for at least the past 24 months:

1) there has been no *case* of *infection* with *Mmm*;

2) the *Veterinary Authority* has current knowledge of, and authority over, all *herds* of ~~susceptible animals~~ bovines;

3) appropriate *surveillance* has been implemented in accordance with:

   a) Article 1.4.6. where historical freedom can be demonstrated; or

   b) Articles 11.5.13. and 11.5.14. where historical freedom cannot be demonstrated;

4) measures to prevent the introduction of the *infection* have been in place: in particular, the importations or movements of bovine *commodities* into the country or *zone* have been carried out in accordance with this chapter and other relevant chapters of the *Terrestrial Code*;

5) no *vaccination* or treatment against CBPP has been carried out;

6) no animal vaccinated or treated against CBPP ~~have~~ has been introduced ~~since the cessation of *vaccination*~~.

~~To qualify for inclusion in the existing list of CBPP free countries and *zones*, a Member Country should:~~

~~1) have a record of regular and prompt animal disease reporting;~~

~~2) send a declaration to WOAH stating that:~~

   ~~a) there has been no *outbreak* of CBPP during the past 24 months;~~

   ~~b) no evidence of CBPP *infection* has been found during the past 24 months;~~

   ~~c) no *vaccination* against CBPP has been carried out during the past 24 months,and supply documented evidence that *surveillance* for CBPP in accordance with this chapter is in operation and that regulatory measures for the prevention and control of CBPP have been implemented;~~

~~3) not have imported since the cessation of *vaccination* any animals vaccinated against CBPP.~~

The country or *zone* will be included in the list of countries or *zones* free from CBPP in accordance with Chapter 1.6. ~~only after the submitted evidence has been accepted by WOAH~~.

Retention on the list requires annual reconfirmation of compliance with all points above and the ~~relevant~~ provisions under point 4 of Article 1.4.6. ~~that the information in points 2 *a)*, 2 *b)*, 2 *c)* and 3 above be re-submitted annually and~~ Documented evidence should be resubmitted annually for points 1 to 4 above. Any changes in the epidemiological situation or other significant events should be ~~reported~~ notified to WOAH in accordance with ~~the requirements in~~ Chapter 1.1.

Article 11.5.4~~6~~.

Compartment free from CBPP ~~free compartment~~

~~The bilateral recognition of a CBPP free *compartment* should follow the principles laid down in this chapter and in Chapters 4.3. and 4.4.~~

A *compartment* free from CBPP can be established in any country or *zone*. In defining such a *compartment* the principles of Chapters 4.4. and 4.5. should be followed. ~~Susceptible animals~~ Bovines in the *compartment* should be separated from any other ~~susceptible animals~~ bovines by the effective application of a *biosecurity plan*.

A Member Country wishing to establish a *compartment* free from CBPP should:

1) have a record of regular and prompt animal disease reporting and, if not free, have an *official control programme* and a *surveillance* system for CBPP in place in accordance with Articles 11.5.13. and 11.5.14. that allows knowledge of the prevalence, distribution and characteristics of CBPP in the country or *zone*;

2) declare for the free *compartment* that:

   ~~a) there has been no *case* of CBPP during the past 24 months;~~

   ~~b~~a) no *infection* with *Mmm* has ~~been detected~~ occurred during the past 24 months;

   ~~c~~b) *vaccination* against CBPP is prohibited;

   ~~d~~c) no animal vaccinated or treated against CBPP within the past 24 months is in the *compartment*;

   ~~e~~d) animals, semen and embryos may only enter the *compartment* in accordance with relevant articles in this chapter;

   ~~f~~e) documented evidence shows that *surveillance* in accordance with Articles 11.5.13. and 11.5.14. is in operation;

   ~~g~~f) an *animal identification* and *traceability* system in accordance with Chapters 4.1. and 4.2. is in place;

3) describe in detail:

   a) the animal *subpopulation* in the *compartment*;

   b) the *biosecurity plan* to mitigate the risks identified by the *surveillance* carried out in accordance with point 1 notably to prevent the aerosol transmission of CBPP.

The *compartment* should be approved by the *Veterinary Authority*.

Article 11.5.5.

Country ~~of~~ or zone infected with *Mmm* ~~CBPP infected country or zone~~

A country or *zone* shall be considered as infected with *Mmm* ~~W~~when the requirements for acceptance as a ~~CBPP free~~ country or *zone* free from CBPP are not fulfilled~~, a country or *zone* shall be considered as infected~~.

Article 11.5.5bis.

Establishment of a containment zone within a country or zone previously free from CBPP

In the event of *outbreaks* of ~~CBPP~~ *infection* with *Mmm* within a country or *zone* previously free from CBPP, including within a *protection zone*, a *containment zone*, which includes all epidemiologically linked *outbreaks*, ~~can~~ may be established, in accordance with Article 4.4.7., to minimise the impact on the rest of the country or *zone*.

For this to be achieved and for the Member Country to take full advantage of this process, the *Veterinary Authority* should submit as soon as possible to WOAH, in addition to the requirements of Article 4.4.7., ~~in support of the application,~~ documented evidence that:

1) on suspicion, a ~~strict~~ standstill has been imposed on the suspected *establishments*, and ~~in the country or *zone* animal movement control has been imposed and~~ effective controls on the movement of animals and other relevant *commodities* are in place in the country or *zone*;

2) the *infection* has been confirmed and notified in accordance with Chapter 1.1.;

3~~2~~) on confirmation, ~~an~~ the ~~additional~~ standstill and movement ~~of susceptible animals has been imposed~~ controls described in point 1 have been reinforced ~~in the entire *containment zone* and the movement controls described in point 1 have been reinforced~~;

4~~3~~) epidemiological investigations into the likely source of the *outbreaks* have been carried out;

5~~4~~) a *slaughter* policy, with or without the use of emergency *vaccination*, has been applied;

6~~5~~) *surveillance* in accordance with Articles 11.5.13. and 11.5.14. is in place in the *containment zone* and in the rest of the country or *zone*;

7~~6~~) measures that prevent the spread of CBPP to the rest of the country or *zone*, taking into consideration physical and geographical barriers, are in place.

The free status of the areas outside the *containment zone* is suspended while the *containment zone* is being established. The free status of these areas ~~outside the *containment zone*~~ may be reinstated irrespective of the provisions of Article 11.5.4., once the *containment zone* has been approved by WOAH as complying with Article 4.4.7. and points 1 to ~~6~~ 7 above.

In the event of recurrence of *infection* with *Mmm* in the *containment zone*, established in accordance with point 4 a) of Article 4.4.7., the approval of the *containment zone* is withdrawn and the ~~CBPP~~ free status of the whole country or *zone* is suspended until the relevant requirements of Article 11.5.4~~6~~. are fulfilled.

In the event of occurrence of *infection* with *Mmm* in the outer zone of a *containment zone* established in accordance with point 4 b) of Article 4.4.7., the approval of the *containment zone* is withdrawn and the free status of the whole country or *zone* is suspended until the relevant requirements of Article 11.5.4~~6~~. are fulfilled.

The recovery of the ~~CBPP~~ free status of the *containment zone* should follow the provisions of Article 11.5.4~~6~~.

Article 11.5.6~~4~~.

Recovery of free status

Should an *outbreak* of CBPP occur in a previously free country or *zone*, its status may be recovered when *surveillance* in accordance with Articles 11.5.13. and 11.5.14. has been carried out with negative results, and 12 months after:

1) the *disinfection* of the last affected *establishment*, provided that a *slaughter* policy without *vaccination* has been implemented; or

2) the *disinfection* of the last affected *establishment* and the *slaughter* of all vaccinated animals, provided that a *slaughter* policy with emergency *vaccination* and *slaughter* of vaccinated animals has been implemented.

~~When a CBPP *outbreak* occurs in a CBPP free country or *zone*, one of the following waiting periods is required to regain the status of CBPP free country or *zone*:~~

~~1) 12 months after the last *case* where a *stamping-out* policy and serological *surveillance* and strict movement control are applied in accordance with this chapter;~~

~~2) if *vaccination* was used, 12 months after the *slaughter* of the last vaccinated *animal*.~~

~~1) 12 months after the *slaughter* of the last *case* where a *slaughter* policy, without emergency *vaccination*, and *surveillance* are applied in accordance with Articles 11.5.13. and 11.5.14.; or~~

~~2) 12 months after the *slaughter* of the last *case* and of all vaccinated animals, whichever occurred last, where a *slaughter* policy, emergency *vaccination* and *surveillance* in accordance with Articles 11.5.13. and 11.5.14. are applied.~~

The country or *zone* will regain the status of CBPP free country or *zone* only after the submitted evidence, based on the provisions of Chapter 1.10., has been accepted by WOAH.

Where a ~~*stamping-out*~~ *slaughter* policy is not practised, the above waiting periods do not apply but Article 11.5.3. applies.

Article 11.5.7.

Recommendations for importation ~~of susceptible animals~~ bovines from ~~CBPP free~~ countries~~,~~ ~~or~~ zones~~,~~ or compartments free from CBPP ~~free compartments~~

~~For domestic bovids and water buffaloes~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the animals:

1) showed no clinical sign of CBPP on the day of shipment;

2) were kept in a CBPP free country, *zone* or *compartment* since birth or for at least the past six months.

Article 11.5.8.

Recommendations for importation ~~of susceptible animals~~ bovines from ~~CBPP infected~~ countries or zones infected with *Mmm* for immediate slaughter

~~For domestic bovids and water buffaloes for slaughter~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the animals:

1) showed no clinical sign of CBPP on the day of shipment;

2) originate from an *establishment* in which *surveillance* in accordance with Articles 11.5.13. and 11.5.14. demonstrates that ~~where~~ no *case* of CBPP ~~had~~ has occurred ~~was officially reported for~~ during the past six months; and

3) are transported ~~directly~~ under the supervision of the *Veterinary Authority* in a *vehicle/vessel*, which was subjected to *disinfection* before loading, directly from the *establishment* of origin to the ~~*slaughterhouse/abattoir*~~ *place of shipment*~~in sealed *vehicles*~~ without coming into contact with other ~~susceptible animals~~ bovines.

Article 11.5.9.

Recommendations for importation of bovine semen from ~~CBPP free~~ countries, ~~or~~ zones, ~~or~~ compartments free from CBPP ~~free compartments~~

~~For bovine semen~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1) the donor animals:

   a) showed no clinical sign of CBPP on the day of collection of the semen;

   b) were kept in a CBPP free country, *zone* or *compartment* since birth or for at least the past six months;

2) the semen was collected, processed and stored in accordance with Chapters 4.6. and 4.7.

Article 11.5.10.

Recommendations for importation of bovine semen from ~~CBPP infected~~ countries or zones infected with *Mmm*

~~For bovine semen~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1) the donor animals:

   a) were kept since birth, or for the past six months, in an *establishment* in which *surveillance* in accordance with Articles 11.5.13. and 11.5.14. demonstrates that no *case* of *infection* with *Mmm* has occurred during that period;

   ~~a~~b) showed no clinical sign of CBPP on the day of collection of the semen;

   ~~b~~c) were subjected to ~~the complement fixation~~ a serological test for CBPP with negative results, on two occasions, with an interval of not less than 21 days and not more than 30 days between ~~each~~ samplings~~tests~~, the second sampling~~test~~ being performed within 14 days prior to collection;

   ~~c~~d) were isolated from other ~~domestic bovids and water buffaloes~~ ~~susceptible animals~~ bovines that did not meet the same health requirements from the day of the first ~~the complement fixation~~ serological test until collection;

   ~~d) were kept since birth, or for the past six months, in an *establishment* in which *surveillance* in accordance with Articles 11.5.13. and 11.5.14. demonstrates that where no case of CBPP was reported had occurred during that period, , and that the *establishment* was not situated in a CBPP infected *zone*;~~

   e) AND EITHER:

      i) have not been vaccinated against CBPP;

      OR

      ii) were vaccinated ~~using a vaccine complying with the standards described in the *Terrestrial Manual*~~ not more than four months prior to collection; in this case, the condition laid down in point (~~b~~c) above is not required;

2) the semen:

   a) was collected, processed and stored in accordance with Chapters 4.~~5~~6. and 4.~~6~~7.;

   b) was subjected to a test for the ~~identification~~ detection of the agent.

Article 11.5.11.

Recommendations for importation of *in vivo* derived or *in vitro* produced oocytes or embryos of ~~susceptible animals~~ bovines from ~~CBPP free~~ countries~~,~~ ~~or~~ zones~~,~~ or compartments free from CBPP ~~free compartments~~

~~For *in vivo* derived or *in vitro* produced oocytes or embryos of domestic bovids and water buffaloes~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1) the donor animals:

   a) showed no clinical sign of CBPP on the day of collection of the oocytes or embryos;

   b) were kept in a ~~CBPP free~~ country, *zone* or *compartment* free from CBPP since birth or for at least the past six months;

2) the oocytes were fertilised with semen meeting the conditions of Articles 11.5.9. or 11.5.10.;

3) the oocytes or embryos were collected, processed and stored in accordance with Chapters 4.8., 4.9. and 4.10., as relevant.

Article 11.5.12.

Recommendations for importation of *in vivo* derived or *in vitro* produced oocytes or embryos of ~~susceptible animals~~ bovines from ~~CBPP infected~~ countries or zones infected with *Mmm*

~~For *in vivo* derived or *in vitro* produced oocytes or embryos of domestic bovids and water buffaloes~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1) the donor animals:

   a) were kept since birth, or for the past six months, in an *establishment* in which *surveillance* in accordance with Articles 11.5.13. and 11.5.14. demonstrates that no *case* of *infection* with *Mmm* has occurred during that period;

   ~~a~~b) showed no clinical sign of CBPP on the day of collection of the embryos or oocytes;

   ~~b~~c) were subjected to ~~the complement fixation~~ a serological test for CBPP with negative results, on two occasions, with an interval of not less than 21 days and not more than 30 days between ~~each~~ samplings~~tests~~, the second sampling~~test~~ being performed within 14 days prior to collection;

   ~~c~~d) were isolated from other ~~domestic bovids and water buffaloes~~ bovines that did not meet the same health requirements from the day of the first ~~the complement fixation~~ serological test until collection;

   ~~d) were kept since birth, or for the past six months, in an *establishment* in which *surveillance* in accordance with Articles 11.5.13. and 11.5.14. demonstrates that where no *case* of CBPP was reported had occurred during that period, and that the *establishment* was not situated in a CBPP infected *zone*;~~

   e) AND EITHER:

      i) have not been vaccinated against CBPP;

      OR

      ii) were vaccinated ~~using a vaccine complying with the standards described in the *Terrestrial Manual*~~ not more than four months prior to collection; in this case, the condition laid down in point (~~b~~c) above is not required;

2) the oocytes were fertilised with semen meeting the conditions of Articles 11.5.9. ~~and~~ or 11.5.10.;

3) the oocytes or embryos were collected, processed and stored in accordance with Chapters 4.8., 4.9. and 4.10., as relevant.

Article 11.5.13.

~~**Introduction to surveillance**~~ **General principles of surveillance**

Surveillance aims at identifying *infection* in bovines. Articles 11.5.13. ~~to~~ and 11.5.~~17~~14. define the principles and provide a guide for the *surveillance* of CBPP in accordance with Chapter 1.4. notably point ~~2(h)~~ 3 of Article 1.4.3. concerning quality assurance. They are applicable to Member Countries seeking establishment ~~of freedom from CBPP. Guidance is provided for Member Countries seeking reestablishment~~, maintenance or recovery of freedom from CBPP ~~for~~ at the ~~entire~~ country, ~~or for a *zone*, following an *outbreak*~~ or *compartment* level or seeking endorsement by WOAH of their *official control programme* for CBPP, in accordance with Article 11.5.13. ~~*Surveillance* aims at identifying *infection* in bovines susceptible species as indicated in Article 11.5.1.~~

1. Early detection

A *surveillance* system for early detection should be in place in accordance with Chapter 1.4. under the responsibility of the *Veterinary Authority*.

2. Demonstration of freedom

The impact and epidemiology of CBPP differ widely in different regions of the world and therefore it is impossible to provide specific recommendations for all situations. *Surveillance* strategies employed for demonstrating freedom from CBPP at an acceptable level of confidence should be adapted to the local situation. It is incumbent upon the applicant Member Country to submit a dossier to WOAH in support of its application that not only explains the epidemiology of CBPP in the region concerned but also demonstrates how all the risk factors are managed. This should include provision of science ~~scientifically~~ based supporting data. Therefore, ~~T~~there is ~~therefore~~ considerable latitude available to Member Countries to provide a well-reasoned argument to prove that the absence of ~~CBPP~~ *infection* with *Mmm* is assured at an acceptable level of confidence.

Surveillance for CBPP should be in the form of a continuing programme designed to establish that the whole territory or part of it is free from CBPP ~~*infection*~~.

A Member Country wishing to substantiate freedom from CBPP should demonstrate absence of *infection* with *Mmm* in bovines.

~~Article 11.5.14.~~

~~General conditions and methods for surveillance~~

3. WOAH endorsed official control programme

Surveillance strategies employed in support of a WOAH endorsed *official control programme* should demonstrate evidence of the effectiveness of any control strategy used and of the ability to rapidly detect all *outbreaks* of *infection* with *Mmm* ~~CBPP~~.

Considerable latitude exists for Member Countries to design and implement *surveillance* to establish that the whole country or a *zone* is free from CBPP and to understand the epidemiology of CBPP as part of the *official control programme*.

The Member Country should submit an application ~~dossier~~ to WOAH ~~in~~ supported by a dossier ~~of its application~~ that explains the epidemiology of CBPP in the region concerned and demonstrates how all the risk factors are identified and managed. This should include provision of ~~scientifically~~ science-based supporting data.

The entire investigative process should be documented within the *surveillance* programme. All the epidemiological information should be substantiated, and the results should be collated in the final report.

~~The entire investigative process should be documented within the *surveillance* system in accordance with Chapter 1.4. should be under the responsibility of the Veterinary Authority. A procedure should be in place for the rapid collection and transport of samples from suspect cases of CBPP to a laboratory for CBPP diagnoses.~~

~~2)~~ ~~The CBPP *surveillance* programme should:~~

~~a)~~ ~~include an early warning system throughout the production, marketing and processing chain for reporting suspicious cases. Farmers and workers (such as community animal health workers) who have day-to-day contact with livestock, *meat* inspectors as well as *laboratory* diagnosticians, should report promptly any suspicion of CBPP. They should be integrated directly or indirectly (e.g. through private *veterinarians* or *veterinary para-professionals*) into the *surveillance* system. All suspect cases of CBPP should be investigated immediately. Where suspicion cannot be resolved by the epidemiological and clinical investigation, samples should be taken and submitted to a *laboratory*. This requires that sampling kits information should be substantiated, and other equipment are available for those responsible for *surveillance*. Personnel responsible for *surveillance* should be able to call for assistance from a team with expertise in CBPP diagnosis and control;~~

~~b)~~ ~~implement, when relevant, regular and frequent clinical inspection and testing of high-risk groups of *animals*, such as those adjacent to a CBPP infected country or *zone* (for example, areas of transhumant production systems);~~

~~c)~~ ~~take into consideration additional factors such as animal movement, different production systems, geographical and socio-economic factors that may influence the risk of *disease* occurrence.~~

~~An effective *surveillance* system will periodically identify suspicious cases that require follow-up and investigation to confirm or exclude that the cause of the condition is CBPP. The rate at which such suspicious cases are likely to occur will differ between epidemiological situations and cannot therefore be predicted reliably. Applications for freedom from CBPP *infection* should, in consequence, provide details of the occurrence of suspicious cases and how they were investigated and dealt with. This should include the results of *laboratory* testing and the control measures to which the *animals* concerned were subjected during the investigation (quarantine, movement stand-still orders, etc.). should be collated in the final report.~~

~~Article 11.5.15.~~

4. Surveillance strategies

~~1.~~ ~~Introduction~~

~~The target population for *surveillance* aimed at identifying *disease* and *infection* should cover all the susceptible species (*Bos taurus*, *B. indicus*, *B. grunniens* and *Bubalusbubalis*) within the country or *zone*.~~

~~Given the limitations of the diagnostic tools available,~~ ~~t~~The interpretation of serological *surveillance* results should be at the *herd* level rather than at the individual animal level.

