Foreword

The aim of the Aquatic Animal Health Code (hereafter referred to as the ‘Aquatic Code’) is to assure the sanitary safety of international trade in aquatic animals (fish, molluscs and crustaceans) and their products. This is achieved through the detailing of health measures to be used by the Veterinary Administrations or other Competent Authorities of importing and exporting countries to avoid the transfer of agents pathogenic for animals or humans, while avoiding unjustified sanitary barriers.

The health measures in the Aquatic Code (in the form of standards, guidelines and recommendations) have been formally adopted by the OIE International Committee, the general assembly of all Delegates of OIE Member Countries, which constitutes the organisation’s highest decision-making body. This 10th edition incorporates the modifications to the Aquatic Code agreed by the OIE International Committee during the 75th General Session in May 2007. These include revised chapters on the following subjects: definitions, diseases listed by the OIE, zoning and compartmentalisation, recommendations for transport, infection with Bonamia ostreae, infection with Bonamia exitiosa, infection with Haplosporidium nelsoni, infection with Marteilia refringens, infection with Mikrocytos mackini, infection with Xenohaliotis californiensis, koi herpervirus disease, Taura syndrome, white spot disease, yellowhead disease, tetrahedral baculovirosis, spherical baculovirosis and infectious hypodermal and haematopoietic necrosis.

The development of these standards, guidelines and recommendations is the result of the continuous work of one of the OIE’s Specialist Commissions, the OIE Aquatic Animal Health Standards Commission (hereafter referred to as the ‘Aquatic Animals Commission’). This Commission, which comprises five elected members and two observers experienced in the fields of methods for surveillance, diagnosis, control and prevention of infectious aquatic animal diseases, meets twice yearly to address its work programme. The Commission also draws upon the expertise of internationally renowned specialists to prepare draft texts for new chapters of the Aquatic Code or revise existing chapters in light of advances in veterinary science. The views of the Delegates of Member Countries are systematically sought through the circulation of draft and revised texts. As well, the Aquatic Animals Commission collaborates closely with the OIE Terrestrial Animal Health Standards Commission on issues needing a harmonised approach, and with the Biological Standards Commission and the Scientific Commission for Animal Diseases to ensure the Aquatic Animals Commission is using the latest scientific information in its work.

The value of the Aquatic Code lies in the fact that measures published in it are the result of consensus among the Competent Authorities of OIE Member Countries.

The World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) conferred on the OIE new responsibilities under international law by specifying ‘the standards, guidelines and recommendations developed under the auspices of the OIE’ as the international standards for animal health and zoonoses. The SPS Agreement is aimed at establishing a multilateral framework of rules and disciplines to guide the development, adoption and enforcement of sanitary measures in order to minimise their negative effects on international trade. Essentially, two options are available to Member Countries to provide a scientific justification for an import health measure. The first, and most encouraged by the WTO, is for Competent Authorities to base their import health measures on the OIE’s international standards, guidelines and recommendations. Where these do not exist, or in cases where a government chooses to apply stricter measures, the importing country must be able to show that its measure is based on a scientific assessment of the potential health risks. Guidelines for conducting risk analyses are described in the Aquatic Code. The Aquatic Code thus forms an integral part of the regulatory reference system established by the WTO.

The Aquatic Code is published annually in the three official OIE languages (English, French and Spanish). The contents of the Aquatic Code are available on the OIE Web site at http://www.oie.int.
The Users' Guide, which follows the foreword, is designed to help Competent Authorities and other interested parties to use the various chapters of the Aquatic Code efficiently and effectively, and to promote equitable access by all developing and developed countries to the world market in animals and animal products, according to their animal health status.

We wish to thank former and present Members of the Aquatic Animals Commission, who have contributed to producing this book and its companion volume, the Manual of Diagnostic Tests for Aquatic Animals, for their hard work. Dr P. de Kinkelin is thanked for his initiating role, as it was under his chairmanship of the Commission that work on the two books was begun. Special thanks are also expressed to those scientific experts in different Member Countries who provided comments and information, and finally the staff of the OIE Headquarters for their dedication in producing this 10th edition of the Aquatic Code.

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June 2007
A. Introduction

1. The purpose of this guide is to assist the Veterinary Administrations and/or other Competent Authorities of OIE Member Countries to use the Aquatic Animal Health Code (hereafter referred to as the ‘Aquatic Code’) in developing their animal health measures applicable to imports and exports of aquatic animals and aquatic animal products.

2. The recommendations in each of the chapters in Part 2 of the Aquatic Code are designed to prevent the disease in question being introduced into the importing country, taking into account the nature of the commodity and the aquatic animal health status of the exporting country. This means that, correctly applied, the recommendations ensure that the intended importation can take place with an optimal level of animal health security, incorporating the latest scientific findings and available techniques.

3. The recommendations in the Aquatic Code make reference only to the animal health situation in the exporting country, and assume that the disease is either not present in the importing country or is the subject of a control or eradication programme. Therefore, when determining its import measures, an importing country should do so in a way that is consistent with the principle of national treatment and the other provisions of the WTO SPS Agreement. An importing country is always free to authorise the importation of animals or animal products into its territory under conditions either more or less stringent than those recommended by the Aquatic Code, but this must be based on a scientific risk analysis and done in accordance with the country's obligations under the SPS Agreement.

4. To avoid confusion, key terms and expressions used in the Aquatic Code are defined in Chapter 1.1.1. When preparing model international aquatic animal health certificates, the importing country should endeavour to use these terms and expressions in accordance with the definitions given in the Aquatic Code.

5. At the head of each chapter relating to a specific disease (in Part 2 of the Aquatic Code), there is an article clearly describing the scope of each chapter.

6. In many of the Aquatic Code chapters, the use of diagnostic tests is recommended. In each case, a reference in the first article of the chapter is made to the relevant section in the OIE Manual of Diagnostic Tests for Aquatic Animals (hereafter referred to as the ‘Aquatic Manual’).

7. Section 1.3. of the Aquatic Code deals with obligations and ethics in international trade. Veterinary Administrations and/or other Competent Authorities should have a sufficient number of copies of the Aquatic Code to allow all veterinarians directly involved in such trade to familiarise themselves with the contents. In addition, diagnostic laboratories should be fully conversant with the technical recommendations in the Aquatic Manual.

8. When, in some parts of this Aquatic Code, the term ‘under study’ is applied to an Article or part of an Article, the meaning is that the text has not been adopted by the OIE International Committee and is not part of the Aquatic Code. Accordingly, that recommendation needs not be applied by Member Countries.

9. The complete text of the Aquatic Code has been made available on the OIE Web site (address: http://www.oie.int) to ensure wider access.

B. Disease Information, the Bulletin and World Animal Health

These three OIE publications inform Veterinary Administrations and/or other Competent Authorities on the animal health situation world-wide. Importing countries can thus have an overview of the animal health status, disease
occurrence and control programmes in exporting countries. If it considers the data available at the international level to be insufficient, the importing country should contact the exporting country directly, or through OIE Headquarters, to obtain additional information.

C. International Health Certificates

1. An international aquatic animal health certificate is a document, drawn up by the exporting country in accordance with the terms of Chapter 1.3.1. and Chapter 1.3.2. of the Aquatic Code, describing the aquatic animal health requirements for the exported commodity. The assurance given to the importing country that diseases will not be introduced through the importation of aquatic animals or aquatic animal products depends on the quality of the exporting country's aquatic animal health infrastructure and the rigour with which international aquatic animal health certificates are issued in the exporting country.

2. International veterinary certificates are intended to facilitate safe trade and should not be used to impede it by imposing unjustified health conditions. In all cases, the exporting country and the importing country should refer to the health conditions recommended in the Aquatic Code before agreeing on the terms of the certificate. They should also respect their rights and obligations under the SPS Agreement.

3. The steps to be followed when drafting international aquatic animal health certificates are as follows:
   a) list the diseases against which the importing country is justified in seeking protection;
   b) list the health requirements for each of these diseases, which can be determined by referring to the relevant articles in the Aquatic Code; the Aquatic Code provides for various levels of sanitary status in the case of many diseases: disease free country, zone, compartment or aquaculture establishment;
   c) use the model international aquatic animal health certificates presented in Part 4 of the Aquatic Code as a general framework, adapting the contents and form of the paragraphs as required, for example by devoting more space to details of the origin of the consignment.

4. As stated in Article 1.3.2.2. of the Aquatic Code, it is important that international aquatic animal health certificates be kept as simple as possible and be clearly worded, so as to avoid any misunderstanding of the requirements of importing countries. The same article gives advice on how to draft certificates so as to ensure the validity of their contents and prevent forgery.

D. Notes of Guidance for Importers and Exporters

In order to avoid any misunderstanding of the requirements, it is often advisable to prepare notes of guidance to assist importers and exporters. The notes should set out all the conditions concerning importation measures to be applied before and after importation, as well as during transport and unloading, legal obligations and operational procedures. The attention of exporters should also be drawn to the relevant International Air Transport Association (IATA) rules for the carriage of aquatic animals and aquatic animal products by air.

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GENERAL DEFINITIONS

CHAPTER 1.1.1.

DEFINITIONS

Article 1.1.1.1.

For the purpose of the Aquatic Code:

**Acceptable risk**

means a risk level judged by Member Countries to be compatible with the protection of public health, aquatic animal health and terrestrial animal health within their countries.

**Approved laboratory**

means a laboratory in a Member Country that is approved by the Competent Authority to carry out diagnostic work on diseases listed by the OIE and is responsible for health control work.

**Aquaculture**

means the farming of aquatic animals with some sort of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators, etc.

**Aquaculture establishment**

means an establishment in which fish, molluscs or crustaceans for breeding, stocking or marketing are raised or kept.

**Aquatic Animal Health Standards Commission**

means the OIE Commission responsible for updating the Aquatic Code in the intervals between General Sessions of the OIE International Committee. The Aquatic Animal Health Standards Commission is concerned with diseases of fish, molluscs and crustaceans.

**Aquatic animal health status**

means the status of a country, zone or compartment with respect to an aquatic animal disease, according to the criteria listed in the relevant chapter of the Aquatic Code dealing with the disease.

**Aquatic animal import unit**

means a live aquatic animal or its eggs or gametes, or a specified weight of a product of aquatic animal origin.

**Aquatic animal products**

means non-viable aquatic animals and products from aquatic animals.
Aquatic animals

means all life stages (including eggs and gametes) of fish, molluscs and crustaceans originating from aquaculture establishments or removed from the wild, for farming purposes, for release into the aquatic environment or for human consumption.

Aquatic animals for slaughter/ harvest

means aquatic animals that are destined to be transported or taken following arrival in the importing country under the control of the relevant Competent Authority, to a fish slaughtering premises or other processing plant preparing products for human consumption.

Aquatic Code

means the OIE Aquatic Animal Health Code.

Aquatic Manual

means the OIE Manual of Diagnostic Tests for Aquatic Animals.

Area of direct transit

means a special area established in a transit country approved by the relevant Competent Authority where aquatic animals stay for a very short time, and where water changes may be made, before further transport to their final destination when passing through the transit territory.

Basic biosecurity conditions

means a set of conditions applying to a particular disease, and a particular zone or country, required to ensure adequate disease security, such as:

a) the disease, including suspicion of the disease, is compulsorily notifiable to the Competent Authority; and

b) an early detection system is in place within the zone or country; and

c) import requirements to prevent the introduction of disease into the country or zone, as outlined in the Aquatic Code, are in place.

Biological products

means:

a) biological reagents for use in the diagnosis of certain diseases;

b) sera for use in the prevention and treatment of certain diseases;

c) inactivated or modified vaccines for use in preventive vaccination against certain diseases;

d) genetic material of infectious agents;

e) endocrine tissues from fish or used in fish.

Biosecurity plan

means a plan that identifies significant potential pathways for the introduction and spread of disease in a zone or compartment, and describes the measures which are being, or will be, applied to mitigate the risks to introduce and spread disease, taking into consideration the recommendations in the Aquatic Code. The plan should also describe how these measures are audited, with respect to both their implementation and their targeting, to ensure that the risks are regularly re-assessed and the measures adjusted accordingly.
**Breeding station**

means an aquaculture establishment working to improve the genetic standard and production of aquatic animals.

