Compartmentalisation and zoning: the Dutch perspective

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Summary
The aim of the World Organisation for Animal Health (OIE) procedure of compartmentalisation is to contribute to safe trade in live animals and animal products. The fundamental requirement for its application is that the population considered for trade remains epidemiologically separate from populations of higher risk. Compartmentalisation makes use of a functional separation through management, taking into account all relevant epidemiological factors. In this paper, the authors begin by describing current (inter)national developments and actions in this field. Second, some sensitive issues are outlined where one internationally accepted view would help to implement compartmentalisation successfully in international trade. The OIE standards do not contain the procedure for assessing the biosecurity plan, which is crucial. The authors propose the use of a hazard analysis and critical control point system (HACCP) to determine the effectiveness of a biosecurity plan, taking account of all possible risks and potential disease entry points. This could be based on the model of the Codex Alimentarius Commission. Other issues discussed are the outbreak of disease close to a compartment, the role of certification agencies and non-compliance with the biosecurity plan.

Keywords

Introduction
Globalisation is leading to growing movements of people, animals and goods between countries, which result in an increasing risk of the spread of animal diseases. The World Trade Organization’s Agreement on the Application of Sanitary and Phytosanitary Measures defines countries’ rights and obligations regarding health protection in international trade. Under this agreement, the World Organisation for Animal Health (OIE) is mandated to develop the international standards, guidelines and recommendations for animal health and zoonoses, which covers the use of compartmentalisation (9). Compartmentalisation is a credible way forward in building consensus to maintain global trade during a disease outbreak (1). This paper focuses on some practicalities related to the use of compartmentalisation for the purpose of international trade.
The OIE defines a compartment as ‘one or more establishments under a common biosecurity management system containing an animal subpopulation with a distinct health status with respect to a specific disease or specific diseases for which required surveillance, control and biosecurity measures have been applied for the purpose of international trade’ (10). A zone (or region) is defined as an animal subpopulation with a distinct health status based on geographical separation. Zoning is applied globally, and particularly within the European Union (EU), where it forms the basis for the EU common market for live animals and animal-based products. Zoning is a common measure used by many countries in disease eradication, whereas compartmentalisation is a relatively new concept.

The compartmentalisation concept is widely regarded with interest because of the option it offers to take different control measures within and outside the compartment in the event of a serious disease outbreak and because of the possibility that such outbreaks may become less of an impediment to international trade. Concrete initiatives are currently being taken in the EU, and a number of countries, including Australia, Canada, New Zealand, Thailand and the United States of America (USA).

**Dutch review of its animal health policy**

The Netherlands has encountered outbreaks of classical swine fever in 1997/1998, foot and mouth disease in 2001 and highly pathogenic avian influenza (HPAI) in 2003. The Netherlands was fully transparent to its trading partners, informing them about every change in the disease situations and the zoning and surveillance system that the Netherlands applied. However, quite a number of countries outside the EU did not accept the Dutch zoning system for trade purposes. Only after complete eradication of the disease in the whole country, and in some cases even beyond the timeframes indicated by the OIE to regain country freedom, was the Netherlands able to resume trade. In certain cases the Netherlands has still not been able to recapture the market share it had prior to the outbreaks.

After these animal disease outbreaks, the Ministry of Agriculture, Nature and Food Quality in the Netherlands decided to review its animal disease control policy. This national review also provided input for the review of the EU animal health policy (6), which began around the same time.

There was a wide public consultation process with all stakeholders, resulting in the development of a national policy document – the National Agenda for Animal Health 2007 to 2015 (8). Animal health is a matter of great public concern that affects all: government, commercial livestock producers, producers of products of animal origin, owners of non-commercial animals, the recreational sector, consumers and citizens. The review of animal disease control policy therefore also involved seeking new ways to prevent and control animal diseases and new instruments that might be used in the event of an outbreak. The key concept in the national animal health strategy is the prevention of animal diseases, implementing, where possible, different policies for different groups of animals (wild animals, rare and endangered species, pets and animals kept for commercial purposes) with regard to combating animal diseases and the use of vaccination. In this context, the Ministry's Directorate of Food Quality and Animal Health launched a compartmentalisation project. The project has provided an in-depth analysis of the OIE concept of compartmentalisation (7), examining the possibility of its implementation in the Netherlands on the basis of an open process of consultation.

