

# Terrestrial Animal Health Standards Commission Report September 2016

## CHAPTER 4.3.

### ZONING AND COMPARTMENTALISATION

#### Article 4.3.1.

##### Introduction

For the purposes of the *Terrestrial Code*, 'zoning' and 'regionalisation' have the same meaning.

The purpose of this chapter is to provide recommendations on the principles of zoning and compartmentalisation to Member Countries wishing to establish and maintain different *subpopulations* with specific health status within their territory. These principles should be applied in accordance with the relevant chapters of the *Terrestrial Code*. This chapter also outlines a process by which trading partners may recognise such *subpopulations*.

Establishing and maintaining a *disease-free* status throughout the country should be the final goal for Member Countries. However, given the difficulty of this of establishing and maintaining a *disease-free* status for an entire territory, especially for *diseases*, the entry of which is difficult to control through measures at national boundaries, there may be benefits to a Member Country in establishing and maintaining a *subpopulation* with a distinct specific health status within its territory for the purpose of *disease control* or *international trade*. *Subpopulations* may be separated by natural or artificial geographical barriers or, in certain situations, by the application of appropriate management.

Zoning and compartmentalisation are procedures implemented by a Member Country under the provisions of this chapter with a view to defining *subpopulations* of distinct health status within its territory for the purpose of *disease control* and/or *international trade*. While zoning applies to an animal *subpopulation* defined primarily on a geographical basis (using natural, artificial or legal boundaries), compartmentalisation applies to an animal *subpopulation* defined primarily by management and husbandry practices related to *biosecurity*. In practice, spatial considerations and good management, including *biosecurity plans*, play important roles in the application of both concepts.

A particular application of the concept of zoning is the establishment of a *containment zone*. In the event of limited *outbreaks* of a specified *disease* within an otherwise free country or zone, a single *containment zone*, which includes all cases, can be established for the purpose of minimizing the impact on the entire country or zone.

This chapter is to assist Member Countries wishing to establish and maintain different *subpopulations* within their territory using the principles of compartmentalisation and zoning. These principles should be applied in accordance with the measures recommended in the relevant *disease* chapter(s). This chapter also outlines a process through which trading partners may recognise such *subpopulations*. This process is best implemented by trading partners through establishing parameters and gaining agreement on the necessary measures prior to *outbreaks of disease*.

Before trade in *animals* or their products may occur, an *importing country* needs to be satisfied that its *animal health status* will be appropriately protected. In most cases, the import regulations developed will rely in part on judgements made about the effectiveness of sanitary procedures undertaken by the *exporting country*, both at its borders and within its territory.

As well as contributing to the safety of *international trade*, zoning and compartmentalisation may assist *disease control* or eradication within a Member Country's territory. Zoning may encourage the more efficient use of resources within certain parts of a country and compartmentalisation may allow the functional separation of a *subpopulation* from other domestic *animals* or *wild animals* through *biosecurity* measures, which a zone (through geographical separation) would not achieve through geographical separation. In a country where a *disease* is endemic, establishment of *free zones* may assist in the progressive control and eradication of the *disease*. Following a *disease outbreak* in a previously free country or zone, to facilitate *disease control* and the continuation of trade, the use of zoning may allow a Member Country to limit the extension of the *disease* to a

defined restricted area, while preserving the status of the remaining territory, the **For the same reasons,** the use of compartmentalisation may allow a Member Country to take advantage of epidemiological links among subpopulations or common practices relating to biosecurity, despite diverse geographical locations, to facilitate disease control and/or the continuation of trade.

A Member Country may thus have more than one zone or compartment within its territory.

Zoning and compartmentalisation cannot be applied to all diseases but separate requirements will be developed for each disease for which the application of zoning or compartmentalisation is considered appropriate.

To regain free status following a disease outbreak in a zone or compartment, Member Countries should follow the recommendations in the relevant disease chapter in the Terrestrial Code.

The purpose of this chapter is to provide recommendations on the principles of zoning and compartmentalisation to Member Countries wishing to establish and maintain different subpopulations within their territory. These principles should be applied in accordance with the relevant chapters of the Terrestrial Code. This chapter also outlines a process by which trading partners may recognise such subpopulations.

#### Article 4.3.2.

##### General considerations

The Veterinary Services of an exporting a Member country Country which that is establishing a zone or compartment within its territory for international trade purposes should clearly define the subpopulation in accordance with the recommendations in the relevant chapters in of the Terrestrial Code, including those on surveillance, and the identification and traceability of live animals. The Veterinary Services of an exporting country should be able to explain to the Veterinary Services of an importing country the basis for claiming a distinct animal health status for the given zone or compartment under consideration.

The procedures used to establish and maintain the distinct animal health status of a zone or compartment will depend on the epidemiology of the disease, including in particular the presence and role of vectors and susceptible wildlife species, and environmental factors, as well as on the application of biosecurity and sanitary measures.