**Broodstock**

means sexually mature fish, molluscs or crustaceans.

**Buffer zone**

means a zone established to protect the health status of aquatic animals in a free country or free zone, from those in a country or zone of a different aquatic animal health status, using measures based on the epidemiology of the disease under consideration to prevent spread of the disease agent into a free country or free zone.

**Central Bureau**

means the Permanent Secretariat of the World Organisation for Animal Health (OIE), the headquarters of which are:

12, rue de Prony, 75017 Paris, FRANCE
Telephone: 33-(0)1 44 15 18 88
Fax: 33-(0)1 42 67 09 87
Electronic mail: oie@oie.int
WWW: http://www.oie.int

**Certifying official**

means a person authorised by the Competent Authority to sign health certificates for aquatic animals.

**Commodity**

means aquatic animals, aquatic animal products, biological products and pathological material.

**Compartment**

means one or more aquaculture establishments under a common biosecurity management system containing an aquatic animals population with a distinct health status with respect to a specific disease or diseases for which required surveillance and control measures are applied and basic biosecurity conditions are met for the purpose of international trade. Such compartments must be clearly documented by the Competent Authority(ies).

**Compartmentalisation**

means identifying compartments for the purpose of disease control or international trade.

**Competent Authority**

means the Veterinary Services, or other Authority of a Member Country, having the responsibility and competence for ensuring or supervising the implementation of the aquatic animal health measures or other standards in the Aquatic Code.

**Container**

means a transport appliance:

a) of a permanent type and sufficiently strong to enable repeated use;

b) specially constructed to facilitate transport of aquatic animals or aquatic animal products by one or several means of transport;

c) provided with fittings that make it easy to manipulate, particularly for trans-shipment from one kind of transport vehicle to another;
d) constructed in a watertight way, easy to load and unload and capable of being cleansed and disinfecticed;
e) ensuring safe and optimal transport of aquatic animals.

Contingency plan

means a documented work plan designed to ensure that all needed actions, requirements and resources are provided in order to eradicate or bring under control outbreaks of specified diseases of aquatic animals.

Crustacean products

means fresh crustaceans, processed whole crustaceans or edible products of crustaceans that have been subjected to treatment such as cooking, drying, salting, brining, smoking or freezing.

Diagnosis

means determination of the nature of a disease.

Discharge

means blood or water from the slaughtering or processing of aquatic animals.

Disease

means clinical or non clinical infection or infestation with one or more of the aetiological agents of the diseases referred to in the Aquatic Code.

Disease agent

means an organism that causes or contributes to the development of a disease referred to in the Aquatic Code.

Disinfectants

means chemical compounds capable of destroying pathogenic microorganisms or inhibiting their growth or survival ability.

Disinfection

means the application, after thorough cleansing, of procedures intended to destroy the infectious or parasitic agents of diseases of aquatic animals, including zoonoses; this applies to aquaculture establishments (i.e. hatcheries, fish farms, oyster farms, shrimp farms, nurseries, etc.), vehicles, and different equipment/objects that may have been directly or indirectly contaminated.

Early detection system

means an efficient system for ensuring the rapid recognition of signs that are suspicious of a listed disease, or an emerging disease situation, or unexplained mortality, in aquatic animals in an aquaculture establishment or in the wild, and the rapid communication of the event to the Competent Authority, with the aim of activating diagnostic investigation with minimal delay. Such a system will include the following characteristics:

a) broad awareness, e.g. among the personnel employed at aquaculture establishments or involved in processing of the characteristic signs of the listed diseases and emerging diseases;
b) veterinarians or aquatic animal health specialists trained in recognising and reporting suspicious disease occurrence;
c) ability of the Competent Authority to undertake rapid and effective disease investigation;
d) access by the Competent Authority to laboratories with the facilities for diagnosing and differentiating listed diseases and emerging diseases.
**Egg**

means a viable fertilised ovum of an aquatic animal. 'Green eggs' means newly fertilised ova of fish. 'Eyed eggs' means eggs of fish where the eyes of the embryo are visible and that the eggs may be transported.

**Emerging disease**

means a newly recognised serious disease, the cause of which may or may not yet be established, that has the potential to be spread within and between populations, for example by way of trade in aquatic animals and/or aquatic animal products.

**Eviscerated fish**

means fish from which internal organs, excluding the brain and gills, have been removed.

**Exporting country**

means a country from which aquatic animals or aquatic animal products, biological products or pathological material are sent to a destination in another country.

**Fallowing**

means, for disease management purposes, an operation where an aquaculture establishment is emptied of aquatic animals susceptible to a disease of concern or known to be capable of transferring the disease agent, and, where feasible, of the carrying water. For aquatic animals of unknown susceptibility and those agreed not to be capable of acting as carriers of a disease of concern, decisions on fallowing should be based on a risk assessment.

**Fish products**

means fresh fish, processed whole fish or edible products of fish that have been subjected to treatment such as cooking, drying, salting, brining, smoking or freezing.

**Fish slaughtering premises**

means premises used for the slaughter of fish for human consumption or other purposes and approved by the Competent Authority for export purposes. These premises must meet recognised approved standards for the structural and other veterinary hygiene requirements.

**Food hygiene**

comprises conditions and measures necessary for the production, processing, storage and distribution of food of aquatic animal origin designed to ensure a safe, sound, wholesome product fit for human consumption or animal feeding.

**Free aquaculture establishment**

means an aquaculture establishment that fulfils the requirements for freedom from diseases listed by the OIE according to the relevant chapter in the Aquatic Code and approved as such by a Competent Authority.

**Free compartment**

means a compartment that fulfils the requirements for self-declaration of freedom from disease with respect to the disease(s) under consideration, according to the relevant chapter(s) in the Aquatic Code.

**Free country**

means a country that fulfils the requirements for self-declaration of freedom from disease with respect to the disease(s) under consideration according to the relevant chapter(s) in the Aquatic Code.
Free zone

means a zone that fulfils the requirements for self-declaration of freedom from disease with respect to the disease(s) under consideration according to the relevant chapter(s) in the Aquatic Code.

Fresh crustaceans

means crustaceans that have not been subjected to any treatment or that have been subjected to a treatment that has not irreversibly modified their organoleptic or physicochemical characters; for the purpose of the Aquatic Code, fresh crustaceans include chilled crustaceans.

Fresh fish

means fish that have not been subjected to any treatment or that have been subjected to a treatment that has not irreversibly modified their organoleptic and physicochemical characters; for the purpose of the Aquatic Code, fresh fish include chilled and frozen fish.

Fresh molluscs

means oysters/mussels that have not been subjected to any treatment or that have been subjected to a treatment that has not irreversibly modified their organoleptic and physicochemical characters; for the purpose of the Aquatic Code, fresh molluscs include chilled molluscs.

Frontier post

means any international airport or any port, railway station or road post open to international trade.

Gametes

means the sperm or unfertilised eggs of aquatic animals that are held or transported separately prior to fertilisation.

Hatcheries

means aquaculture establishments raising aquatic animals from fertilised eggs.

Hazard

means any pathogen that could produce adverse consequences on the importation of a commodity.

Hazard identification

means the process of identifying the pathogenic agents that could potentially be introduced in the commodity considered for importation.

Imported outbreak

means a disease outbreak introduced into a territory from another country.

Importing country

means a country that is the final destination to which aquatic animals, aquatic animal products, biological products or pathological material are sent.

Incidence

means the number of new outbreaks of disease within a specified period of time in a defined aquatic animal population.

Incubation period

means the period that elapses between the introduction of a disease agent into an aquatic animal population and the occurrence of the first clinical signs of the disease.
Infected aquaculture establishment

means an aquaculture establishment in which a disease referred to in the Aquatic Code has been diagnosed.

Infected zone

means a zone in which a disease has been diagnosed. The infected zone must be clearly defined by the Competent Authority(ies) concerned and may be separated from the rest of the country by a buffer zone.

Infection

means the presence of a multiplying or otherwise developing or latent disease agent in a host.

Infective period

means the longest period during which an affected aquatic animal can be a source of infection.

Infestation

means the presence in sufficient numbers of a multiplying parasitic, or commensal, agent on a host so as to cause damage or disease.

Inspection

means the control carried out by the Competent Authority in order to ensure that an aquatic animal is/ aquatic animals are free from the diseases considered in the Aquatic Code; the inspection may call for clinical examination, laboratory tests and, generally, the application of other procedures that could reveal an infection or an infestation that may be present in an aquatic animal population.

International aquatic animal health certificate

means a certificate issued by a member of the personnel of the Competent Authority of the exporting country, certifying the state of health of the aquatic animals, and a declaration that the aquatic animals originate from a source subjected to official health surveillance according to the procedures described in the Aquatic Manual.

International trade

means import, export or transit of aquatic animals, aquatic animal products, biological products and pathological material.

Laboratory

means a laboratory of high technical competence under direct supervision of a veterinarian or other person with competent biological training. Through quality controls and monitoring performance, the Competent Authority approves such a laboratory in regard to testing requirements for export.

Lot

means a group of aquatic animals of the same species in one aquaculture establishment originating from the same spawning population that has always shared the same water supply.

Marketing

means placing aquatic animals and aquatic animal products on the market.

Mollusc nurseries

means aquaculture establishments raising young molluscs from metamorphosed larvae to a maximum 11 months.
**Notification**

means the procedure by which:

a) the Veterinary Administration informs the Central Bureau,

b) the Central Bureau informs the Veterinary Administrations of Member Countries

of the confirmation of a disease outbreak, according to the provisions of Section 1.2. of the Aquatic Code.

**Offal**

means visceral organs, cut-offs, condemned raw material, organs, etc. of aquatic animals.

**OIE-listed diseases**

means diseases that are referred to in Chapter 1.2.3. of the Aquatic Code. (Synonym: diseases listed by the OIE.)

**Outbreak of disease**

means an occurrence of disease in an aquatic animal population.

**Ova**

see eggs and gametes.

**Partial stamping-out policy**

means the carrying out under the authority of the Competent Authority, on confirmation of a disease, of prophylactic animal health measures consisting of killing selected lots of the aquatic animals within an aquaculture establishment. See also stamping-out policy.

**Pathological material**

means tissues, organs, fluids, etc., from aquatic animals, or strains of infectious organisms (which could be identified as an isolate or biovar) to be sent to an aquatic animal disease laboratory or to a reference laboratory recognised by the World Organisation for Animal Health (OIE), the World Health Organization (WHO), the Food and Agriculture Organization of the United Nations (FAO), the European Union (EU), etc.

**Personnel of the Competent Authority**

means any competent personnel working within the body of, or designated by, the Competent Authority.

**Place of shipment**

means the place where the aquatic animals, aquatic animal products, biological products and pathological material are loaded into the vehicle/other transporting units or handed to the agency that will transport them.

**Population**

means a group of units sharing a common defined characteristic.

**Prevalence**

means the total number of infected aquatic animals expressed as a percentage of the total number of aquatic animals in a given aquatic animal population at one specific time.
Processing
means the subjecting of aquatic animals to actions such as gutting, cleaning, filleting, freezing, thawing or packing.

Products of animal origin destined for use in aquatic animal feeding

Products of aquatic animal origin destined for human consumption
means fish, mollusc and crustacean products intended for human consumption.

Qualitative risk assessment
means an assessment where the conclusions on the likelihood of the outcome or the magnitude of the consequences are expressed in qualitative terms such as high, medium, low or negligible.

Quantitative risk assessment
means an assessment where the outputs of the risk assessment are expressed numerically, as probabilities or distributions of probabilities.

Quarantine
means maintaining a group of aquatic animals in isolation with no direct or indirect contact with other aquatic animals, in order to undergo observation for a specified length of time and, if appropriate, testing and treatment, including proper treatment of the effluent waters.