**Global perspective**

The Dutch initiative is related to other concrete international initiatives on the introduction of the compartmentalisation concept.

**Australia, Canada, New Zealand and North America**

Australia, Canada, New Zealand and the USA have a consultation structure for discussing veterinary issues: the quadrilateral working party (QUAD). The QUAD created a working group on zoning and compartmentalisation that advised the QUAD countries to work towards formal recognition of each other’s procedures for establishing compartments and zones. In order to achieve this, each QUAD country will take action in order to gain official political support within its own territory and may carry out a review of its Veterinary Services using the assessment tool developed by the OIE. A working group of QUAD countries will draw up a common procedure incorporating target requirements regarding the method by which QUAD countries will determine, recognise, validate and monitor compartments, based on the OIE standards. A pilot programme will be started with poultry breeding establishments.

The QUAD countries and the European Commission exchange information on their respective efforts in the field of compartmentalisation.

**European Union**

At the end of 2006, the European Commission, primarily inspired by discussions in the OIE, started a working
group on compartmentalisation with the following members: Cyprus, France, Germany, Italy, the Netherlands, Sweden, and the United Kingdom (UK).

Firstly, an inventory was made of the Member States’ interest in the compartmentalisation concept (Table I). It shows that EU Member States and the European livestock industry have a broad interest in compartmentalisation, with a focus on HPAI and Newcastle disease (ND). Member States requested a common EU approach to compartmentalisation. Further development of the concept within the EU will therefore initially be worked out with the poultry sector.

The working group currently prepares the EU harmonised legal drafts for official recognition of compartments by EU Member States. At the same time, preparation of EU legislation to allow poultry imports from third country compartments into the EU based upon the regulations governing intra-Community trade is in its final stage.

The following principles for the recognition procedure will probably be applied:

– in order to obtain international recognition for EU compartments, it is important that the compartment (and its component establishments) can guarantee a high level of biosecurity;

Table I
European Union Member States’ interest in compartmentalisation (November 2006)
The European Commission asked the governments of Member States four questions, the answers to which are displayed here. The questions were as follows:
Question 1: Have you been approached by the livestock industry about introducing compartmentalisation?
Question 2: If so, which sectors have demonstrated an interest?
Question 3: Which diseases did this involve?
Question 4: Have you received concrete plans?

<table>
<thead>
<tr>
<th>Country</th>
<th>Question 1</th>
<th>Question 2</th>
<th>Question 3</th>
<th>Question 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>No</td>
<td>–</td>
<td>–</td>
<td>?</td>
</tr>
<tr>
<td>Belgium</td>
<td>Yes</td>
<td>Pig, poultry</td>
<td>All former OIE list A diseases</td>
<td>No</td>
</tr>
<tr>
<td>Cyprus</td>
<td>No</td>
<td>–</td>
<td>–</td>
<td>No</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>No</td>
<td>–</td>
<td>–</td>
<td>No</td>
</tr>
<tr>
<td>Denmark</td>
<td>Yes</td>
<td>Pig, poultry</td>
<td>Avian influenza, Newcastle disease, bursal disease, fowl typhoid, pullorum disease, salmonellosis</td>
<td>No</td>
</tr>
<tr>
<td>Estonia</td>
<td>No</td>
<td>Poultry</td>
<td>Avian influenza, Newcastle disease, bluetongue</td>
<td>No</td>
</tr>
<tr>
<td>Finland</td>
<td>Yes</td>
<td>Poultry, aquaculture</td>
<td>Avian influenza, Newcastle disease, viral haemorrhagic septicemia, infectious haematopoietic necrosis, infectious salmon anaemia, spring viraemia of carp, Koi herpesvirus disease</td>
<td>No</td>
</tr>
<tr>
<td>France</td>
<td>Yes</td>
<td>Poultry</td>
<td>Avian influenza, Newcastle disease</td>
<td>Yes</td>
</tr>
<tr>
<td>Ireland</td>
<td>No</td>
<td>–</td>
<td>–</td>
<td>No</td>
</tr>
<tr>
<td>Italy</td>
<td>Yes</td>
<td>Pig, poultry, bovine, aquaculture</td>
<td>Classical swine fever, African swine fever, swine vesicular disease, avian influenza, bluetongue</td>
<td>Yes</td>
</tr>
<tr>
<td>Latvia</td>
<td>No</td>
<td>–</td>
<td>–</td>
<td>No</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>Yes</td>
<td>Pig, poultry</td>
<td>Avian influenza, Newcastle disease, classical swine fever</td>
<td>No</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Yes</td>
<td>Poultry, pharmaceutical industry</td>
<td>Avian influenza, Newcastle disease, classical swine fever, foot and mouth disease</td>
<td>Yes</td>
</tr>
<tr>
<td>Poland</td>
<td>No</td>
<td>Pig, aquaculture</td>
<td>Aujeszky’s disease, infectious bovine rhinotracheitis, infectious pustular vulvovaginitis, viral haemorrhagic septicemia, infectious haematopoietic necrosis, spring viraemia of carp</td>
<td>No</td>
</tr>
<tr>
<td>Portugal</td>
<td>Yes</td>
<td>Pig, poultry, bovine</td>
<td>Swine vesicular disease, avian influenza, bluetongue</td>
<td>No</td>
</tr>
<tr>
<td>Slovakia</td>
<td>No</td>
<td>–</td>
<td>–</td>
<td>No</td>
</tr>
<tr>
<td>Slovenia</td>
<td>Yes</td>
<td>Pig</td>
<td>Classical swine fever</td>
<td>No</td>
</tr>
<tr>
<td>Spain</td>
<td>Yes</td>
<td>Pig, poultry, bovine, aquaculture</td>
<td>All</td>
<td>No</td>
</tr>
<tr>
<td>Sweden</td>
<td>Yes</td>
<td>Poultry, aquaculture</td>
<td>Avian influenza, Newcastle disease, other</td>
<td>No</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Yes</td>
<td>Poultry</td>
<td>Avian influenza, Newcastle disease</td>
<td>No</td>
</tr>
</tbody>
</table>