Randomised *surveillance* may not be the preferred approach given the epidemiology of the disease (usually uneven distribution and potential for occult foci of *infection* in small populations) and the limited sensitivity and specificity of currently available tests. ~~Targeted~~ Risk-based *surveillance* (e.g. based on the increased likelihood of *infection* in particular localities or species, focusing on *slaughter* findings, and active clinical *surveillance*) may be the most appropriate strategy. The applicant Member Country should justify the *surveillance* strategy chosen as adequate to detect the presence of ~~CBPP~~ *infection* with *Mmm* in accordance with Chapter 1.4. ~~and the epidemiological situation.~~

~~Targeted~~ Risk-based *surveillance* may involve testing of the entire target subpopulation or a sample from it. In the latter case the sampling strategy should incorporate an epidemiologically appropriate design prevalence. The sample size selected for testing should be large enough to detect *infection* if it were to occur at a predetermined minimum rate. The sample size and expected disease prevalence determine the level of confidence in the results of the survey. The applicant Member Country should justify the choice of design prevalence and confidence level based on the objectives of *surveillance* and the epidemiological situation, in accordance with Chapter 1.4. Selection of the design prevalence in particular should be clearly based on the prevailing or historical epidemiological situation.

Regular and frequent clinical inspection and testing of high-risk groups of *animals*, such as those adjacent to a country or *zone* infected with *Mmm* (for example, areas of transhumant production systems), should be implemented when relevant.

Additional factors such as animal movement, different production systems, geographical and socio-economic factors that may influence the risk of disease introduction and occurrence should be taken into consideration.

Irrespective of the survey design selected, the sensitivity and specificity of the diagnostic tests employed are key factors in the design, sample size determination and interpretation of the results obtained. ~~Ideally, the sensitivity and specificity of the tests used should be validated.~~

5. Follow-up of suspected cases and interpretation of results

An effective *surveillance* system will identify suspected *cases* that require immediate follow-up and investigation to confirm or exclude that the cause of the condition is an *infection* with *Mmm*. Samples should be taken and submitted for diagnostic testing, unless the suspected *case* can be confirmed or ruled out by epidemiological and clinical investigation. Details of the occurrence of suspected *cases* and how they were investigated and dealt with should be documented. This should include the results of diagnostic testing and the measures applied to the animals concerned during the investigation.

~~Irrespective of t~~The surveillance ~~system employed,the~~ design should anticipate the occurrence of false positive *laboratory* results ~~reactions~~. If the characteristics of the testing system are known, the rate at which these false positives are likely to occur can be calculated in advance. There should be an effective procedure for following-up positives to ~~ultimately~~ determine, with a high level of confidence, whether or not they are indicative of *infection* ~~or not~~. This should involve ~~follow-up with~~ supplementary tests~~,~~ ~~clinical~~ and follow-up investigation ~~and post-mortem examination in~~ to collect diagnostic material from the original ~~sampling~~ *epidemiological unit* ~~as well as~~ and *herds* which may be epidemiologically linked to it.

Laboratory results should be examined in the context of the epidemiological situation.

Article 11.5.14.

Methods of surveillance

1. Clinical surveillance

Clinical *surveillance* aims at detecting clinical signs of CBPP in a *herd* by ~~close~~ a thorough physical examination of ~~susceptible *animals*~~ bovines. Clinical inspection is an important component of CBPP *surveillance* contributing to reaching the desired level of confidence of detection of disease if a sufficiently large number of ~~clinically susceptible *animals*~~ bovines ~~is~~ are examined.

~~Clinical *surveillance* and *laboratory* testing should always be applied in series to clarify the status of CBPP suspects detected by either of these complementary diagnostic approaches. *Laboratory* testing and post-mortem examination may contribute to confirm clinical suspicion, while clinical *surveillance* may contribute to confirmation of positive serology. Any sampling unit within which suspicious *animals* are detected should be classified as infected until contrary evidence is produced.~~

~~3~~2. Pathological surveillance

Systematic pathological *surveillance* for CBPP is the most effective approach and should be conducted at ~~*slaughterhouses/abattoirs* and other~~ *slaughter* ~~facilities~~. Suspect pathological findings should be confirmed by agent identification. Training courses for *slaughter* personnel and *meat* inspectors are highly recommended.

~~4.~~ ~~Serological~~ 3. Laboratory testing

Serological *surveillance* is not the preferred strategy for CBPP. However, in the framework of epidemiological investigations, serological testing may be used.

The limitations of available serological tests for CBPP make the interpretation of results difficult and useful only at the *herd* level. Positive findings should be followed up by clinical and pathological investigations and agent identification.

Clustering of seropositive reactions should be expected in CBPP ~~*infections*~~ and is usually accompanied by clinical signs. As clustering may signal field strain *infection*, the investigation of all instances should be incorporated into the *surveillance* strategy.

Following the identification of a CBPP infected *herd*, contact *herds* should be tested serologically. Repeated testing may be necessary to reach an acceptable level of confidence in *herd* classification.

~~5. Agent surveillance~~

Agent *surveillance* should be conducted to ~~follow up and~~ confirm or exclude *infection* with *Mmm*. ~~suspect *cases*. Isolates should be typed to confirm *Mmm*SC.~~

~~Article 11.5.16.~~

~~**Countries or zones applying for recognition of freedom from CBPP**~~

~~In addition to the general conditions described in this chapter, a Member Country applying for recognition of CBPP freedom for the country or a *zone* should provide evidence for the existence of an effective *surveillance* programme. The strategy and design of the *surveillance* programme depend on the prevailing epidemiological circumstances and should be planned and implemented in accordance with general conditions and methods in this chapter, to demonstrate absence of CBPP *infection*, during the preceding 24 months in susceptible populations. This requires the support of a national or other *laboratory* able to undertake identification of CBPP *infection*.~~

~~Article 11.5.17.~~

~~**Countries or zones re-applying for recognition of freedom from CBPP following an outbreak**~~

~~In addition to the general conditions described in this chapter, a Member Country re-applying for recognition of country or *zone* freedom from CBPP should show evidence of an active *surveillance* programme for CBPP, following the recommendations of this chapter.~~

~~Two strategies are recognised by WOAH in a programme to eradicate CBPP *infection* following an *outbreak*:~~

~~1) *slaughter* of all clinically affected and in-contact susceptible animals;~~

~~2) *vaccination* used without subsequent *slaughter* of vaccinated animals.~~

~~The time periods before which an application can be made for re-instatement of freedom from CBPP depends on which of these alternatives is followed. The time periods are prescribed in Article 11.5.4.~~

Article 11.5.15~~18~~.

WOAH endorsed official control programme for CBPP

~~The overall objective of a WOAH endorsed *official control programme* for CBPP is for Member Countries to progressively improve their situation and eventually attain CBPP free status. The *official control programme* should be applicable to the entire country even if certain measures are directed towards defined subpopulations.~~

A Member Country~~ies~~ may, on a voluntary basis, apply for endorsement of ~~their~~ its *official control programme* for CBPP in accordance with Chapter 1.6., when ~~they have~~ it has implemented measures in accordance with this article.

For an *official control programme* for CBPP to be endorsed by WOAH, the Member Country should provide a detailed *official control programme* for the control and eventual eradication of CBPP in the country or *zone*. This document should address and provide documented evidence on the following:

1) epidemiology:

   a) the detailed epidemiological situation of CBPP in the country, highlighting the current knowledge and gaps;

   b) the main production systems and movement patterns of ~~susceptible animals~~ bovines and their products within and into the country and, where applicable, the specific *zone*;

2) surveillance and diagnostic capabilities:

   a) CBPP *surveillance* in place, in accordance with Chapter 1.4. and Articles 11.5.13. and 11.5.14.;

   b) diagnostic capability and procedures, including regular submission of samples to a laboratory that performs diagnostic testing and further characterisation of strains in accordance with the *Terrestrial Manual* including procedures to isolate and identify *Mmm*;

3) vaccination (if practised as part of the *official control programme* for CBPP):

   a) *vaccination* is in accordance with Chapter 4.18. and compulsory in the target *population*;

   b) detailed information on *vaccination* campaigns, in particular:

      i) the strategy that is adopted for the *vaccination* campaign;

      ii) target *populations* for *vaccination*;

      iii) target geographical area for *vaccination*;

      iv) monitoring of *vaccination* coverage, including serological monitoring of population immunity;

      v) the strategy to identify vaccinated animals;

      vi) technical specification of the vaccines used and description of the vaccine licensing procedures in place;

      vii) use of vaccines fully compliant with the standards and methods described in the *Terrestrial Manual*;

      viii) the proposed strategy and work plan including the timeline for transition to the cessation of *vaccination*;

4) the measures implemented to prevent the introduction of the pathogenic agent and to ensure the rapid detection of all CBPP *outbreaks*;

5) an emergency preparedness plan and an emergency response plan to be implemented in case of CBPP *outbreaks*;

6) work plan and timelines of the *official control programme*;

7) performance indicators for assessing the effectiveness of the control measures to be implemented;

8) monitoring, evaluation and review of the *official control programme* to demonstrate the effectiveness of the strategies.

~~1) have a record of regular and prompt animal disease reporting in accordance with the requirements in Chapter 1.1.;~~

~~2) submit documented evidence of the capacity of *Veterinary Services* to control CBPP; this evidence can be provided by countries following the WOAH PVS Pathway;~~

3) submit a detailed plan of the programme to control and eventually eradicate CBPP in the country or *zone* including:

   a) the timeline;

   b) the performance indicators for assessing the efficacy of the control measures to be implemented;

   c) submit documentation indicating that the *official control programme* for CBPP has been implemented and is applicable to the entire territory;

4) submit a dossier on the epidemiology of CBPP in the country describing the following:

   a) the general epidemiology in the country highlighting the current knowledge and gaps;

   b) the measures to prevent introduction of *infection*, the rapid detection of, and response to, all CBPP *outbreaks* in order to reduce the incidence of CBPP *outbreaks* and to eliminate CBPP in at least one *zone* in the country;

   c) the main livestock production systems and movement patterns of CBPP susceptible animals and their products within and into the country;

5) submit evidence that CBPP *surveillance* is in place,

   a) taking into account provisions in Chapter 1.4. and the provisions on *surveillance* of this chapter;

   b) have diagnostic capability and procedures, including regular submission of samples to a *laboratory* that carries out diagnosis and further characterisation of strains in accordance with the *Terrestrial Manual* including procedures to isolate and identify *M. mycoides* subsp. *mycoides* SC as opposed to *M. mycoides* subsp. *mycoides* LC;

6) where *vaccination* is practised as a part of the *official control programme* for CBPP, provide:

   a) evidence (such as copies of legislation) that *vaccination* of selected populations is compulsory;

   b) detailed information on *vaccination* campaigns, in particular on:

      i) target populations for *vaccination*;

      ii) monitoring of *vaccination* coverage;

      iii) technical specification of the vaccines used and description of the licensing procedures in place;

      iv) the proposed timeline and strategy for the cessation of *vaccination*;

7) provide an emergency preparedness and contingency response plan to be implemented in case of CBPP *outbreaks*.

The Member Country's *official control programme* for CBPP will be included in the list of programmes endorsed by WOAH only after the submitted evidence has been accepted by WOAH.

The country will be included in the list of countries having a WOAH endorsed *official control programme* for CBPP in accordance with Chapter 1.6.

Retention on the list requires an annual update on the progress of the *official control programme* and information on significant changes concerning the points above. Changes in the epidemiological situation and other significant events should be reported to WOAH in accordance with the requirements in Chapter 1.1.

WOAH may withdraw the endorsement of the *official control programme* if there is evidence of:

– ~~non-compliance with the timelines or performance indicators of the programme; or~~

– ~~significant problems with the performance of the *Veterinary Services*; or~~

– ~~an increase in the incidence of CBPP that cannot be addressed by the programme.~~

Annex 12

CHAPTER 11.X.

INFECTION WITH BOVINE PESTIVIRUSES (BOVINE VIRAL DIARRHOEA)

Article 11.X.1.

General provisions

For the purposes of the *Terrestrial Code*, bovine viral diarrhoea is defined as an *infection* of bovines (*Bos taurus*, *Bos indicus* and *Bubalus bubalis*) ~~(herafter 'susceptible animals')~~ with bovine viral diarrhoea virus type 1 (~~pestivirus A,~~ *Pestivirus bovis*), type 2 (~~pestivirus B,~~ *Pestivirus tauri*), ~~and~~ or type 3 (~~pestivirus H,~~ *Pestivirus brazilense*) (here~~in~~after 'bovine pestiviruses').

The following defines the occurrence of *infection* with bovine pestiviruses:

1) A bovine pestivirus, excluding vaccine strains, has been isolated and identified as such in a sample from a ~~susceptible animal~~ bovine; or

2) antigen or ~~ribo~~nucleic acid specific to a bovine pestivirus, excluding vaccine strains, has been detected in a sample from a ~~susceptible animal~~ bovine.

Standards for diagnosis ~~diagnostic tests~~ and vaccines, as well as information on the epidemiology, are described in the *Terrestrial Manual*.

CHAPTER 12.1.

INFECTION WITH AFRICAN HORSE SICKNESS VIRUS

Article 12.1.1.

General provisions

For the purposes of the *Terrestrial Code*, African horse sickness (AHS) is defined as an *infection* of equids with African horse sickness virus (AHSV).

The following defines the occurrence of an *infection* with AHSV:

1) AHSV has been isolated and identified as such in a sample from an equid ~~or a product derived from that equid~~; or

2) ~~antigen or ribo~~nucleic acid specific to AHSV has been ~~identified~~ detected in a sample~~s~~ from an equid showing clinical signs or pathological lesions consistent with AHS, or epidemiologically linked to a confirmed or suspected ~~or confirmed~~ *case*; or

3) ~~serological evidence of active *infection* with AHSV by detection of~~ seroconversion ~~due to recent exposure to with production of antibodies against structural or nonstructural proteins of AHSV~~, ~~that are~~ which is not ~~a~~ the consequence of *vaccination*, ~~have~~ has been ~~identified~~ detected in ~~a paired samples from~~ an equid ~~that either~~ show~~s~~ing clinical signs or pathological lesions consistent with AHS, or ~~is~~ epidemiologically linked to a confirmed or suspected ~~or confirmed~~ *case.*

For the purposes of the *Terrestrial Code*, the *infective period* for AHS is 40 days~~ for domestic horses. Although critical information is lacking for some species, this chapter applies to all Equidae.~~.

~~All countries or *zones* adjacent to a country or *zone* not having free status should determine their AHSV status from an ongoing *surveillance* programme. Throughout the chapter, *surveillance* is in all cases understood as being conducted as described in Articles 12.1.11. to 12.1.13.~~

Standards for diagnosis ~~diagnostic tests~~ and vaccines, as well as information on the epidemiology, are described in the *Terrestrial Manual*.

Article 12.1.1bis.

Safe commodities

When authorising the importation or transit of the following *commodities*, *Veterinary Authorities* should not require any AHS-related conditions regardless of the *animal health status* of the *exporting country* or *zone*:

1) *milk* and *milk products*;

2) *meat* and *meat products*;

3) hides and skins;

4) hooves;

5) gelatine and collagen;

~~6) sterile filtered horse serum;~~

7) *protein meal*;

8) rendered fat.

Article 12.1.2.

~~AHS free c~~Country or zone free from AHS

~~1)~~ A country or *zone* may be considered free from AHS when the relevant provisions in point 2 a) of Article 1.4.6. have been complied with, and when within the ~~proposed free~~ country or *zone*: ~~*infection* with AHSV is notifiable in the whole country, systematic *vaccination* is prohibited, importation of equids and their semen, oocytes or embryos are carried out in accordance with this chapter, and either:~~

1) for at least the past 24 months:

a) the *Veterinary Authority* has current knowledge of, and authority over, all domestic and ~~*captive wild*~~ equids in the country or *zone*;

b) the *Veterinary Authority* has current knowledge of the distribution, habitat and indication of disease occurrence through passive *surveillance* of *wild* and *feral* equids in the country or *zone*;

c) ~~either:~~

~~i)~~ there has been no *case* of *infection* with AHSV~~ and the country or *zone* is not adjacent to an infected country or *zone*; or~~

~~ii) a *surveillance* programme has demonstrated no evidence of *Culicoides* in accordance with Chapter 1.5.~~;

d) appropriate *surveillance* has been implemented in accordance with:

i) point 2 b) of Article 1.4.6. where historical freedom can be demonstrated; or

ii) Articles 12.1.11. to 12.1.13. where historical freedom cannot be demonstrated; ~~or~~

~~iii) Chapter 1.5. where a *surveillance* programme has demonstrated no evidence of *Culicoides*.~~

e) if adjacent to an infected country or *zone*, includes an area in which *surveillance* is conducted in accordance with Articles 12.1.11. to 12.1.13.;

f) measures to prevent the introduction of the *infection* have been in place: in particular, the importations or movements of *commodities* into the country or *zone* have been carried out in accordance with this chapter and other relevant chapters of the *Terrestrial Code*;

2) no systematic *vaccination* against AHS has been carried out for at least the past 12 months.

~~a) historical freedom as described in Chapter 1.4. has demonstrated no evidence of AHSV in the country or *zone*; or~~

~~b) the country or *zone* has not reported any *case* of AHS for at least two years and is not adjacent to an infected country or *zone*; or~~

~~c) a *surveillance* programme has demonstrated no evidence of AHSV in the country or *zone* for at least two years; or~~

d) the country or *zone* has not reported any *case* of AHS for at least 40 days and a *surveillance* programme has demonstrated no evidence of *Culicoides* for at least two years in the country or *zone*.

2) An AHS free country or *zone* which is adjacent to an infected country or *zone* should include a *zone* in which *surveillance* is conducted in accordance with Articles 12.1.11. to 12.1.13., as relevant.

3) An AHS free country or *zone* will not lose its free status through the importation of seropositive or vaccinated equids and their semen, oocytes or embryos from infected countries or *zones*, provided these imports are carried out in accordance with this chapter.

4) To qualify for inclusion in the list of AHS free countries or *zones*, a Member Country should:

a) have a record of regular and prompt animal disease reporting;

b) send a declaration to the OIE stating:

i) the section under point 1) on which the application is based;

ii) no routine *vaccination* against AHS has been carried out during the past year in the country or *zone*;

iii) equids are imported in accordance with this chapter;

c) supply documented evidence that:

i) *surveillance* in accordance with Articles 12.1.11. to 12.1.13. is applied, unless historically free in accordance with Article 1.4.6.;

ii) regulatory measures for the early detection, prevention and control of *infection* with AHSV have been implemented.