Risk
means the likelihood of the occurrence and the likely magnitude of the consequences of an adverse event to public, aquatic animal or terrestrial animal health in the importing country during a specified time period.

Risk analysis
means the complete process composed of hazard identification, risk assessment, risk management and risk communication.

Risk assessment
means the evaluation of the likelihood and the biological and economic consequences of entry, establishment, or spread of a hazard within the territory of an importing country.

Risk communication
is the interactive exchange of information on risk among risk assessors, risk managers and other interested parties.

Risk management
means the process of identifying, selecting and implementing measures that can be applied to reduce the level of risk.

Sanitary measure
means measures such as those described in each chapter of the Aquatic Code that are used for risk reduction and are appropriate for particular diseases.
Sanitary slaughtering
means slaughtering of aquatic animals according to particular procedures providing safety against the spread of specific infectious agents.

Screening method
means the laboratory method in the Aquatic Manual approved for surveillance for a given disease referred to in the Aquatic Code.

Sealed vehicle
means a vehicle that is properly sealed so that neither water nor aquatic animals can escape during transportation.

Self-declaration of freedom from disease
means declaration by the Competent Authority of the country concerned that the country, zone or compartment is free from a listed disease based on implementation of the provisions of the Aquatic Code and the Aquatic Manual. The country may wish to transmit this information to the OIE Central Bureau, which may publish the information.

Sensitivity analysis
means the process of examining the impact of the variation in individual model inputs on the conclusions of a quantitative risk assessment.

Sexual products
means eggs and gametes of sexually mature aquatic animals.

Shellfish
means fresh molluscs or fresh crustaceans or the edible products of these species that have been subjected to treatment by cooking, drying, salting, brining or smoking.

Shipment
means a group of aquatic animals or products thereof destined for transportation. See also place of shipment.

Slaughtering
means the killing and bleeding of fish.

Sperm
means the male gametes of aquatic animals.

Stamping-out policy
means the carrying out under the authority of the Competent Authority, on confirmation of a disease of preventive aquatic animal health measures, consisting of killing the aquatic animals that are affected, those suspected of being affected in the population and those in other populations that have been exposed to infection or infestation by direct or indirect contact of a kind likely to cause the transmission of the disease agent. All these aquatic animals, vaccinated or unvaccinated, on an infected site should be killed and the carcasses destroyed by burning or burial, or by any other method that will eliminate the spread of infection or infestation through the carcasses or products of the aquatic animals destroyed. This policy should be accompanied by cleansing and disinfection procedures as defined in the Aquatic Code. Fallowing should be for an appropriate period determined by risk assessment.
**Subclinical**

means without clinical manifestations, for example a stage of infection or infestation at which signs are not apparent or detectable by clinical examination.

**Subpopulation**

means a distinct part of a population identifiable according to specific common aquatic animal health characteristics.

**Surveillance**

means a systematic series of investigations of a given population of aquatic animals to detect the occurrence of disease for control purposes, and which may involve testing samples of a population.

**Surveillance zone**

means a zone in which a systematic series of investigations of a given population of aquatic animals takes place.

**Susceptible species**

means a species of aquatic animal in which infection or infestation has been demonstrated by natural cases or by experimental exposures to the disease agent that mimics the natural pathways for infection or infestation. Each disease chapter in the Aquatic Manual contains a list of currently known susceptible species.

**Targeted surveillance**

means surveillance targeted at a specific disease, infection or infestation.

**Territory**

means land and water under jurisdiction of a country.

**Transit country**

means a country through which aquatic animals, aquatic animal products, biological products or pathological material destined for an importing country, are transported or in which a stopover is made at a frontier post.

**Transparency**

means comprehensive documentation of all data, information, assumptions, methods, results, discussion and conclusions used in the risk analysis. Conclusions should be supported by an objective and logical discussion and the document should be fully referenced.

**Transport**

means movement of aquatic animals or products thereof to a destination by means of aircraft, motor vehicle or boat.

**Uncertainty**

means the lack of precise knowledge of the input values, which is due to measurement error or to lack of knowledge of the steps required, and the pathways from hazard or risk, when building the scenario being assessed.

**Unit**

means individually identifiable elements. This is a generic concept used to describe, for example, the members of a population, or the elements selected when sampling. In these contexts, examples of units include individual animals, ponds, nets, cages, farms, villages, districts, etc.
Variability

means a real-world complexity in which the value of an input is not the same for each case because of natural diversity in a given population.

Vehicle

means any method of transport by land, air or water.

Vertical transmission

means the transmission of a pathogen from a parent aquatic animal to its progeny via its sexual products.

Veterinarian

means a person registered or licensed by the relevant veterinary statutory body of a country to practise veterinary medicine/science in that country.

Veterinary Administration

means the governmental Veterinary Service having authority in the whole country for implementing the animal health measures and international veterinary certification process which the OIE recommends, and supervising or auditing their application.

Veterinary Authority

means a Veterinary Service, under the authority of the Veterinary Administration, which is directly responsible for the application of animal health measures in a specified area of the country. It may also have responsibility for the issuing or the supervision of the issuing of international veterinary certificates in that area.

Veterinary Services

means the Veterinary Administration, all the Veterinary Authorities, and all persons authorised, registered or licensed by the veterinary statutory body.

Veterinary statutory body

means an autonomous authority regulating veterinarians and veterinary para-professionals.

Water catchment

means an area or basin of land bounded by natural features such as hills or mountains, into which all run-off water flows.

Zone

means a portion of one or more countries comprising:

a) an entire water catchment from the source of a waterway to the estuary or lake, or

b) more than one water catchment, or

c) part of a water catchment from the source of a waterway to a barrier that prevents the introduction of a specific disease or diseases, or

d) part of a coastal area with a precise geographical delimitation, or

e) an estuary with a precise geographical delimitation,

that consists of a contiguous hydrological system with a distinct health status with respect to a specific disease or diseases. The zones must be clearly documented (e.g. by a map or other precise locators such as GPS co-ordinates) by the Competent Authority(ies).
Zoning

means identifying zones for the purpose of disease control or international trade.
SECTION 1.2.

NOTIFICATION SYSTEMS

CHAPTER 1.2.1.

NOTIFICATION OF DISEASES AND EPIDEMIOLOGICAL INFORMATION

Article 1.2.1.1.

For the purposes of the Aquatic Code and in terms of Articles 5, 9 and 10 of the Statutes, every Member Country of the OIE shall recognise the right of the Central Bureau to communicate directly with the Veterinary Administration of its territory or territories.

All notifications and all information sent by the OIE to the Veterinary Administration shall be regarded as having been sent to the country concerned and all notifications and all information sent to the OIE by the Veterinary Administration shall be regarded as having been sent by the country concerned.

Article 1.2.1.2.

1. Countries shall make available to other countries, through the OIE, whatever information is necessary to minimise the spread of aquatic animal diseases and their aetiological agents and to assist in achieving better world-wide control of these diseases.

2. To achieve this, countries shall comply with the reporting requirements specified in Article 1.2.1.3.

3. To assist in the clear and concise exchange of information, reports shall conform as closely as possible to the current OIE disease reporting format.

4. Recognising that scientific knowledge concerning the relationship between disease agents and diseases is constantly evolving and that the presence of an infectious agent does not necessarily imply the presence of a disease, countries shall ensure through their reports that they comply with the spirit and intention of paragraph 1 above. This means that the presence of an infectious agent, even in the absence of clinical disease, should be reported.

5. In addition to notifying findings in accordance with Article 1.2.1.3., countries shall also provide information on the measures taken to prevent the spread of diseases, including possible quarantine measures and restrictions on the movement of aquatic animals, aquatic animal products, biological products and other miscellaneous objects that could by their nature be responsible for transmission of disease. In the case of diseases transmitted by vectors, the measures taken against such vectors shall also be described.
Article 1.2.1.3.

Veterinary Administrations shall send to the OIE:

1. Immediate notification (within 24 hours), by fax or electronically, of any of the following events:
   a) for diseases listed by the OIE, the first occurrence or re-occurrence of a disease in a country or zone or compartment of the country, if the country or zone or compartment of the country was previously considered to be free of that particular disease; or
   b) for diseases listed by the OIE, if the disease has occurred in a new host species; or
   c) for diseases listed by the OIE, if the disease has occurred with a new pathogen strain or in a new disease manifestation; or
   d) for diseases listed by the OIE, if the disease has a newly recognised zoonotic potential; or
   e) for diseases not listed by the OIE, if there is a case of an emerging disease or pathogenic agent should there be findings that are of epidemiological significance to other countries.

In deciding whether findings justify immediate notification (within 24 hours), countries must ensure that they comply with the obligations of Section 1.3. of the Aquatic Code (especially Article 1.3.1.1.), to report developments that may have implications for international trade.

2. Weekly reports by fax or electronically subsequent to a notification under paragraph 1 above, to provide further information on the evolution of an incident that justified immediate notification. These reports should continue until the disease has been eradicated or the situation has become sufficiently stable that six-monthly reporting under point 3 will satisfy the obligation of the country to the OIE; in each case, a final report on the incident should be submitted.

3. Six-monthly reports on the absence or presence and evolution of diseases listed by the OIE, and findings of epidemiological significance to other countries with respect to diseases that are not listed.

4. An annual questionnaire concerning any other information of significance to other countries.

Article 1.2.1.4.

1. The Veterinary Administration of a country in which an infected zone or compartment was located shall inform the Central Bureau when this zone or compartment is free from the disease.

2. An infected zone or compartment of a disease shall be considered as such until a period exceeding the known infective period for the disease in question has elapsed after the last reported outbreak and when full prophylactic and appropriate sanitary measures have been applied to prevent possible reappearance or spread of the disease. These measures will be found in detail in the various chapters of Part 2. of the Aquatic Code.

3. A country may again declare itself free (i.e. self-declaration of freedom from disease) from a specific disease when it complies with all the conditions given in the corresponding chapters of Part 2. of the Aquatic Code.

4. The Veterinary Administration of a country in which one or more free zones or compartments have been established may wish to inform the Central Bureau, giving necessary particulars of the zones or compartments and describing their location (e.g. by a map or other precise locators such as GPS [Global Positioning System] co-ordinates). The Central Bureau may publish this information.

Article 1.2.1.5.

1. The Central Bureau shall send by fax or electronically to the Veterinary Administration concerned, all notifications received as provided in Articles 1.2.1.2.-1.2.1.4.
2. The Central Bureau shall notify Member Countries through Disease Information of any event of exceptional epidemiological significance reported by a Member Country.
Criteria for listing an aquatic animal disease

Diseases proposed for listing must meet all of the relevant parameters set for each of the criteria, namely A. Consequences, B. Spread and C. Diagnosis. Therefore, to be listed, a disease must have the following characteristics: 1 or 2 or 3; and 4 or 5; and 6; and 7; and 8. Such proposals should be accompanied by a case definition for the disease under consideration.

