# REPORT OF THE MEETING OF THE OIE *AD HOC* GROUP ON COMPARTMENTALISATION FOR AFRICAN SWINE FEVER

Paris, 3 – 5 March 2020

The meeting of the OIE *ad hoc* Group on Compartmentalisation for African swine fever (hereafter referred to as the Group) was held at the OIE Headquarters in Paris from 3 to 5 March 2020.

#### 1. Opening

Dr Matthew Stone, Deputy Director General of the OIE for International Standards and Science, welcomed the Group members, the representative from the Scientific Commission for Animal Diseases (Scientific Commission) and the vice-president of the Terrestrial Animal Health Standards Commission (Code Commission) on behalf of Dr Monique Eloit, Director General of the OIE.

He informed the Group of the role of the OIE expert network and *ad hoc* Groups in the standards setting process. He noted that when considering compartmentalisation challenges related to the epidemiology of the disease, the diverse global pig sector and the regulatory function of the Competent Authority should be addressed. The guidelines on compartmentalisation should be well structured, readable, and science based, and should avoid being prescriptive to allow for diversity in Member situations. He invited the *ad hoc* Group to consider good regulatory principles as they apply to defining the problem and its context, identifying options, and analysing impacts. He also noted that the guidelines—being developed to support Members to improve the implementation and recognition of compartmentalisation to facilitate business continuity—will be under the overarching framework of the FAO/OIE GF-TADS global initiative for the control of African swine fever (ASF).

#### 2. Adoption of the agenda and background introduction

The meeting was chaired by Dr Nigel Gibbens. The OIE Secretariat served as rapporteur.

The draft agenda, including breakout groups and plenary discussions, was adopted by the Group. The terms of reference, agenda and list of participants are provided as <u>Appendices I, II and III</u>, respectively

The OIE Secretariat provided the Group with a brief update on the state of play of the GF-TADS global initiative for the control of ASF, and a summary of the international standards related to the Group's terms of reference.

Professor Pfeiffer (the consultant) outlined the key epidemiological features of ASF, including relevant risk pathways associated with the spread of ASF. He also presented the importance of considering these risk pathways in the context of value chains, which may differ from country to country.

As an introduction, each member of the Group was asked to identify one opportunity and one challenge related to the implementation of compartmentalisation for ASF. Challenges identified included a lack of understanding of compartmentalisation and the diversity of production systems that exist across the world. Opportunities identified included the establishment of public-private partnerships, and the ability for compartmentalisation (correctly applied) to serve as a tool for disease control and business continuity.

The Group was reminded that the objective of the meeting was to discuss the main principles and the supporting scientific evidence necessary for implementation of compartmentalisation for ASF. The Group will not be required to endorse the guidelines that will be developed as a follow-up of the meeting; however, the Group's contribution will be duly acknowledged. The guidelines will be circulated electronically for the Group's feedback prior to their finalisation.

## 3. General discussion on the outline of the compartmentalisation guidelines

The draft outline of the guidelines and the results of the Group's pre-meeting electronic consultation were discussed.

The Group agreed that the target audience of the guidelines should be both the private sector and Competent Authorities. While the *Terrestrial Code* provides the framework for compartmentalisation, the guidelines will provide practical recommendations for its appropriate implementation for ASF. The Group agreed that the guidelines should contain a comprehensive description of the key elements for a successful implementation of the compartment and make cross-references to relevant documents (*e.g.* existing guidelines, compartmentalisation checklists, international standards, scientific literature, etc). The guidelines should be readable and short, in the region of 20 pages of text (excluding annexes).

The Group emphasised that the guidelines should be based on current science and should be future-proofed. They should be treated as a living document to be revised as new evidence becomes available, and able to incorporate lessons learnt from their implementation. The guidelines should not be prescriptive. To illustrate how the guidelines may be applied in practice, examples or case studies may be included.