In some instances (Estonia and Poland), although the answer to the first question was ‘no’, further details have been provided. This is either because the government is interested in introducing compartmentalisation in certain sectors or because the government is aware that there is interest from these sectors but no formal negotiations have yet been entered into.
the general EU procedure for official recognition of compartments in Member States and Third Countries will be formalised in EU legislation;

the use of hazard analysis and critical control points (HACCP) (2), a risk analysis system developed by the Codex Alimentarius and general hygiene rules will be included in the EU official recognition procedure;

general procedure has to be agreed upon by the Standing Committee on the Food Chain and Animal Health (SCOFCAH), which forms part of the EU animal health decision-making process;

initially, Member States will present their national procedures and each officially recognised compartment to the other Member States in SCOFCAH. As more experience is gained may it not be necessary to present each new compartment. The Directorate-General for Health and Consumers (DG SANCO) and the Directorate F, the Food and Veterinary Office (FVO), which is the European Commission inspection service supervising compliance with animal health and food safety law, will assess the implementation of the national procedure in the Member States;

in the event of an outbreak whereby a recognised compartment lies in the protection and surveillance zone, pursuant to the EU Avian Influenza Directive (5), a derogation would be required for the purpose of trade with other Member States. This will not change unless the legislation is changed;

in the event of an outbreak within a radius of 1 km of the compartment, the EU-required standstill period would also apply to the compartment. This period would be expected to be quite short, just long enough to ensure the maintenance of the integrity of the compartment;

it is crucial for global acceptance that for the purpose of intra-Community trade, EU Member States accept from each other products originating from compartments even during the outbreak of a serious animal disease. Such a procedure has to be decided upon prior to an outbreak;

the EU firmly supports the provisions of the World Trade Organization (WTO) and will make similar arrangements to allow imports of products derived from third countries in principle.

France is advanced in the development of compartments for pure-line poultry breeding and great grandparent stock production establishments. In 2006, a procedure was agreed with the sector for the establishment, official recognition, validation and control of avian influenza (AI) compartments based on OIE standards and publications. A pilot project was then launched to assess whether the official recognition procedure was satisfactory. France is seeking an EU-accepted procedure via the Commission working group before officially approaching third countries.

Asia

Individual Asian countries as well as the Association of Southeast Asian Countries (ASEAN) deploy similar initiatives. In particular, Thailand is quite advanced and in its pilot project has laid down hygiene standards for compartmentalisation in addition to the OIE standards. These hygiene standards are based on EU Directives and quality assurance schemes such as good manufacturing practices (GMP) and good agricultural practice codes. The HACCP system and ISO9000 standards of the International Organization for Standardization (ISO) are also used.