5) The Member Country will be included in the list only after the submitted evidence has been accepted by the OIE.

The country or *zone* will be included in the list of countries or *zones* free from AHS in accordance with Chapter 1.6.

Retention on the list requires annual reconfirmation of compliance with all points above and relevant provisions under point 4 of Article 1.4.6. that the information in points 4 b) ii) and iii) and 4 c) above be annually re-submitted and Documented evidence should be resubmitted annually for point 1 above. Any changes in the epidemiological situation or other significant events should be reported notified to WOAH in accordance with the requirements in Chapter 1.1., and in particular, formally state that:

a) there has been no *outbreak* of AHS during the past year in the country or *zone*;

b) no evidence of *infection* with AHSV has been found during the past year in the country or *zone*.

Article 12.1.3.

AHS infected cCountry or zone infected with AHSV

A country or *zone* shall be considered as infected with AHSV For the purposes of this chapter, an AHS infected country or *zone* is one that does not fulfil when the requirements for acceptance as a country or *zone* free from AHS are not fulfilled to qualify as AHS free.

Article 12.1.4.

Establishment of a containment zone within a an AHS free country or zone previously free from AHS

In the event of ~~limited~~ *outbreaks* of AHS within a~~n AHS free~~ country or *zone* previously free from AHS, including within a *protection zone*, a ~~single~~ *containment zone*, which includes all epidemiologically linked *outbreaks*, ~~can~~ may be established, in accordance with Article 4.4.7., ~~for the purpose of~~ to minimise~~ing~~ the impact on the ~~entire~~ rest of the country or *zone*. ~~Such a *zone* should include all *cases* and can be established within a *protection zone*.~~

For this to be achieved and for the Member Country to take full advantage of this process, the *Veterinary Authority* should ~~provide~~ submit as soon as possible to WOAH, in addition to the requirements of Article 4.4.7., ~~in support of the application,~~ documented evidence that:

1) the *outbreaks* have been contained ~~are limited~~ based on the following factors:

   a) ~~immediately on suspicion, a rapid response has been implemented, including *notification* reporting, standstill of movements of equids and effective controls of the movements of equine *commodities* has been made~~on suspicion, a standstill has been imposed on the suspected *establishments* and effective controls on the movement of equids~~animals~~ and other equid-related *commodities* are in place in the country or *zone*;

   b) the *infection* has been confirmed and notified in accordance with Chapter 1.1.;

   c~~b~~) ~~standstill of movements of equids has been imposed, and effective controls on the movement of equids and their products specified in this chapter are in place~~on confirmation, the standstill and movement controls described in point ~~1~~(a) have been reinforced;

   ~~c) epidemiological investigation (trace-back, trace-forward) has been completed;~~

   c~~d) the *infection* has been confirmed and notified in accordance with Chapter 1.1;~~

   d~~e~~) epidemiological investigations ~~on~~ into the likely source of the *outbreak* have been carried out;

   ~~f) all *cases* have been shown to be epidemiologically linked;~~

   e~~g~~) no new *cases* have been found in the *containment zone* within a minimum of two *infective periods* as defined in Article 12.1.1.;

~~2) the equids within the *containment zone* are clearly identifiable as belonging to the *containment zone*;~~

2) increased passive and targeted *surveillance* in accordance with Articles 12.1.11. to 12.1.13. in the rest of the country or *zone* has not detected any evidence of *infection*;

3) ~~animal health~~measures are in place to effectively prevent the spread of AHSV *infection* to the rest of the country or *zone*, taking into consideration the establishment of a *protection zone* within the *containment zone*, the seasonal *vector* conditions and existing physical, geographical and ecological barriers;

4) ongoing *surveillance* in accordance with Articles 12.1.11. to 12.1.13. is in place in the *containment zone*.

~~The free status of the areas outside the *containment zone* is suspended while the *containment zone* is being established in accordance with points 1) to 5) above.~~The free status of the areas ~~of~~ outside the *containment zone* is suspended while the *containment zone* is being established. The free status of these areas ~~outside the *containment zone*~~ may be reinstated irrespective of Article 12.1.5. once the *containment zone* has been approved ~~is recognised~~ by ~~the~~ WOAH as complying with points 1 to 4 above.

In the event of the recurrence of ~~AHSV~~ *infection* with AHSV in the *containment zone*, established in accordance with point 4 a) of Article 4.4.7., the approval of the *containment zone* is withdrawn and the ~~AHS~~ free status of the whole country or *zone* is suspended until the relevant requirements of Article 12.1.5. are fulfilled.

In the event of occurrence of *infection* with AHSV in the outer zone of a *containment zone* established in accordance with point 4 b) of Article 4.4.7., the approval of the *containment zone* is withdrawn and the free status of the whole country or *zone* is suspended until the relevant requirements of Article 12.1.5. are fulfilled.

The recovery of the ~~AHS~~ free status of the *containment zone* should follow Article 12.1.5.

Article 12.1.5.

Recovery of free status

~~To regain free status when an AHS *outbreak* occurs in a country or *zone* previously free, Article 12.1.2. applies, irrespective of whether emergency *vaccination* has been applied or not.~~

Should an *outbreak* of AHS occur in a previously free country or *zone*, its status may be recovered in accordance with Article 12.1.2., irrespective of whether emergency *vaccination* has been applied or not.

The AHS free status of the country or *zone* will be reinstated only after the submitted evidence has been accepted by ~~the~~ WOAH.

Article 12.1.6.

Recommendations for importation of equids from AHS free countries or zones

~~For equids~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the animals:

1) showed no clinical sign of AHS on the day of shipment;

2) have not been vaccinated against AHS within the last 40 days;

3) were kept in an AHS free country or *zone* since birth or for at least 40 days prior to shipment;

4) either:

   a) did not transit through an infected *zone* during transportation to the *place of shipment*; or

   b) were protected from *Culicoides* attacks at all times when transiting through an infected *zone*.

Article 12.1.7.

Recommendations for importation of equids from AHS infected countries or zones

~~For equids~~

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the animals:

1) showed no clinical sign of AHS on the day of shipment;

2) have not been vaccinated against AHS within the last 40 days;

3) were held in isolation in a *vector*-protected *establishment*:

a) for a period of at least 28 days and a serological test to detect antibodies against ~~the~~ AHSV ~~group~~, was carried out with a negative result on a blood sample collected at least 28 days after introduction into the *vector*-protected *establishment*; or

b) for a period of at least 40 days and serological tests to detect antibodies against AHSV were carried out with no significant increase in antibody titre on blood samples collected on two occasions, with an interval of not less than 21 days, the first sample being collected at least 7 days after introduction into the *vector*-protected *establishment*; or

c) for a period of at least 14 days and a~~n agent identification~~ test for the ~~identification~~ detection of the agent was carried out with a negative result on a blood sample collected not less than 14 days after introduction into the *vector*-protected *establishment*; or

d) for a period of at least 40 days and were vaccinated, at least 40 days before shipment, against all serotypes whose presence in the source population has been demonstrated through a *surveillance* programme in accordance with Articles 12.1.12. and 12.1.13., and were identified in the accompanying certification as having been vaccinated;

4) were protected from *Culicoides* attacks at all times during transportation (including transportation to and at the *place of shipment*).

Article 12.1.8.

Recommendations for the importation of equine semen

Veterinary Authorities of *importing countries* should require the presentation of an *international veterinary certificate* attesting that the donor animals:

1) showed no clinical sign of AHS on the day of collection of the semen and for the following 40 days;

2) had not been ~~immunised~~ vaccinated against AHS with a live attenuated vaccine within 40 days prior to the day of collection;

3) were either:

a) kept in an AHS free country or *zone* for at least 40 days before commencement of, and during collection of the semen; or

b) kept in an AHS free *vector*-protected *artificial insemination centre* throughout the collection period, and subjected to either:

i) a serological test to detect antibodies against ~~the~~ AHSV ~~group~~, carried out with a negative result on a blood sample collected at least 28 days and not more than 90 days after the last collection of semen; or

ii) ~~agent identification~~ tests for the ~~identification~~ detection of the agent, carried out with negative results on blood samples collected at commencement and conclusion of, and at least every seven days, during semen collection for this consignment.

Article 12.1.9.

Recommendations for the importation of *in vivo* derived equine oocytes or embryos

Veterinary Authorities of *importing countries* should require the presentation of an *international veterinary certificate* attesting that:

1) the donor animals:

   a) showed no clinical sign of AHS on the day of collection of the oocytes or embryos and for the following 40 days;

   b) had not been ~~immunised~~ vaccinated against AHS with a live attenuated vaccine within 40 days prior to the day of collection;

   c) were either:

      i) kept in an AHS free country or *zone* for at least 40 days before commencement of, and during collection of the oocytes or embryos, or

      ii) kept in an AHS free *vector*-protected *collection centre* throughout the collection period, and subjected to either:

         – a serological test to detect antibodies against ~~the~~ AHSV ~~group~~ carried out with a negative result on a blood sample collected at least 28 days and not more than 90 days after the last collection of oocytes or embryos; or

         – ~~agent identification~~ tests for the ~~identification~~ detection of the agent carried out with negative results on blood samples collected at commencement and conclusion of, and at least every seven days during oocytes or embryos collection for this consignment;

2) the embryos were collected, processed and stored in accordance with Chapters 4.8. and 4.10., as relevant;

3) the semen used to fertilise the oocytes complies ~~at least~~ with the requirements in Article 12.1.8.

Article 12.1.10.

Protecting animals from *Culicoides* attacks

1. Vector-protected establishment or facility

   The *establishment* or facility should be approved by the *Veterinary Authority* and the means of protection should at least comprise the following:

   a) appropriate physical barriers at entry and exit points, for example double-door entry-exit system;

   b) openings of the building are *vector* screened with mesh of appropriate gauge impregnated regularly with an approved insecticide in accordance with the instructions of the manufacturer;

   c) *vector surveillance* and control within and around the building;

   d) measures to limit or eliminate breeding sites for *vectors* in the vicinity of the *establishment* or facility;

   e) ~~S~~standard ~~O~~operating ~~P~~procedure, including description of back-up and alarm systems, for operation of the *establishment* or facility and transport of equids to the place of *loading*.

2. During transportation

   When equids are transport~~inged~~ ~~equids~~ through AHS infected countries or *zones*, *Veterinary Authorities* should require that they are ~~strategies to~~ protected ~~animals~~ from *Culicoides* attacks ~~during transport~~, taking into account the local ecology of the *vector*.

   a) Transport by ~~road~~ land

Potential *risk management* strategies include a combination of:

i) treating animals with chemical repellents prior to and during transportation, in sanitized *vehicles* treated with appropriate residual contact insecticide;

ii) *loading*, transporting and *unloading* animals at times of low *vector* activity (i.e. bright sunshine and low temperature);

iii) ensuring *vehicles* do not stop en route during dawn or dusk, or overnight, unless the *animals* are held behind insect-proof netting;

iv) darkening the interior of the *vehicle*, for example by covering the roof or sides of *vehicles* with shade cloth;

v) surveillance for *vectors* at common stopping and offloading points to gain information on seasonal variations;

vi) using historical, ongoing or modelling information on AHS to identify low-risk ports and transport routes.

b) Transport by air

Prior to *loading* the equids, the crates, *containers* or jet stalls are sprayed with an insecticide approved in the country of dispatch.

Crates, *containers* or jet stalls in which equids are being transported and the cargo hold of the aircraft should be sprayed with an approved insecticide when the doors have been closed and prior to take off. All possible insect harbourage should be treated. The insecticide sprayers ~~containers~~ should be retained for inspection on arrival.

In addition, during any stopover in countries or *zones* ~~not free from~~ infected with AHSV, prior to the opening of any aircraft door and until all doors are closed, netting of appropriate gauge impregnated with an approved insecticide should be placed over all crates, *containers* or jet stalls.

Article 12.1.11.

Introduction to surveillance

Articles 12.1.11. to 12.1.13. define the principles and provide guidance on *surveillance* for AHS, complementary to Chapter 1.4. and, for *vectors*, complementary to Chapter 1.5.

AHS is a *vector*-borne *infection* transmitted by ~~a limited number of~~ some species of *Culicoides* ~~insects~~. ~~Unlike the related bluetongue virus, AHSV is so far geographically restricted to sub-Saharan Africa with periodic excursions into North Africa, southwest Europe, the Middle East and adjacent regions of Asia.~~ An important component of AHSV epidemiology is vectorial capacity which provides a measure of disease *risk* that incorporates *vector* competence, abundance, seasonal incidence, biting rates, survival rates and the extrinsic incubation period. ~~However, methods and tools for measuring some of these *vector* factors remain to be developed, particularly in a field context.~~

~~According to this chapter, a~~A Member Country demonstrating freedom from *infection* with AHSV for the entire country or a *zone* should provide evidence for the existence of an effective *surveillance* programme. The strategy and design of the *surveillance* programme will depend on the prevailing epidemiological circumstances and should be planned and implemented in accordance with general conditions and methods described in this chapter. This requires the support of a *laboratory* able to undertake identification of *infection* with AHSV through ~~the virus detection~~ tests for the detection of the agent and antibody detection tests.

Susceptible *captive wild*, *feral* and *wild* equine populations should be included in the *surveillance* programme.

The purpose of *surveillance* is to determine ~~if~~ whether a country or *zone* is free from AHS. *Surveillance* deals not only with the occurrence of clinical signs caused by AHSV, but also with evidence of *infection* with AHSV in the absence of clinical signs.

Article 12.1.12.

General conditions and methods for surveillance

1) A *surveillance* system should be under the responsibility of the *Veterinary Authority*. In particular the following should be in place:

   a) a formal and ongoing system for detecting and investigating *outbreaks* of disease;

   b) a procedure for the rapid collection and transport of samples from suspected *cases* of AHS to a *laboratory* for diagnosis;

   c) a system for recording, managing and analysing diagnostic, epidemiological and *surveillance* data.

2) In a free country or *zone*, the *surveillance* programme for AHS should include an *early warning system* for reporting suspected *cases*. Persons who have regular contact with equids, as well as diagnosticians, should report promptly any suspicion of AHS to the *Veterinary Authority*. An effective *surveillance* system will periodically identify suspected *cases* that require follow-up and investigation to confirm or exclude that the cause of the condition is AHS. The rate at which such suspected *cases* are likely to occur will differ ~~between~~ among epidemiological situations and cannot therefore be predicted reliably. All suspected *cases* of AHS should be investigated immediately and samples should be taken and submitted to a *laboratory*. This requires that sampling kits and other equipment be available to those responsible for *surveillance*.

3) In a free country or *zone* ~~bordering~~ adjacent to an infected country or *zone*, *surveillance* ~~based upon~~ taking into account geography, climate, history of *infection* and other relevant factors should be carried out over an appropriate distance of at least 100 kilometres from the border with the infected country or *zone*; a lesser distance could be acceptable if there are relevant ecological or geographical features likely to interrupt the transmission of AHSV.

4) In an AHS infected country or *zone*, random or targeted serological and virological *surveillance*, appropriate to the epidemiological situation, should be conducted in accordance with Chapter 1.4.

Article 12.1.13.

Surveillance strategies

The target population for *surveillance* aimed at identification of disease or *infection* should cover equids within the country or *zone*. ~~Active and p~~Passive *surveillance* for *infection* with AHSV should be ongoing in all countries, ~~while active *S*~~*surveillance* should be ongoing in countries not having a free status or having identified specific risks of introduction. Surveillance should be composed of random or targeted approaches using virological, serological and clinical methods appropriate to the epidemiological situation.

A Member Country should justify the *surveillance* strategy chosen as appropriate to detect the presence of *infection* with AHSV in accordance with Chapter 1.4. and the prevailing epidemiological situation. It may, for example, be appropriate to target clinical *surveillance* ~~at particular~~ towards those species most likely to exhibit clinical signs (e.g. horses). Similarly, virological and serological testing may be targeted ~~to~~ towards species that rarely show clinical signs (e.g. donkeys).

In vaccinated populations serological and virological *surveillance* is necessary to detect the AHSV types circulating to ensure that all circulating types are included in the *vaccination* programme.

Serological or virological *surveillance* is also needed to detect subclinical *infections* in free countries or *zones* adjacent to countries or *zones* in which live attenuated AHS vaccines are used.

For random surveys, the design of the sampling strategy should incorporate epidemiologically appropriate design prevalence. The sample size selected for testing should be large enough to detect *infection* if it were to occur at a predetermined minimum rate. The sample size, expected prevalence and diagnostic sensitivity of the tests determine the level of confidence in the results of the survey. The Member Country should justify the choice of design prevalence and confidence level based on the objectives of *surveillance* and the epidemiological situation, in accordance with Chapter 1.4. Selection of the design prevalence~~, in particular,~~ should be based on the prevailing or historical epidemiological situation.

Irrespective of the survey approach selected, the sensitivity and specificity of the diagnostic tests employed are key factors in the design, sample size determination and interpretation of the results obtained. Ideally, the sensitivity and specificity of the tests used should be validated for the *vaccination* or *infection* history and the different species in the target population.

Irrespective of the testing system employed, *surveillance* system design should anticipate the occurrence of false positive reactions. If the characteristics of the testing system are known, the rate at which these false positives are likely to occur can be calculated in advance. There should be an effective procedure for following up positives to ultimately determine with a high level of confidence, whether they are indicative of *infection* or not. This should involve both supplementary tests and follow-up investigation to collect diagnostic material from the original sampling unit as well as those which may be epidemiologically linked to it.

The principles for *surveillance* for disease or *infection* are technically well defined. *Surveillance* programmes to prove the absence of AHSV *infection* or transmission, should be carefully designed to avoid producing results that are insufficiently reliable to be accepted by WOAH for official recognition of status. The design of any *surveillance* programme, therefore, requires inputs from professionals competent and experienced in this field.

1. Clinical surveillance

   Clinical *surveillance* aims at the detection of clinical signs of AHS in equids particularly during a newly introduced *infection*. In horses, clinical signs may include pyrexia, oedema, hyperaemia of mucous membranes and dyspnoea.

   Suspected *cases* detected by clinical *surveillance* should always be confirmed by *laboratory* testing.

2. Serological surveillance

   Serological *surveillance* of equine populations is an important tool to confirm absence of AHSV transmission in a country or *zone*. The species tested should reflect the local epidemiology of *infection* with AHSV, and the equine species available. *Surveillance* plans should include consideration of species that display clinical signs less commonly, such as donkeys or zebra. Management variables that may reduce the likelihood of *infection*, such as the use of insecticides and animal housing, should be taken into account when selecting equids to be included in the *surveillance* system.

   Samples should be examined for antibodies against AHSV. Positive AHSV antibody tests results can have four possible causes:

   a) natural *infection* with AHSV;

   b) *vaccination* against AHS;

   c) maternal antibodies;

   d) lack of specificity of the test.

Sera collected for other purposes may be used for AHSV *surveillance*. However, the principles of survey design described in these recommendations and the requirements for a statistically valid survey for the presence of *infection* with AHSV should not be compromised.

The results of random or targeted serological surveys are important in providing reliable evidence that no *infection* with AHSV is present in a country or *zone*. It is, therefore, essential that the survey is thoroughly documented. It is critical to interpret the results in light of the movement history of the animals being sampled.