The Group agreed that the guidelines should be outcome focused and provide Members with the flexibility to develop and implement approaches appropriate to their context to achieve the outcomes required for successful compartmentalisation. The guidelines should consider the different epidemiological contexts, characteristics of pig production systems, and pork value chains. This outcome-based approach, while flexible, needs to meet regulatory requirements at the national level and allow for assessment of the compartments. The Group noted that the creation of the national regulatory framework for compartmentalisation should be drawn up in consultation with the private sector to facilitate and enable compliance. A bottom-up approach to this was recommended.

Given that there is varied understanding of the concept of compartmentalisation, the Group proposed to include a section on the general principles of compartmentalisation, including both what compartmentalisation is, and what it is not (*e.g.* a compartment is not just a high-biosecurity farm). It should emphasise the need for strong biosecurity management to ensure effective separation of animal subpopulations, traceability of all the inputs and outputs used or produced in the compartment, and surveillance to demonstrate the status of the compartment. Ultimately, pigs in the compartment and products derived from these must be protected against ASF, thus maintaining the compartment's free status. The Group also proposed to include an approach for identifying ASF risk pathways and associated risk mitigation measures, and highlight that compartmentalisation is a tool available to countries for disease control and to maintain business continuity, along with zoning and commoditybased trade.

The Group recognised that compartmentalisation relies on strong public-private partnerships (PPP) and noted that the guidelines should cross reference with the existing handbook<sup>1</sup> on the matter.

The Group suggested that tools to be included in the guidelines could include checklists, templates and case studies to be used by the different parties involved in the implementation of the compartment. The Group also considered that the principles of the hazard analysis and critical control points (HACCP) system could be useful in providing a model that may be adapted to guide the implementation of compartmentalisation.

The Group noted that the recognition of a compartment is likely to be facilitated if it is established during 'peace time' in free countries or zones. It agreed that implementation of compartmentalisation in endemic or epidemic settings is feasible, although it noted that this would be more challenging.

The revised outline of the guidelines is attached as Appendix IV.

## 4. Technical items

The following technical items were discussed during the breakout group and plenary sessions:

## i) Biosecurity

<sup>1</sup> https://www.oie.int/fileadmin/Home/eng/Media Center/docs/pdf/PPP/oie ppp handbook-20190419 ENint BD.pdf

The Group discussed the potential risk pathways and corresponding biosecurity measures to be considered in the guidelines. Risk pathways include (but are not limited to): live animals (domestic and wild pigs), people, vehicles, feed (animal or plant based), arthropod vectors, pork products. The relative risk of the different risk factors determined through risk assessment should be considered when defining appropriate and practical biosecurity measures. The Group recommended consideration of all plausible risk factors. Acknowledging the different epidemiological scenarios, the Group recommended inclusion of a template for considering risk pathways in the guideline toolkit.

The Group discussed risk pathways in abattoirs and processing plants and agreed that the risk mitigation measures should focus on traceability and segregation to prevention of cross contamination (see item 4.ii).

The Group discussed whether different levels of biosecurity could be allowed depending on the commodity to be traded. The Group considered that the level of biosecurity to be applied should not be influenced by the commodity being traded (*e.g.* live animals versus meat products). The biosecurity plan should be designed to address the level of risk expected should the disease be present outside the compartment.

The Group stressed the need to design a contingency plan describing corrective actions to be taken in case of challenges to the integrity of the compartment, and biosecurity breaches.

#### ii) Supply chain

The Group discussed the pork supply chain and the functional units that need to be included in the compartments. References were made to Article 4.5.2. of the *Terrestrial Code*. The Group agreed that not all the units (feed mills, abattoirs, rendering plants, etc) need to be included in the compartment. However, their locations and inter-relationships should be clearly described.

