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**GUIDELINES  
COMPARTMENTALISATION FOR RUMINANT FARM  
(FMD control)**

# **GUIDELINES**

## **COMPARTMENTALISATION FOR RUMINANT FARM**

### **(FMD control)**

#### **SCOPE**

This standard provides principles for establishment of compartmentalisation for Ruminant Farm (FMD Control) comprised of general condition, risk assessment, biosecurity plan based on the principles of Good Animal Husbandry Practice (GAHP), traceability, documentation, disease surveillance and action plans in case of emergency response and notification, in order to enhance and support animal health, consumer safety as well as international trade.

#### **1. DEFINITIONS**

For the purpose of this standard:

- 1.1 Establishment means Ruminant Farm.
- 1.2 Ruminant Farm means an animal with cloven hoof subpopulation contained in one farm
- 1.3 Compartment means an animal subpopulation contained in one or more establishments under a common biosecurity management system 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.
- 1.4 Biosecurity management means the preventive management system applied for mitigation of risks posed by infectious diseases into or out of the production units.
- 1.5 Surveillance means the systematic monitoring of animal population for pathogen(s) or disease(s). The frequency and type of surveillance is based on the epidemiology of the specific pathogen(s) or disease(s).
- 1.6 Traceability means the ability to follow the movement of an animal or a food through specified stage(s) of production, processing and distribution.
- 1.7 Disease free status means the recognitions of farm/compartment where the surveillance plan has been applied. The evidences of clinical and laboratory results demonstrate no incident of specific disease infection in the specified timeframe.
- 1.8 Department Veterinary Services (DVS) means the national veterinary authority of respective ASEAN Member States

## **2. INTRODUCTION**

The Office International des Epizootics (OIE) or World Organisation for Animal Health has issued the application of compartmentalisation as one of the disease control program based on farm management, sanitation and biosecurity measures, together with surveillance and disease control, to enhance animal health and facilitate international trade.

Compartmentalisation has increased the role in international trade for animals and their products due to the fact that it can be carried out regardless of the geographical conditions. In addition, in case of outbreaks in the surrounding areas, the disease free status of compartment can still be maintained by stringent application of measures on disease control, biosecurity, disease surveillance and traceability.

## **3. PRINCIPLES**

To establish the compartment being disease free status either a specific disease or diseases, the compartment shall be clearly defined for its operations, indicating the location of all its components and related function units, e.g. feed mills, slaughterhouses, rendering plants, their interrelationships amongst farms within compartment and the ability to an epidemiological separation between the animals in a compartment and subpopulations with a different health status.

### **3.1 SEPARATION OF A COMPARTMENT FROM POTENTIAL SOURCES OF INFECTION**

#### **3.1.1 Physical or spatial factors that affect the status of biosecurity in a compartment**

Compartment shall be primarily based on management and biosecurity measures. Consideration of geographical factors and surrounding areas prone to impact the disease free status are essential to ensure an adequate separation between the animals in a compartment and subpopulations with a different health status. The achievement of compartmentalisation shall take the following factors into account:

- 3.1.1.1 Disease status in adjacent areas and related function units for epidemiologically linkage to the compartment.
- 3.1.1.2 Location, disease status and biosecurity measures of the surrounding compartment or adjacent areas which the distance and physical separation from:
  - i. Animal outside a compartment that may have different health status, including wildlife and migratory routes
  - ii. Slaughterhouses, rendering plants or feed mills;

- iii. Markets, animal fairs, agricultural shows, sporting events, zoos and other areas of animal concentration.

### **3.1.2 Infrastructure factors**

For effectiveness of biosecurity measures within a compartment, consideration should be given to:

- i. Fencing or other effective means of physical separation
- ii. Facilities for people entry including access control, changing area and showers
- iii. Vehicle access including washing and disinfection procedures
- iv. Animal transportation system
- v. Isolation facilities for introduced animals
- vi. Facilities for tools and equipment storages
- vii. Facilities for feed and veterinary products storages
- viii. Facilities for carcasses, manure and waste disposal
- ix. Water supply
- x. Insects, living vectors, rodents and birds
- xi. Ventilation system
- xii. Feeds supply and sources

### **3.1.3 Biosecurity plan**

The management of the compartment shall be designed and monitored for the effectiveness of biosecurity plan of the specified disease.