These global initiatives indicate that the time is right to focus on compartmentalisation as a tool in animal disease control policies and in assuring international safe trade, especially for the poultry sector.

Dutch perspective

The Dutch analysis also concludes that compartmentalisation is a useful instrument in animal disease prevention and control (7). It helps to protect important genetic material in major disease outbreaks and stimulates knowledge and innovation. An important result of the Dutch study is a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis of the compartmentalisation concept (Table II).

The main weakness is that currently an internationally approved system for approval and auditing of compartments is not yet comprehensively defined, let alone been accepted by trading partners; however, the OIE draft guidelines on this were agreed upon at the annual General Session of the OIE in May 2008.

Current Dutch actions

Based on the analysis, the Ministry of Agriculture, Nature and Food Quality is planning to implement a compartmentalisation pilot project. To date, primary poultry breeder establishments and the veterinary vaccine industry have shown interest in developing the compartmentalisation concept in co-operation with the Veterinary Services. This pilot project will thus focus on these enterprises, with the aim being to establish a procedure for government recognition. In collaboration with the interested enterprises, efforts will be made to
achieve a situation whereby the compartments can be formally recognised. By helping to determine the number of staff needed (and the qualifications they require) this pilot project will provide insight into the commitment required on the part of the government for the future training of personnel to approve and regularly audit compartments. The project will also help increase understanding of the criteria and basic principles that must play a role in assessment and surveillance and these insights may be used to provide input in the European Union and other international forums. The pilot programme will also provide an indication of the costs and resources needed for government as well as business operators.

The results of the compartmentalisation pilot project will be very useful for international trade as soon as the EU harmonised procedure for recognition is in place.

In the wake of the HPAI outbreak, the Netherlands identified several poultry establishments that are of particular importance in the production chain or the pharmaceutical industry, as follows:

- breeding establishments that maintain the pure line for commercial poultry breeds
- grandparent stock farms
- producers of specific pathogen free (SPF) birds or SPF eggs
- vaccine egg producers.

These establishments are specifically designed so that in the case of an outbreak of avian influenza they might be granted special exemption. In addition, as far as possible, it is important to limit the delay to those processes that are significant for veterinary or human vaccine production. The EU avian influenza Directive (5) provides the possibility to take special measures for these establishments. Under the current version of the Dutch avian influenza contingency plan an exemption from culling can be granted on the basis of a risk analysis based on the EU Directive. From the Dutch perspective, all compartments should fit the requirements of this exemption. A difference between compartments and other farms that can be granted an exemption is that compartments are also important for the purpose of international trade (and not only disease control).

**Discussion**

**Procedure for official recognition of compartments**

The EU working group needs to clarify two issues before Member States can mutually accept each other's compartments.

Firstly, the OIE standards do not contain the procedure to be followed in assessing the biosecurity plan, which is crucial. To determine the effectiveness of a biosecurity plan, taking account of all possible risks and potential

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**Table II**

**SWOT-analysis (strengths, weaknesses, opportunities and threats) of OIE compartmentalisation**

Strengths and weaknesses are inherent to the concept, while opportunities and threats can evolve from applying the concept

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tbody>
<tr>
<td>– New instrument for the purposes of international trade</td>
<td>– No established procedures for assessing and validating the biosecurity plan</td>
</tr>
<tr>
<td>– Allows a more tailored approach to animal disease control</td>
<td>or disease monitoring</td>
</tr>
<tr>
<td>– Business operators are rewarded for efforts in prevention</td>
<td>– No clear procedure in the event of an outbreak in the vicinity of a compartment</td>
</tr>
<tr>
<td>– Good argument against culling of compartments during an outbreak</td>
<td>– Role of international certifying agencies is unclear</td>
</tr>
<tr>
<td>– Preservation of important genetic material within compartments</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>– Compartmentalisation particularly offers opportunities for countries with a high level of knowledge and infrastructure with considerable experience in the export market, both public and private sector, e.g. the Netherlands</td>
<td>– Not accepted by trade partners</td>
</tr>
<tr>
<td>– International trade possible during an outbreak</td>
<td>– Imbalance in knowledge of veterinary authorities supervising compartments</td>
</tr>
<tr>
<td>– Incentive for further knowledge development in the area of prevention</td>
<td>and private business operators managing their compartments</td>
</tr>
<tr>
<td>– Stimulates prevention at all primary holdings and suppliers</td>
<td>– Quality of the Veterinary Authority differs for each exporting country</td>
</tr>
<tr>
<td>– Further development of knowledge infrastructure of education centres</td>
<td></td>
</tr>
<tr>
<td>– Growth in consultancy businesses specialised in biosecurity systems</td>
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</tbody>
</table>
disease entry points, the EU working group is working towards using a HACCP system. HACCP provides a harmonised procedure for the assessment of the effectiveness of risk reduction. Member States’ Veterinary Services are experienced in the use of HACCP and the system is well-known at an international level. Thailand and the QUAD countries are also considering using this system.