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria (A-C)</th>
<th>Parameters that support a listing</th>
<th>Explanatory notes</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>A. Consequences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td>The disease has been shown to cause significant production losses at a national or multinational (zonal or regional) level.</td>
<td>There is a general pattern that the disease will lead to losses in susceptible species, and that morbidity or mortality are related primarily to the agent and not management or environmental factors. (Morbidity includes, for example, loss of production due to spawning failure.) The direct economic impact of the disease is linked to its morbidity, mortality and effect on product quality.</td>
</tr>
<tr>
<td>2.</td>
<td>Or</td>
<td>The disease has been shown to or scientific evidence indicates that it is likely to negatively affect wild aquatic animal populations that are an asset worth protecting for economic or ecological reasons.</td>
<td>Wild aquatic animal populations can be populations that are commercially harvested (wild fisheries) and hence are an economic asset. However, the asset could be ecological or environmental in nature, for example, if the population consists of an endangered species of aquatic animal or an aquatic animal potentially endangered by the disease.</td>
</tr>
<tr>
<td></td>
<td>Or</td>
<td>The agent is of public health concern.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. Spread</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td>Infectious aetiology of the disease is proven.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Or</td>
<td>An infectious agent is strongly associated with the disease, but the aetiology is not yet known.</td>
<td>Infectious diseases of unknown aetiology can have equally high-risk implications as those diseases where the infectious aetiology is proven. Whilst disease occurrence data are gathered, research should be conducted to elucidate the aetiology of the disease and the results be made available within a reasonable period of time.</td>
</tr>
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</table>
### Chapter 1.2.2. - Criteria for listing aquatic animal diseases

<table>
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<th>Explanatory notes</th>
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<tbody>
<tr>
<td>6.</td>
<td>And</td>
<td>Potential for international spread, including via live animals, their products or fomites.</td>
<td>International trade in aquatic animal species susceptible to the disease exists or is likely to develop and, under international trading practices, the entry and establishment of the disease is a likely risk.</td>
</tr>
<tr>
<td>7.</td>
<td>And</td>
<td>Several countries or countries with zones may be declared free of the disease based on the general surveillance principles outlined in Chapter 1.1.4. of the Aquatic Manual.</td>
<td>Free countries/zones could still be protected. Listing of diseases that are ubiquitous or extremely widespread would render notification unfeasible. However, individual countries that run a control programme on such a disease can propose its listing provided they have undertaken a scientific evaluation to support their request. Examples may be the protection of broodstock from widespread diseases, or the protection of the last remaining free zones from a widespread disease.</td>
</tr>
</tbody>
</table>

**And**

### C. Diagnosis

| 8.  | A repeatable and robust means of detection/diagnosis exists. | A diagnostic test should be widely available and preferably has undergone a formal standardisation and validation process using routine field samples (See Aquatic Manual.) or a robust case definition is available to clearly identify cases and allow them to be distinguished from other pathologies. |

**Article 1.2.2.2.**

**Criteria for listing an emerging aquatic animal disease**

A newly recognised disease or a known disease behaving differently may be proposed for listing if it meets the criteria 1 or 2, and 3 or 4. Such proposals should be accompanied by a case definition for the disease under consideration.

<table>
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<tr>
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<tbody>
<tr>
<td>1.</td>
<td>Infectious aetiology of the disease is proven.</td>
<td></td>
</tr>
<tr>
<td>Or</td>
<td>An infectious agent is strongly associated with the disease, but the aetiology is not yet known.</td>
<td>Infectious diseases of unknown aetiology can have equally high-risk implications as those diseases where the infectious aetiology is proven. Whilst disease occurrence data are gathered, research should be conducted to elucidate the aetiology of the disease and the results be made available within a reasonable period of time.</td>
</tr>
<tr>
<td>And</td>
<td></td>
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<th>Explanatory notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>The agent is of public health concern.</td>
<td></td>
</tr>
<tr>
<td>Or</td>
<td>Significant spread in naive populations of wild or cultured aquatic animals.</td>
<td>The disease has exhibited significant morbidity, mortality or production losses at a zone, compartment or country level. 'Naive' means animals previously unexposed either to a new disease or a new form of a known disease.</td>
</tr>
</tbody>
</table>

1. ‘Susceptible’ is not restricted to ‘susceptible to clinical disease’ but includes ‘susceptible to covert infections’.
CHAPTER 1.2.3.

DISEASES LISTED BY THE OIE

Preamble: The following diseases are listed by the OIE according to the criteria for listing an aquatic animal disease (see Article 1.2.2.1.) or criteria for listing an emerging aquatic animal disease (see Article 1.2.2.2.).

Article 1.2.3.1.

The following diseases of fish are listed by the OIE:
- Epizootic haematopoietic necrosis
- Infectious haematopoietic necrosis
- Spring viraemia of carp
- Viral haemorrhagic septicaemia
- Infectious salmon anaemia
- Epizootic ulcerative syndrome
- Gyrodactylosis (Gyrodactylus salaris)
- Red sea bream iridoviral disease
- Koi herpesvirus disease.

Article 1.2.3.2.

The following diseases of molluscs are listed by the OIE:
- Infection with Bonamia ostreae
- Infection with Bonamia exitiosa
- Infection with Martelia refringens
- Infection with Perkinsus marinus
- Infection with Perkinsus olseni
- Infection with Xenohaliotis californiensis
- Abalone viral mortality.

Article 1.2.3.3.

The following diseases of crustaceans are listed by the OIE:
- Taura syndrome
- White spot disease
- Yellowhead disease
- Tetrahedral baculovirosis (Baculovirus penaei)
- Spherical baculovirosis (Penaeus monodon-type baculovirus)
- Infectious hypodermal and haematopoietic necrosis
- Crayfish plague (Aphanomyces astaci)
- Necrotising hepatopancreatitis
- Infectious myonecrosis
- White tail disease
- Hepatopancreatic parovirus disease
- Mourilyan virus disease.

1 Listed according to Article 1.2.2.2.
2 Listing of this disease is under study.
SECTION 1.3.

OBLIGATIONS AND ETHICS IN INTERNATIONAL TRADE

CHAPTER 1.3.1.

GENERAL OBLIGATIONS

Article 1.3.1.1.

International trade in aquatic animals and aquatic animal products depends on a combination of health factors that should be taken into account to ensure unimpeded trade, without incurring unacceptable risks to human and aquatic animal health. As a general principle, international trade in aquatic animals and their products from populations known to be infected with a listed disease and considered to be capable of transmitting the disease should only be done with the prior agreement of the importing and exporting countries.

Because of the likely variations in aquatic animal health situations, various options are offered by the Aquatic Code. The aquatic animal health situation in the exporting country, in the transit country or countries and in the importing country should be considered before determining the requirements that have to be met for trade. To maximise harmonisation of the aquatic animal health aspects of international trade, Competent Authorities of Member Countries should base their import requirements on the OIE standards, guidelines and recommendations.

These requirements should be included in the model international aquatic animal health certificates approved by the OIE, which form Part 4. of the Aquatic Code.

Certification requirements should be exact and concise, and should clearly convey the wishes of the importing country. For this purpose, prior consultation between Competent Authorities of importing and exporting countries is useful and may be necessary. It enables the setting out of the exact requirements so that the signing veterinarian or other certifying official can, if necessary, be given a note of guidance explaining the understanding between the Competent Authorities involved.

When Members of, or representatives acting on behalf of, a Competent Authority wish to visit another country for matters of professional interest to the Competent Authority of the other country, the latter should be informed.

Article 1.3.1.2.

Responsibilities of the importing country

1. The import requirements included in the international aquatic animal health certificate should assure that commodities introduced into the importing country comply with the national level of protection. Importing countries should restrict their requirements to those justified for such level of protection. If these are more strict than the OIE standards, guidelines and recommendations, then they should be based on an import risk analysis.
2. The international aquatic animal health certificate should not include requirements for the exclusion of pathogens or aquatic animal diseases that are present within the territory of the importing country and are not subject to any official control programme. The requirements applying to pathogens or diseases subject to official control programmes in a country or zone should not provide a higher level of protection on imports than that provided for the same pathogens or diseases by the measures applied within that country or zone.

3. The transmission by the Competent Authority or Veterinary Administration of certificates or the communication of import requirements to persons other than the Competent Authority or Veterinary Administration of another country necessitates that copies of these documents be also sent to the Competent Authority or Veterinary Administration. This important procedure avoids delays and difficulties that may arise between traders and Competent Authorities or Veterinary Administrations when the authenticity of the certificates or permits is not established.

This information is usually the responsibility of Veterinary Administrations or other Competent Authorities of the exporting country. However, it can be the responsibility of Veterinary Authorities or other Competent Authorities at the place of origin of the aquatic animals, if different from the exporting country, when it is agreed that the issue of certificates does not require the approval of the Veterinary Administrations or other Competent Authorities.

Article 1.3.1.3.

Responsibilities of the exporting country

1. An exporting country should be prepared to supply the following information to importing countries on request:
   a) information on the aquatic animal health situation and national aquatic animal health information systems to determine whether that country is free or has zones that are free from OIE-listed diseases including the regulations and procedures in force to maintain its free status;
   b) regular and prompt information on the occurrence of transmissible diseases;
   c) for diseases not listed, if there are new findings that are of potential epidemiological significance to other countries;
   d) details of the country’s ability to apply measures to control and prevent OIE-listed diseases;
   e) information on the structure of the Competent Authority and the authority that they exercise;
   f) technical information, particularly on biological tests and vaccines applied in all or part of the national territory;
   g) identification of the country or location of harvest or production of the product being exported.

2. Competent Authorities of exporting countries should:
   a) have official procedures for the authorisation of certifying officials, defining their functions and duties as well as conditions covering possible suspension and termination of their appointment;
   b) ensure that the relevant instructions and training are provided to certifying officials;
   c) monitor the activities of the certifying officials to verify their integrity and impartiality.

The Head of the Competent Authority of the exporting country is ultimately accountable for the certifying official used in international trade.
Article 1.3.1.4.

Responsibilities in case of an incident occurring after importation

International trade involves a continuing ethical responsibility. Therefore, if within the recognised infestive periods of the various diseases subsequent to an export taking place, the Competent Authority becomes aware of the appearance or reappearance of a disease that has been specifically included in the international aquatic animal health certificate or other disease of potential epidemiological importance to the importing country there is an obligation for the Authority to notify the importing country, so that the imported aquatic animals may be inspected or tested and appropriate action be taken to limit the spread of the disease should it have been inadvertently introduced.

Equally, if a disease condition appears in imported aquatic animals within a time period after importation consistent with the recognised incubation period of the disease, the Competent Authority of the exporting country should be informed so as to enable an investigation to be made, because this may be the first available information on the occurrence of the disease in a previously free aquatic animal population. The Competent Authority of the importing country should be informed of the result of the investigation because the source of infection may not be in the exporting country.
CHAPTER 1.3.2.

CERTIFICATION PROCEDURES

Article 1.3.2.1.

Protection of the professional integrity of the certifying official

Certification should be based on the highest possible ethical standards, the most important of which is that the professional integrity of the certifying official must be respected and safeguarded.

It is essential not to include in the requirements additional specific matters that cannot be accurately and honestly signed by a certifying official. For example, these requirements should not include certification of an area as being free from diseases that are not notifiable in that country, the occurrence of which the signing certifying official is not necessarily informed about. Equally, to ask for certification for events that will take place after the document is signed is unacceptable when these events are not under the direct control and supervision of the signing certifying official.

Certification of freedom from diseases based on purely clinical freedom and aquatic animal population history is of limited value. This is also true of diseases for which there is no specific diagnostic test, or the value of the test as a diagnostic aid is limited.

The purpose of the note of guidance referred to in Article 1.3.1.1. is not only to inform the signing certifying official but also to safeguard professional integrity.

Article 1.3.2.2.

Procedures for the preparation of international aquatic animal health certificates

Certificates should be drawn up in accordance with the following principles:

1. Paper certificates should be pre-printed, if possible on one sheet of paper, serially numbered, and issued by the Competent Authority on officially headed notepaper and, if possible, printed using techniques that prevent forgery. Electronic certification procedures should include equivalent safeguards.

2. They should be written in terms that are as simple, unambiguous and easy to understand as possible, without losing their legal meaning.

3. If so required, they should be written in the language of the importing country. In such circumstances, they should also be written in a language understood by the certifying official.

4. They should require appropriate identification of aquatic animals and aquatic animal products except where this is impractical (e.g. eyed eggs).

5. They should not require a certifying official to certify matters that are outside his/her knowledge or that he/she cannot ascertain and verify.

6. Where appropriate, they should be accompanied, when presented to the certifying official, by notes of guidance indicating the extent of enquiries, tests or examinations expected to be carried out before the certificate is signed.

7. Their text should not be amended except by deletions that must be signed and stamped by the certifying official. The signature and stamp must be in a colour different to that of the printing of the certificate.