Biosecurity and surveillance are essential components of zoning and compartmentalisation, and the arrangements should be developed through active cooperation of industry and Veterinary Services.

The authority, organisation and infrastructure of the Veterinary Services, including laboratories, should be clearly documented in accordance with the Chapters 3.1. and 3.2. on the evaluation of Veterinary Services of the Terrestrial Code, to provide confidence in the integrity of the zone or compartment. The final authority of over the zone or compartment, for the purposes of domestic and international trade, lies with the Veterinary Authority. The Veterinary Authority should conduct an assessment of the resources needed and available to establish and maintain a zone or compartment. These include the human and financial resources and the technical capability of the Veterinary Services (and of the relevant industry and production system (especially in the case of a compartment), including for disease surveillance and diagnosis.

In the context of maintaining the animal health status of a population or subpopulation of a country, zone or compartment, references to 'import', 'importation' and 'imported animals/ products' found in the Terrestrial Code apply both to importations into a the country as well as and to the movements of animals and their products into the zones and/or compartments. Such movements should be the subject of appropriate sanitary measures and biosecurity to preserve the animal health status of the country, zone or compartment.

The Veterinary Services should provide movement certification, and carry out documented periodic inspections of facilities, biosecurity, records and surveillance procedures. Veterinary Services should conduct or audit surveillance, reporting and laboratory diagnostic examinations.

The exporting country should be able to demonstrate, through detailed documentation provided to the importing country, that it has implemented the recommendations in the Terrestrial Code for establishing and maintaining such a zone or compartment.

An importing country should recognise the existence of this zone or compartment when the appropriate measures recommended in the Terrestrial Code are applied and the Veterinary Authority of the exporting country certifies that this is the case.

The exporting country should conduct an assessment of the resources needed and available to establish and maintain a zone or compartment for international trade purposes. These include the human and financial

resources, and the technical capability of the *Veterinary Services* (and of the relevant industry and production system, in the case of a *compartment*) including *disease surveillance* and diagnosis.

~~*Biosecurity* and *surveillance* are essential components of zoning and compartmentalisation, and the arrangements should be developed through cooperation of industry and *Veterinary Services*.~~

~~Industry's responsibilities include the application of *biosecurity* measures, documenting and recording movements of *animals* and personnel, quality assurance schemes, monitoring the efficacy of the measures, documenting corrective actions, conducting *surveillance*, rapid reporting and maintenance of records in a readily accessible form.~~

Industry's responsibilities include the application of *biosecurity*, documenting and recording movements of *animals* and personnel, quality assurance schemes, documenting corrective actions, conducting *surveillance*, rapid reporting and maintenance of records in a readily accessible form.

~~The *Veterinary Services* should provide movement certification, and carry out documented periodic inspections of facilities, *biosecurity* measures, records and *surveillance* procedures. *Veterinary Services* should conduct or audit *surveillance*, reporting and *laboratory* diagnostic examinations.~~

#### Article 4.3.3.

#### ~~Principles for defining and establishing a zone or compartment, including protection and containment zones~~

~~In conjunction with the above considerations, the The following principles should apply when Member Countries define a *zone* or a *compartment*.~~

- 1) ~~The extent of a *zone* and its geographical limits should be established by the *Veterinary Authority* on the basis of natural, artificial and/or legal boundaries, and made public through official channels.~~
- 2) ~~A *protection zone* may be established to preserve the health status of *animals* in a free country or *zone*, from adjacent countries or *zones* of different *animal health status*. Measures should be implemented based on the epidemiology of the *disease* under consideration to prevent introduction of the pathogenic agent and to ensure early detection.~~

~~These measures should include intensified movement control and *surveillance* and may include:~~

- a) ~~*animal identification* and *animal traceability* to ensure that *animals* in the *protection zone* are clearly distinguishable from other populations;~~
- b) ~~*vaccination* of all or at risk susceptible *animals*;~~
- c) ~~testing and/or *vaccination* of *animals* moved;~~
- d) ~~specific procedures for sample handling, sending and testing;~~
- e) ~~enhanced *biosecurity* including cleansing *disinfection* procedures for transport means, and possible compulsory routes;~~
- f) ~~specific *surveillance* of susceptible *wildlife* species and relevant *vectors*;~~
- g) ~~awareness campaigns to the public or targeted at breeders, traders, hunters, *veterinarians*.~~

~~The application of these measures can be in the entire free *zone* or in a defined area within and/or outside the free *zone*.~~

- 3) ~~In the event of limited *outbreaks* in a country or *zone* previously free of a *disease*, a *containment zone* may be established for the purposes of trade. Establishment of a *containment zone* should be based on a rapid response including:~~
  - a) ~~Appropriate standstill of movement of *animals* and other *commodities* upon notification of suspicion of the specified *disease* and the demonstration that the *outbreaks* are contained within this zone through epidemiological investigation (trace-back, trace-forward) after confirmation of *infection*. The primary~~

*outbreak* has been identified and investigations on the likely source of the *outbreak* have been carried out and all cases shown to be epidemiologically linked.