The Group discussed how a compartment should be defined and what should be included in a compartment. Members had different views on how far 'upstream' of the value chain the compartment should extend, such as great-grandparent stock and genetic facilities, but concluded that not all parts were essential depending on the product to be traded, which could be anything from elite/grandparent stock to meat products. Regardless of the chosen scope, the compartment should always include a 'subpopulation of animals', as described in the *Terrestrial Code*; hence, an abattoir cannot be a stand-alone compartment. The Group acknowledged that there are practical implications resulting from this decision. For example, excluding these breeding facilities would impose a higher demand on the quarantine and testing requirements for pigs newly introduced to the compartment (reference to Article 15.1.9 of the *Terrestrial Code*). The safety of inputs to the compartment (*e.g.* feed, biologicals) may be secured either by adhering to international standards that provide the necessary guarantee of freedom from ASF, or by sourcing from facilities included within the compartment.

The Group reviewed relevant chapters of the Terrestrial Code (Chapters 4.4, 4.5, 15.1) and felt that it was not clear whether functional units within the compartment (e.g. abattoirs) had to be restricted to handling only animals from compartments and products of these animals. It concluded that live animals should be maintained within holdings dedicated to the compartment, and that linked downstream functional units should also be defined as part of the compartment to ensure that all animals or products leaving the compartment are maintained at the same status. This means that abattoirs, cutting plants, and processing functional units must be defined as part of the compartment when the purpose of the compartment is the trade of pig meat. They may either be dedicated to receiving animals and products only from ASF-free compartments, or if processing animals and products of a different status, operate effective segregation and biosecurity measures to ensure that the status of the animals and products derived from ASF-free compartments is maintained. This could be in the form of traceability and measures to prevent cross contamination, such as strict segregation measures in time and space when operating with animals sourced from and outside of the compartment (e.g. different lines, different days, etc). To facilitate understanding, the Group recommended that the guidelines provide examples showing how this may be applied. The Group also determined that vehicles used to transport commodities produced in the compartment should be included as part of the compartment.

## iii) Surveillance

The Group noted that the objectives of surveillance in a compartment should be the early detection of disease, and the demonstration of disease freedom.

The Group discussed the surveillance requirements as described in Article 4.5.5. of the *Terrestrial Code* and the possibility of adapting them to the level of risk as defined by the location of the compartment. The Group agreed that, for a compartment located in an ASF-free country or zone, conducting pathogen-specific surveillance as well as clinical and syndromic surveillance (*e.g.* testing animals displaying ASF-compatible clinical signs or lesions, or testing triggered by mortalities which exceed the baseline rate) within the compartment, and implementing an early warning system outside of the compartment, may be sufficient. For a compartment located in a country or zone not free of ASF, additional targeted, risk-based surveillance may be required for external surveillance. Risk factors (such as the presence of ASF in the wild pig population, outdoor free-ranging pigs, or soft ticks) should be considered in the surveillance design. In addition, certain changes in the epidemiology of the disease outside of the compartment may require changes in the external surveillance strategy to better identify the increased risk of introduction of ASF into the compartment posed by particular pathways.

The Group was of the view that the internal surveillance for a compartment should be defined irrespective of the epidemiological situation outside it. The risk mitigation measures and surveillance applied inside the compartment should be capable of resisting the incursion of disease, provide early detection should an incursion occur, and be able to demonstrate freedom. Thus, there should be no need to adjust the internal surveillance design when there is a change in the country status of ASF; however, requests by trading partners for additional assurance could arise and may be accommodated.

A distinction was made between external surveillance required to detect epidemiological changes outside of the compartment (e.g. early warning system, targeted risk-based surveillance), and the surveillance conducted as part of the national control programme. The former form of surveillance is a requirement of the compartmentalisation, thus incurring extra costs that may or may not need to be borne by the private sector, i.e. compartment operator.

The Group acknowledged that the surveillance strategy employed should be appropriate to the epidemiological situation of the country or zone and recommended the use of outcome-based guidelines for surveillance. In this regard, the Group recommended that the guidelines provide tools to measure the desired surveillance outcomes such as defining the desired level of confidence and probability of detection of ASF if it were present in the compartment.

In terms of the detection of diseases other than ASF (Article 4.5.7. of the *Terrestrial Code*), the Group recognised that, while the detection of some diseases would not necessarily imply a breakdown in the biosecurity measures against ASF, it would affect the confidence in the integrity of the compartment and merit some form of investigation. The Group agreed that monitoring production diseases such as porcine epidemic diarrhoea could be a good indicator of the integrity of the compartment.