Serological *surveillance* in a free *zone* should target those areas that are at highest risk of AHSV transmission, based on the results of previous *surveillance* and other information. This will usually be towards the boundaries of the free *zone*. In view of the epidemiology of AHSV, either random or targeted sampling is suitable to select *herds* or animals for testing.

~~Serological *surveillance* in a free country or *zone* should be carried out over an appropriate distance from the border with an infected country or *zone*, based upon geography, climate, history of *infection* and other relevant factors. The *surveillance* should be carried out over a distance of at least 100 kilometres from the border with that country or *zone*, but a lesser distance could be acceptable if there are relevant ecological or geographical features likely to interrupt the transmission of AHSV. An AHS free country or *zone* may be protected from an adjacent infected country or *zone* by a *protection zone*.~~

Serological *surveillance* ~~in infected *zones*~~ will ~~identify changes in~~ support the definition of ~~the~~ an *infected zone*, and can also be used to identify the AHSV types circulating. In view of the epidemiology of *infection* with AHSV, either random or targeted sampling is suitable.

3. Virological surveillance

Isolation and genetic analysis of AHSV from a proportion of infected animals is beneficial in terms of providing information on serotype and genetic characteristics of the viruses concerned.

Virological *surveillance* can be conducted:

a) to identify virus transmission in ~~at~~ at-risk populations;

b) to confirm clinically suspected *cases*;

c) to follow up positive serological results;

d) to better characterise the genotype of circulating virus in a country or *zone*.

4. Sentinel animals

Sentinel animal~~s~~ programmes are a form of targeted *surveillance* with a prospective study design. They comprise groups of unexposed equids that have not been vaccinated and are managed at fixed locations and observed and tested regularly to detect new *infections* with AHSV.

The primary purpose of a sentinel ~~equid~~ animal programme is to detect *infections* with AHSV occurring at a particular place, for instance sentinel groups may be located on the boundaries of infected *zones* to detect changes in distribution of AHSV. In addition, sentinel equid programmes allow the timing and dynamics of *infections* to be observed.

A sentinel ~~equid~~ animal programme should use animals of known source and history of exposure, control management variables such as use of insecticides and animal housing (depending on the epidemiology of AHSV in the area under consideration), and be flexible in its design in terms of sampling frequency and choice of tests.

Care is necessary in choosing the sites for the sentinel groups. The aim is to maximise the chance of detecting AHSV activity at the geographical location for which the sentinel site acts as a sampling point. The effect of secondary factors that may influence events at each location, such as climate, may also be analysed. To avoid confounding factors sentinel groups should comprise animals selected to be of similar age and susceptibility to *infection* with AHSV. The only feature distinguishing groups of sentinels should be their geographical location. Sera from sentinel animal programmes should be stored methodically in a serum bank to allow retrospective studies to be conducted in the event of new serotypes being isolated.

The frequency of sampling should reflect the equine species used and the reason for choosing the sampling site. In endemic areas virus isolation will allow monitoring of the serotypes and genotypes of AHSV circulating during each time period. The borders between infected and non-infected areas can be defined by serological detection of *infection*. Monthly sampling intervals are frequently used. Sentinels in declared free *zones* add to confidence that *infections* with AHSV are not occurring unobserved. Here sampling prior to and after the possible period of transmission is sufficient.

Definitive information on AHSV circulating in a country or *zone* is provided by isolation and identification of the viruses. If virus isolation is required sentinels should be sampled at sufficiently frequent intervals to ensure that some samples are collected during the period of viraemia.

5. Vector surveillance

AHSV is transmitted between equids~~ne~~ ~~hosts~~ by species of *Culicoides* which vary across the world. It is therefore important to be able to identify potential *vector* species accurately although many such species are closely related and difficult to differentiate with certainty.

Vector surveillance is aimed at demonstrating the absence of *vectors* or defining high, medium and low-risk areas and local details of seasonality by determining the various species present in an area, and their respective seasonal occurrence, and abundance. *Vector surveillance* has particular relevance to potential areas of spread. Long term *surveillance* can also be used to assess *vector* abatement measures or to confirm continued absence of *vectors*.

The most effective way of gathering this information should take account of the biology and behavioural characteristics of the local *vector* species of *Culicoides* and may include the use of Onderstepoort-type light traps or similar, operated from dusk to dawn in locations adjacent to equids.

Vector surveillance should be based on scientific sampling techniques. The choice of the number and types of traps to be used in *vector surveillance* and the frequency of their use should take into account the size and ecological characteristics of the area to be surveyed.

The operation of *vector surveillance* sites at the same locations as sentinel animals is advisable.

The use of a *vector surveillance* system to detect the presence of circulating viruses is not recommended as a routine procedure ~~as~~ because the typically low *vector infection* rates mean that such detections can be rare. Animal-based *surveillance* strategies are preferred to detect virus transmission.

Annex 14

CHAPTER 12.3.

INFECTION WITH *TRYPANOSOMA EQUIPERDUM* (DOURINE)

Article 12.3.1.

General provisions

Dourine is a disease of equids caused by *Trypanosoma equiperdum* of the subgenus *Trypanozoon* mainly transmitted directly from animal to animal during coitus. It may also be transmitted vertically and iatrogenically. Dourine may manifest in acute, chronic or clinically inapparent forms.

After a transient blood multiplication, *T. equiperdum* invades various tissues, especially genital organs ~~and may also invade the nervous system~~.

For the purposes of the *Terrestrial Code*, dourine is defined as an *infection* of domestic and *captive wild* horses, donkeys, mules and hinnies (hereafter 'animal host') ~~*wild* equids~~ with *T. equiperdum*.

The following defines the occurrence of infection with *Trypanosoma equiperdum*:

1) Trypanosomes with *Trypanozoon* morphology have been observed in a sample from an animal host ~~domestic and *captive wild* equids~~ showing clinical signs consistent with dourine and linked to a suspected *case* of *infection* with *T. equiperdum* or found in an area where surra is not known to occur; or

2) trypanosomes with *Trypanozoon* morphology have been observed in a sample from an animal host ~~domestic and *captive wild* equids~~ epidemiologically linked to a confirmed *case* of *infection* with *T. equiperdum*; or

3) nucleic acid specific to *Trypanozoon* has been detected in a sample from an animal host ~~equid~~ epidemiologically linked to a confirmed *case* of *infection* with *T. equiperdum*; or

4) antibodies have been detected in a sample from an animal host ~~domestic and *captive wild* equids~~ epidemiologically linked to a confirmed *case* of *infection* with *T. equiperdum*.

For the purposes of the *Terrestrial Code,* the *incubation period* of *infection* with *T. equiperdum* shall be ~~six months~~ 90 days. *Infective period* shall be lifelong.

For the purposes of this chapter, a temporary importation of horses refers to the introduction of horses into a country or *zone*, for a defined period of time, not exceeding 90 days, during which the *risk* of transmission of the *infection* is mitigated through specific measures under the supervision of the *Veterinary Authority.* Temporarily imported horses are re-exported at the end of this period. The duration of the temporary importation period and the destination after this period, as well as the conditions required to leave the country or *zone,* should be defined in advance.

Standards for diagnosis and information on the epidemiology are described in the *Terrestrial Manual*.

Article 12.3.2.

Safe commodities

When authorising the import or transit of the following *commodities*, *Veterinary Authorities* should not require dourine-related conditions regardless of the *animal health status* of the *exporting country* or *zone*:

1) pasteurised *milk* and pasteurised *milk products*;

2) hair~~, wool and fibre~~;

3) gelatine and collagen;

4) hooves;

5) *meat* from animals that have been slaughtered in a *slaughterhouse/abattoir* and have been subjected to ante- and post-mortem inspections with favourable results;

6) *meat products*;

7) hides and skins (except raw);

8) embryos or oocytes collected, processed, and stored in accordance with Chapters 4.8. to 4.10.;

9) *protein meal;*

10) rendered fat.

Article 12.3.3.

Country or zone free from dourine

A country or *zone* may be considered free from ~~*infection* with *T. equiperdum*~~ dourine when:

1) ~~the~~ *infection* with *T. equiperdum* is notifiable in the entire country for at least the past two years;

2) appropriate *biosecurity* and *sanitary measures* to prevent the introduction of the *infection* have been in place; in particular, the importations or movements of ~~equids~~ animal hosts and other *commodities* into the country or *zone* have been carried out in accordance with this chapter and other relevant chapters of the *Terrestrial Code*;

3) and either:

   a) the country or *zone* is historically free as described ~~relevant provisions~~ in point 2)b) of Article 1.4.6. ~~have been complied with~~; or

   b) for at least the past two years, ~~there has been no *case* in the country or *zone* and~~ *specific surveillance* in accordance with Articles 12.3.11. to 12.3.14. has been in place in the entire country or *zone* and there has been no *case* in the country or *zone*.

   In order to maintain its free status, a country or *zone* should:

   1) comply with points 1 and 2 above; and

2) conduct *surveillance* in accordance with Articles 12.3.11. to 12.3.13.

Article 12.3.4.

Compartment free from dourine

The establishment and bilateral recognition of a *compartment* free from ~~*infection* with *T. equiperdum*~~ dourine should follow the provisions laid down in this chapter and in Chapters 4.4. and 4.5.

Article 12.3.5.

Recovery of free status

Should a *case* of *infection* with *T. equiperdum* occur in a previously free country or *zone*, its status may be recovered after the following:

1) all infected ~~equids~~ animal hosts have been either isolated and slaughtered, or killed and appropriately disposed of;

2) ~~equids~~ animal hosts which have been in contact with infected ~~equids~~ animal hosts were tested and all positive ~~equids~~ animal hosts were isolated and slaughtered, or killed and appropriately disposed of; and,

3) For six months after the last *case* was slaughtered or killed:

   a) the ~~equids~~ animal hosts in contact have undergone monthly repeated serological and agent detection tests with negative results in both tests;

   b) *surveillance* in accordance with Articles 12.3.11. to 12.3.14. has been carried out with negative results;

   c) appropriate *biosecurity* has been in place.

Otherwise, Article 12.3.3. applies.

Article 12.3.6.

Recommendations for importation of ~~equids~~horses, donkeys, mules and hinnies from countries, zones or compartments free from dourine

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the ~~equids~~animal hosts:

1) showed no clinical signs of ~~*infection* with *T. equiperdum*~~ dourine on the day of shipment;

2) were kept since birth or at least ~~six months~~ 90 days prior to shipment in the free country, *zone* or *compartment* of origin or were imported from a free country, *zone* or *compartment*.

Article 12.3.7.

Recommendations for importation of ~~equids~~ horses, donkeys, mules and hinnies from countries, zones or compartments not free from dourine

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the ~~equids~~animal hosts:

1) showed no clinical signs of dourine on the day of shipment;

2) for at least 45 days prior to shipment were not used for breeding (including artificial insemination, semen collection, use as teasers) and did not have any direct or indirect sexual contact with other animal hosts ~~horses~~; and

3) during this period, all ~~equids~~ animals from the same group were subjected to an antibody detection test on samples taken on two occasions, with an interval of 30 days, with negative results.

Article 12.3.8.

Recommendations for the temporary importation of horses

When importing on a temporary basis ~~for purposes other than breeding and rearing~~ horses that do not comply with the recommendations in Article 12.3.6. or Article 12.3.7., for purposes other than breeding and rearing, *Veterinary Authorities* should:

1) require:

   a) that the horses be accompanied by a passport in accordance with the model contained in Chapter 5.12. or be individually identified as belonging to a high health status *subpopulation* as defined in Chapter 4.17.;

   b) if not belonging to a high health status *subpopulation,* the presentation of an *international veterinary certificate* attesting that the horses:

      i) showed no clinical sign of *infection* with *T. equiperdum* on the days of shipments;

      ii) ~~if not belonging to a high health status *subpopulation,*~~ were negative in an antibody detection test within 15 days prior to departure from the country of origin;

   c) the duration of the temporary importation period, the destination after this period, and the conditions required to leave the country or *zone* be defined;

2) ensure that during their stay in the country or *zone*, the horses:

   a) are not used for breeding (including artificial insemination, semen collection, use as teasers) and do not have any direct or indirect sexual contact with other horses;

   b) are not subjected to any practice that may represent a risk of transmission of *infection* with *T. equiperdum.*

Article 12.3.9.

Recommendations for importation of semen from countries, zones or compartments free from dourine

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1) the donor males:

   a) showed no clinical signs of *infection* with *T. equiperdum* on the day of collection of the semen;

   b) were kept for the six months prior to semen collection in a country, zone or compartment free from dourine;

2) the semen was collected, processed and stored in a *semen collection centre* accordance with Chapters 4.6. and 4.7.

Article 12.3.10.

Recommendations for importation of semen from countries or zones not free from dourine

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1) the donor males:

   a) have been kept for at least six months prior to semen collection in an *establishment* in which *surveillance* in accordance with Articles 12.3.11. to 12.3. 14. demonstrates that no *case* of *infection* with *T. equiperdum* had occurred during that period;

   b) showed no clinical sign of dourine ~~*infection* with *T. equiperdum*~~ during that period;

   c) were subjected, before collection, to an antibody detection test on a blood sample taken on two occasions, with an interval of 30 days, with negative results;

2) the semen was collected, processed and stored in a *semen collection centre* accordance with Chapters 4.6. and 4.7.

Article 12.3.11.

Introduction to surveillance

Articles 12.3.11. to 12.3.14. define the principles and provide guidance on *surveillance* for dourine ~~*infection* with *T. equiperdum*~~, complementary to Chapter 1.4.

The purpose of *surveillance* could be the demonstration of the absence of *infection*, the early detection of *cases*, or the measurement and monitoring of the *prevalence* and distribution of the *infection* with *T. equiperdum* in a country, *zone* or *compartment*.

The most important component of the epidemiology of dourine is sexual transmission, therefore sexually mature ~~equids~~ animal hosts are considered the target population. Notwithstanding, iatrogenic transmission should also be considered.

The impact and epidemiology of dourine widely differs between different regions of the world, and between different type of animal production systems. For instance considering the presence or absence of other trypanosomes and therefore, it is not appropriate to provide specific recommendations for all situations. Member Countries should provide scientific data explaining the epidemiology of the disease in the country or *zone* concerned, such as host susceptibility (e.g. horse, donkey, mule) and co-infections with other *Trypanosoma* spp., and adapt the *surveillance* strategies for defining their status to the local conditions. There is considerable latitude available to Member Countries to justify their status at an acceptable level of confidence.

Article 12.3.12.

Principles of surveillance for dourine

The following principles are complementary to Chapter 1.4. and should be applied by Member Countries seeking to achieve and demonstrate freedom from ~~infection~~ dourine as well as being part for *official control programme* in countries where the disease is endemic.

In countries where other *T~~t~~rypanozoon ~~somes~~ infections* occur in ~~equids~~animal hosts, the diagnosis of dourine is challenging because the clinical signs are not pathognomonic, and diagnostic methods are not pathogen-species

specific. As a consequence it is difficult to perform differential diagnosis between *infection* with *T. equiperdum* and other *Trypanozoon infection*s.

Surveillance for dourine *infection* with *Trypanosoma equiperdum* should encompass not only clinical signs and relevant sampling and testing, but also information on animal husbandry practices and epidemiological context, including sexual contacts, breeding history of the equidanimal, international and other animal movements, contact patterns, presence of other trypanosomes, and *vectors* (biting flies including tsetse flies). The *Veterinary Services* should implement programmes to raise awareness among farmers, owners, breeders and workers, who have day to day contact with equidsanimals, as well as *veterinarians*, *veterinary paraprofessionals* and diagnosticians. Those persons should observe and report promptly any suspicion of dourine *infection* with *T. equiperdum* to the *Veterinary Services*.

Under the responsibility of the *Veterinary Authority*, Member Countries should have in place a *surveillance* system in accordance with the Chapter 1.4. and, in particular:

- the formal and ongoing system for detecting and investigating *cases* should include all suspicions of *Trypanozoon infection* with Trypanosomes;
- the procedure for the rapid collection and transport of samples from suspected *cases* to a *laboratory* for diagnosis should include the relevant types and methods of sampling for dourine *infection* with *T. equiperdum* as described in the *Terrestrial Manual*;
- the *laboratory* is approved for diagnosis of dourine *infection* with *T. equiperdum*.

Special attention is to be made to low susceptible animals that are more resistant such as donkeys and mules that can act as healthy carriers and a reservoir of *Trypanosoma equiperdum.*

Article 12.3.13.

Surveillance for early warning of dourine

1) An ongoing *surveillance* programme for dourine should be in place and be designed to detect the presence of dourine *infection* with *T. equiperdum* in the country or *zone* in a timely manner.

2) The dourine *surveillance* programme should include the following.

   a) An *early warning system* for reporting suspected animals described in Article 12.3.12., in accordance with Article 1.4.5.

   b) Implementation, as relevant, of regular and frequent clinical inspection of individual equids animal hosts at risk of dourine that could, for instance, include equids animals that were imported from countries not free from dourine.

Article 12.3.14.

Surveillance for demonstrating freedom from dourine

1. Requirements for declaring freedom of the entire country, a zone or a compartment from dourine

   Transparency in the application of different methodologies is essential to ensure consistency in decision-making, ease of understanding, fairness and rationality. The assumptions made, the uncertainties, and the effect of these on the interpretation of the results, should be documented.

   The design of the *surveillance* programme will depend on the epidemiological circumstances and it should be planned and implemented in accordance with this chapter and Article 1.4.6. This requires the availability of

demographic data on the ~~equids~~ animal host population and the support of a *laboratory* able to undertake identification of ~~dourine~~ *infection* with *T. equiperdum* through parasite detection and antibody tests.

Data from different *surveillance* activities can be included to increase the sensitivity of the *surveillance* system. If this is to be done, data from structured (e.g. surveys and active *surveillance*) and non-structured (e.g. passive *surveillance*) sources should be combined.

The *surveillance* programme should include *surveillance* of different ~~equids~~ animal host subpopulations (e.g. thoroughbred, saddle horses (riding horses), working horses, ponies, donkeys, mules).

Documentation of freedom from dourine should provide details of the ~~equids~~ animal hosts population, the occurrence of suspected *cases* and how they were investigated and dealt with. This should include the results of *laboratory* testing and the *biosecurity* and control measures to which the animals concerned were subjected during the investigation.

In order to maintain freedom of an establishment within an infected country or zone and to demonstrate no *case of infection* with *T. equiperdum* has occurred, passive surveillance relying on clinical observation alone is insufficient. Depending on the prevailing epidemiological situation and assessed risk for the introduction of *T.equiperdum*, samples should also be collected on a routine basis for parasite detection and antibody tests. There should also be systematic screening of horses that are introduced into the establishment for the absence of ~~dourine~~ *infection* with *T. equiperdum*.

2. Additional requirements for recovery of free status

In addition to the general conditions described in this chapter, a Member Country seeking recovery of country or *zone* free status, including a *containment zone* established in accordance with Article 4.4.7., should show evidence of an active *surveillance* programme (clinical inspection and serological surveillance) to demonstrate absence of ~~dourine~~ *infection* with *T. equiperdum*.

Populations under this *surveillance* programme should include:

1) *establishments* in the proximity of the *outbreak*;

2) *establishments* epidemiologically linked to the *outbreak*;

3) *animals* moved from or used to re-populate affected *establishments*.

