CHAPTER 4.4.

ZONING AND COMPARTMENTALISATION

Article 4.4.1.

Introduction

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 achieving this goal, there may be benefits to a Member Country in establishing and maintaining a *subpopulation* with a specific health status within its territory for the purposes of *international trade* or disease prevention or control. *Subpopulations* may be separated by natural or artificial geographical barriers or by the application of appropriate *biosecurity* management.

While zoning applies to an animal *subpopulation* defined primarily on a geographical basis, compartmentalisation applies to an animal *subpopulation* defined primarily by management and husbandry practices related to *biosecurity*. In practice, spatial considerations and appropriate management, including *biosecurity plans*, play important roles in the application of both concepts.

Zoning may encourage the more efficient use of resources within certain parts of a country. Compartmentalisation may allow the functional separation of a *subpopulation* from other domestic or *wild animals* through *biosecurity*, which would not be achieved 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. To facilitate disease control and the continuation of trade following a disease *outbreak* in a previously free country or *zone*, 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. 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.

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

Article 4.4.2.

General considerations

The *Veterinary Services* of a Member Country that is establishing a *zone* or *compartment* within its territory should clearly define the *subpopulation* in accordance with the recommendations in the relevant chapters of the *Terrestrial Code*, including those on *surveillance*, on *animal identification* and *animal traceability* and on *official control programmes*.

The procedures used to establish and maintain the specific *animal health status* of a *zone* or *compartment* depend on the epidemiology of the disease, including the presence and role of *vectors* and susceptible *wildlife* and environmental factors, on the animal production systems as well as on the application of *biosecurity* and *sanitary measures*, including movement control.

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

The *Veterinary Services*, including *laboratories*, should be established and should operate in accordance with Chapters 3.2. and 3.3., to provide confidence in the integrity of the *zone* or *compartment*. The final authority 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 *surveillance*, diagnosis and, when appropriate, *vaccination*, treatment and protection against *vectors*.

In the context of maintaining the *animal health status* of a *population* or *subpopulation* of a country, *zone* or *compartment*, importations into the country as well as movements of *animals* and their products, and fomites, into the *zones* or *compartments* should be the subject of appropriate *sanitary measures* and *biosecurity*.

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

The production sector's responsibilities include, in consultation with the *Veterinary Services* if appropriate, the application of *biosecurity*, documenting and recording movements of *commodities* and personnel, managing quality assurance schemes, documenting the implementation of corrective actions, conducting *surveillance*, rapid reporting and maintenance of records in a readily accessible form.

Article 4.4.3.

Principles for defining and establishing a zone or compartment

The following principles 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 or legal boundaries, and made public through official channels.
2) 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 communicated to the relevant operators through official channels.
3) *Animals* and *herds* or *flocks* belonging to *subpopulations* of *zones* or *compartments* should be recognisable as such through a clear epidemiological separation from other *animals* and all factors presenting a *risk*. The measures taken to ensure the identification of the *subpopulation* and to establish and maintain its health status through a *biosecurity plan* should be documented in detail. These measures should be appropriate to the particular circumstances, and depend on the epidemiology of the disease, environmental factors, the health status of *animals* in adjacent areas, applicable *biosecurity* (including movement controls, use of natural, artificial or legal boundaries, spatial separation of *animals*, control of fomites, and commercial management and husbandry practices), and *surveillance*.
4) Relevant *commodities* 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* or *flock* or individual animal level. Relevant movements of *commodities* into and out of the *zone* or *compartment* should be well documented and controlled. The existence of an *animal identification system* is a prerequisite to assess the integrity of the *zone* or *compartment*.
5) 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 standard operating procedures to provide clear evidence that the *surveillance* conducted, the *animal identification* and *traceability* system, and the management and husbandry practices are adequate to meet the definition of the *compartment*. In addition to information on controls of movements of relevant *commodities*, the plan should include *herd* or *flock* production records, *feed*, water and bedding sources, *surveillance* results, birth and death records, visitor logbook, morbidity and mortality history and investigations, 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 being managed and regularly reassessed, and the measures adjusted accordingly.

Articles 4.4.4. to 4.4.7. 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 4.4.4.

Free zone

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

In conjunction with Articles 4.4.2. and 4.4.3., and depending on the prevailing epidemiological situation, the attainment or maintenance of free status may require past or ongoing specific *surveillance* and *vector 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. and the relevant 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 *infection* or *infestation*, and principles determined for its definition and establishment are respected, the *zone* maintains its free status.

Article 4.4.5.

Infected zone

An *infected zone* is one either in which an *infection* or *infestation* has been confirmed, or that is defined as such in the relevant chapters of the *Terrestrial Code*.