#### iv) Approval of compartments and role of public-private partnerships

The Group discussed the approaches and steps for defining a compartment and recognised the important role of public-private partnerships (PPP) in ensuring the smooth implementation and recognition of a compartment. The existence of strong PPP was considered a prerequisite for the implementation of compartmentalisation.

In establishing a compartment, the private sector would require a supporting legislation framework that is in line with the *Terrestrial Code*, developed by the Competent Authority in consultation with the private sector. The private sector would have to ensure that its proposed ASF compartmentalisation operating manual is in line with relevant national regulations. Regulatory approvals for compartments should be issued by the Competent Authority, which also carries the responsibility of audits, although these may be outsourced to third party accreditors. The guidelines should consider the different possibilities for conducting audits.

Securing export markets rely on negotiations by the Competent Authority, supported by interactions between private sector trading partners. As per the WTO SPS Agreement, it is the responsibility of the Competent Authorities of trading partners to consider requests for recognition of a compartment, and they have the sovereign right to conduct appropriate inspections to inform their decision. Trading partners should communicate their decision on recognition along with the reasons for refusal if not agreed. Importing countries may have their own system for auditing and verifying the operations of a component. The Group noted that the specific procedures and requirements may differ from country to country, and that the guidelines should not be prescriptive in this regard but provide real-life examples.

### v) Business continuity (national and international benefits)

The Group recognised that priorities between the private and public sector may differ. In the event of disease occurrence, the Competent Authority would often implement zoning which provides a public good benefit to all holdings within a free zone, whereas compartmentalisation could be perceived as a measure that would benefit mostly the business operator since trade would continue, albeit only from the recognised compartments. In contrast, when zoning alone is implemented, the business operator in a non-free zone would not have the option to continue trade, regardless of the level of biosecurity or the absence of disease in their establishments.

Given that the private sector is mainly responsible for establishing the control measures in a compartment and bearing the associated costs, the Group acknowledged that for compartmentalisation to be a viable option, the cost-benefit analysis would have to be favourable for the private sector. Benefits to be derived include a health status that allows gaining access to international markets and local trade regardless of the disease status of the country, as well as a greater ability to move animals in the event of implementation of disease control measures in the country. The Group also identified that in order to incentivise business operators to establish compartments, there should be an established demand for the trade along with sufficiently strong Competent Authority relationships to underpin the agreement of compartments and recognition of safe trade of commodities derived from these compartments.

#### vi) Impact of changes of ASF status at national or regional level

The Group discussed the concept of 'zero down-time'<sup>2</sup> and considered the issue of trading partners losing confidence and not recognising the agreed compartment in the event of change in the ASF status of the country or zone where the compartment is located.

The Group agreed that while zero down-time should be the underlying principle of compartmentalisation to facilitate business continuity, some down-time might occur in practice, as the occurrence of disease could provoke concern by trading partners. Some members of the Group believed that interruption of business would be unnecessary and stressed that the biosecurity and management measures applied in the compartment should be robust enough to withstand external disease pressure and prevent disease incursion into the compartment. It was noted that the last paragraph of Article 4.5.7. of the *Terrestrial Code* could be misleading, as it could be interpreted that in the event of a change in the disease status of the country, the status of the compartment should be 're-evaluated' which defeats the purpose of compartmentalisation. The Group agreed that the re-evaluation of the compartment status should not imply full evaluation of the compartment system, but an assurance by the Competent Authority to trading partners as to the integrity of the compartment.

The Group recommended that actions to be taken in the event of occurrence of ASF should be outlined and documented when compartments are agreed between Competent Authorities. The Group also recognised that prompt and transparent communication with the trading partners on disease occurrence and results of the epidemiological investigations is paramount in providing this assurance. These aspects should be covered in the guidelines, including model trade certificates.