Secondly, the working group concluded that application of a high level of hygiene is a precondition for the implementation of a compartment recognition procedure. In order to achieve harmonised targets for hygiene within the EU, the hygiene and sampling requirements arising from the EU Zoonoses Regulation 2160/2003 (4) could be used, e.g. the hygiene requirements for the eradication of salmonellosis.

Role of certification agencies

In the Terrestrial Animal Health Code the OIE refers to the ‘management’ of the biosecurity plan. The EU working group would propose using the word ‘business operator’, meaning the natural or legal person responsible for ensuring that the requirements of food laws are met within the food business under their control. The EU uses similar words in the General Food Law (3). In order to avoid confusion it would be preferable to use one term internationally.

One of the principles of compartmentalisation is that the business operator issues specific guarantees based on the implementation of a biosecurity system, whereby the business operator also monitors the proper functioning of its own system. The government then checks the reliability of this biosecurity system, i.e. audits and controls the monitoring carried out by the business operator. In the context of international trade, business operators in the food industry make large-scale use of ISO-certified inspection authorities to audit their systems. It is not yet clear how this will be dealt with in regard to compartmentalisation.

There are important similarities between the use of a biosecurity plan and the use of a quality control system. Both generally refer to a system of management controls for ensuring the consistency and reliability of the outputs of the organisation. An organisation with a quality control system has a description of the roles and responsibilities of all personnel and has implemented standard operating procedures and a full registration of all work performed. Traceability is an important component of a quality control system. Internationally recognised quality control systems like ISO standards or the GMP codes used by various organisations also require the implementation of an auditing and certification process. It can generally be stated that holdings that have quality control systems in place will be faster and more easily eligible for compartmentalisation. Furthermore, sectors with a high degree of chain integration generally have better developed quality control systems than other sectors.

Confidence in Veterinary Services

Confidence in the quality of the services involved (Veterinary Services, sampling officers and accredited laboratories, both those with whom the Veterinary Services are used to working and those used by private companies) is key to the acceptance of compartmentalisation for international trade.

The OIE has developed the ‘Performance of Veterinary Services’ tool to evaluate Veterinary Services. Countries can perform an assessment to identify strengths and weaknesses and define improvement measures.

The EU evaluates the Member States’ Veterinary Services by means of the FVO inspections. The FVO inspects compliance with specific European veterinary laws and thereby indirectly controls the organisation and performance of the service concerned.

Outbreak of disease

A sensitive point is to address the possible consequence when a compartment is situated close to a disease outbreak, that is, in the protection or surveillance zone. This has not yet been elaborated sufficiently at international level and is a point of discussion in both the QUAD and the EU working group. Proper elaboration of this point is essential if the concept is to be practicable.

The current guarantees issued for trade between EU Member States are based on zoning recommended safe distances from outbreaks are enforced. Zoning operates satisfactorily. If the EU is to allow export from compartments in protection and surveillance zones, EU Member States have to agree first on allowing intra-Community trade. If such agreement is reached, the results of this decision can then be applied to trade with third countries. This will prevent accusation that an individual EU Member State is more lenient in trading with third countries compared to its intra-Community trade partners. Intra-Community trade would only be possible from an avian influenza compartment located within a protection or surveillance zone after a derogation on the basis of the EU AI Directive (5). This derogation would have to be approved in the SCOFCAH and requires a qualified majority of Member States to agree. Until a derogation is granted, transport from the compartment will not be possible under existing European legislation. The EU
working group is currently elaborating such a procedure. Therefore, an initial but short standstill would apply which would give all trading partners some additional assurances.