- b) ~~A stamping-out policy or another effective control strategy aimed at eradicating the disease should be applied and the susceptible animal population within the containment zones should be clearly identifiable as belonging to the containment zone. Increased passive and targeted surveillance in accordance with Chapter 1.4. in the rest of the country or zone should be carried out and has not detected any evidence of infection.~~
  - e) ~~Measures consistent with the disease-specific chapter should be in place to prevent spread of the infection from the containment zone to the rest of the country or zone, including ongoing surveillance in the containment zone.~~
  - d) ~~For the effective establishment of a containment zone, it is necessary to demonstrate that there have been no new cases in the containment zone within a minimum of two incubation periods from the last detected case.~~
  - e) ~~The free status of the areas outside the containment zone would be suspended pending the establishment of the containment zone. The free status of these areas could be reinstated, once the containment zone is clearly established, irrespective of the provisions of the disease-specific chapter.~~
  - f) ~~The containment zone should be managed in such a way that it can be demonstrated that commodities for international trade can be shown to have originated outside the containment zone.~~
  - g) ~~The recovery of the free status of the containment zone should follow the provisions of the disease-specific chapter.~~
- 24) The factors defining a *compartment* should be established by the *Veterinary Authority* on the basis of relevant criteria such as management and husbandry practices related to *biosecurity*, and made public communicated to the relevant industry through official channels.
- 35) ~~Animals and herds/flocks belonging to such subpopulations of zones or compartments need to should be recognisable as such through a clear epidemiological separation from other animals and all things factors presenting a disease risk. For a zone or compartment, the The Veterinary Authority should document in detail the measures taken to ensure the identification of the subpopulation and the establishment and maintenance of its health status through a biosecurity plan. The measures used to establish and maintain the distinct animal health status of a zone or compartment should be appropriate to the particular circumstances, and will depend on the epidemiology of the disease, environmental factors, the health status of animals in adjacent areas, applicable biosecurity measures (including movement controls, use of natural, and artificial or legal boundaries, the spatial separation of animals, control of fomites, and commercial management and husbandry practices), and surveillance.~~
- 46) Relevant *animals and animal products* within the *zone* or *compartment* should be identified in such a way that their movements are traceable. Depending on the system of production, identification may be done at the ~~herd/flock~~ or individual animal level. Relevant animal movements into and out of the *zone* or *compartment* should be well documented and controlled. The existence of a valid an animal identification system is a prerequisite to assess the integrity of the *zone* or *compartment*.
- 57) For a *compartment*, the *biosecurity plan* should describe the partnership between the relevant industry and the *Veterinary Authority*, and their respective responsibilities. It should also describe the routine standard operating procedures to provide clear evidence that the *surveillance* conducted, the *live animal identification* and *traceability* system, and the management practices are adequate to meet the definition of the *compartment*. In addition to information on controls of movements of relevant animals and animal products animal movement controls, the plan should include ~~herd/or flock~~ production records, feed sources, *surveillance* results, birth and *death* records, visitor logbook, morbidity and mortality history, medications, *vaccinations*, documentation of training of relevant personnel and any other criteria necessary for evaluation of *risk management*. The information required may vary in accordance with the species and *diseases* under consideration. The *biosecurity plan* should also describe how the measures will be audited to ensure that the *risks* are regularly ~~re-assessed~~ reassessed and the measures adjusted accordingly.

Articles 4.3.4. to 4.3.7. describe different types of zones that can be established by Member Countries. However, other types of zones may be established for the purposes of disease control or trade.

#### Article 4.3.4.

##### Free zone

A free zone is one in which the absence of a specific disease, infection or infestation in an animal population has been demonstrated by surveillance in accordance with the relevant requirements of the Terrestrial Code.

In conjunction with Articles 4.3.2. and 4.3.3., and depending on the prevailing epidemiological situation, the attainment or maintenance of free status demonstration may require past or ongoing pathogen-specific surveillance, as well as appropriate biosecurity and sanitary measures, within the zone and at its borders. The surveillance should be conducted in accordance with Chapter 1.4. or and the relevant disease-specific chapters of the Terrestrial Code.

The free status can apply to one or more susceptible animal species populations, domestic or wild.

So long as an ongoing surveillance demonstrates there is no occurrence of the specific disease, infection or infestation, the zone keeps maintains its free status.

#### Article 4.3.5.

##### Infected zone

An infected zone is one either in which a disease, infection or infestation either has been diagnosed, or that does not meet disease freedom provisions of the relevant chapters of the Terrestrial Code, the absence of which cannot be demonstrated. In the latter case, the disease-specific chapter of the Terrestrial Code contains an article describing the conditions for free and infected status.