Annex 4

WORK PROGRAMME FOR
THE TERRESTRIAL ANIMAL HEALTH STANDARDS COMMISSION

Chapter	Issues	Summary of the work	Status - September 2024		Priority order *
			Stage of consideration	Remarks (Month when draft text first circulated for comment /# of rounds for comment) or last TAHSC report reference	
General	Wildlife Health	Overarching consideration on how wildlife animal health is addressed in the *Terrestrial Code*	Preliminary discussions	Noted in Sep 2024 TAHSC report	2
	New chapter on emergency management	Develop a new chapter and potentially modify the existing chapters	Expert consultation	Noted in Sep 2024 TAHSC report	2
	Commodities	Consideration to determine whether several types of highly processed products (such as blood meal, dried plasma, rendered fats, and hydrolysed protein) have a globally standardised production process and meet criteria to be considered safe commodities as regards specific diseases. Pet-food: Consider the inclusion of 'extruded dry pet food' and 'heat-treated meat products in a hermetically sealed container with an F0 value of 3 or above' in the list	Preparatory work	Noted in Sep 2024 TAHSC report Noted in Sep 2022 TAHSC report (pet-food commodities)	2

		of safe commodities of chapters (when revised).			
Use of terms	Use of terms: animal health status	- Consider the need to revise definition to incorporate 'herd', and avoid restrictive wording - Possible revision of the Glossary definition - Review use of the terms across the *Code* for consistency	Preparatory work	Refer to Feb 2020 TAHSC report	1
	Use of terms: notify / notifiable disease / report / reportable disease	Review use of the terms across the *Code* for consistency. Develop a policy for their use	Preparatory work	Refer to Feb 2019 TAHSC report	2
User's guide	Revision of the Users' guide (standing item)	Partial revision - to provide more explanation on disease-specific chapters - to develop a new point on terms referring to animals used in the *Terrestrial Code* - work on introduction	Circulated for comments and work in parallel	Noted in Sep 2024 TAHSC report (Sep 2023/3)	1
Glossary	1. New definition for 'swill', definitions for 'biosecurity' and 'biosecurity plan' 2. New definitions for 'isolation' and 'pathogenic agent', and definition for 'disinfection'	Swill: Review use of the term across the *Code*. Develop a policy for its use and consider developing a definition. (connected to biosecurity work)	Circulated for comments	1. Noted in Sep 2024 TAHSC report (Sep 2023/2) 2. Noted in Sep 2024 TAHSC report (Sep 2024/1)	1
	1. New definition for 'point of exit' and definitions for 'border post' and 'quarantine station' 2. New definition for 'point of entry' and definition for 'transit country'	Review as a part of the work to revise Chs 5.4. to 5.7.	Circulated for comments	1. Noted in Sep 2024 TAHSC report (Sep 2023/2) 2. Noted in Sep 2024 TAHSC report (Sep 2024/1)	1
	New definition for 'veterinary medical use'	Move the definition from Ch 6.9.	Pending the work of AMRWG	Noted in Sep 2023 TAHSC report	3

	Definition of 'poultry'	(Not defined yet, related to revision of chapters in Section 10)	Preparatory work	Noted in Sep 2024 TAHSC report	1
	Definition for 'laboratory'	Revision of definition	Expert consultation	Noted in Feb 2024 TAHSC report	2
	New definition for 'suspected case'	Develop a new definition	Expert consultation	Noted in Feb 2024 TAHSC report	2
Section 1					
1.1.	Notification of diseases and provision of epidemiological information	identification of the first step	Not started	Refer to Sep 2024 TAHSC report	2
1.6.	Procedures for official recognition of animal health status, endorsement of an official control programme, and publication of a self-declaration of animal health status, by WOAH	Partial revision: - New article to improve clarity on the ability for Members to hold pathogenic agents within laboratories without affecting their animal health status. - introduce the possibility to host the questionnaires on the web.	Circulated for comments	Noted in Sep 2024 TAHSC report (Feb 2023/1)	2
1.7.-1.12	Status Questionnaires	Deletion of chapters, to move their content to the WOAH Website	Preparatory work	Noted in Sep 2024 TAHSC report	2
Section 4					
4.4., 4.Y.	Zoning and compartmentalisation and new chapter on implementation of zoning	To address necessary points, as relevant, with the development of new Ch 4.4. and develop a full new chapter (taskforce by SCAD and TAHSC to work on this issue)	Preparatory work	Noted in Sep 2024 TAHSC report	1

4.7.	Collection and processing of bovine, small ruminant and porcine semen	Comprehensive revision of chapter	Expert consultation	Refer to Sep 2024 TAHSC report	1
4.8.	Collection and processing of *in vivo* derived embryos from livestock and equids	Consider potential amendments as a consequence of the changes in the IETS Manual	Preparatory work	Pending progress of data collection	2
4.9.	Collection and processing of oocytes and *in vitro* produced embryos from livestock and horses	Consider potential amendments as a consequence of the changes in the IETS Manual	Preparatory work	Pending progress of data collection	2
4.13.	Disposal of dead animals	Consider including all potentially contaminated wastes/products/fomites	Preparatory work	Refer to Feb 2022 TAHSC report	2
4.14.	General recommendations on disinfection and disinsection	Comprehensive revision of chapter Consider question from AHG on biosecurity	Preparatory work	Refer to Feb 2022 TAHSC report	2
4.X.	New chapter on biosecurity	Develop a new chapter	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2023/2)	1
Section 5					
General	Revision of Section 5 Trade measures, import/export procedures and veterinary certification (especially Chs 5.4. to 5.7.)	Comprehensive revision of Chs 5.4., 5.5., 5.6. and 5.7.	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2023/2 for Chs 5.4. and 5.6., Sep 2024/1 for Chs 5.5. and 5.7.)	1
5.X.	Development of introductory chapter	New introductory chapter for Section 5	Preparatory work	Noted in Sep 2024 TAHSC report	3
5.1., 5.2., 5.10.	Certification procedures	Partial revision to review provisions on electronic certification and check model of certificate	Expert consultation	Refer to Sep 2024 TAHSC report	2

5.8.	International transfer and laboratory containment of animal pathogenic agents	- Consider impact of holding PA in labs (and research facilities) - Align with corresponding *Manual* chapter (categories of PA) - Potential link with work with Nagoya protocol	Preparatory work Pending update of Manual Chapter 1.1.3	Noted in Sep 2023 TAHSC report	3
5.12.	Model passport for international movement of competition horses	Update the relevant chapters on equine diseases to take into account proposals made by the AHG on HHP Horses Veterinary Certificates	Preparatory work	Noted in Sep 2024 TAHSC report	2
Section 6					
6.8.	Harmonisaiton of national antimicrobial resistance surveillance and monitoring programmes	Inclusion of definitions for monitoring and surveillance, as well as for active and passive surveillance and integrated surveillance	Expert consultation	Noted in Sep 2024 TAHSC report	2
6.12.	Zoonoses transmissible from non-human primates	Consider possible inclusion of SARS-CoV-2 in this chapter, possible inclusion of Macacine Herpesvirus 1 and the revision of test schedule and animal species to be tested for tuberculosis (Origin Member requests)	Not started	Refer to Feb 2022 TAHSC report	4
Section 7					
7.1.	Introduction to the recommendations for animal welfare	Partial revision - to include 'five domains' concept - to clarify the meaning of the terms 'animal-based', 'resource-based' and 'management-based' measures etc.	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2023/3)	1

7.2., 7.3., 7.4.	Transport of animals by land, sea and air	Comprehensive revision of chapters	Expert consultation	Noted in Sep 2024 TAHSC report	1
7.6.	Killing of animals for disease control purposes	- Comprehensive revision of chapter	- Partial revision: Expert consultation - Comprehensive revision: Expert consultation	Refer to Sep 2024 TAHSC report (Feb 2024/1)	1
Section 8					
8.4.	Infection with Brucella abortus, B. melitensis and B. suis	Revision of provisions for free status	Not started	Noted in Sep 2024 TAHSC	3
8.8.	Infection with foot and mouth disease virus	Partial revision: development of an article with provision for safe trade of fetal bovine serum	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2024/1)	3
		Partial revision: consideration of recommendations for import of 'horns'	Expert consultation	Noted in Sep 2024 TAHSC report	3
8.10.	Japanese encephalitis	Comprehensive revision of chapter (related to works on Chs 8.21., 12.4. and 12.11.)	Expert consultation	Noted in Sep 2024 TAHSC report	2
8.11.	Infection with *Mycobacterium tuberculosis* complex	Partial revision - to add recommendations for camelids and goats - to clarify point 1(b) of Article 8.11.4.	Not started	Refer to Feb 2022 TAHSC report	3
8.13.	New world screwworm and old world screwworm	Partial revision (case definition)	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2024/1)	3

8.15.	Infection with rabies virus	Partial revision - to add recommendations on wildlife-mediated rabies	Preparatory work	Refer to Sep 2022 TAHSC report	3
8.18.	Infection with Trichinella spp.	Consider the role and risks associated with different animal hosts	Not started	Noted in Sep 2024 TAHSC report	4
8.20.	Tularemia	Partial revision (case definition)	Preparatory work	Noted in Sep 2024 TAHSC report	3
8.21.	West Nile fever	Comprehensive revision of chapter (related to works on Chs 8.10., 12.4. and 12.11.)	Expert consultation	Noted in Feb 2024 TAHSC report	2
8.X.	New Chapter on Crimean-Congo haemorrhagic fever	Develop a new chapter (case definition)	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2024/1)	2
		Consider need to develop recommendations for prevention.	Preparatory work	Noted in Sep 2024 TAHSC report	2
8.Y.	New Chapter on Infection with Nipah virus	Develop a new chapter (case definition)	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2023/3)	2
Section 10					
General	Overall consideration of Section 10 Aves	Consider approach to risk management recommendations for different production sectors, species, commodities, structure of chapter (following latest adopted HAPI) across different diseases.	Preparatory work	Noted in Sep 2023 TAHSC report	3
10.2.	Avian infectious bronchitis	Review trade articles for clarity.	Preparatory work	Noted in Sep 2023 TAHSC report	3

10.3.	Avian infectious laryngotracheitis	Consider amendments to ensure alignment with recently revised *Manual* chapter	Not started	Noted in Sep 2023 TAHSC report	3
10.5.	Infection with *Mycoplasma gallisepticum* (Avian mycoplasmosis)	Full update of the chapter (content and structure) based on the recent update of the *Manual* Chapter. Consider inclusion of *M. synoviae* into a single chapter (and listed disease).	Preparatory work	Noted in Sep 2023 TAHSC report	3
10.9.	Infection with Newcastle disease virus	Revision to align with recent revision of Ch 10.4.	Not started	Noted in Sep 2023 TAHSC report	3
10.X.	Infection with avian metapneumovirus (Turkey rhinotracheitis and swollen head syndrome of chicken)	Develop a new chapter (case definition)	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2024/1)	2
Section 11					
11.5.	Infection with *Mycoplasma mycoides* subsp. *mycoides* SC (Contagious bovine pleuropneumonia)	Harmonisation of chapters with official status recognition	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2022/4)	1
11.11.	Trichomonosis	Comprehensive revision of chapter	Not started	Refer to Feb 2022 TAHSC report (Sep 2020/2)	3
11.X.	New Chapter on Infection with bovine pestivirus (bovine viral diarrhoea)	Develop a new chapter (case definition)	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2022/5)	1
Section 12					
12.1.	African horse sickness	Harmonisation of chapters with official status recognition Proposals from AHG on AHS and SCAD	Circulated for comments	Noted in Sept 2024 TAHSC report (Sep 2022/4)	1

12.3.	Dourine	Comprehensive revision of chapter	Circulated for comments	Refer to Sep 2024 TAHSC report (Feb 2024/2)	2
12.4.	Equine encephalomyelitis (Eastern and Western)	Comprehensive revision of chapter (related to works on Chs 8.10., 8.21. and 12.11.)	Circulated for comments	Noted in Sep 2024 TAHSC report (Sep 2024/1)	2
12.8.	Infection with equid herpesvirus-1 (Equine rhinopneumonitis)	For consistency of disease name	Preparatory work	Noted in Feb 2024 TAHSC report Manual chapter adopted at the last GS	3
12.11.	Venezuelan equine encephalomyelitis	Comprehensive revision of chapter (related to works on Chs 8.10., 8.21. and 12.4.)	Expert consultation	Noted in Sep 2024 TAHSC report	2
Section 13					
13.2.	Rabbit haemorrhagic disease	Comprehensive revision of chapter	Preparatory work	Noted in Sep 2023 TAHSC report	3
Section 14					
14.7.	Infection with peste des petits ruminants virus	Partial revision: - Reconsider susceptible animals targeted in the chapter (wild animals, pigs) - Review Article 14.7.19. and Article 14.7.25 to remove reference to Chapter 8.8. - New article on recommendations for importation of animals for direct slaughter - Apply new drafting conventions	Preparatory work	Noted in Sep 2024 TAHSC report	2
14.8.	Scrapie	Comprehensive revision of chapter	Expert consultation	Noted in Sep 2024 TAHSC report	2

14.9.	Sheep pox and goat pox	Comprehensive revision of chapter	Expert consultation	Noted in Sep 2024 TAHSC report	3

*** Description of the consequence of priority order**	
1	- ***active work for the TAHSC*** - ***identified as the priority to progress as soon as possible*** - ***to be put forward for next meeting agenda***
2	- ***active work for the TAHSC*** - ***progression as time and resources allow*** - ***to be included in next meeting agenda***
3	- ***not immediate work for the TAHSC*** - ***possible progression if time, resources allow*** - ***needs to progress before consideration for next meeting agenda***
4	- ***not active*** - ***not to be immediately started***
List of abbreviations	
AHG	***Ad hoc* Group**
BSC	**Biological Standards Commission**
Ch	**Chapter**
HQ	**WOAH Headquarters**
IETS	**International Embryo Technology Society**
SCAD	**Scientific Commission for Animal Diseases**
TAHSC	**Terrestrial Animal Health Standard Commission**

GLOSSARY

BORDER INSPECTION POST

means any ~~airport, or any port, railway station or road check point~~ ~~international~~ *point of entry* for *commodities* ~~open to *international trade* of *commodities*~~, and associated facilities, where ~~import~~ ~~veterinary~~official inspection~~s can be~~ is performed by *Veterinary Services*.

CONTAINER

means a non-self-propelled receptable or other rigid structure ~~for holding *animals*~~ to ~~carry~~ hold *commodities* during transportation ~~a journey by one or several means of transport~~.

DISINFECTION

means an action ~~the application, after thorough cleansing, of procedures~~ intended to inactivate or destroy pathogenic agents on potentially contaminated objects. ~~the infectious or parasitic agents of animal diseases, including zoonoses; this applies to premises, *vehicles* and different objects which may have been directly or indirectly contaminated.~~

ISOLATION

means the placement of an *animal* or a group of *animals* separated from other animals under appropriate *biosecurity*.

PATHOGENIC AGENT

means a biological agent that causes, or contributes to, the development of a disease in *animals*.

POINT OF ENTRY

means any point at which *commodities* enter the territory of a country.

POINT OF EXIT

means any point from where *commodities* leave the territory of a country ~~*the exporting* country~~.

QUARANTINE ~~STATION~~ CENTRE

means an *establishment* under the control of the *Veterinary Authority* where *animals* are maintained in isolation for observation, and if appropriate testing and treatment, during a specified length of time under *biosecurity* to prevent ~~with no direct or indirect~~ ~~ensure no contact with other *animals* and *vectors* when relevant, to ensure so that there is no transmission~~entry of specified pathogenic agents ~~outside~~ into ~~n~~or escape out of the *establishment* ~~while the *animals* are undergoing observation for a specified length of time and, if appropriate, testing or treatment~~.

TRANSIT COUNTRY

means a country through which *commodities* destined for another country ~~an *importing country*~~ are transported or in which they make a stopover ~~is made at a *border post*~~.

~~VEHICLE/VESSEL~~MEANS OF TRANSPORT

means ~~any means of conveyance including~~ a train, truck, trailer, aircraft or ~~ship~~vessel that is used for ~~carrying~~transporting ~~animals~~ *commodities*.

CHAPTER 1.6.

PROCEDURES FOR OFFICIAL RECOGNITION OF ANIMAL HEALTH STATUS, ENDORSEMENT OF AN OFFICIAL CONTROL PROGRAMME, AND PUBLICATION OF A SELF-DECLARATION OF ANIMAL HEALTH STATUS, BY WOAH

Article 1.6.1.

Application for official recognition of animal health status and endorsement of an official control programme by WOAH

A Member Country may request:

1) official recognition of *animal health status* by WOAH of:

   a) freedom of a country or *zone* from African horse sickness (AHS);

   b) risk status of a country or *zone* with regard to bovine spongiform encephalopathy (BSE);

   c) freedom of a country or *zone* from classical swine fever (CSF);

   d) freedom of a country or *zone* from contagious bovine pleuropneumonia (CBPP);

   e) freedom of a country or *zone* from foot and mouth disease (FMD), where *vaccination* is either practised or not practised;

   f) freedom of a country or *zone* from peste des petits ruminants (PPR);

2) endorsement by WOAH of:

   a) an *official control programme* for CBPP;

   b) an *official* control *programme* for FMD;

   c) an *official* control *programme* for PPR;

   d) an *official* control *programme* for dog-mediated rabies.

WOAH does not grant official recognition of *animal health status* or endorsement of an *official control programme* for diseases other than those listed under points 1 and 2 above.

The Member Country should present documentation setting out the compliance of their *Veterinary Services* with the provisions of Chapters 1.1., 1.4., 3.2., 3.3. and 4.4. of the *Terrestrial Code*, when relevant, and with the provisions of the relevant disease-specific chapters in the *Terrestrial Code* and the *Terrestrial Manual*.

When requesting official recognition of *animal health status* or endorsement by WOAH of an *official control programme*, the Member Country should follow the Standard Operating Procedures (available on the WOAH

website) and submit to WOAH a dossier providing the information requested in the following chapters (as appropriate): 1.7. (for AHS), 1.8. (for BSE), 1.9. (for CSF), 1.10. (for CBPP), 1.11. (for FMD) or 1.12. (for PPR).

The WOAH framework for the official recognition of *animal health status*, the endorsement of *official control programmes*, and their maintenance is described in relevant Resolutions adopted by the World Assembly of WOAH Delegates.

The country or the *zone* will be included in the relevant lists of official *animal health status* or endorsed *official control programmes* only after the evidence submitted has been adopted by the World Assembly of WOAH Delegates.

When a Member Country requests official recognition of *animal health status* for a *zone*, the geographical boundaries of the proposed *zone* should be clearly defined. When applying for recognition of a free *zone* that is adjacent to another *zone* of the same status, it should be stated whether the new *zone* is being merged or kept separate. If the proposed *zone* remains separate, details should be provided of the control of the movement of relevant *commodities* between the *zones* in accordance with Chapter 4.4.

The overall objective of the WOAH endorsed *official control programmes* is for Member Countries to progressively improve their animal health situation and eventually attain official recognition of *animal health status* or in the case of dog-mediated rabies to make a self-declaration as a free country or *zone*. The *official control programme* should be applicable to the entire country even if certain measures are directed towards defined *zones*.

Article 1.6.2.

Maintenance of official recognition of animal health status and endorsement of an official control programme by WOAH

Retention on the lists of countries and *zones* having an official *animal health status* or of countries having an endorsed *official control programme* requires that the information in relevant chapters be re-submitted annually and that changes in the epidemiological situation or other significant events be notified to WOAH in accordance with the requirements in Chapter 1.1.