**Supervising compartment status**

The Veterinary Services approve and audit compartments and are responsible for making public a list (available on their websites) of approved compartments. The situation with regard to public announcements is delicate if the Veterinary Services discover that the compartment does not fully comply with the agreed biosecurity plan (even when no outbreaks of an animal disease are present), e.g. it has not handed over results of surveillance to the Veterinary Services. In this case, the Veterinary Services may temporarily suspend the status of a compartment. The EU working group is considering a proposal to remove compartments from the website in such a situation, and to inform the Commission, but not to actively inform trading partners. In case of a minor non-compliance, although the compartment may be temporarily suspended, trade may continue from the disease-free zone or country.

**Scientific studies**

Veterinary Services need to assess the biosecurity plan and its biosecurity risk management decisions. This implies a very close co-operation between the Veterinary Services and scientific institutions. Scientific studies can be carried out in order to determine whether biosecurity plans based on HACCP for avian influenza and Newcastle disease compartments provide sufficient guarantees against these and possibly other animal diseases. Secondly, studies can be performed to see which modifications would be necessary to increase the number of animal diseases against which the biosecurity plan is effective.

Based on scientific studies and experience gained, application of the compartmentalisation system in other livestock sectors and other sorts of businesses will subsequently be possible.

**Positive and negative scenarios**

The decision to implement the OIE compartmentalisation concept cannot be taken without trying to look into the future. The Dutch analysis indicates two predominant scenarios: one positive and the other negative. It is not possible to either indicate which scenario will prevail, or to provide an indication of the number of years necessary for these scenarios to become reality.

**Positive scenario**

In the positive scenario, the initial compartments for HPAI and Newcastle disease are well accepted. The business operators fulfil their responsibility in prevention of infection in a professional manner and the government develops effective supervisory arrangements that are well supported within society. Trading partners accept the concept in peacetime, and exporting countries conclude protocols with them, outlining how trade should take place from a specific compartment during an outbreak of AI. The value of these AI compartments becomes apparent during an outbreak, in that the compartments do not become infected and do not contribute in any other way to the spread of the outbreak. As a result, most trading partners are happy to maintain trade or resume trading with the compartments fairly quickly.

This scenario generates confidence in the OIE concept of compartmentalisation and therefore the number of compartments increases. The government then takes an increasingly tailored approach to culling instead of resorting to blanket culling across a zone and, consequently, fewer and fewer animals are killed during an outbreak. This encourages business operators to place strong emphasis on prevention, with the aim of ensuring that their businesses come under less pressure during animal disease outbreaks. A trend towards higher levels of biosecurity in establishments is thus initiated by the private sector. If a considerable percentage of the holdings in a sector are operating as a compartment, trade from the commercial sector is sufficiently protected through compartments. The non-commercial (hobby) animals are not necessarily subject to disease control measures provided there is no risk to health.

A similar scenario plays out in third countries too: there is a steady increase in the number of establishments operating as a compartment and the EU, the world's largest importer of agricultural products, allows imports from the compartments of non-Member States, based upon the regulations governing intra-Community trade.

The use of compartments for the purpose of international trade and as a system for establishing disease-free status therefore increases. Since compartmentalisation is an initiative of a specific business operator, it offers firmer assurance for continuity than zoning, but both concepts gain equal acceptance and as far as governments are concerned no preference exists in favour of one concept or the other.

**Negative scenario**

In the negative scenario the first compartments for HPAI and Newcastle disease are not enthusiastically accepted by trading partners. The business operators do not fully meet their responsibility for prevention in a sufficiently consistent manner, and the government's corrective actions are insufficient. A number of trade partners accept the concept in peacetime, and the exporting country
concludes protocols with them, outlining how to proceed with trade from a compartment during an outbreak of HPAI. However, during an outbreak one or more of the lesser-prepared compartments become infected. As a result, governments adopt a critical standpoint in relation to recognition of compartments for trade. Gaining approval to resume trade remains something that requires a great deal of energy for the government of the country affected by an outbreak.