8. Only original certificates are acceptable.
Certifying officials

Certifying officials should:

1. be authorised by the Competent Authority of the exporting country to sign international aquatic animal health certificates;

2. only certify matters that are within their own knowledge at the time of signing the certificate, or that have been separately attested by another competent party approved by the Competent Authority;

3. sign only at the appropriate time certificates that have been completed fully and correctly; where a certificate is signed on the basis of supporting documentation, the certifying official should be in possession of that documentation before signing;

4. have no conflict of interest in the commercial aspects of the aquatic animals or aquatic animal products being certified and be independent from the commercial parties.

Electronic certification

1. Certification may be provided by electronic documentation sent directly from the Competent Authority of the exporting country to the Competent Authority of the importing country. Normally, such systems also provide an interface with the commercial organisation marketing the commodity for provision of information to the certifying authority. The certifying official must have access to all information such as laboratory results and aquatic animal identification data.

2. Electronic certificates should carry the same information as conventional certificates.

3. The Competent Authority must have in place systems for the security of electronic certificates against access by unauthorised persons or organisations.

4. The certifying official must be officially responsible for the secure use of his/her electronic signature. This may be by a personal identification number or a similar secure mechanism.
SECTION 1.4.

RISK ANALYSIS

CHAPTER 1.4.1.

GENERAL CONSIDERATIONS

Article 1.4.1.1.

Introduction

The importation of aquatic animals and animal products, whether of aquatic or terrestrial origin, involves a degree of disease risk to the importing country. This risk, which may be to humans or animals, may be represented by one or several diseases not present in the importing country.

The principal aim of import risk analysis is to provide importing countries with an objective and defensible method of assessing the disease risks associated with the importation of animals, animal products, animal genetic material, feedstuffs, biological products and pathological material. The principles and methods are the same whether the commodities are derived from aquatic and/or terrestrial animal sources. The analysis should be transparent. This is necessary so that the exporting country is provided with clear reasons for the imposition of import conditions or refusal to import.

Transparency is also essential because data are often uncertain or incomplete and, without full documentation, the distinction between facts and the analyst's value judgements may blur.

This chapter outlines the role of the OIE with respect to the Agreement on the Application of Sanitary and Phytosanitary Measures (the so-called SPS Agreement) of the World Trade Organization (WTO), provides definitions and describes the OIE procedure for settlement of disputes.

Chapter 1.4.2. provides guidelines and principles for conducting transparent, objective and defensible risk analyses for international trade. However, it cannot provide detail on the means by which a risk analysis is carried out as the purpose of the Aquatic Code is simply to outline the necessary basic steps. The components of risk analysis described in Chapter 1.4.2. are hazard identification, risk assessment, risk management and risk communication (Figure 1).
The risk assessment is the component of the analysis that estimates the likelihood and consequences associated with a hazard. Risk assessments may be qualitative or quantitative. For many diseases, particularly those referred to in the Aquatic Code where there are well-developed internationally agreed standards, there is broad agreement concerning the likely risks, although the status of some diseases may differ between countries or even between the Northern and Southern Hemispheres. In many cases it is likely that a qualitative assessment is all that is required. Qualitative assessment does not require mathematical modelling skills to carry out and so is often the type of assessment used for routine decision making. No single method of import risk assessment has proven applicable in all situations, and different methods may be appropriate in different circumstances.

The process of import risk analysis on aquatic animals and aquatic animal products usually needs to take into consideration the results of an evaluation of the Competent Authorities, zoning and regionalisation, and surveillance systems that are in place for monitoring aquatic animal health in the exporting country. These are described in separate chapters in the Aquatic Code.

Article 1.4.1.2.

The Agreement on the Application of Sanitary and Phytosanitary Measures and role and responsibility of the OIE

The SPS Agreement encourages WTO Members to base their sanitary measures on international standards, guidelines and recommendations, where they exist. Members may choose to adopt a higher level of protection than that provided by international texts if there is a scientific justification or if the level of protection provided by the relevant international texts is considered to be inappropriate. In such circumstances, Members are subject to obligations relating to risk assessment and to a consistent approach to risk management.

The SPS Agreement encourages Governments to make a wider use of risk analysis. WTO Members shall undertake an assessment as appropriate to the circumstances of the actual risk involved.

The SPS Agreement recognises the OIE as the relevant international organisation responsible for the development and promotion of international animal health standards, guidelines, and recommendations affecting trade in live animals and animal products, whether aquatic or terrestrial in origin.

Article 1.4.1.3.

The OIE in-house procedure for settlement of disputes

The OIE shall maintain its existing voluntary in-house mechanisms for assisting Member Countries to resolve differences. In-house procedures that will apply are that:

1. Both parties agree to give the OIE a mandate to assist them in resolving their differences.
2. If considered appropriate, the Director General of the OIE recommends an expert, or experts, and a chairman, as requested, agreed by both parties.

3. Both parties agree on the terms of reference and working programme, and to meet all expenses incurred by the OIE.

4. The expert or experts are entitled to seek clarification of any of the information and data provided by either country in the assessment or consultation processes, or to request additional information or data from either country.

5. The expert or experts should submit a confidential report to the Director General, who will transmit it to both parties.
Introduction

An import risk analysis begins with a description of the commodity proposed for import and the likely annual quantity of trade. It must be recognised that whilst an accurate estimate of the anticipated quantity of trade is desirable to incorporate into the risk estimate, it may not be readily available, particularly where such trade is new.

Hazard identification is an essential step that must be conducted before the risk assessment.

The risk assessment process consists of four interrelated steps. These steps clarify the stages of the risk assessment, describing them in terms of the events necessary for the identified potential risk(s) to occur, and facilitate understanding and evaluation of the conclusions (or ‘outputs’). The product is the risk assessment report, which is used in risk communication and risk management.

The relationships between risk assessment and risk management processes are outlined in Figure 1.

Fig. 1. The relationship between risk assessment and risk management processes
Hazard identification

Hazard identification involves identifying the pathogenic agents that could potentially produce adverse consequences associated with the importation of a commodity.

The hazards identified would be those appropriate to the species being imported, or from which the commodity is derived, and which may be present in the exporting country. It is then necessary to identify whether each hazard is already present in the importing country, and whether it is an OIE-listed disease or is subject to control or eradication in that country and to ensure that import measures are not more trade restrictive than those applied within the country.

Hazard identification is a categorisation step, identifying biological agents dichotomously as hazards or not hazards. The risk assessment should be concluded if hazard identification fails to identify hazards associated with the importation.

The evaluation of the Competent Authorities, surveillance and control programmes, and zoning and regionalisation systems are important inputs for assessing the likelihood of hazards being present in the aquatic animal population of the exporting country.

An importing country may decide to permit the importation using the appropriate sanitary standards recommended in the Aquatic Code, thus eliminating the need for a risk assessment.

Principles of risk assessment

1. Risk assessment should be flexible in order to deal with the complexity of real-life situations. No single method is applicable in all cases. Risk assessment must be able to accommodate the variety of animal commodities, the multiple hazards that may be identified with an importation and the specificity of each disease, detection and surveillance systems, exposure scenarios and types and amounts of data and information.

2. Both qualitative and quantitative risk assessment methods are valid. Although quantitative analysis is recognised to provide deeper insights into a particular problem, qualitative methods may be more relevant when available data are limited as is often the case with aquatic species.

3. The risk assessment should be based on the best available information that is in accord with current scientific thinking. The assessment should be well documented and supported with references to the scientific literature and other sources, including expert opinion.

4. Consistency in risk assessment methods should be encouraged and transparency is essential in order to ensure fairness and rationality, consistency in decision making and ease of understanding by all the interested parties.

5. Risk assessments should document the uncertainties, the assumptions made, and the effect of these on the final risk estimate.

6. Risk increases with increasing volume of commodity imported.

7. The risk assessment should be amenable to updating when additional information becomes available.
Article 1.4.2.4.

Risk assessment steps

1. Release assessment

Release assessment consists of describing the biological pathway(s) necessary for an importation activity to 'release' (that is, introduce) a hazard into a particular environment, and estimating the likelihood of that complete process occurring. The release assessment describes the likelihood of the 'release' of each of the hazards under each specified set of conditions with respect to amounts and timing, and how these might change as a result of various actions, events or measures. Examples of the kind of inputs that may be required in the release assessment are:

a) Biological factors
   - Species, strain or genotype, and age of aquatic animal
   - Strain of agent
   - Tissue sites of infection and/or contamination
   - Vaccination, testing, treatment and quarantine.

b) Country factors
   - Incidence/prevalence
   - Evaluation of Competent Authorities, surveillance and control programmes, and zoning systems of the exporting country.

c) Commodity factors
   - Whether the commodity is alive or dead
   - Quantity of commodity to be imported
   - Ease of contamination
   - Effect of the various processing methods on the pathogenic agent in the commodity
   - Effect of storage and transport on the pathogenic agent in the commodity.

If the release assessment demonstrates no significant risk, the risk assessment does not need continue.

2. Exposure assessment

Exposure assessment consists of describing the biological pathway(s) necessary for exposure of humans and aquatic and terrestrial animals in the importing country to the hazards and estimating the likelihood of these exposure(s) occurring, and of the spread or establishment of the hazard.

The likelihood of exposure to the hazards is estimated for specified exposure conditions with respect to amounts, timing, frequency, duration of exposure, routes of exposure, and the number, species and other characteristics of the human, aquatic animal or terrestrial animal populations exposed. Examples of the kind of inputs that may be required in the exposure assessment are:

a) Biological factors
   - Presence of potential vectors or intermediate hosts
   - Genotype of host
   - Properties of the agent (e.g. virulence, pathogenicity and survival parameters).

b) Country factors
   - Aquatic animal demographics (e.g. presence of known susceptible and carrier species, distribution)
- Human and terrestrial animal demographics (e.g. possibility of scavengers, presence of piscivorous birds)
- Customs and cultural practices
- Geographical and environmental characteristics (e.g. hydrographic data, temperature ranges, water courses).

c) Commodity factors
- Whether the commodity is alive or dead
- Quantity of commodity to be imported
- Intended use of the imported aquatic animals or products (e.g. domestic consumption, restocking, incorporation in or use as aquaculture feed or bait)
- Waste disposal practices.

If the exposure assessment demonstrates no significant risk, the risk assessment should conclude at this step.

3. **Consequence assessment**

Consequence assessment consists of identifying the potential biological, environmental and economic consequences. A causal process must exist by which exposures to a hazard result in adverse health, environmental or socio-economic consequences. Examples of consequences include:

a) Direct consequences
   - Aquatic animal infection, disease, production losses and facility closures
   - Adverse, and possibly irreversible, consequences to the environment
   - Public health consequences.

b) Indirect consequences
   - Surveillance and control costs
   - Compensation costs
   - Potential trade losses
   - Adverse consumer reaction.

4. **Risk estimation**

Risk estimation consists of integrating the results of the release assessment, exposure assessment, and consequence assessment to produce overall measures of risks associated with the hazards identified at the outset. Thus risk estimation takes into account the whole of the risk pathway from hazard identified to unwanted outcome.

For a quantitative assessment, the final outputs may include:

- The various populations of aquatic animals and/or estimated numbers of aquaculture establishments or people likely to experience health impacts of various degrees of severity over time
- Probability distributions, confidence intervals, and other means for expressing the uncertainties in these estimates
- Portrayal of the variance of all model inputs
- A sensitivity analysis to rank the inputs as to their contribution to the variance of the risk estimation output
- Analysis of the dependence and correlation between model inputs.
Article 1.4.2.5.

Principles of risk management

1. Risk management is the process of deciding upon and implementing measures to achieve the Member Country's appropriate level of protection, whilst at the same time ensuring that negative effects on trade are minimised. The objective is to manage risk appropriately to ensure that a balance is achieved between a country's desire to minimise the likelihood or frequency of disease incursions and their consequences and its desire to import commodities and fulfil its obligations under international trade agreements.

2. The international standards of the OIE are the preferred choice of sanitary measures for risk management. The application of these sanitary measures should be in accordance with the intentions of the standards or other recommendations of the SPS Agreement.

Article 1.4.2.6.

Risk management components

1. Risk evaluation - the process of comparing the risk estimated in the risk assessment with the Member Country's appropriate level of protection.