The Group also noted on the importance of making specific provisions for actions in relation to compartments in the national ASF contingency plan to ensure that the above points are not neglected in case of disease incursion (*e.g.* compartmentalisation agreements drawn up with trading partners prior the incursion). In addition, the management of compartments in the event of disease incursion (*e.g.* in relation to movement standstills) should be covered by veterinary legislation and/or the national ASF contingency plan.

### 5. Next Steps

The consultant will consider the outline that was agreed by the Group and further develop the compartmentalisation guidelines based on the discussion at this meeting and circulate the guidelines electronically for the Group's feedback by mid-April 2020.

<sup>&</sup>lt;sup>2</sup> No interruption of the trade in the case of ASF incursion in the country or zone where the compartment is located

# 6. Other matters

Arising from a request at the Code Commission meeting of February 2020, the Group discussed the issue of 'swill'. It noted that while swill feeding is a major risk of transmission of the disease, the *Terrestrial Code* does not give clear definition of 'swill'. The Group reviewed several existing definitions used by some Competent Authorities and noted differences in coverage depending on the approach to regulate swill feeding as well as the pig production setting.

The Group also noted that the definition should facilitate proper management of swill feeding under the various settings in which it is used, taking into account the significance of the reuse of waste while ensuring prevention of disease spread, particularly where feed resources are limited. The representative of the Code Commission noted the discussion to inform further consideration by the Code Commission.

## 7. Adoption of the report

The Group reviewed the draft report and guidelines outline provided by the rapporteur and agreed to circulate it electronically for comments before the final adoption.

.../Appendices

# AD HOC GROUP ON COMPARTMENTALISATION FOR AFRICAN SWINE FEVER Paris, 3 – 5 March 2020

#### Background

African swine fever (ASF) is an infectious disease of domestic and wild pigs of all breeds and ages, with the acute form of the disease being characterised by high fever, haemorrhages in the reticuloendothelial system and a high mortality rate. In recent years, the number of countries or territories with ASF has increased with notification from Member Countries in Sub Sahara Africa, Europe and Asia. Understanding the complex epidemiology of ASF as well as the pig value chain is required for the effective control of the disease, and to establish and maintain a specific animal health status.

Due to the unprecedented spread of ASF and the growing global threat of the disease, a call was made at the 87th General Assembly of OIE National Delegates for the establishment of a global initiative to control ASF with an endorsement of a resolution to this effect. This included a recommendation regarding Member Countries to consider the potential impact of ASF incursion and manage risks to business continuity by making use of the OIE standards in relation to zoning, compartmentalisation and commodity-based trade that can be recognised by trading partners within certification arrangements.

Currently, *Terrestrial Code* Chapter 4.4 on zoning and compartmentalization and Chapter 4.5. on application of compartmentalisation provide recommendations on the principles to Member Countries wishing to establish and maintain different subpopulations with specific health status within their territory, and a structured framework for the application and recognition of compartments. In addition, Chapter 15.1. on African swine fever provides general criteria required for the determination of ASF status of a country, zone or compartment. However, there remains a need for a practical guideline that incorporates the general principles outlined in the *Terrestrial Code* but provides specific requirements and guidance for application and validation of compartmentalization that can be recognised internationally.

In this regard, the Director General decided to convene an *ad hoc* Group to contribute to the development of a guideline on compartmentalization for ASF that will support Member Countries in their efforts to prepare for and minimise the impact of ASF incursion through business continuity.

#### **Terms of Reference**

Consider the latest scientific evidence regarding the epidemiology and control strategies for ASF and provide expert opinions and guidance for the development of a guideline on compartmentalisation for ASF based on the principles described in the *Terrestrial Code*.

The *modus operandi* of the *ad hoc* Group will include a combination of electronic consultations and physical meeting in OIE Headquarter-Paris (early March 2020).