Non-compliance with the requirements for the maintenance of *animal health status* results in the suspension of that status. Within 24 months of suspension, except otherwise stated in the disease-specific chapter, a Member Country may apply for the recovery of a previously recognised status, following the provisions of the relevant disease-specific chapter. When the status has not been recovered within the specified period of its suspension, it is withdrawn and the Member Country should reapply following the procedure for the application for official recognition of *animal health status*.

WOAH may withdraw the endorsement of an *official control programme* if there is evidence of:

– non-compliance with the timelines or performance indicators of the programme; or

– significant problems with the quality of the *Veterinary Services* as described in Section 3 of the *Terrestrial Code*; or

– an increase in the *incidence* or distribution of the disease that cannot be addressed by the programme.

Article 1.6.3.

Publication by WOAH of a self-declaration of animal health status by a Member Country

A Member Country may make a self-declaration of freedom of a country, *zone* or *compartment* from a WOAH *listed disease* or another animal disease, *infection* or *infestation*. The Member Country may inform WOAH of the claimed status and request publication by WOAH of the self-declaration to inform WOAH Member Countries.

A Member Country requesting the publication of a self-declaration should follow the Standard Operating Procedure (available on the WOAH website) for submission of a self-declaration of *animal health status* and provide documented information on its compliance with the relevant chapters of the *Terrestrial Code*, including:

– evidence that the *infection* or *infestation* is a *notifiable disease* in the entire country;

– history of absence or eradication of the *infection* or *infestation* in the country, *zone* or *compartment*;

– *surveillance* including an *early warning system* for all relevant species in the country, *zone* or *compartment*;

– measures implemented to maintain freedom in the country, *zone* or *compartment*.

The self-declaration may be published only after all the information provided has been received and administrative and technical screening has been performed by WOAH. Publication does not imply endorsement of the claim of freedom by WOAH and does not reflect the official opinion of WOAH. Responsibility for the accuracy of the information contained in a self-declaration lies entirely with the WOAH Delegate of the Member Country concerned.

Except when otherwise provided for in the *listed disease*-specific chapter, an *outbreak* in a Member Country, a *zone* or a *compartment* having a self-declared free status results in the loss of the self-declared free status. A Member Country wishing to reclaim a lost free status should submit a new self-declaration following the procedure described in this article.

WOAH does not publish self-declarations for *listed diseases* in point 1 of Article 1.6.1.

Article 1.6.4.

Specific provisions

The *animal health status* of a *country* or *zone* is not affected by:

– the presence of the disease, infection, or infestation in imported animals in a quarantine centre;

– the importation or the presence of the *pathogenic agent*, or of *commodities* or organisms carrying the *pathogenic agent*, in a *laboratory* or other *approved* facilities with appropriate laboratory biosafety and laboratory biosecurity in accordance with the *Terrestrial Manual*.

This should be supported by evidence of compliance with all relevant standards of the *Terrestrial Code* and *Terrestrial Manual.*

CHAPTER 5.4.

MEASURES AND PROCEDURES APPLICABLE ~~IN~~ TO THE EXPORTATION OF COMMODITIES

Article 5.4.1.

Purpose and scope

This chapter provides general principles for measures and procedures that are applicable ~~in~~ to the exportation of *commodities* to prevent the spread of pathogenic agents through *international trade* of *commodities*, without creating unjustified restrictions, covering from facilities of origin (such as *establishment*, *slaughterhouse*/*abattoir*, *semen collection centre*) to the *point of exit*.

This chapter provides *exporting countries* with recommendations on measures and procedures, and the roles and responsibilities of the *Veterinary Authority* or other relevant *Competent Authorities*~~,~~ and of ~~business operators~~ any natural or legal entity or person responsible for export of *commodities* subject to the provisions of this chapter (hereafter 'operator'), in addition to responsibilities that are described in Article 5.1.3. This chapter provides guidance to ensure the quality and ~~performance~~ implementation of official controls for exportation.

This chapter applies to all *commodities*; some recommendations are specifically addressed to certain ~~of those~~ *commodities*.

Article 5.4.2.

General considerations

The *Veterinary Authority* of the *exporting country* should ~~ensure that~~ make operators aware of the *importing country* requirements, if they are available to the *Veterinary Authority* in accordance with Chapters 5.1. and 5.2. In addition, the *Veterinary Authority* should make operators aware of the process required to meet the conditions of the *international veterinary certificate* including *importing country* requirements. ~~including all information required for the agreed *international veterinary certificate*, in accordance with Article 5.1.1. and Chapter 5.3., are available to exporters.~~

The *Veterinary Authority* ~~of the *exporting country*~~ should be responsible for the implementation ~~performance~~ of official controls in coordination with other relevant *Competent Authorities* in accordance with *veterinary legislation* to ensure that exported *commodities* ~~can be traded safely and~~ meet the ~~requirements of the *importing country*~~ requirements. ~~Its~~ Their legal mandate and responsibilities~~, as described in Article 3.4.5. and 3.4.13.,~~ should include the ~~export~~ official controls ~~activities~~ at any step and the opportunity to request from the operator ~~exporter~~ any necessary information. Where appropriate, the *Veterinary Authority* and other relevant *Competent Authorities* may delegate certain tasks ~~in accordance with point 2 of Article 3.4.5~~. Adequate human, technical, physical and financial resources should be available in the *exporting country* for the *Veterinary Services* to ~~allow those~~effectively implement official controls ~~to be undertaken effectively~~ and to properly apply the certification obligations and procedures laid down in Chapters 5.1. and 5.2., in accordance with the quality principles ~~described~~ in ~~Article~~ Chapter 3.2.~~2.~~

The *Veterinary Authority* should cooperate closely with the customs authority and other authorities of the *exporting country* dealing with exports to ensure that official controls are implement~~performe~~d effectively~~,~~ and ~~to protect~~ maintain ~~the status~~ compliance of the *commodities* with *importing country* requirements ~~without creating unjustified barriers to trade~~. This cooperation should also cover actions to prevent and combat fraud or illegal pathways.

The *Veterinary Authority* should have procedures, as applicable, for certification of the *animal health status* of the country, *zone*, *compartment*, or *herd*/*flock* as well as of the disease situation in *establishments* and other premises

and communicate with the operator ~~exporter~~ regarding any additional documentary evidence that may be required to support such certification.

The *Veterinary Authority* ~~in the *exporting country*~~ should ensure that the applicable certified *animal health status* of the country, *zone*, *compartment*, or *herds*~~*/flock* or *animals*~~, is based on appropriate *surveillance* and reporting in accordance with Chapter 1.4.

The *Veterinary Authority* ~~in the *exporting country*~~ should have procedures for registration and approval of *establishments* of origin, where applicable, and other facilities used for production and handling of consignments, to comply with the ~~agreed~~ *international veterinary certificate*. Operators should not hinder access by the *Veterinary Authority* to the *commodities*, the premises where they are located and the *means* ~~by which they are transported~~ *of transport*. During official controls, operators should assist and cooperate with the *Veterinary* ~~*Authority*~~ *Services* and make available all information concerning the consignment.

The *Veterinary Authority* ~~of the *exporting country*~~ should ensure that appropriate identification of *commodities* is in place to support traceability for the consignment to comply with the ~~agreed~~ *international veterinary certificate*. *Animal identification* should be in accordance with Chapter 4.2. and Chapter 4.3.

Upon request from the *Veterinary Authority* of the *importing country* or from the *Veterinary Authority* of the *transit country*, the *Veterinary Authority* of the *exporting country* should provide additional information on the process to ensure compliance with the conditions included in the ~~agreed~~ *international veterinary certificate*, and undertake investigation and reporting, or~~and~~ give reasonable access for audit in case of repeated non-compliant consignments ~~jeopardising the safety of trade~~. The *Veterinary Authority* of the *exporting country* should ~~take~~ ensure that the ~~appropriate and necessary preventive measures to ensure that the status of the~~ *commodities* remain compliant~~is not jeopardised~~ before and during transport to the *point of exit*. The *exporting country* should suspend the export of a *commodity* when there is reason to believe that it may present a risk for animal and public health or ~~that~~ if it does not comply with the ~~agreed~~ *international veterinary certificate*.

The *Veterinary Authority* of the *exporting country* should promptly communicate to the *Veterinary Authority* of the *importing country*, any change or situation, such as a change of the *animal health status*, that may affect its capacity to ~~fulfil~~ certify the conditions of the ~~agreed~~ *international veterinary certificate*.

The *Veterinary Authority* of the *exporting country* should also inform without delay the *Veterinary Authority* of the *importing country*~~,~~ and, where necessary, the *transit country*~~,~~ in the event that a particular issue such as the occurrence of a *listed disease* or a disease referred to in the *importing country* requirements which may affect~~s~~ ~~the~~ compliance ~~status~~ of a *commodity* which has already left the *exporting country*. This information should be part of the relevant emergency response plan developed in accordance with Chapter 4.19.

In case of *animals*, operators should ensure that *animal welfare* is maintained throughout the export process in accordance with Section 7 as relevant.

The *Veterinary Authority* ~~of the *exporting country*~~ should carry out collaborative activities with other relevant *Competent Authorities*, customs, other authorities and operators, and with *Veterinary Authorities* in other countries, to control the risk posed by the illegal cross-border movement of *commodities*, i.e. the international movement of *commodities* done in a way to expressly and intentionally avoid official controls.

Article 5.4.3.

General principles applicable to procedures for official controls for exportation

1. Preparation for exportation

   Operators~~Exporters~~ should ~~announce~~ inform the *Veterinary Authority* of their intention to ~~the~~ export ~~to the *Veterinary Authority*~~ sufficiently in advance ~~as~~ to meet the~~to~~ conditions of the ~~agreed~~ *international veterinary certificate* and the administrative requirements of the *exporting*, *transit* and *importing countries*.

   Operators~~Exporters~~ should provide to the *Veterinary Authority* the~~as~~ required details of the consignment. The *Veterinary Authority* should outline to the operator~~exporter~~ the procedures, standards and timeframe for preparation of the consignment, and the documentary evidence required to demonstrate compliance with these requirements. Where relevant, the *Veterinary Authority* should identify eligible bodies or officers for the

implementationperformance and certification of procedures specified in the agreed *international veterinary certificate*.

The operatorexporter and the *Veterinary Authority* should coordinate the implementation, and its documentation, of the conditions of the agreed *international veterinary certificate*. Implementation of these conditions and its documentation should be in accordance with the procedures and standards communicated by the *Veterinary Authority* of the *exporting country* and will form the basis upon which the *Official Veterinarian* will issue the *international veterinary certificate* for the consignment.

The *Veterinary Authority* should ensure that the facilities and operational procedures required for isolation of *animals* or processing of products comply with the conditions of the agreed *international veterinary certificate*, which may including include registration, approval, and inspection, in accordance with Chapters 4.6., 4.7. and 5.7. or other relevant chapters of the *Terrestrial Code*.

Testing of *commodities* required to fulfil the conditions of the agreed *international veterinary certificate* should be in accordance with Article 3.2.10. and with the *Terrestrial Manual*. The *Veterinary Authority* should define and communicate to the operatorexporter the procedures for sample collection, identification and submission, the list of *approved laboratories* and the *approved* diagnostic tests.

The *Veterinary Authority* should define and communicate to the operatorexporter the procedures for *vaccination* and treatment if required to fulfil the conditions of the agreed *international veterinary certificate*. The operatorexporter should arrange for *vaccination* or treatment of *animals*, noting timeframes relevant to the scheduled date of exportation. *Vaccination* and treatment of *animals* should use *veterinary medicinal products* registered or allowed in the *exporting country*, in line with the conditions of the agreed *international veterinary certificate*.

The *Veterinary Authority* should define and communicate to the operatorexporter the standards and procedures for *disinfection* of and disinsection elimination of arthropod *vectors* fromof *vehicles*/vesselsthe *means of transport* and *containers* in accordance with Chapter 4.14., if required to fulfil the conditions of the agreed *international veterinary certificate*.

In the case of *animals*, Tthe operatorexporter should also be able to provide to the *Veterinary Authority* a *journey* travel transport plan from the *point of exit* in the *exporting country* to the point of *unloading* in the *importing country*. In the case of animals, it should be in accordance with Chapters 7.2., 7.3. or 7.4.Section 7, and in compliance with *importing country* requirements as relevant.

2. Procedures of exportation

a) Verification and certification

The operatorexporter should cooperate with the *Veterinary Authority* to demonstrate that the conditions of the agreed *international veterinary certificate* have been met and that the consignment is eligible for certification and export. The operatorexporter should provide all documentary evidence of compliance with the *importing country* requirements conditions of the agreed and *international veterinary certificate* as required by the *Veterinary Authority*, including an import permit where appropriate. There should be clear traceability and linkage, at every stage of preparation of animals and *animal product*commodities, to the final consignment presented for export, as relevant to fulfil the conditions of the agreed *international veterinary certificate*.

The *Official Veterinarian* should review the preparation of the export consignment to confirm that *commodities* animals and *animal products* have been clearly identified at every stage of their preparation, that the consignment complies with the conditions of the agreed *international veterinary certificate* and is in accordance with Chapters 5.1. and 5.2. of the *Terrestrial Code*. The *Official Veterinarian* should also review all transport arrangements the *journey* travel plan for the consignments of *animals* to ensure it they support maintainsenance compliance. of the *commodity*'s status and *animal welfare*.

Once satisfied that preparation and *journey* travel planstransport arrangements are appropriate and that the consignment is eligible for certification and export, the *Official Veterinarian* should issue the *international veterinary certificate*.

b) Domestic transportation of commodities

The *Veterinary Authority* should collaborate with other relevant authorities and stakeholders to ensure that management of the consignment ~~pre-export~~ before and during transport is consistent with ~~agreed~~ established processes and standards.

The operator~~exporter~~ should ensure that the assembly, *loading* and crating of *animals* or other *commodities* is appropriate to maintain compliance with the *importing country* requirements~~preserving the status~~ and *animal welfare* of the consignment from the *place of shipment*, including adequate *disinfection* of and ~~disinsection~~ elimination of arthropod *vectors* from~~of~~ the ~~*vehicle/vessel*~~*means of transport* and *container*.

The *Veterinary Authority* in the *exporting country* may require health and welfare inspection of consignments of *animals* at the *point of exit*, which includes the possibility to deny permission to export if concerns are identified.

Article 5.4.4.

Specific recommendations depending on commodities

1. Animals

~~In the case of animals, the *Veterinary Authority* should ensure that *animal welfare* is maintained throughout the whole process of exportation, in accordance with Chapters 7.1., 7.2., 7.3. and 7.4. as relevant.~~

The operator~~exporter~~ should ensure that ~~*vehicles/vessels*~~*means of transport* used for transportation of *animals* throughout the ~~whole~~ export process ~~of exportation~~ undergo adequate *disinfection*, and that measures are implemented to prevent and control vermin such as rodents or arthropods. These measures should be applied before every *loading* of *animals*. ~~*Vehicles/vessels*~~*Means of transport* should contain only *animals* of the same health status except where adequately separated.

Containers should be either new or cleaned and disinfected before every *loading* of *animals*, in accordance with Chapter 4.14.~~, or be for single use~~

The *Veterinary Authority* should ensure that, before leaving the *exporting country*, consignments of *animals* ~~should be~~are subjected to a visual examination, at an appropriate place and time according to the procedures of the *exporting country* and the ~~agreed~~ *international veterinary certificate* ~~and the requirements of the *exporting country*~~. It should be ensured that, from the time of this visual inspection until the time of leaving the *exporting country*, the *animals* in the consignment are not in contact with other *animals* of a different health status.

The *Veterinary Authority* ~~in the *exporting country*~~ may require welfare inspection of consignments of *animals* at the *point of exit*. Such inspections should be supported by *veterinary legislation*, which should also ascribe authority to deny permission to export if *animal welfare* concerns are identified.

2. Germinal products

Consignments of *germinal products* should be packed, dispatched, and transported in a way that preserves the viability and integrity of the products.

Consignments of *hatching eggs* should be dispatched from parental *flocks* that meet the conditions of the ~~agreed~~ *international veterinary certificate*. *Containers* should be either new or cleaned and disinfected before every use, in accordance with Chapter 4.14.

Cryogenic tanks for semen, oocytes or~~,~~ embryos should be dispatched from *semen collection centres* or *collection centres* that meet the conditions of the ~~agreed~~ *international veterinary certificate*. They should be single-use cryogenic tanks or be cleaned and disinfected before use in accordance with Chapter 4.14. and use new liquid nitrogen.

Consignments of semen, oocytes or~~,~~ embryos~~,~~ should be identified in accordance with the relevant recommendations of Chapters 4.6. to 4.11.

The *Veterinary Authority* should ensure that, before leaving the *exporting country*, consignments of *germinal products* ~~be~~are subjected to a visual examination and documentary check and cryogenic tanks for semen, oocytes or~~,~~ embryos ~~be~~are sealed and marked, according to the procedures of the *exporting country* and the ~~agreed~~ *international veterinary certificate* ~~and the requirements of the *exporting country*~~.

3. Animal products

Containers used for transporting *animal products* should be suitable for the type of product, protect the *animal products* from damage or contamination, and fulfil the conditions of the procedures of the *exporting country* and the ~~agreed~~ *international veterinary certificate* ~~and the requirements of the *exporting country*~~.

The *Veterinary Authority* should ensure that adequate measures are taken to clean and, where necessary after cleaning, to disinfect before use, *containers* and *means of transport*~~ation~~ in accordance with Chapter 4.14., particularly when conveying or transporting unpacked materials.

The *Veterinary Authority* should ensure that, before leaving the *exporting country*, consignments of *animal products* ~~should be~~are subjected to a visual examination and documentary check, according to the procedures of the *exporting country* and the ~~agreed~~ *international veterinary certificate* ~~and the requirements of the *exporting country*~~.

Article 5.4.5.

~~Emergency p~~Planning for unexpected events

~~The *Veterinary Authority* should develop a plan to address the occurrence within the *exporting country* after the *commodities* have been exported, of a *listed disease* or a disease referred to in the *importing country* requirements, which may have impacted the status of the exported *commodities*. The *Veterinary Authority* should be guided by *importing country* requirements in implementing the plan.~~

The *Veterinary Authority* should ensure that the operator~~exporter~~ develops a plan to address ~~emergencies~~ unexpected events which may impact the compliance~~status of the *commodities*~~ with *importing country* requirements and *animal welfare* recommendations in Section 7. ~~being exported~~, ~~failure of transport arrangements,~~ The plan should address concerns such as deviation from the *journey* plan, failure to reach the *transit* or *importing country*, or rejection of the consignment by them ~~*transit* or *importing country*~~. The ~~emergency~~ plan may be generic or specific to each consignment. ~~and should focus on preserving the status of the consignment and *animal welfare* in accordance with Chapters 7.2., 7.3. and 7.4.~~

The ~~emergency~~ plan should identify responsibility for development and communication of alternative transport arrangements when necessary. The relevant *Competent Authority* in the *exporting*, *transit* and *importing countries* should be consulted as appropriate by the operator regarding revised transport arrangements to assess the implications for the compliance~~status of the *commodities*~~ with *importing country* requirements and *animal welfare* recommendations. ~~The *Veterinary Authority* in the *exporting country* should be consulted on alternative transport arrangements for consignments of *animals* to ensure that *animal welfare* is preserved.~~

~~The emergency plan should include procedures for managing exported consignments that fail to reach the designated *transit* or *importing countries* or are rejected by them.~~

CHAPTER 5.5.