2. Option evaluation - the process of identifying, evaluating the efficacy and feasibility of, and selecting measures to reduce the risk associated with an importation in line with the Member Country's appropriate level of protection. The efficacy is the degree to which an option reduces the likelihood and/or magnitude of adverse health and economic consequences. Evaluating the efficacy of the options selected is an iterative process that involves their incorporation into the risk assessment and then comparing the resulting level of risk with that considered acceptable. The evaluation for feasibility normally focuses on technical, operational and economic factors affecting the implementation of the risk management options.

3. Implementation - the process of following through with the risk management decision and ensuring that the risk management measures are in place.

4. Monitoring and review - the ongoing process by which the risk management measures are continuously audited to ensure that they are achieving the results intended.

Article 1.4.2.7.

Principles of risk communication

1. Risk communication is the process by which information and opinions regarding hazards and risks are gathered from potentially affected and interested parties during a risk analysis, and by which the results of the risk assessment and proposed risk management measures are communicated to the decision makers and interested parties in the importing and exporting countries. It is a multidimensional and iterative process and should ideally begin at the start of the risk analysis process and continue throughout.

2. A risk communication strategy should be put in place at the start of each risk analysis.

3. The communication of risk should be an open, interactive, iterative and transparent exchange of information that may continue after the decision on importation.

4. The principal participants in risk communication include the authorities in the exporting country and other stakeholders such as domestic aquaculturists, recreational and commercial fishermen, conservation and wildlife groups, consumer groups, and domestic and foreign industry groups.
5. The assumptions and uncertainty in the model, model inputs and the risk estimates of the risk assessment should be communicated.

6. Peer review of risk analyses is an essential component of risk communication for obtaining a scientific critique aimed at ensuring that the data, information, methods and assumptions are the best available.
Chapter 1.4.3.

Evaluation of Competent Authorities

Article 1.4.3.1.

For the purposes of the Aquatic Code, every Member Country shall recognise the right of another Member Country to undertake, or request it to undertake, an evaluation of its Competent Authority where reasons exist concerning international trade in aquatic animals, aquatic animal products, aquatic animal genetic material, biological products and aquatic animal feedstuffs between the two countries.

Reasons are deemed to exist where the initiating Member Country is an actual or a prospective importer or exporter of aquatic animals, aquatic animal products, aquatic animal genetic material, biological products or aquatic animal feedstuffs and where the evaluation is to be a component of a risk assessment process that is to be used to determine or review sanitary/zoo-sanitary measures that apply to such trade.

Any evaluation should be conducted having regard to OIE guidelines.

Article 1.4.3.2.

The evaluation of Competent Authorities shall be conducted by Member Countries on a bilateral basis. The two countries concerned should consult mutually on the evaluation criteria, the information required and on the outcome of the evaluation.

A Member Country that intends to conduct an evaluation of another Member Country's Competent Authority shall give it notice in writing. This notice should define the purpose of the evaluation and details of the information required.

The choice of criteria on which evaluation is conducted should be appropriate to the circumstances applying to the countries concerned. Criteria should be relevant to the type of trade involved, the aquatic animal production systems in the respective countries, the difference in aquatic animal health status between the countries, and other factors that relate to the overall risk assessment.

On receipt of a formal request for information to enable an evaluation of its Competent Authority by another Member Country, and following bilateral agreement of the evaluation criteria, a Member Country should provide expeditiously to the other country meaningful and accurate information and data of the type requested.

The outcome of the evaluation conducted by a Member Country should be provided in writing as soon as possible, and in any case within four months of receipt of the relevant information, to the Member Country that has undergone the evaluation. The evaluation report should detail any findings that affect trade prospects. The Member Country that conducts the evaluation should clarify in detail any points of the evaluation on request.

Article 1.4.3.3.

A Member Country involved in the international trade in live aquatic animals, aquatic animal products, aquatic animal genetic material, biological products or aquatic animal feedstuffs should generate and maintain current information on its Competent Authority with regard to OIE guidelines.

A Member Country can request the Director General of the OIE to arrange for an expert or experts to assist in the self-evaluation of its Competent Authority.
Article 1.4.3.4.

In the event of a dispute between two Member Countries over the appropriate evaluation criteria or the outcome of the evaluation of the Competent Authority, the matter should be dealt with in accordance to the procedures set out in Article 1.4.1.3.
CHAPTER 1.4.4.

ZONING AND COMPARTMENTALISATION

Article 1.4.4.1.

Introduction

Given the difficulty of establishing and maintaining freedom from a particular disease for an entire country especially for diseases whose entry is difficult to control, there may be benefits to one or more Member Countries in establishing and maintaining a subpopulation with a distinct aquatic animal health status. Subpopulations may be separated by natural or artificial geographical barriers or, in certain situations, by the application of appropriate management practices.

Zoning and compartmentalisation are procedures implemented by a country under the provisions of this chapter to define subpopulations of distinct aquatic animal health status for the purpose of disease control or international trade. Compartmentalisation applies to a subpopulation when management practices related to biosecurity are the defining factors, while zoning applies when a subpopulation is defined on a geographical basis. In practice, spatial considerations and good management play important roles in the application of both concepts.

This chapter is to assist OIE Member Countries wishing to establish and maintain different subpopulations, 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 aquatic animals or aquatic animal products may occur, an importing country needs to be satisfied that its aquatic 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.

In addition to contributing to the safety of international trade, zoning and compartmentalisation may assist disease control or eradication within Member Countries. Zoning may encourage the more efficient use of resources, and compartmentalisation may allow the functional separation of a subpopulation from other domestic or wild aquatic animals through biosecurity measures, which a zone (through geographical separation) would not achieve. Following an outbreak of disease, compartmentalisation may allow a Member Country be able 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 resumption of trade.

Zoning and compartmentalisation may not be applicable 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 the status of a free zone or free compartment following an outbreak of disease, Member Countries should follow the recommendations in the relevant disease chapter in the Aquatic Code.

Article 1.4.4.2.

General considerations

The Competent Authority of an exporting country that is establishing a zone or compartment for international trade purposes should clearly define the subpopulation in accordance with the recommendations in the
relevant chapters in the Aquatic Code, including those on surveillance, and the identification and traceability of aquatic animals. The Competent Authority of an exporting country should be able to explain to the Competent Authority of an importing country the basis for its claim of a distinct aquatic animal health status for the zone or compartment in such terms.

The procedures used to establish and maintain the distinct aquatic 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, risk of introduction and establishment of disease, and applicable biosecurity measures. The exporting country should be able to demonstrate, through detailed documentation supplied to the importing country, published through official channels, that it has implemented the recommendations in the Aquatic 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 Aquatic Code are applied, and the Competent Authority of the exporting country certifies that this is the case. Note that an importing country may adopt a higher level of protection where it is scientifically justified and the obligations referred to in Article 1.4.1.2. are met. Article 1.4.4.4. is also relevant.

Where countries share a zone or compartment, the Competent Authority of each country should collaborate to define and fulfil their respective responsibilities.

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 Competent Authority (and of the relevant industry, in the case of a compartment) including on disease surveillance and diagnosis.

Article 1.4.4.3.

Principles for defining a zone or compartment

In conjunction with the above considerations and the definitions of zone and compartment, the following principles should apply when Member Countries define a zone or compartment:

1. The extent of a zone should be established by the Competent Authority on the basis of the definition of zone and made public through official channels.
2. The factors defining a compartment should be established by the Competent Authority on the basis of relevant criteria such as management and husbandry practices related to biosecurity, and made public through official channels.
3. Aquatic animals belonging to such subpopulations need to be recognizable as such through a clear epidemiological separation from other aquatic animals and all things presenting a disease risk.
4. For a zone or compartment, the Competent Authority should document in detail the measures taken to ensure the identification of the subpopulation, for example by means of registration of all the aquaculture establishments located in such a zone or compartment and the establishment and maintenance of its aquatic animal health status through a biosecurity plan. The measures used to establish and maintain the distinct aquatic 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 aquatic animal health status in adjacent areas, applicable biosecurity measures (including movement controls, use of natural and artificial boundaries, the spatial separation of aquatic animals, and commercial management and husbandry practices), and surveillance.
5. For a compartment, the biosecurity plan should describe the partnership between the relevant enterprise/industry and the Competent Authority, and their respective responsibilities, including the procedures for oversight of the operation of the compartment by the Competent Authority.
6. For a compartment, the biosecurity plan should also describe the routine operating procedures to provide clear evidence that the surveillance conducted and the management practices are adequate to
meet the definition of the compartment. In addition to information on aquatic animal movements, the biosecurity plan should include production and stock records, feed sources, traceability, surveillance results, visitor logbook, morbidity and mortality history, vaccinations, documentation of training and any other criteria necessary for evaluation of risk mitigation. The information required may vary according to the aquatic animal species and disease(s) under consideration. The biosecurity plan should also describe how the measures will be audited to ensure that the risks are regularly re-assessed and the measures adjusted accordingly.

7. Thus defined, the zones and compartments constitute the relevant subpopulations for the application of the recommendations in Part 2 of the Aquatic Code.

Article 1.4.4.4.

Sequence of steps to be taken in establishing a zone or a compartment and having it recognised for international trade purposes

There is no single sequence of steps which should be followed in establishing a zone or a compartment. The steps that the Competent Authority of the importing country and the exporting country choose and implement will generally depend on the circumstances existing within the countries and at their borders, and their trading history. The recommended steps are:

1. For zoning
   a) The exporting country identifies a geographical area, which it considers to contain an aquatic animal subpopulation with a distinct aquatic animal health status with respect to a specific disease/specific disease, based on surveillance.
   b) The exporting country describes in the biosecurity plan the measures which are being, or will be, applied to distinguish such an area epidemiologically from other parts of its territory, in accordance with the recommendations in the Aquatic Code.
   c) The exporting country provides the above information to the importing country, with an explanation of why the area can be treated as an epidemiologically separated zone for international trade purposes.
   d) The importing country determines whether it accepts such an area as a zone for the importation of aquatic animals and aquatic animal products, taking into account:
      i) an evaluation of the exporting country’s Competent Authority;
      ii) the result of a risk assessment based on the information provided by the exporting country and its own research;
      iii) its own aquatic animal health situation with respect to the disease(s) concerned; and
      iv) other relevant OIE standards.
   e) The importing country notifies the exporting country of the result of its determination and the underlying reasons, within a reasonable period of time, being either:
      i) recognition of the zone;
      ii) request for further information; or
      iii) rejection of the area as a zone for international trade purposes.
   f) An attempt should be made to resolve any differences over the recognition of the zone, either in the interim or finally, by using an agreed mechanism to reach consensus (such as the OIE dispute settlement mechanism).
   g) The importing country and the exporting country should enter into a formal agreement recognising the zone.
2. **For compartmentalisation**

   a) Based on discussions with the relevant enterprise/industry, the exporting country identifies a compartment of one or more aquaculture establishments or other premises that operate under common management practices related to biosecurity, and which contains an identifiable aquatic animal subpopulation with a distinct aquatic animal health status with respect to a specific disease/specific diseases; the exporting country describes how this status is maintained through a partnership between the relevant enterprise/industry and the Competent Authority of the exporting country.

   b) The exporting country examines the compartment’s biosecurity plan and confirms through an audit that:
      
      i) the compartment is epidemiologically closed throughout its routine operating procedures as a result of effective implementation of its biosecurity plan; and
      
      ii) the surveillance programme in place is appropriate to verify the status of such aquaculture establishment(s) with respect to such disease(s).

   c) The exporting country describes the compartment, in accordance with the recommendations in the Aquatic Code.

   d) The exporting country provides the above information to the importing country, with an explanation of why such an enterprise can be treated as an epidemiologically separated compartment for international trade purposes.

   e) The importing country determines whether it accepts such an enterprise as a compartment for the importation of aquatic animals and aquatic animal products, taking into account:
      
      i) an evaluation of the exporting country’s Competent Authority;
      
      ii) the result of a risk assessment based on the information provided by the exporting country and its own research;
      
      iii) its own aquatic animal health situation with respect to the disease(s) concerned; and
      
      iv) other relevant OIE standards.

   f) The importing country notifies the exporting country of the result of its examination and the underlying reasons, within a reasonable period of time, being either:
      
      i) recognition of the compartment;
      
      ii) request for further information; or
      
      iii) rejection of such an enterprise as a compartment for international trade purposes.

   g) An attempt should be made to resolve any differences over the recognition of the compartment, either in the interim or finally, by using an agreed mechanism to reach consensus (such as the OIE dispute settlement mechanism).

   h) The importing country and the exporting country should enter into a formal agreement recognising the compartment.
SECTION 1.5.
IMPORT/EXPORT PROCEDURES

CHAPTER 1.5.1.
RECOMMENDATIONS FOR TRANSPORT

Article 1.5.1.1.