The draft guidelines would take into account, but not be limited to:

- a. The relevant chapters of the Terrestrial Code;
- b. Separation from sources of infection by geography, infrastructure and biosecurity;
- c. Key components, roles and responsibilities of Veterinary Authority and private sector
- d. Process for the Veterinary Authority to designate and certify compartment for ASF
- e. Process by which trading partners may validate and recognise the subpopulation designated by compartmentalisation

# AD HOC GROUP ON COMPARTMENTALISATION FOR AFRICAN SWINE FEVER Paris, 3 – 5 March 2020

## Agenda

- 1. Opening of the meeting
- 2. Adoption of the agenda and background introduction
- 3. General discussion on outline of compartmentalisation guidelines
- 4. Technical items
  - i) Biosecurity
  - ii) Supply chain
  - iii) Surveillance
  - iv) Approval of compartments and role of public-private partnerships
  - v) Business continuity (national and international benefits)
  - vi) Impact of changes of ASF status at national or regional level
- 5. Next steps
- 6. Other matters
- 7. Adoption of the report

# AD HOC GROUP ON COMPARTMENTALISATION FOR AFRICAN SWINE FEVER Paris, 3 – 5 March 2020

#### List of participants

#### **MEMBERS**

Dr Nigel Gibbens

Animal health policy and disease control consultant Itinerant Vets Ltd Nightingale House 46-48 East Street Epsom, Surrey KT17 1HQ UNITED KINGDOM tinerant.vets Damail.com

#### Dr Francisco Reviriego

Advisor on crisis management European Commission Belliard 232 building (B232) Rue Breydel 4 / Breydelstraat 4 1040 Bruxelles / Brussel BELGIUM Francisco.REVIRIEGO-GORDEJO@ec.europa.eu

**Dr Gordon Spronk** Chariman of the Board Pipestone Holdings LLC 1300 S Highway 75 Pipestone MN 56164 UNITED STATES OF AMERICA gordon.spronk@pipestone.com

Dr Anne Meyer Consultant (Epidemiology)

Ausvet Euròpe 3 Rue Camille Jordan 69001, Lyon FRANCE usvet com au

#### Consultant

Professor Dirk Pfeiffer Room 506, 5/F, Block 2, To Yuen Building, 31 To Yuen Street City University of Hong Kong HỔNG KONG SAR dirk ofei fer@citvu edu hk

#### Dr James A Roth

Director, Center for Food Security & Public Health 2156 Department of Veterinary Microbiology and Preventive Medicine College of Veterinary Medicine Iowa State University Ames, Iowa 50011 UNITED STATES OF AMERICA Jaroth@iastate.edu

**Dr Nguyen Van Long** Head of Epidemiology Department of Animal Health Ministry of Agriculture and Rural Development 15 Lane 78 Giai Phong Road Dong Da Hanoi VIFŤNAM long.dahvn@gmail.com

Dr Yan Zhichun Chief Officer of Science New Hope Liuhe Co., Ltd 11 / F, Block A, T3, Wangjing SOHO Center No. 10 Wangjing Street Chaoyang District, Beijing 100102 PEOPLE'S REPUBLIC OF CHINA zhichunyan@vip.tom.com

#### Dr Mohit Baxi

Director, Animal Import/Export Canadian Food Inspection Agency 59 Camelot Drive, Floor 3, Room 137 E Ontario, Ottawa K1A 0Y9 CANADA mohit.baxi@canada.ca

Dr Mpho Maja

Director of Animal Health Department of Agriculture, Forestry and Fisheries 20 Steve Biko former (Beatrix) Street Arcadia, Pretoria, 0001 SOUTH AFRICA Mpho.Maja@daff.gov.za

Dr Jacques Servière IMS Scientific Advisor International Meat Secretariat 5 Rue Lespagnol 75020 Paris FRANCE jacques.serviere@meat-ims.org

Dr Jeremy Hon-pong Ho Veterinary Officer (Animal Health) Animal Health Division, Agriculture, Fisheries and Conservation Department PB13, Farm Section, Tai Lung Experimental Farm Lin Tong Mei, Fan Kam Road, Sheung Shui, New Territories HONG KONG SAR Dafcd.gov.hk eremy hp ho(