The above scenario has a negative influence on the concept of compartmentalisation. EU Member States no longer always accept each other’s compartments, which in turn provides third countries with a convincing argument for not permitting trade from compartments. In addition, as OIE compartmentalisation did not offer the guarantees that were expected of it, additional fears arise that all trade from the affected country may present a risk.

Compartmentalisation continues to exist, but only for top producers of genetic material in the various chains. This acceptance is driven more by the need to obtain new genetic stock than by the assurances provided by compartmentalisation. Finally, importing countries only accept semen or hatching eggs from compartments in countries that are free from animal diseases to protect themselves from political pressure in their own country.

Conclusions

The time is right to adopt OIE compartmentalisation on a national and international scale. The Dutch analysis concludes that biosecurity plans and measures are more readily accepted if described using HACCP-methodology.

The practical experience of Veterinary Services is the best starting-point for working towards globally accepted procedures. Veterinary Services in the Netherlands and other interested countries must build up their own experience of the practical implementation of the OIE concept of compartmentalisation. Secondly, they must share their experience and seek ways of concurring with international initiatives. Discussions and pilot projects will show where further scientific research is needed to develop the concept for other animal diseases and other sectors.

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Compartmentation et zonage : le point de vue des Pays-Bas

E.A.A.C. Gemmeke, H. Batho, E. Bonbon, P.W. de Leeuw & C. Bruschke

Résumé

La procédure de compartimentation mise en place par l’Organisation mondiale de la santé animale (OIE) a pour but de contribuer à la sécurité des échanges d’animaux vivants et de produits d’origine animale. La condition fondamentale pour appliquer la compartimentation consiste à séparer épidémiologiquement la population destinée aux échanges de toute autre population présentant un risque plus élevé. La compartimentation fournit une séparation fonctionnelle au moyen de méthodes de gestion prenant en compte chaque facteur épidémiologique pertinent. Les auteurs commencent par décrire les récentes évolutions et initiatives déployées dans ce domaine aux niveaux national et international. Quelques questions sensibles sont ensuite examinées, par rapport auxquelles l’obtention d’un consensus au plan international permettrait de mettre en œuvre avec succès la compartimentation pour mieux protéger les échanges internationaux. Les normes de l’OIE ne prévoient pas de procédure pour évaluer le plan de biosécurité, qui est une composante fondamentale de la compartimentation. Les auteurs proposent que la méthode de l'analyse des
dangers et des points critiques pour leur contrôle (HACCP) soit utilisée pour déterminer l’efficacité des plans de biosécurité en envisageant la totalité des risques et des points d’entrée potentiels de maladie. Le modèle conçu par la Commission du Codex alimentarius pourrait servir de point de départ à cette fin. Les auteurs abordent également la question des foyers survenant à proximité d’un compartiment, ainsi que le rôle des agences de certification et le problème du non-respect du plan de biosécurité.

Mots-clés

Perspectiva neerlandesa en materia de compartimentación y zonificación

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Resumen
El procedimiento de compartimentación de la Organización Mundial de Sanidad Animal (OIE) tiene por objeto contribuir a la seguridad del comercio de animales vivos y productos de origen animal. El requisito básico para aplicar dicho procedimiento es que la población animal destinada al comercio permanezca separada, epidemiológicamente hablando, de las poblaciones de mayor riesgo. La compartimentación se basa en un aislamiento funcional, orquestado por una serie de medidas de gestión que se adoptan teniendo en cuenta todos los factores epidemiológicos pertinentes. Los autores empiezan describiendo las novedades y actuaciones registradas en la materia en los planos nacional e internacional. Después exponen brevemente una serie de cuestiones delicadas, en las que la existencia de un punto de vista internacionalmente aceptado sería de ayuda para aplicar con éxito la compartimentación al comercio internacional. En las normas de la OIE no está especificado el procedimiento que debe seguirse para evaluar el plan de seguridad biológica, elemento importante donde los haya. Los autores proponen que se utilice un sistema de análisis de peligros y control de puntos críticos (HACCP) para determinar la eficacia de esos planes, teniendo en cuenta todos los posibles riesgos y los eventuales puntos de entrada de una enfermedad. Para ello cabría basarse en el modelo de la Comisión del Codex Alimentarius. Los autores abordan además otros temas, como la aparición de un brote en las cercanías de un compartimento, la función de los organismos de certificación o los casos de incumplimiento del plan de seguridad biológica.

Palabras clave
References