General arrangements

1. These arrangements should be compulsory in all countries either by legislative or regulatory texts and methods of application should be described in a manual available to all concerned.

2. Vehicles (or containers) used for the transport of aquatic animals shall be designed, constructed and fitted in such a way as to withstand the weight of the aquatic animals and water and to ensure their safety and welfare during transportation. Vehicles shall be thoroughly cleansed and disinfected before use according to the guidelines given in the Aquatic Code.

3. Vehicles (or containers) in which aquatic animals are confined during transport by sea or by air shall be secured to maintain optimal conditions for the aquatic animals during transport, and to allow easy access by the attendant.

Article 1.5.1.2.

Particular arrangements for containers

1. The construction of containers intended for transportation of aquatic animals shall be such that the accidental release of water, etc., is prevented during transport.

2. In the case of the transportation of aquatic animals, provision shall be made to enable preliminary observation of the contents of containers.

3. Containers in transit in which there are aquatic animal products shall not be opened unless the Competent Authorities of the transit country consider it necessary. If this is the case, containers shall be subject to precautions to prevent contamination.

4. Containers shall be loaded only with one kind of product or, at least, with products not susceptible to contamination by one another.

5. It rests with each country to decide on the facilities it requires for the transport and importation of aquatic animals and aquatic animal products in containers.
Particular arrangements for the transport of aquatic animals by air

1. The stocking densities for the transport of aquatic animals in containers should be determined by taking the following into consideration when transporting by air:
   a) the total volume of available space for each type of aquatic animal;
   b) the oxygenation capacity available to supply the containers while on the ground and during all stages of the flight.

   With regard to fish, molluscs and crustaceans, the space reserved for each aquatic animal species in containers that have been fitted for the separate transportation of several aquatic animals or for the transportation of groups of aquatic animals should comply with acceptable densities specified for the species in question.

2. The OIE approved International Air Transport Association (IATA) Regulations for live animals may be adopted if they do not conflict with national legislative arrangements. (Copies of these Regulations are obtainable from the International Air Transport Association, 800 Place Victoria, P.O. Box 113, Montreal, Quebec H4Z 1M1, Canada.)

Disinfection and other sanitary measures

1. Disinfection and all zoo-sanitary work should be carried out in order to:
   a) avoid all unjustified inconvenience and to prevent damage or injury to the health of people and aquatic animals;
   b) avoid damage to the structure of the vehicle or its appliances;
   c) prevent, as far as possible, any damage to aquatic animal products.

2. On request, the Competent Authority shall issue the transporters with a certificate indicating the measures that have been applied to all vehicles, the parts of the vehicle that have been treated, the methods used and the reasons that led to the application of the measures.

   In the case of aircraft, the certificate may be replaced, on request, by an entry in the General Declaration of the aircraft.

3. Likewise, the Competent Authority shall issue on request:
   a) a certificate showing the date of arrival and departure of the aquatic animals
   b) a certificate to the shipper or exporter, the consignee and transporter or their representatives, indicating the measures applied.

Treatment of transportation water

Water to be used for transportation of aquatic animals should be appropriately treated after transport and/or before discharge in order to minimise the risk of transferring pathogens. The specific recommendations are provided in the chapter of the Aquatic Code on disinfection.

During transportation of aquatic animals, the transporter should not be permitted to evacuate and replace the water in the transport tanks except on specifically designated sites in the national territory. The waste and rinsing water should not be emptied into a drainage system that is directly connected to an aquatic...
environment where aquatic animals are present. The water from the tanks should therefore either be disinfected by a recognised process (for example, 50 mg iodine or chlorine/litre for one hour), or sprayed over land that does not directly drain into waters containing aquatic animals. Each country shall designate the sites in their national territories where these operations can be carried out. This Article does not apply to treatment of transport water for transport by sea.

Article 1.5.1.6.

Discharge of infected material

The Competent Authority shall take all practical measures to prevent the discharge of any infective material, including transport water, into internal or territorial waters. This Article does not apply to transport of aquatic animals by sea.
CHAPTER 1.5.2.

AQUATIC ANIMAL HEALTH MEASURES APPLICABLE BEFORE AND AT DEPARTURE

Article 1.5.2.1.

1. Each country should only authorise the exportation from its territory of live aquatic animals and aquatic animal products that are correctly identified, and inspected according to the procedures outlined in the Aquatic Code and Aquatic Manual.

2. In certain cases, the above-mentioned aquatic animals could, according to the wish of the importing country, be subjected to certain biological tests or to prophylactic parasitological procedures within limits of a defined period of time before their departure.

3. Observation of the above-mentioned aquatic animals before leaving the country may be carried out in the establishment where they were reared or at the frontier post. When they have been found to be clinically healthy and free from diseases listed by the OIE or any other specified infectious disease by a member of the personnel of the Competent Authority or a certifying official approved by the importing country during the period of observation, the aquatic animals should be transported to the place of shipment in specially constructed containers, previously cleansed and disinfected, without delay and without coming into contact with other susceptible aquatic animals, unless these aquatic animals have health guarantees similar to those of the transported aquatic animals.

4. The transportation of aquatic animals for breeding or rearing or slaughter shall be carried out directly from the establishment of origin to the place of shipment or to the processing establishment in conformity with the conditions agreed between the importing and exporting countries.

Article 1.5.2.2.

Each country should only undertake the exportation of live aquatic animals or eggs or gametes destined for a country or zone or aquaculture establishment officially declared free from one or more of the diseases listed by the OIE, when the exporting country or zone or aquaculture establishment of origin is itself officially declared free of the same disease(s). If the live aquatic animals originate in an infected aquaculture establishment or infected zone, with respect to the disease(s) in question, the exporting country should not export the aquatic animals if they have been exposed to infection by direct or indirect contact of a kind likely to cause transmission of the disease agent(s), without the prior agreement of the importing country.

Article 1.5.2.3.

Each country exporting aquatic animals at any stage of development or aquatic animal products should inform the country of destination and when necessary the transit countries if, after exportation, diagnosis of a disease listed by the OIE occurs in the establishment of origin, or in aquatic animals that were in the aquaculture establishment or natural water body at the same time as the exported animals, within a period of time that indicates that the exported consignment may have been infected.

Article 1.5.2.4.

Before the departure of the aquatic animals and aquatic animal products, a member of the personnel of the Competent Authority or a certifying official approved by the importing country should provide an international
Article 1.5.2.5.

1. Before the departure of a consignment of aquatic animals on an international journey, the Competent Authority of the port, airport or district in which the frontier post is situated may, if it is considered necessary, have a health examination carried out on the consignment. The time and place of the examination shall be fixed taking into account customs and other formalities and in such a way as not to impede or unreasonably delay departure.

2. The Competent Authority referred to in point 1 above shall take necessary measures to:
   a) prevent the shipment of aquatic animals showing clinical signs of any disease listed by the OIE;
   b) avoid entry into the container of possible vectors or disease agents.
CHAPTER 1.5.3.

AQUATIC ANIMAL HEALTH MEASURES APPLICABLE DURING TRANSIT FROM THE PLACE OF DEPARTURE IN THE EXPORTING COUNTRY TO THE PLACE OF ARRIVAL IN THE IMPORTING COUNTRY

Article 1.5.3.1.

1. Any country through which the transit of aquatic animals has to be made, and that normally conducts commercial transactions with the exporting country, should not refuse the transit, subject to the reservations mentioned herein and on condition that notification is made of the proposed transit to the Veterinary Administration or Competent Authority in charge of the frontier posts. This notification shall state the species and quantities of aquatic animals, the methods of transport and the frontier posts of entry and exit in accordance with a previously arranged and authorised itinerary in the transit country.

2. Any country through which transit has to take place may refuse such transit if, in the exporting country or transit country that precedes it on the itinerary, certain diseases exist that have been specifically included in the international aquatic animal health certificates or in bilateral agreements. Alternatively, the Competent Authority of the transit country may impose conditions with regard to the method, including packaging, and route of transport.

3. Any transit country may require the presentation of international aquatic animal health certificates. Such a country may, in addition, cause an examination to be made by a member of the personnel of the Competent Authority on the health status of fish, molluscs or crustaceans in transit, except in cases where transport in sealed vehicles or containers is a condition of transit.

4. Any transit country may refuse passage through its territory of aquatic animals at one of its frontier posts if an examination carried out by a member of the personnel of the Competent Authority shows that the consignment of aquatic animals in transit is affected by or infected with any of the diseases listed by the OIE and if these diseases are exotic to that country or the zone through which the transportation was to take place, or if there is an enforced control programme for the disease(s) in question, or if the international aquatic animal health certificate is inaccurate and/or unsigned or does not apply to fish, molluscs or crustaceans.

In these circumstances, the Competent Authority of the exporting country shall be informed immediately, thereby providing an opportunity for checking the findings or correcting the certificate.

If the diagnosis of any disease listed by the OIE is confirmed or if the certificate cannot be corrected, the consignment of aquatic animals in transit shall either be returned to the exporting country if there is a common frontier with it, or be slaughtered or destroyed.

Article 1.5.3.2.

1. Any transit country may require vehicles used for the transit of aquatic animals through its territory to be constructed to prevent the escape and dispersion of waste water or other contaminated material.

2. Unloading of aquatic animals shall be permitted in the territory of the transit country only if an emergency situation arises. The importing country shall be informed of any unforeseen unloading in the transit country and the reason for it.
Article 1.5.3.3.

Vessels stopping in a port or passing through a canal or other navigable route situated in the territory of a country, on their way to a port situated in the territory of another country, must comply with the conditions required by the Competent Authority.

Article 1.5.3.4.

1. If, for reasons beyond the control of its captain, a ship or aircraft calls or lands somewhere other than at a port or airport, or at a port or airport other than that at which it should normally call or land, the captain of the ship or aircraft, or his/her deputy, shall immediately notify the nearest Competent Authority or any other public authority of the new port of call or landing.

2. As soon as the Competent Authority is notified of this calling or landing place, it shall take appropriate action.

3. The aquatic animals on board the ship or aircraft shall not be permitted to leave the vicinity of the docking or landing place and the removal from the vicinity of any equipment or packing material accompanying them shall not be permitted.

4. When the measures prescribed by the Competent Authority have been carried out, the ship or aircraft shall be permitted, for aquatic animal health purposes, to proceed to the port or airport at which it would normally have called or landed or, if there are technical reasons for which this cannot be done, to a port or an airport that is more suitable.


CHAPTER 1.5.4.

FRONTIER POSTS IN THE IMPORTING COUNTRY

Article 1.5.4.1.

The Competent Authority shall provide specified frontier posts with an office comprising personnel, equipment and premises as the case may be and, in particular, means for:

1. detecting and isolating aquatic animal populations affected with or suspected of being affected with a disease;
2. carrying out disinfection of vehicles used to transport aquatic animals and aquatic animal products;
3. making clinical examinations and obtaining specimens of material for diagnostic purposes from live aquatic animals or carcasses of aquatic animals affected or suspected of being affected with a disease, and obtaining specimens of aquatic animal products suspected of contamination.

Furthermore, it is preferable that each port and international airport be provided with equipment for the sterilisation or incineration of any material dangerous to aquatic animal health.

Article 1.5.4.2.