#### **Representative of Terrestrial Animal Health Standards Commission**

#### Dr Masatsugu Okita

2nd Vice-President Director, International Animal Health Affairs Office Animal Health Division Ministry of Agriculture, Forestry and Fisheries 1-2-1 Kasumigaseki, Chiyoda-ku Tokyo 100-8950, JAPAN sugu okita130@maff.go.jp

#### **Representative of Scientific Commission for Animal Diseases**

#### Dr Silvia Bellini

Member Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna 'Bruno Ubertini' Via Bianchi 9 25124 Brescia, ITALY Tel: +39 366 588 8774

#### **OIE Headquarters**

Dr Gregorio Torres Head of the Science Department g.torres@oie.int

Dr Jee Yong Park Chargé de mission Science Department i.v.park@oie.int

Dr Charmaine Chng Chargée de mission Standards Department c.chna@oie.int

# **Revised Outline for ASF Compartmentalisation Guidelines**

## 1. Purpose and readership

Brief description of the purpose of these guidelines and the target audience.

## 2. Introduction

This section introduces the concepts of zoning and compartmentalisation, and explains the incentive for implementing compartmentalisation.

#### 2.1. Zoning, compartmentalisation and commodity-based trade

Introduce the Terrestrial Code concept of zoning, compartmentalisation and commodity-based trade. Explain the difference between the zoning and compartmentalisation, including advantages and disadvantages when choosing between the two in terms of disease control and safe trade. For the latter, commodity-based trade is an additional option.

#### 2.2. National and international benefits of compartmentalisation

Describe the main reasons for implementing compartmentalisation with particular reference to the benefits associated with business continuity and improvement of animal health.

## 3. Outcomes required for successful ASF compartmentalisation

This section focuses on the principles and outcomes of an 'outcomes-based approach' to compartmentalisation.

#### 3.1. Description of pork supply chain

Explain the approach to describing the pork supply chain (including industry structure) associated with the proposed compartment. It needs to be explained that the compartment will be part of a particular pork supply chain, and that it directly or indirectly links to other pork supply chains within the same country or beyond. Need to recognise the diversity of supply chains between and within countries. An output will be a visual description of the pork supply chain.

#### **3.2.** Definition of the compartment

Describe the process of defining a compartment together with its functional units, with examples of what could be and what could not be a compartment, and considerations to bear in mind, such as the product intended for trade. This needs to be done within the context of the underlying pork supply chain.

#### 3.3. Protection from introduction of ASF virus

Focusing on the ultimate outcome of ASF compartmentalisation, i.e. protection from introduction of ASF virus, describe the approaches to identifying and managing the associated risks.

#### **3.3.1.** ASF risk pathways

Identify the risk pathways for the compartment, based on an understanding of the pork supply chain of which the compartment is part or associated. An output will be a visual description of the risk pathways.

### 3.3.2. Risk assessment

Utilising the ASF risk pathways, describe the approach to conducting a risk assessment for introduction of ASF virus to the compartment. The outputs will be estimates of risk and uncertainty associated with each risk pathway, and the contribution of each step in the pathway to overall risk for the particular risk pathway.

#### 3.3.3. Risk management

The section will describe the approach that utilises risk assessment to develop specific risk mitigation actions (including biosecurity, surveillance and traceability) that reduce the ASF virus introduction risk associated with each risk pathway.

3.3.3.1. Biosecurity
3.3.3.2. Surveillance
3.3.3.3. Diagnostic capabilities and procedures
3.3.3.4. Traceability

#### 4. Implementation

Describe the approaches and steps for implementation and recognition of a compartment.

### 4.1. Roles and responsibilities

Identify the roles and responsibilities of different stakeholders. Describe what is to be done by which party during the different stages of the implementation process.

#### 4.1.1. Veterinary authority

4.1.1.1. Exporting country4.1.1.2. Importing country

#### 4.1.2. Private industry

#### 4.1.3. Third parties

#### 4.2. Public-private partnership

Emphasise the importance of public-private partnerships (PPP) for compartmentalisation as a prerequisite for ensuring smooth implementation and recognition of a compartment. Refer to OIE Guidelines for PPP.