An *infected zone* in which an *infection* or *infestation* has been confirmed may be:

1) a *zone* of a country where the *infection* or *infestation* is present and has not yet been eradicated, while other *zones* of the country may be free; or
2) a *zone* of a previously free country or *zone*, in which the *infection* or *infestation* 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 an *outbreak* in a previously *free zone*, Member Countries should follow the recommendations in the relevant chapters of the *Terrestrial Code*.

Article 4.4.6.

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* by preventing the introduction of a pathogenic agent of a specific *infection* or *infestation* from neighbouring countries or *zones* of different *animal health status*.

A *protection zone* may be established as a temporary measure in response to an increased *risk* of disease. In such case, it may be maintained up to 24 months.

The *protection zone* can be established within or outside a *free zone* or within a free country. Based on the results of a *risk assessment*, more than one *protection zone* may be established.

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

In addition to the general considerations in Article 4.4.2. and the principles in Article 4.4.3., these measures should include intensified movement control, *animal identification* and *animal traceability* to ensure that *animals* in the *protection zone* are clearly distinguishable from other populations. *Vaccination* of susceptible *animals* in accordance with Chapter 4.18. may also be applied.

Increased *surveillance*, in accordance with Chapter 1.4. and the relevant disease-specific chapter, should be implemented in the *protection zone* and the rest of the country or *zone*, including *surveillance* of *wildlife* and *vectors* as relevant.

If the *animal health status* of an established *protection zone* changes owing to the occurrence of a *case*, the *animal health status* of the rest of the country or *zone* is not affected, provided the measures in place prevent the spread of disease and allow the subsequent establishment of a *containment zone* in accordance with the criteria in Article 4.4.7.

Unless otherwise specified in the relevant disease-specific chapters of the *Terrestrial Code*, if the *animal health status* of an established *protection zone* changes because of *vaccination*, the *animal health status* of the rest of the country or *zone* is not affected.

Regarding diseases for which WOAH grants official recognition of *animal health status*:

– a *protection zone* is considered as effectively established when the conditions described in this article and in the relevant disease-specific chapters have been applied and documented evidence has been submitted to and accepted by WOAH;

– if a Member wishes to make the *protection zone* permanent, the process for official recognition by WOAH should be followed in accordance with Chapter 1.6. and the relevant disease-specific chapters.

Article 4.4.7.

Containment zone

1) In the event of *outbreaks* in a country or *zone* previously free from a disease, a *containment zone*, which includes all epidemiologically linked *outbreaks*, may be established to minimise the impact on the rest of the country or *zone*.

2) 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 either inside or outside the *containment zone*.

3) Establishment of a *containment zone* should be based on a rapid response, prepared in a contingency plan, that includes:

   – appropriate control of movement of *animals* and other *commodities* upon declaration of suspicion of the specified disease;

   – epidemiological investigation (trace-back, trace-forward) after confirmation of *infection* or *infestation*, demonstrating that the *outbreaks* are epidemiologically related and all are contained within the defined boundaries of the *containment zone*;

   – a *stamping-out policy* or another effective emergency control strategy aimed at eradicating the disease;

   – *animal identification* of the susceptible population within the *containment zone*, enabling its recognition 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*, demonstrating no occurrence of *infection* or *infestation*;

   – *biosecurity* and *sanitary measures*, including ongoing *surveillance* and control of the movement of *animals*, other *commodities* and fomites within and from the *containment zone*, consistent with the *listed disease*-specific chapter, when there is one, to prevent spread of the *infection* or *infestation* from the *containment zone* to the rest of the country or *zone*.

4) A *containment zone* is considered to be effectively established when the following is demonstrated, unless otherwise specified in the disease-specific chapter:

   EITHER

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

   OR

   b) it comprises an inner *zone* where *cases* may continue to occur and an outer *zone* where no *outbreaks* have occurred for at least two *incubation periods* after the control measures above have been put in place and which separates the inner *zone* from the rest of the country or *zone*.

5) The free status of the areas outside the *containment zone* is suspended pending the effective establishment of the *containment zone*. Once the *containment zone* has been established, the areas outside the *containment zone* regain free status.

6) The free status of the *containment zone* should be regained in accordance with the relevant *listed disease*-specific chapters or, if there are none, with Article 1.4.6.

7) In the event of an occurrence of a *case* of the *infection* or *infestation* for which the *containment zone* was established, either in the *containment zone* described in point 4 a) or in the outer *zone* where no *outbreaks* had occurred as described in point 4 b), the rest of the country or *zone* loses its free status.

Article 4.4.8.

Bilateral recognition of country or zone status by trading countries

While WOAH has procedures for official recognition of status for a number of *infections* (refer to Chapter 1.6.), for other *infections* or *infestations*, countries may recognise each other's status through a bilateral process. 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 specific *animal health status* for a 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*.

In accordance with Chapter 5.3., 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* is able to demonstrate that this is the case.

NB: FIRST ADOPTED IN 1998; MOST RECENT UPDATE ADOPTED IN 2021.