MEASURES AND PROCEDURES APPLICABLE TO THE TRANSIT OF COMMODITIES

Article 5.5.1.

Purpose and scope

This chapter provides general principles for measures and procedures that are applicable to prevent the spread of pathogenic agents, without creating unjustified restrictions, when *commodities* destined for another country are either making a stopover in, or transported through a *transit country*, covering from the *point of entry* to the *point of exit.*

This chapter provides *transit countries* with recommendations on measures and procedures, and the roles and responsibilities of the *Veterinary Authority* and other relevant *Competent Authorities* and of any natural or legal entity or person responsible for transit of *commodities* subject to the provisions of this chapter (hereafter 'operator'). An international movement of *commodities* may be considered a 'transit' if *commodities* are transported from an *exporting country* through a *transit country* to an *importing country*.The transit period should not exceed the time necessary for transport and logistics, and *commodities* and all relevant conditions as stated in the certificate issued by the *exporting country* should remain unchanged; otherwise the operation should be interpreted as an importation and exportation.

This chapter provides guidance to ensure the quality and implementation of official controls for transit.

Article 5.5.2.

General considerations

The *Veterinary Authority* or other relevant *Competent Authorities* of the *transit country* should ensure that *transit country* requirements and procedures, including a list of the *border inspection posts* designated for the transit of *commodities,* are made available to operators and to the *Veterinary Authority* of the *exporting country*.

A *transit country* may require adequate advance notice or approval regarding the date of entry into and exit from its territory of *commodities*, stating the type of *commodity*, species, quantity, *means of transport* and the *point of entry* or *border inspection post* and *point of exit* to be used.

Operators should be aware of the *transit country* requirements and procedures before shipment, which may include announcing to the *Competent Authorities* of the *transit country* the arrival of consignments at the *point of entry*. Operators should ensure that *commodities* are presented for official controls, including the original official certificates or documents, or digital equivalents, in accordance with *transit country* requirements, and that requirements and procedures defined by the *Competent Authorities* of the *transit country* are met.

Operators should ensure that the *commodities* are separated from other *commodities* in the *transit country*, that all relevant conditions as stated in the certification issued by the *exporting country* remain unchanged, and that any unforeseen unloading of *commodities* in the *transit country* is informed to the *Veterinary Authorities* of the *transit country* and the *importing country*.

In the case of *animals*, operators should ensure that *animal welfare* is maintained throughout the transit process, in accordance with Section 7 as relevant.

Article 5.5.3.

General principles applicable to procedures for official controls for transit

The *Veterinary Authority* or other relevant *Competent Authorities* should implement official inspection based on risk and with appropriate frequency to ensure compliance with the *transit country* requirements. By way of derogation, the *Veterinary Authority* may exempt from inspection *safe commodities* or *commodities* posing a negligible risk and for which inspection is not considered necessary.

A *transit country* may not accept the transit of *commodities* not complying with its requirements.

The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that conditions included in the *international veterinary certificate* at origin are maintained during official controls, stopover, storage and transport, that *biosecurity* is applied to prevent transmission of pathogenic agents throughout the transit process and that unnecessary delays are avoided. Original documentation intended for the *importing country* should remain with the consignment.

Article 5.5.4.

Planning for the unexpected events

The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that the operator develops a plan to address unexpected events which may compromise the compliance of the transited *commodities* with the requirements of the *transit country* or the *importing country*. The plan may be generic, or specific to each consignment, and should focus on preventing the introduction to the *transit country* of a *listed disease* or a disease referred to in the *transit country* requirements, and on ensuring *animal welfare* recommendations in Section 7. The plan should identify responsibilities and include procedures for commodities not complying with the *transit country* requirements.

Article 5.5.5.

General recommendations on measures to address identified informal or illegal movement of commodities at border inspection posts

To control the *risks* posed by informal or illegal cross-border movement at *border inspection posts*, the *Veterinary Authority* or other relevant *Competent Authorities* should coordinate and cooperate with the customs authority as described in Article 5.6.8.

Annex 19

CHAPTER 5.6.

MEASURES AND PROCEDURES APPLICABLE ~~IN~~ TO THE IMPORTATION OF COMMODITIES

Article 5.6.1.

Purpose and scope

This chapter provides general principles for measures and procedures that are applicable to ~~in~~ the importation of *commodities* to prevent the spread of pathogenic agents through *international trade* of *commodities*, without creating unjustified restrictions, covering from ~~the time of~~ arrival at the *point of entry* ~~border of~~in the *importing country* until clearance of *commodities*.

This chapter provides *importing countries* with recommendations on measures and procedures, and the roles and responsibilities of the *Veterinary Authority* and other relevant *Competent Authorities*~~,~~ and of any natural or legal entity or person responsible for import of *commodities* subject to the provisions of this chapter ~~business operators~~(hereafter 'operator'), in addition to responsibilities that are described in Article 5.1.2. This chapter provides guidance to ensure the quality and implementation~~performance~~ of official controls for importation. This chapter not only covers legal importation, but also provides general recommendations for illegal or informal entry of commodities.

~~The *animal health status* of the *importing country* or *zone* is not affected by the presence of disease or infection in imported animals in a *quarantine centre* or at a *border inspection post*.~~

Article 5.6.2.

General considerations

The *Veterinary Authority* or other relevant *Competent Authorities* of the *importing country* should ensure that the *importing country* requirements, which may be included in ~~ing~~ *international veterinary certificates*, ~~and~~ as well as up-to-date information relevant to the import procedures, including a list of the *border inspection posts* designated for the import and transit of those *commodities*, are made available to operators and to the *exporting countries*.

The *Veterinary Authority* or other relevant *Competent Authorities* ~~of the *importing country*~~ should be responsible for the ~~performance~~ implementation of official controls in accordance with *veterinary legislation* to ensure that ~~imported~~ *commodities* can be safely imported. ~~Its~~ Their legal mandate and responsibilities~~, as described in Articles 3.4.5. and 3.4.13.,~~ should include the ~~import~~ official controls ~~activities~~ at any step and the possibility to request from the operator~~importer~~ any necessary information. Where appropriate, the *Veterinary Authority* or other relevant *Competent Authorities* may delegate certain tasks ~~in accordance with point 2 of Article 3.4.5~~. Adequate human, technical, physical and financial resources should be available in the *importing country* for the *Veterinary Services* to effectively implement~~perform~~ official controls ~~inspection~~ in accordance with the quality principles ~~described~~ in ~~Article~~ Chapter 3.2~~.2~~.

An *importing country* may require adequate advance notice or approval regarding the date of entry of *commodities* into its territory ~~of *commodities*~~, stating the type of *commodity*, species, quantity, means of transport and the *border inspection post* to be used.

~~The *Veterinary Authority* or other *Competent Authorities* when relevant, should perform o~~Official inspections should be implemented ~~in accordance with Article 3.2.12.~~ regularly, on a risk basis and with appropriate frequency to ensure compliance with the *importing country* requirements. By way of derogation, the *Veterinary Authority* or other relevant *Competent Authorities* may exempt from the inspection~~,~~ *safe commodities* or *commodities* posing a negligible risk and for which inspection is not considered necessary.

Biosecurity should be applied to prevent transmission of pathogenic agents from *commodities* throughout the import process.

An *importing country* may prohibit the ~~introduction~~ entry into its territory of a consignment of *commodities* not complying with the *importing country* requirements.

Operators~~Importers~~ should be aware of the *importing country* requirements and import procedure before the importation and inform~~announce~~, in advance, to the relevant *Competent Authorities* the arrival of consignments at the *border inspection post*, in accordance with *importing country* requirements. Operators~~Importers~~ should ensure that *commodities* are presented for official controls ~~inspection~~ at the *border inspection post*, together with the original ~~official~~ *international veterinary certificates* or documents, or digital equivalents, which are required to accompany the consignments.

In case of *animals*, operators~~importers~~ should ensure that *animal welfare* is maintained throughout the ~~whole~~ import process ~~of importation,~~ in accordance with ~~Chapters 7.1., 7.2., 7.3. and 7.4.~~Section 7 as relevant.

The *Veterinary Authority* ~~of the *importing country*~~ should carry out collaborative activities with other relevant *Competent Authorities*, customs, other authorities and operators, and with *Veterinary Authorities* in other countries, to control the risk posed by the illegal cross-border movement of *commodities*, i.e. international movement of *commodities* done in a way to expressly and intentionally avoid official controls.

Article 5.6.3.

General principles applicable to procedures for ~~import~~ official controls for importation

Veterinary Authority or other relevant *Competent Authorities* should ~~take~~ control ~~of~~ the imported *commodities* to ~~decide~~ determine whether ~~or not~~ the consignment complies with the *importing country* requirements.

~~Import~~ Official controls should be ~~performed~~ implemented at an appropriate place which might include a *border inspection post*, a point of entry, *quarantine centre*, the place of destination, or premises of the operator responsible for the consignment. The consignment should remain under the control of the *Veterinary Authority* or other relevant *Competent Authorities* until formal clearance.

In case of emergency, ships and aircraft~~s~~ may be granted access to a port or airport ~~which~~ that are not their intended destination. In those cases, they should be subjected to the animal health and *animal welfare* measures which the *Veterinary Authority* or other relevant *Competent Authorities* may consider necessary based on the potential risk.

1. Official inspection

   Where official inspections of *commodities* are ~~performed~~ implemented, they should always include a documentary check and, depending on the risk to human and animal health and *animal welfare,* should also include identity checks and physical inspection~~checks~~*.* When the *Veterinary ~~Authority or other Competent Authorities~~Services* need~~s to have~~ full access to the consignment for the purpose of identity checks or physical inspection, consignments should be partially or fully unloaded from the means of transport.

   a) Documentary check

      A documentary check should be implement~~perform~~ed on all consignments presented for official controls ~~inspection~~ to ensure that they meet the *importing country* requirements.

      A ~~D~~documentary check should include examination of the *international veterinary certificate*, and possibly of laboratory reports or other documents, including those of a commercial nature, which are required to accompany the consignment.

      When implementing~~performing~~ a documentary check, the *Veterinary ~~Authority or other Competent Authorities~~Services* should inspect the required documents, in original or their digital equivalents as agreed between the *importing* and *exporting country*, to ensure that:

      i) the *international veterinary certificate* has been issued by the *Official Veterinarian* of the *exporting country*; complies with relevant principles set out in Article 5.2.3. and corresponds as relevant to the

model ~~established~~ agreed between the *exporting* and ~~by~~ the *importing country* for that *commodity* and intended use~~, based on Chapters 5.10. to 5.13.~~; and

ii) the information contained in the checked documents complies with the *importing country* requirements.

b) Identity check

An i~~i~~dentity check should be implement~~perform~~ed upon arrival of the consignment at the point of inspection, as a visual inspection to verify that the content and the labelling of a consignment, including the identification of *commodities*, seals and means of transport, correspond to the information declared in the *international veterinary certificate* and accompanying documents.

The frequency of identity checks, the quantity of *commodities* to be inspected as well as the criteria for ~~sampling~~ selection for checking should be determined by the *Veterinary Authority* or other relevant *Competent Authorities* ~~of the *importing country*~~ based on *risk assessment*.

c) Physical inspection

Physical inspection should include, as appropriate:

i) clinical examination of ~~an~~ *animals* for evidence of ~~transmissible~~ diseases and *animal welfare* issues

~~ii) and~~ physical checks of *animal products* and *germinal products*,

~~iii) and, as appropriate,~~ checks on packaging and labelling,

iv) checks on the means of transport~~, labelling~~ and temperature records,

~~v) the~~ sampling for analysis, testing or diagnosis, and

vi) any other checks required by the *Veterinary Authority* or other relevant *Competent Authorities* to verify compliance with the *importing country* requirements.

The frequency of physical inspection, the quantity of *commodities* to be inspected as well as the criteria for ~~sampling~~ selection for physical inspection should be determined by the *Veterinary Authority* or other relevant *Competent Authorities* ~~of the *importing country*~~ based on *risk assessment*, and considering the following:~~.~~

i) For a~~A~~nimals

The ~~*Veterinary Authority* or other *Competent Authorities* of the *importing country* should determine the~~ number of *animals* to be clinically examined should be determined in accordance with the overall number of *animals* in the consignment and the declared purpose of the *animals*;~~, which~~ it may be increased if the physical checks carried out have not been satisfactory.

In some cases, such as ~~F~~for *animals* ~~that are not required to be identified individually and animals~~ considered to be dangerous, clinical examination ~~should~~ could consist of observation of the state of health and behaviour of the entire group or of a representative number of *animals*.

If the clinical examination reveals an anomaly, a more thorough clinical examination may be carried out, including sampling and testing, where appropriate.

ii) ~~Germinal~~ For germinal products

~~The *Veterinary Authority* or other *Competent Authorities* should carry out~~ Physical checks of the consignment should be carried out to verify the compliance of labelling and the transport conditions

with *importing country* requirements~~,~~ including, when relevant, temperature records ~~when relevant~~ and the integrity of the seals, packaging material and cryogenic tanks.

~~The *Veterinary Authority* or other *Competent Authorities* of the *importing country* should determine the number of items to be checked, which may be increased if the checks carried out have not been satisfactory.~~

~~The *Veterinary Authority* or other *Competent Authorities* may carry out physical checks to verify that the labelling complies with *importing country* requirements.~~

Physical inspection may include laboratory testing of the *germinal products*.

If the physical checks reveal an anomaly, a more thorough inspection may be carried out.

iii) For ~~A~~animal products

~~The *Veterinary Authority* or other *Competent Authorities* should carry out~~ physical checks of the consignment should be carried out to verify the compliance of labelling and the transport conditions with *importing country* requirements, including temperature records when relevant and the integrity of the packaging material and seals.

~~The *Veterinary Authority* or other *Competent Authorities* may carry out physical checks to verify that the labelling complies with *importing country* requirements.~~

Physical inspection may include sensory examination and laboratory testing of the *animal products*.

If the physical checks reveal an anomaly, a more thorough inspection may be carried out.

2. Sampling and testing

Sampling and testing of imported *commodities* ~~with a view~~ to check~~ing~~ compliance with the ~~health~~ *importing country* requirements ~~laid down in the *international veterinary certificate*~~, may be implement~~perform~~ed following a risk-based sampling plan or upon suspicion of non-compliance resulting from the documentary, identity or physical checks of *commodities*, without creating unjustified barriers to trade. Testing should be implement~~perform~~ed in a~~n *approved*~~ *laboratory*.

The *Veterinary Authority* or other relevant *Competent Authorities* may develop a risk-based sampling plan for imported consignments, that should specify the percentage of consignments to be sampled, taking into account the *animal health status* of the *importing* and *exporting country*, the species concerned, the nature and declared purpose of the *commodities*, the number of incoming consignments and the results of previous sampling.

Where no immediate danger to animal health or public health is suspected from *commodities* sampled in accordance with a sampling plan, a consignment may be released before the results of laboratory tests are available. A traceability system should be in place to recall commodities if needed.

3. Sanitary measures at import

To meet the *importing country* requirements, in addition to the *sanitary measures* implemented in the *exporting countries*, the *Veterinary Authority* or other relevant *Competent Authorities* ~~of *importing country*~~ may require *sanitary measures* to be implemented at importation before release of the *commodities* from official controls. Measures may include *disinfection* of and ~~disinsection~~ elimination of arthropod *vectors* from~~of *vehicles/vessels*~~*means of tranport* and *containers* used in the transportation and *unloading* of *commodities*, in accordance with Chapter 4.14.

In the case of *animals*, measures may include *vaccination*, treatment or isolation. In the case of other *commodities*, measures may include a holding period or the application of physical or chemical treatment.

4. Release of consignments

Based on the implement~~performed~~ ~~import~~ official controls, the *Veterinary Authority* or other relevant *Competent Authorities* ~~of *importing countries*~~ should decide whether the consignment complies with the *importing country* requirements.

When the decision is made that the consignment complies with the *importing country* requirements and has been cleared for release, the *Veterinary Authority* or other relevant *Competent Authorities* should notify the operator~~importer~~ and the information should be made available to the customs authorities.

Article 5.6.4.

Further action for non-compliant commodities

Commodities identified as non-compliant based on the implement~~performed~~ ~~import~~ official controls should not be released by the *Veterinary Authority* or other relevant *Competent Authorities* and should be ~~isolated~~ detained under appropriate conditions including isolation for *animals*, pending further decision ~~by the *Competent Authority*~~.

Depending on the type of *commodity* and the *risk* the *commodity* represents to human and animal health, and environment, or for~~due to~~ *animal welfare* reasons, the *Veterinary Authority* or other relevant *Competent Authorities*~~,~~ should identify the options for the disposition of the *commodities* and notify the operator~~importer~~. Disposition of *commodities* may include:

a) re-dispatching the *commodity* back to the *exporting country* or another country, with the agreement of the receiving *Competent Authority*;

b) subjecting the *commodity* to treatment or to other risk mitigation measures necessary to allow importation;

c) *killing* and disposal of *animals*, or destruction of other *commodities*.

Any action applied to consignments of *animals* should comply with ~~Chapters 7.1. and 7.6.~~the relevant provisions of Section 7.

The *Veterinary Authority* or other relevant *Competent Authorities* of the *importing country* should notify any decision and reasons to refuse entry of a *commodity* to the customs authorities and are encouraged to communicate it to the *Veterinary Authority* of the *exporting country*. Where appropriate, the *Veterinary Authority* of the *exporting country* should be given the opportunity to explain the situation in an attempt to have the consignment released.

Following decisions taken in relation to non-compliant *commodities*, the *Veterinary Authority* or other relevant *Competent Authorities* should supervise the effective disposition of the *commodities* and apply measures to prevent the introduction into the country of *commodities* which have been refused import, and the reuse of the *international veterinary certificate* that accompanied the consignment.

The *Veterinary Authority* or other relevant *Competent Authority* of the *importing country* should inform the *exporting country* of any case of a *listed disease* or disease referred to in the *importing country requirements* in a consignment of *animals*.

Article 5.6.5.

~~Emergency~~P~~p~~lan~~ning for unexpected events

~~The *Veterinary Authority* or other *Competent Authorities* of the *importing country* should develop a plan to address the occurrence, within the *exporting country* after the *commodities* have been exported or within the *transit country* after the *commodities* have transited, of a *listed disease* or a disease referred to in the *importing country* requirements which may have impacted the status of the exported *commodities*.~~

~~The *Veterinary Authority* or other *Competent Authorities* may also develop a plan to address the occurrence of a *listed disease*, or a disease referred to in the *importing country* requirements, within the *importing country* before the animals have been released.~~

The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that the operator~~importer~~ develops a plan to address unexpected events ~~emergencies~~ which may impact the compliance~~status of the *commodities*~~ with

importing country requirements~~being imported, and non-compliant *commodities* described in Article 5.6.4~~. The ~~emergency~~ plan may be generic, or specific to each consignment, and should focus on preventing the introduction to the *importing country* of a *listed disease* or a disease referred to in the *importing country* requirements, and on *animal welfare* recommendations in ~~accordance with~~ Section 7~~Chapters 7.2., 7.3. and 7.4~~. The ~~emergency~~ plan should identify responsibility and include procedures for actions taken for non-compliant *commodities* described in Article 5.6.4.

