



Scientific review on Zoning

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Introduction - Definitions

Zoning (Regionalisation)

PROCEDURE to define subpopulations

- AIMS**
- Disease Control
 - International Trade

- METHODS**
- Definition of Geographical Areas
 - Biosecurity Plan
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Introduction – Reasons

- Each Country was intended as a single area, with **a single global health status**
 - Difficulties in eradicating diseases from the whole Country
 - Difficulties in maintain a disease-free status in the whole Country
 - Possible impairment of international trade
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Bibliographical review - Methods

- References included:
 - OIE Terrestrial Code 2013
 - Relevant publications found on
 - Web of Science™
 - OIE-related publications
 - OIE-related publications
 - Manually searched in the repository on the OIE website
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Bibliographical review - Methods

- Web of Science™
 - Zoning
 - Regionalisation
 - Protection zone
 - Containment zone
 - Surveillance zone
 - Restriction zone
 - Buffer zone
- Filters
 - Veterinary science
 - OIE

Bibliographical review - Results

Search term	Filter 1 – Vet. science	Filter 2 – OIE	No. articles
Zoning	✓		4129
Zoning	✓	✓	8
Regionalisation	✓		36
Regionalisation	✓	✓	2
Protection zone	✓		20
Containment zone	✓		1
Surveillance zone	✓		8
Restriction zone	✓		5
Buffer zone	✓		28

Bibliographical review - Results

Selected articles:

- 17 Web of Science™
- 14 OIE papers

Type of articles	OIE-related publications	Web of Science™
General approach to zoning	9	8
Practical examples	5	9

Zoning - Components

- Three main steps to establish a Zone:
 - Definition of a SUBPOPULATION
 - Definition of a GEOGRAPHICAL AREA
 - Planning and establishment of a BIOSECURITY PLAN
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Definition of the Subpopulation

“... a distinct part of a population identifiable according to specific common animal health characteristics” (OIE Terrestrial Code, 2013)

- Three pieces of information needed:
 - Geographical Location
 - Why the subpopulation was chosen (i.e. health status)
 - Which individuals belong to the subpopulation
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Definition of the Subpopulation

- Geographical Location
 - Definition of a geographical area
 - Why the subpopulation was chosen (i.e. health status)
 - Surveillance measures
 - Which individuals belong to the subpopulation
 - Animals'/farms' identification and traceability
-

Definition of the Subpopulation

IDENTIFICATION and TRACEABILITY

- Identification and registration of:
 - Individual animals
 - Group of animals (with a unique identifier)
 - Traceability:
 - Ability to follow a animal or a group of animals during all stage of life
 - Guarantee a reliable system for identifying subpopulation and controlling movements
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Definition of the Subpopulation

SURVEILLANCE

“ongoing collection, collation and analysis of information related to animal health and the timely dissemination of information so that action can be taken” (OIE, 2013)

- Aims:
 - Demonstrating absence of a disease
 - Determine presence/distribution of a disease
 - (Early) detect the introduction/spread of exotic or emerging diseases
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Definition of a Geographical Area

- Extent of the zone:
 - Defined by Veterinary Authorities
 - Need to take into account the epidemiology of the disease
 - Must be made public through official channels
 - Geographical limits based on:
 - Natural boundaries (mountains, rivers, etc.)
 - Artificial boundaries (fences, railways, roads, etc.)
 - Administrative boundaries (municipalities, provinces, regions, etc.)
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Biosecurity Plan

- Identifies potential means of introduction and spread of diseases in a zone
 - Several measures may be included:
 - Movement Control
 - Vaccination
 - Biosecurity Measures
 - Awareness Campaings
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Type of Zones - Definitions

- Zone
 - A clearly defined part of a territory containing an animal subpopulation with a distinct health status with respect to a specific disease for which required surveillance, control and biosecurity measures have been applied **for the purpose of international trade**
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Type of Zones - Definitions

- Free Zone
 - A zone in which the absence of the disease under consideration has been demonstrated by the requirements specified in the Terrestrial Code for free status being met. Within the zone and at its borders, appropriate official veterinary control is effectively applied for animals and animal products, and their transportation
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Type of Zones - Definitions

- Containment Zone
 - A defined zone around and including suspected or infected establishments, taking into account the epidemiological factors and results of investigations, where control measures to prevent the spread of the infection are applied
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Type of Zones - Definitions

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

**Member
Country**

One of the 188 OIE Member Countries where the Zoning has to be enforced

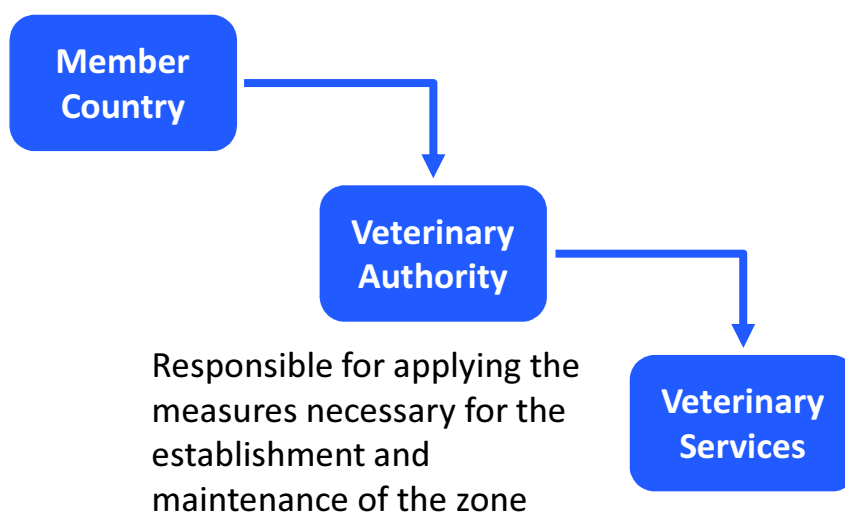
Competent Authorities

**Member
Country**

**Veterinary
Authority**

- Official responsible or the Zone
 - Supervise and control the Veterinary Services
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Competent Authorities



Legal Aspects

- General law providing the bases for Zoning (e.g. Council Directive 2005/94/EC)
 - Need for a National law that transpose the general law
 - Specific law related to a precise Zone to be created (e.g. during an epidemic)
 - Legally binds the Authorities to the zone and activities implemented in the zone
 - Makes the Zone and the related information available through public channels
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International Trade

- OIE provides recommendation
 - Measures provided in the Terrestrial code are not officially mandatory
 - Agreements between countries
 - Define the efficacy of the Zones
 - Need to take into account of different factors, related to each particular situation
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International Trade

- OIE recommendations for acceptance of a Zone
 - Exporting Country provides all the relevant information
 - Importing Country evaluates the information and performs a risk assessment
 - Acceptance
 - Refusal
 - Request for more information
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Acknowledgements

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U. PORTO

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Thanks for your attention!

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