#### 4.3. Regulatory framework

Describe the legislation and national standards for compartmentalisation. Reference to OIE Code chapter 3.4. Veterinary legislation and chapters 5.1. and 5.2. on certification.

#### 4.4. Submission of compartment application by industry partner

Describe the details of the compartment submission, such as what information and documents are to be included in the application document for a compartment to the Competent Authority, including special considerations if the compartment is located in a zone not free from ASF.

#### 4.5. Approval of compartment

Describe the approval process of a compartment application. This includes a description of the independent auditing process and other relevant actions needed before compartment approval.

#### 4.6. Publication of approved compartment

Emphasise the importance of public transparency of approved compartments with suggestions for publication including the official website of the Competent Authority, OIE Bulletins, OIE website.

#### 4.7. Compartment recognition between trading partners

Describe the process for obtaining recognition of a compartment between trading partners based on bilateral negotiation and agreement between Competent Authorities of trading partners.

#### 4.8. Maintenance of compartment

Describe the actions to be taken for maintenance of an approved compartment, emphasising the importance of independent auditing.

#### 4.9. Response to changes in ASF status outside compartment

Describe the response in case of changes of ASF status at national or regional level where the compartment is located, such as requiring evaluation of the compartment integrity by the Competent Authority to give assurance to trading partners, in order to minimise down-time.

#### 4.10. Response to changes in ASF status of compartment

Describe the response in case of changes of ASF status of the compartment, including a contingency plan that describes corrective actions to be taken and the procedure for recovery.

----- Targeting around 20 pages of text for the above sections ------

#### 5. Tools

## 5.1. General model for compartmentalisation

Simple model to indicate the major elements that must be included in implementation of compartmentalisation.

#### 5.2. Flowchart of compartmentalisation process

Flowchart summarising the major steps in the compartmentalisation process.

#### 5.3. Value chain, risk pathway diagram and risk assessment templates

Templates to assist in conducting value chain analyses, develop risk pathway diagrams and risk assessments, including sample checklists or questionnaires.

#### 5.4. Template of national standards

Template of national standards to provide guidance for development of legislation as a regulatory framework for compartmentalisation.

#### 5.5. Compartment checklists

Outcome-based checklist for the requirements of a compartment, non-prescriptive in nature.

#### 5.6. Assessment criteria

Describe the criteria and principles for assessing a compartment.

#### 5.7. Audit process examples

Examples to assist the auditing process.

#### 5.8. Tools for estimating the statistical confidence of freedom of ASF virus for the compartment

Tools for assessing the statistical sensitivity of the surveillance plan of a compartment and evaluating the confidence provided by the surveillance system in the compartment's freedom from ASF.

#### 5.9. Template of compartment operations manual

Template of compartment operations manual to provide guidance with respect to the major elements to be included to facilitate effective operation of a compartment.

## 6. Appendices

## 6.1. Abbreviations and definitions

List of abbreviations and definitions of terms used throughout the guidelines, primarily based on the OIE Code.

#### 6.2. Examples of compartment experience

Describe how compartmentalisation could benefit animal health using examples of experience with compartmentalisation, such as from aquatic animal health, preferably include both positive and negative examples.

### 6.3. ASF virus epidemiology

Briefly summarize recent reviews of ASF epidemiology, including but not limited to clinical signs, virus characteristics, transmission, geographic distribution.

### 6.4. Risk mitigation measures

Describe possible ASF virus risk mitigation measures considering their practicality and adaptation to different levels of risk as estimated by risk assessment and the specific steps included in relevant risk pathways.

#### 6.5. Reference examples for outcome-based criteria

While the content of the guidelines will not be prescriptive, this Appendix provides examples to give a more detailed indication of the criteria, such as specifications of the physical barriers and distance for physical separations.

#### 6.6. Achieving recognition of compartments by trading partners

Describe the steps and requirements to achieve compartment recognition by trading partners.