Article 5.6.6.

General recommendations applicable to ~~vehicles/vessels~~means of transport and containers that transported infected animals

~~*Vehicles/vessels*~~*Means of transport* and *containers* that transported *animals* found to be infected with a pathogenic agent of a *listed disease* or a disease referred to in the *importing country* requirements should be considered ~~as~~ contaminated, and the *Veterinary Authority* or other relevant *Competent Authorities* should apply the following measures as appropriate to the risk:

a) treatment or safe disposal of the litter, forage and any other potentially contaminated material, by its removal from the ~~*vehicles/vessels*~~*means of tranport* and *containers* for immediate transportation to an establishment assigned in advance, where the animal health measures required by the *importing country* should be strictly applied;

b) *disinfection* of all parts of the ~~*vehicles/vessels*~~*means of transport* and *containers* which were used in the transport, feeding, watering, moving and *unloading* of the *animals,* as well as all baggage of travelling attendants, in accordance with Chapter 4.14.;

c) ~~disinsection~~ elimination of arthropod *vectors* from ~~*of vehicles/vessels*~~*means of transport* and *containers* in case of *vector* disease.

Article 5.6.7.

General principles applicable to disposal of international catering waste

International catering waste is a high-risk category of product and should therefore be subject to strict controls to minimise the risk of introduction of pathogenic agents.

The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that all international catering waste entering the country from the international means of transport is handled, collected and disposed of in a way to minimise the risk of introduction of pathogenic agents.

Article 5.6.8.

General recommendations on measures to address identified illegal movement of commodities at border inspection posts

To control the *risks* posed by illegal cross-border movement at *border inspection posts*, the *Veterinary Authority* or other relevant *Competent Authorities* should coordinate and cooperate closely with the customs authority to ensure that the official controls ~~inspection of~~ for *commodities* entering the country are~~is~~ implement~~perform~~ed in accordance with the rules of this chapter and national legislation, including when fraud is suspected.

For that purpose, the *Veterinary Authority* or other relevant *Competent Authorities* should ensure the timely exchange with the customs authority, including via electronic means, of information and decisions made relevant to the organisation and conduct of their respective activities for *commodities* entering the country. The *Veterinary Authority* or other relevant *Competent Authorities* should collaborate with the customs authority to ensure immediate notification to the *Veterinary Authority* or other relevant *Competent Authorities* if ~~of circumstances where a declaration is submitted to the customs authority for~~ a consignment of those categories of *commodities* that should be subject to official ~~inspection~~ control but with no evidence of an official ~~inspection~~ control having been conducted.

The *Veterinary Authority* or other relevant *Competent Authorities*, in collaboration with the customs authorities, should have practical arrangements in place to ensure ~~the~~ implementation of the measures described in Article 5.6.4. in case of detection of illegal cross-border movement of *commodities* at a *border inspection post*.

Article 5.6.9.

General recommendations on measures to address identified informal or illegal movement of commodities outside border inspection posts

To control the *risks* posed by the illegal cross-border movement of *commodities* outside of *border inspection posts*, the *Veterinary Authority* or other relevant *Competent Authorities* should:

1) coordinate with border authorities (police, customs, transport, immigration) to provide technical support for identification of illegal cross border movement of *commodities*;

2) develop and implement practical mechanisms to address informal or illegal cross border movement of *commodities* ~~and implementation thereof~~ in close collaboration with border authorities.

CHAPTER 5.7.

BORDER INSPECTION POSTS AND QUARANTINE CENTRES

Article 5.7.1.

Purpose and scope

This chapter provides recommendations on *border inspection posts* and *quarantine centres* to support effective implementation of measures and procedures applicable to the exportation, transit and importation of *commodities,* in order to prevent the spread of pathogenic agents without creating unjustified trade restrictions.

Quarantine centres may be used for isolation of *animals* either pre-exportation in accordance with disease-specific chapters in the *Terrestrial Code* or post-arrival. The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that the application of *biosecurity* at *quarantine centres* is appropriate to the type of isolation being undertaken, and effectively mitigates risks in accordance with disease-specific chapters of the *Terrestrial Code* (pre-export isolation) or via *risk analysis* (post-arrival quarantine).

Article 5.7.2.

General considerations

Appropriate legislation should be in place, in accordance with Chapter 3.4., to define the facilities, the resourcing and operation of *border inspection posts* and *quarantine centres,* and for their approval.

Material and financial resources should be available at *border inspection posts* and *quarantine centres* as necessary to undertake the relevant functions of the facility while managing official controls, *biosecurity*, health and safety risks and *animal welfare* associated with the type and volume of *commodities* presented for inspection.

Appropriate administration systems should be available to personnel at *border inspection posts* and *quarantine centres* as necessary for the functions of the facility, including record keeping and information and communication technology, to support decision-making and communication.

Biosecurity consistent with Chapter 4.X. is critical to fulfil the functions of *border inspection posts* and *quarantine centres.*

The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that:

– Operations at *border inspection posts* and *quarantine centres* are supported by sufficient authorised personnel who are operating under the principles of Chapter 3.2., appropriately qualified with access to regular training, consistent with the intended use and the type and quantity of *commodities* presented.

– Operational details for *border inspection posts* and *quarantine centres* are made available to operators described in Chapters 5.4., 5.5. or 5.6., including the intended use and the categories of *commodities* for which they are designated, exact locations, contact details, hours of operation, booking requirements and costs.

– Standard Operating Procedures (SOP) are available to personnel at *border inspection posts* and *quarantine centres* describing the procedures undertaken there. Auditable records documenting the performance of these procedures should be kept, including the maintenance of *biosecurity*. Records should include the results of official controls, regular *surveillance* and *monitoring* in the facilities and the surrounding areas.

– *Border inspection posts* and *quarantine centres* have access to *laboratories* and other *approved* service providers with SOPs as necessary to support the implementation of official controls and the measures described in Chapters 5.4., 5.5. and 5.6. consistent with Article 3.2.6.

Article 5.7.3.

Cooperation with other agencies

The *Veterinary Authority* or other relevant *Competent Authorities* should engage with other governmental authorities with responsibilities at international borders in the design and operation of *border inspection posts*, to ensure that official inspection and clearance of transit or import consignments is streamlined where possible. Co-use of facilities and equipment at international borders with other authorities could be considered as long as it does not hinder normal operations described in this chapter. Key principles of the World Trade Organization (WTO) Trade Facilitation Agreement should be considered to facilitate importation and transit of *commodities*.

Article 5.7.4.

Requirements for a border inspection post

Design and operation of a *border inspection post* should be based on *risk analysis* and *biosecurity* including the following:

1) Separation between public areas and restricted areas for inspection of consignments.

2) Perimeter security of restricted areas to prevent entry of unauthorised people and *means of transport*, and unwanted animals, with access control for entry and exit of authorised personnel and *means of transport*.

3) Facilities and equipment suitable for the type and volume of *commodities* presented, necessary for implementation of the official control procedures described in Article 5.6.3, including secure unloading and loading, inspection, sampling and storage or detention of *commodities*, including adequate lighting and temperature control with surfaces appropriate for cleaning and *disinfection*.

4) Facilities and equipment for cleaning and *disinfection* and elimination of arthropod *vectors* of *means of transport* and *containers* that have been used in transportation of *commodities,* consistent with Article 5.6.6.

5) Waste management for restricted areas with storage facilities as necessary, for solid and liquid waste, including discarded *feed,* rejected consignments, dead *animals* and used bedding, with access and secure transportation to facilities for treatment of waste.

Article 5.7.5.

Additional requirements for a border inspection post for animals

In addition to the principles described in Article 5.7.4., a *border inspection post* for consignments of *animals* should be designed and operate in accordance with *animal welfare* principles in Section 7 and should specifically include the following:

1) Separate access to restricted animal inspection areas via road infrastructure, to minimise delays.

2) Facilities necessary for the management of consignments of *animals* according to Article 5.6.3, including containment, feeding, watering, restraint and inspection, consistent with the type and number of *animals* presented.

3) Facilities for temporarily holding *animals*, with adequate space, light, ventilation and separation as appropriate between consignments and species.

Article 5.7.6.

Facilities involved in official inspection other than border inspection post

When the *Veterinary Authority* or other relevant *Competent Authority* defines that official inspection could be implemented at an appropriate place other than a *border inspection post*, the facilities involved should be *approved* following the principles outlined in Articles 5.7.4. and 5.7.5., and the consignment should remain under the control of the *Veterinary Authority* or other relevant *Competent Authorities* until formal clearance.

Article 5.7.7.

Requirements for a quarantine centre

Design and operation of a *quarantine centre* should be based on consideration of the following:

1) The disease situation of the country, *zone* or area surrounding the *quarantine centr*e.

2) Location of facilities at a distance from other *establishments*, sufficient to avoid transmission of diseases of concern.

3) Site topography, to minimise disease risks associated with the flow of contaminated water.

4) Perimeter security to prevent entry of unauthorised people and *means of transport,* and unwanted animals.

5) Controls, including sanitary requirements, for entry and exit of authorised personnel, and the facilities necessary to apply these controls including changing rooms and showers. Controls for exit of authorised personnel may not be necessary for the isolation of *animals* before exportation.

6) Controls, including sanitary requirements, for entry and exit of *means of transport* and equipment, including veterinary instruments and supplies, and the facilities necessary to apply these controls. Controls for exit of *means of transport* and equipment may not be necessary for the isolation of *animals* before exportation.

7) Controls for entry of supplies, including the sources, sanitary status and entry process for *feed* and bedding, and facilities necessary to handle and store these supplies.

8) Facilities and equipment for cleaning and *disinfection*, and removal of arthropod *vectors* including control of waste and effluent, for *means of transport* and *containers* that have been used in transportation of import consignments of *animals*.

9) Waste management. In the case of isolation of *animals* after arrival, waste management should be in accordance with a *biosecurity plan* including storage facilities as necessary, for solid and liquid waste, including discarded *feed*, rejected consignments, dead *animals* and used bedding, with access and secure transportation to facilities for treatment of waste.

10) Facilities for containment and management of consignments of *animals*, including as appropriate to the animal species separation between consignments, *unloading/loading*, housing, yards, restraint, isolation, *vector* control, and for undertaking interventions required by *risk analysis* and/or relevant disease-specific chapters of the *Terrestrial Code*, including sample collection, testing, *vaccination*, treatment and veterinary inspection.

11) Equipment for cleaning and *disinfection* and removal of arthropod *vectors* in the facility between consignments of *animals*.

A *quarantine centre* for isolation of *animals* before exportation should be used to address the specific requirements in disease-specific chapters of the *Terrestrial Code*. Unless specified in those chapters, isolation of *animals* before exportation may be performed in other facilities.

Article 5.7.8.

Planning for unexpected events

The management of consignments at *border inspection posts* and *quarantine centres* that have failed clearance and have thus been refused transit or import is covered in Chapters 5.4. to 5.6.

The *Veterinary Authority* or other relevant *Competent Authorities* should ensure that plans are available to personnel at *border inspection posts* and *quarantine centres* that support responses to foreseeable but uncommon events. The

plans should address communication, *biosecurity*, health and safety, and *animal welfare* in each instance, and may cover:

– Unexpected arrival of *commodities*.

– Evidence of a *listed disease* or a disease included in the *transit* or *importing country* requirements in a consignment of imported or transiting *animals* at a *border inspection post* or *quarantine centre*.

– Veterinary emergency in *animals* at a *border inspection post* or undergoing post-arrival isolation in a *quarantine centre*.

– Escape of *animals*.

– Evidence of *animal products* presenting a risk to animal or public health.

– Natural disasters and interruption of critical services threatening the operation of the *border inspection post* or *quarantine centre*.

CHAPTER 8.8.

INFECTION WITH FOOT AND MOUTH DISEASE VIRUS

[…]

Article 8.8.33bis.

Recommendations for importation of fetal bovine serum from countries or zones infected with FMDV

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that this product has been subjected to:

1) gamma irradiation at a dose of at least 30 kilo Gray (kGy); or

2) an equivalent treatment that has been demonstrated to inactivate FMDV.

[…]

Annex 22

CHAPTER 8.13.

INFESTATION WITH CHRYSOMYA BEZZIANA (OLD WORLD SCREWWORM) AND ~~NEW WORLD SCREWWORM (~~INFESTATION WITH COCHLIOMYIA HOMINIVORAX (NEW WORLD SCREWWORM) ~~AND OLD WORLD SCREWWORM (CHRYSOMYA BEZZIANA)~~

Article 8.13.1.bis

General provisions

New World screwworm and Old World screwworm can infest a wide variety of mammals, including humans and birds.

For the purposes of the *Terrestrial Code*, New World screwworm is defined as an *infestation* of mammals and birds (hereafter 'animal hosts') with *Cochliomyia hominivorax*, and Old World screwworm is defined as an *infestation* of animal hosts with *Chrysomya bezziana*.

The occurrence of *infestation* with *Cochliomyia hominivorax* or *infestation* with *Chrysomya bezziana* is defined by the following: *Cochliomyia hominivorax* or *Chrysomya bezziana* has been observed and identified as such in a sample from an animal host.

Standards for diagnosis and information on the epidemiology are described in the *Terrestrial Manual*.

[…]

CHAPTER 8.X.

INFECTION WITH CRIMEAN-CONGO HAEMORRHAGIC FEVER VIRUS

Article 8.X.1.

General provisions

For the purposes of the *Terrestrial Code,* Crimean-Congo haemorrhagic fever is defined as an *infection* of ruminants, dromedary camels and ostriches (hereafter 'animal hosts') with Crimean-Congo haemorrhagic fever virus (CCHFV).

The following defines the occurrence of *infection* with CCHFV:

1) CCHFV has been isolated and identified as such in a sample from an animal host; or

2) nucleic acid specific to CCHFV has been detected in a sample from an animal host epidemiologically linked to a confirmed or suspected *case,* or to a human infected with CCHFV, or giving cause for suspicion of previous association or contact with CCHFV; or

3) antibodies specific to CCHFV have been detected in a sample from an animal host epidemiologically linked to a confirmed or suspected *case,* or to a human infected with CCHFV, or giving cause for suspicion of previous association or contact with CCHFV.

Standards for diagnosis and information on the epidemiology are described in the *Terrestrial Manual*.

CHAPTER 10.X.

INFECTION WITH AVIAN METAPNEUMOVIRUS (TURKEY RHINOTRACHEITIS AND SWOLLEN HEAD SYNDROME OF CHICKENS)

Article 10.X.1.

General provisions

For the purposes of the *Terrestrial Code*, *infection* with avian metapneumovirus is defined as an *infection* of *poultry* with avian metapneumovirus.

The following defines the occurrence of *infection* with avian metapneumovirus:

1) Avian metapneumovirus has been isolated and identified as such in a sample from *poultry*; or

2) nucleic acid specific to avian metapneumovirus, which is not the consequence of *vaccination*, has been detected in a sample from *poultry*; or

3) seroconversion specific to avian metapneumovirus has been detected in *poultry*; or

4) antibodies specific to avian metapneumovirus, which are not the consequence of *vaccination*, have been detected in a sample from *poultry* showing clinical signs or pathological lesions consistent with *infection* with avian metapneumovirus, or epidemiologically linked to a confirmed or suspected *case*.

Standards for diagnosis and vaccines, as well as information on the epidemiology, are described in the *Terrestrial Manual.*

CHAPTER 12.4.

INFECTION WITH EASTERN EQUINE ENCEPHALITIS VIRUS (EASTERN EQUINE ENCEPHALOMYELITIS) AND INFECTION WITH WESTERN EQUINE ENCEPHALITIS VIRUS (WESTERN EQUINE ENCEPHALOMYELITIS)

Article 12.4.1.

General provisions

Equids are dead-end hosts for eastern equine encephalitis (EEE) and western equine encephalitis (WEE) and therefore, equids and their products do not present a risk of transmission. However, equids are useful sentinels for the early detection of EEE or WEE to mitigate the animal and public health risks of these pathogenic agents.

For the purposes of the *Terrestrial Code*, EEE is defined as an *infection* of equids with eastern equine encephalitis virus (EEEV), and WEE is defined as an *infection* of equids with western equine encephalitis virus (WEEV).

The following defines the occurrence of *infection* with EEEV or *infection* with WEEV:

1) EEEV or WEEV has been isolated and identified as such in a sample from an equid; or

2) nucleic acid or antigen specific to EEEV or WEEV has been detected in a sample from an equid showing clinical signs or pathological lesions consistent with EEE or WEE, or epidemiologically linked to a confirmed or suspected *case*, or giving cause for suspicion of previous association or contact with EEEV or WEEV; or

3) antibodies specific to EEEV or WEEV, which are not the consequence of *vaccination*, have been detected in a sample from an equid showing clinical signs or pathological lesions consistent with EEE or WEE, epidemiologically linked to a confirmed or suspected *case*

Standards for diagnosis and vaccines, as well as information on the epidemiology, are described in the *Terrestrial Manual*.

Article 12.4.2.

Safe commodities

When authorising the importation or transit of equids or their products, *Veterinary Authorities* should not require any EEE- or WEE-related conditions regardless of the *animal health status* of the country or *zone* of origin.

Article 12.4.3.

Surveillance of EEE or WEE

The objective of surveillance of EEE and WEE is for the *Veterinary Authority* to coordinate in a timely manner with public health and other relevant *Competent Authorities* and share information to use the *surveillance* outcomes to prevent animal and human exposure. Although equids are dead-end hosts of EEE and WEE, they act as sentinels for the presence of *infection* with EEEV or WEEV in an area.

Surveillance of EEE or WEE should be carried out in accordance with Chapter 1.4. and with the following recommendations.

Veterinary Authority should develop *early warning systems* to detect VEE and WEE epidemic events, so as to promote awareness campaigns to sensitise the owners and keepers of equids, the *veterinarians* and the public health authorities. In such situations, *surveillance* should be conducted to define the extent of the epidemic area for the purpose of disease prevention and control.

Clinical *surveillance* to detect clinical signs of *infection* with EEEV or WEEV in equids should be the basis of the *early warning system*. Clinical disease in equids is characterised by fever, anorexia, and severe depression. In severe *cases*, it can progress to neurological signs and death. Clinical *surveillance* targeted at neurological signs in equids can provide reinforced evidence of the occurrence of an epidemic. However, clinical signs are not pathognomonic and suspected *cases* detected by clinical *surveillance* should always be confirmed by laboratory testing, taking into account the epidemiological situation. The rate at which such suspected *cases* are likely to occur can differ between epidemiological situations and cannot, therefore, be predicted reliably.

An epidemic should be suspected when ecological conditions favour the breeding of large numbers of mosquito *vectors* with the concurrent or consequent occurrence of an increased number of equids showing clinical signs or pathological lesions consistent with *infection* with EEEV or WEEV, or reports of infection in humans or wild birds. This is especially the case for countries or *zones* infected with EEEV or WEEV, or countries or *zones* adjacent to a country or *zone* in which epidemics have been reported. Ecological conditions can be assessed through sharing and analysis of meteorological data, data on precipitation and water levels, and monitoring of *vector* activity.

Detection of *infection* with EEEV or WEEV in an area is indicative of *vector* activity in this area and is a more sensitive approach to *monitoring* for EEV or WEEV than vector *surveillance*. Findings of EEEV or WEEV in *vectors* is of low sensitivity and, therefore, is not a recommended *surveillance* method.