An infected zone may be:

- = a zone of a country where the disease has been present for a long period and has not yet been eradicated, while other zones of the country have been are free;
- = a zone of a previously free country or zone previously free, in which the disease has been introduced or reintroduced, while the rest of the country or zone remains unaffected.

To gain free status in an infected zone, or regain free status following a disease outbreak in a previously free zone, Member Countries should follow the recommendations in the relevant disease-specific chapters of the Terrestrial Code.

#### Article 4.3.6.

##### Protection zone

A protection zone may be established to preserve the animal health status of an animal population in a free country or a free zone from introduction of a pathogenic agent of a specific disease, infection or infestation from adjacent countries or zones of different animal health status. A protection zone can be established within or outside the free zone or within the free country.

Biosecurity and sanitary measures should be implemented in the protection zone based on the animal management systems, the epidemiology of the disease under consideration and the epidemiological situation prevailing in an the adjacent infected country or zone countries or zones.

These measures should include intensified movement control and surveillance and specific animal identification and animal traceability to ensure that animals in the protection zone are clearly distinguishable from other populations, and may also include:

- 1) specific animal identification and animal traceability to ensure that animals in the protection zone are clearly distinguishable from other populations;

- 12) vaccination of all or at risk susceptible animals;
- 23) testing or vaccination of animals moved;
- 34) specific procedures for sample handling, dispatching and testing;
- 45) enhanced biosecurity including disinfection procedures for vehicles/vessels, vehicles for transportation of feed or fodder, and possible compulsory routes;
- 56) specific surveillance of susceptible wildlife and relevant vectors;
- 67) awareness campaigns aimed at the public or targeted at breeders, traders, hunters or veterinarians.

The protection zone may be a part of an infected zone or of a free zone.

#### Article 4.3.7.

##### Containment zone

In the event of limited outbreaks in a country or zone previously free from a disease, a containment zone which includes all outbreaks may be established to minimise the impact on the rest of the country or zone for the purposes of disease control or trade.

A containment zone is an infected zone that should be managed in such a way that commodities for international trade can be shown to have originated from inside or outside the containment zone.

Establishment of a containment zone should be based on a rapid response, prepared in a contingency plan, including:

- 1) appropriate control standsstill of movement of animals and other commodities upon notification of suspicion of the specified disease;
- 2) epidemiological investigation (trace-back, trace-forward) after confirmation of infection, demonstrating that the outbreaks are epidemiologically linked-related and all contained within the defined boundaries of the containment zone;
- 3) stamping-out policy or another effective emergency control strategy aimed at eradicating the disease;
- 4) clear identification of the susceptible animal population within the containment zone enabling its recognition as belonging to the containment zone;
- 5) increased passive and targeted surveillance in accordance with Chapter 1.4, in the rest of the country or zone demonstrating no evidence of infection;
- 6) biosecurity and sanitary measures, including ongoing surveillance and control of the movement of animals and commodities within and from in the containment zone, consistent with the disease-specific chapter, when there is one, to prevent spread of the infection from the containment zone to the rest of the country or zone.

For the effective establishment of a containment zone, it is necessary to demonstrate that either:

- a) there have been no new cases in the containment zone within a minimum of two incubation periods from the last detected case.

OR

- b) the containment zone comprises an infected zone where outbreaks may continue to occur and a protection zone, where no outbreaks have occurred, which separates the infected zone from the rest of the country or zone.

The free status of the areas outside the containment zone would be is suspended pending demonstration of the effectiveness effective establishment of the containment zone. Once the containment zone has been established, the free status of these areas may then be is reinstated, irrespective of the provisions of the disease specific chapter.

The free status of the containment zone should be regained in accordance with Article 1.4.6. or relevant disease-specific chapters.

The containment zone is an infected zone that should be managed in such a way that commodities for international trade can be shown to have originated from inside or outside the containment zone. Well managed, it may allow the rest of the country or zone to keep their free status.

Article 4.3.8.

Bilateral recognition by trading countries

Trading partners should exchange information allowing the recognition of different subpopulations within their respective territories. This recognition process is best implemented through establishing parameters and gaining agreement on the necessary measures prior to outbreaks of disease.

The Veterinary Services of an exporting country should be able to explain to the Veterinary Services of an importing country the basis for claiming a distinct animal health status for the given zone or compartment under consideration.

The exporting country should be able to demonstrate, through detailed documentation provided to the importing country, that it has implemented the recommendations in the Terrestrial Code for establishing and maintaining such a zone or compartment.

An importing country should recognise the existence of this zone or compartment when the appropriate measures recommended in the Terrestrial Code are applied and the Veterinary Authority of the exporting country certifies that this is the case.

-----

— Text deleted.