Biosecurity plan consists of:

- 3.1.3.1 Potential pathways associated with disease introduction and spread into a compartment, e.g. animal movement, pest and carriers, spreading of disease through air, accessibility of people, biological products, tools and equipment, vehicles, feed, water sources and drainage. Survivability of the agent in the environment should also be taken into consideration.
- 3.1.3.2 Control measures to mitigate exposure for each identified potential pathway
- 3.1.3.3 Standard operating procedures for biosecurity plan including implementation, maintenance, monitoring of the measures, corrective actions, verification of the process and record keeping
- 3.1.3.4 Contingency plan addressing potential changes of the disease status
- 3.1.3.5 Reporting procedures and changing of operation as specified by Department Veterinary Services (DVS)
- 3.1.3.6 Educating and training programs for all personnel, responsible for biosecurity measures and their evaluations
- 3.1.3.7 Availability of continuous disease surveillance plan by providing the evidence of risk mitigation in all possible pathways in accordance with

the principles of GAHP and sufficient to assess the efficacy of biosecurity plan. Re-assess the biosecurity risks of all operations of the compartment regularly or at least once a year in order to properly adjust the biosecurity plan.

#### **3.1.4 Traceability system**

All animals within a compartment shall be marked and registered in such a way that their history and movements can be documented and audited. In case where individual identification may not be feasible, traceability should be under the supervision of the DVS.

All animal movements into and out of the compartment shall be recorded at the compartment level, to be used as database for risk assessment and certification by the DVS.

### **3.2 DOCUMENTATION**

Documents and records shall provide clear evidence showing the efficacy of biosecurity measures, surveillance, traceability and management operations which are under the supervision of the DVS. Evaluation of a compartment shall base on animal health records, notably the surveillance of the OIE listed diseases. Document shall be provided as follows:

- i. Animal movement
- ii. Records of production , including birth and death
- iii. Source of feed
- iv. Laboratory test results
- v. Access log
- vi. Records of illness and treatment
- vii. Vaccination records consist of vaccination programs, types of vaccine for a purpose of disease prevention under supervision of licensed veterinarian
- viii. Use of animal drugs or hazard substances, under supervision of licensed veterinarian
- ix. Biosecurity plans and operation records
- x. Personnel training records
- xi. Other records related to disease control as specified by the DVS

These documents shall be kept for the time period as specified by the DVS.

### **3.3 DISEASE SURVEILLANCE**

Surveillance plan should be suitable for the level and risk that are assessed and identified. Surveillance plan shall consist of:

- i. Internal surveillance: sample are collected from farms within a compartment to determine disease prevalence or to perform initial disease diagnosis
- ii. External surveillance: sample are collected from the area outside a farm in order to ensure the effective outcome of biosecurity plan
- iii. Early detection system: document shall provide early detection plan flow clearly
- iv. Disease surveillance evaluation: the evaluation shall be conducted annually in order to monitor and improve continuously.

### **3.4 DIAGNOSIS CAPABILITIES AND PROCEDURES**

Diagnostic laboratory of the compartment:

- i. Shall be laboratory of the DVS or officially recognised by the DVS
- ii. Shall follow the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals related to animal disease diagnosis;
- iii. Shall have quality assurance system of the diagnostic test result;
- iv. Shall have rapid reporting system of the disease to the DVS's officer;
- v. If necessary, samples may be sent to OIE reference laboratory for re-confirmation.

### **3.5 EMERGENCY RESPONSE AND NOTIFICATION**

The DVS shall have contingency plans as a document of comprehensive plan to response any suspicious case or disease outbreak. In the event of suspicious case or disease outbreak found, the contingency plans for the compartment shall be followed and the DVS shall be informed. If the case is confirmed, DVS shall notify the trading partners.