When required by international traffic in transit, airports shall be provided, as soon as possible, with areas of direct transit; these must, however, comply with the conditions required by the Veterinary Administrations or other responsible competent authorities.

Article 1.5.4.3.

Each Veterinary Administration shall keep at the disposal of the OIE Central Bureau and any interested country on request:

1. a list of specified frontier posts and processing plants for aquatic animals in its territory that are approved for international trade;
2. the period of time required for notice to be given for the application of the arrangements contained in paragraph 2 of Articles 1.5.5.1. and 1.5.5.2.;
3. a list of airports in its territory that are provided with an area of direct transit.
CHAPTER 1.5.5.

AQUATIC ANIMAL HEALTH MEASURES APPLICABLE ON ARRIVAL

Article 1.5.5.1.

1. An importing country should only accept into its territory live aquatic animals that have been subjected to examination by a member of the personnel of the Competent Authority of the exporting country or a certifying official approved by the importing country and that are accompanied by an international aquatic animal health certificate (see Model Certificates given in Part 4.).

2. An importing country may require sufficient advance notification regarding the proposed date of entry into its territory of aquatic animals, stating the species, quantity, means of transport and the name of the frontier post.

   In addition, any importing country shall publish a list of the specified frontier posts supplied with the equipment required for conducting control operations at importation and enabling the importation and transit procedures to be carried out in the most speedy and efficacious way.

3. An importing country may prohibit the introduction into its territory of aquatic animals if these were found, on examination carried out at the frontier post by a member of the personnel of the Competent Authority, to be affected by an OIE-listed disease of concern to the importing country.

   Refusal of entry may also be applied to aquatic animals that are not accompanied by an international aquatic animal health certificate conforming to the requirements of the importing country.

   In these circumstances, the Competent Authority of the exporting country shall be informed immediately, thereby providing an opportunity for checking the findings or correcting the certificate.

   However, the importing country may prescribe that the importation be placed immediately in quarantine in order to carry out a clinical observation and biological examinations with a view to establishing a formal diagnosis.

   If the diagnosis of a disease listed by the OIE is confirmed, or if the certificate cannot be corrected, the importing country may take the following measures:

   a) return the aquatic animals involved to the exporting country if this rejection does not involve transit through a third country;

   b) slaughter and destroy in cases where re-shipment would be dangerous from a health point of view or impossible from a practical point of view.

Article 1.5.5.2.

1. An importing country should only accept into its territory raw uneviscerated fish of those species susceptible to a disease listed by the OIE destined for introduction into an aquatic environment or for human consumption that have been subjected to examination by a member of the personnel of the Competent Authority of the exporting country or a certifying official approved by the importing country, and that are accompanied by an international aquatic animal health certificate (see Model Certificates given in Part 4.).

2. An importing country may require sufficient advance notification regarding the proposed date of entry into its territory of a consignment of products of aquatic animal origin destined for human consumption, together with information on the nature, quantity and packaging of the products, as well as the name of the frontier post.
Article 1.5.5.3.

On arrival at a frontier post of a vehicle transporting aquatic animals infected with any specified disease listed by the OIE, the vehicle shall be considered to be contaminated and the Competent Authority shall apply the following measures:

1. unloading of the vehicle and immediate transportation of any possibly contaminated material, such as water or ice, to an establishment assigned in advance for its destruction and the strict application of the aquatic animal health measures required by the importing country;

2. disinfection of:
   a) outer clothes and boots of the crew on the transporting vehicle;
   b) all parts of the vehicle that were used in the transport, moving and unloading of the aquatic animals.
CHAPTER 1.5.6.

MEASURES CONCERNING INTERNATIONAL TRANSPORT OF AQUATIC ANIMAL DISEASE AGENTS AND PATHOLOGICAL MATERIAL

Article 1.5.6.1.

Introduction

There is the risk that disease may occur as a result of the accidental release of aquatic animal pathogens during international transport of packaged materials. Such pathogens may already occur in the country or they may have been imported deliberately or inadvertently. It is therefore necessary to have in place measures to prevent their accidental release. These measures may be applied at national borders by prohibiting or controlling the importation of specified aquatic animal pathogens or pathological material, which may contain them.

Article 1.5.6.2.

Importation of aquatic animal pathogens

The importation of a disease agent/pathogen referred to in the Aquatic Code, whether in culture, in pathological material or in any other form, should be officially controlled by the Competent Authority to ensure appropriate safeguards are in place to manage the risk posed by the disease agent/pathogen. The conditions should be appropriate to the risk posed by the disease agent/pathogen and, in relation to air transport, the appropriate standards of the International Air Transport Association or other relevant transport associations concerning the packaging and transport of dangerous goods as outlined in Article 1.5.6.3. should apply.

When considering applications to import a disease agent/pathogen referred to in the Aquatic Code, whether in culture, in pathological material or in any other form, from other countries, the Competent Authorities should have regard to the nature of the material, the animal from which it is derived, the susceptibility of that animal to various diseases and the animal health situation of the country of origin. It may be advisable to require that material be pretreated before import to minimise the risk of inadvertent introduction of a disease agent/pathogen referred to in the Aquatic Code.

Any material that does not satisfy the applied conditions should be rendered safe by the Competent Authority of the receiving country.
Chapter 1.5.6. - Measures concerning international transport of aquatic animal disease agents and pathological material

Article 1.5.6.3.

Packaging and documentation for transport

The safe transport of a disease agent/pathogen referred to in the Aquatic Code, with respect to the pathogen, the handlers and the environment, is primarily dependent on proper packaging and it is the responsibility of the sender that this is done in accordance with current regulations.

1. Basic triple packaging system
   The system consists of three layers as follows:
   a) Primary receptacle: a labelled primary watertight, leak-proof receptacle containing the specimen. The receptacle is wrapped in enough absorbent material to absorb all fluid in case of breakage.
   b) Secondary receptacle: a second durable, watertight, leak-proof receptacle to enclose and protect the primary receptacle(s). Several wrapped primary receptacles may be placed in one secondary receptacle. Sufficient additional absorbent material must be used to cushion multiple primary receptacles.
   c) Outer shipping package: the secondary receptacle is placed in an outer shipping package, which protects it and its contents from outside influences such as physical damage, temperature fluctuations and water while in transit.

   Ice or dry ice when used in a shipment must be placed outside the secondary receptacle. If wet ice is used, it should be in a leak-proof container and the outer package must also be leak-proof. The secondary receptacle must be secured within the outer package to prevent damage after the refrigerant has melted or dissipated.

   Dry ice must NOT be placed inside the primary or secondary receptacle because of the risk of explosions. The outer package must permit the release of carbon dioxide gas if dry ice is used. IATA Packing Instruction 904 must be observed for packages containing dry ice.

2. Documentation
   Specimen data forms, letters and other types of information that identify or describe the specimen and also identify the shipper and receiver should be taped to the outside of the secondary receptacle, together with a copy of the recipient's import permit.

Article 1.5.6.4.

Any sender of a disease agent/pathogen referred to in the Aquatic Code or pathological material must ensure that the proposed receiver has obtained the necessary import licence referred to in Article 1.5.6.2.

Article 1.5.6.5.

1. Every consignment of a disease agent/pathogen referred to in the Aquatic Code or pathological material should be notified in advance by the sender to the intended recipient, giving the following information:
   a) exact nature of the sample and its packaging;
   b) the number of packages sent and the marks and numbers enabling their identification;
   c) date of despatch;
   d) method of transport used for consignment of products (ship, aircraft, railway wagon or road vehicle).

2. The recipient should notify the sender of the receipt of each consignment of a disease agent/pathogen referred to in the Aquatic Code or pathological material on its arrival.
3. When a consignment that has been notified by the sender fails to arrive by the anticipated date, the intended recipient should notify the Competent Authority of the receiving country and, at the same time, the sender in the country of origin, so that any necessary action can be taken for investigation to be made without delay.
SECTION 1.6.

CONTINGENCY PLANS

CHAPTER 1.6.1.

GUIDELINES FOR CONTINGENCY PLANNING

Article 1.6.1.1.

A number of diseases are regarded as posing a potential threat to aquaculture as well as to wild stocks of aquatic animals world-wide. The introduction of such diseases into countries recognised to be free from these diseases or into countries with an established control system and eradication programme for such diseases, may result in significant losses. In order to diminish such losses, the Veterinary Administration or other Competent Authority responsible for aquatic animal health may need to act quickly and should develop contingency plan(s) before such events occur.

Article 1.6.1.2.

Legal powers

Countries must establish the necessary legal provisions that are needed for the implementation of contingency plan(s). Such legal powers must include provisions for establishing a list of diseases for which action is needed, definitions of how such diseases should be managed if detected, provisions for access to infected/suspected sites, and other legal provisions, as needed.

Article 1.6.1.3.

Crises centre(s)

Countries must establish specified crises centre(s) (disease control centre(s)) that shall have the responsibility for the co-ordination of all control measures to be carried out. Such centres could either be located centrally or locally, depending on the infrastructure in a given country. A list of the crises centre(s) that has(have) the necessary facilities to carry out disease control measures should be made widely available.

The contingency plan(s) should also state that the crises centre(s) has(have) the authority to act rapidly to bring a given disease situation under control by contacting the personnel, organisations, aquaculture establishments, etc., that are involved directly or indirectly in managing an outbreak of a disease.
Article 1.6.1.4.

**Personnel**

The contingency plan(s) should provide information on the staff required to undertake the control measures, their responsibilities, and instructions on the chain of command.

Article 1.6.1.5.

**Instructions**

Countries establishing contingency plan(s) should provide a detailed set of instructions on actions to be taken when a specified aquatic animal disease is suspected or confirmed. These could include:

1. diagnostic procedures in national reference laboratories;
2. confirmation of diagnosis, if necessary, at an OIE Reference Laboratory;
3. standing instructions to aquatic animal health personnel in the field;
4. instructions for handling/disposal of dead aquatic animals at an aquaculture establishment;
5. instructions for sanitary slaughtering;
6. instructions for disease control at the local level;
7. instructions for the establishment of quarantine areas and observation (surveillance) zones;
8. provisions for controlling movements of aquatic animals in established zones;
9. disinfection procedures;
10. fallowing procedures;
11. surveillance methods for establishing successful eradication;
12. re-stocking procedures;
13. compensation issues;
14. reporting procedures;
15. provisions for raising public awareness of aquatic animal disease.

Article 1.6.1.6.

**Diagnostic laboratories**

Countries establishing contingency plan(s) should establish national reference laboratories having the necessary facilities for diagnostic work on aquatic animal diseases that can be carried out rapidly. The national laboratory(ies) must also have established a set of instructions as regards rapid transportation of samples, and established protocols for quality assurance and diagnostic procedures to be used.
Article 1.6.1.7.

Training programmes

Countries establishing contingency plan(s) must establish necessary training programmes to ensure that skills in field, administrative and diagnostic procedures are maintained. Announced and unannounced field exercises for administrators and aquatic animal personnel should be carried out to maintain the state of readiness.
SECTION 1.7.

FALLOWING

CHAPTER 1.7.1.

GUIDELINES FOR FALLOWING IN AQUACULTURE

Article 1.7.1.1.

Introduction

Gaps in aquaculture production at the same location are commonly recognised to be of value in resting or restoring the local environment. As part of this strategy, fallowing can break re-infection cycles by removing loci of a disease from a farm. Consequently, fallowing is often carried out as a regular disease management measure in aquaculture, especially prior to the introduction of new populations of aquatic animals into a previously used site. In order to promote improved health in aquaculture, the Competent Authority responsible for aquatic animal health in a country may encourage the use of fallowing as a routine management strategy for many diseases. Account should be taken of the likely beneficial effects of fallowing in proportion to the economic costs involved. The Competent Authority should also consider such factors as the level of risk to the local and national aquaculture operations, previous knowledge of the severity of a disease(s), the infective period and distribution of the disease agent(s), the socioeconomic conditions, and benefits pertaining to the general aquatic resources. When the infective period is not known, the farm may be fallowed for a period, the length of which should be based on a risk assessment.

However, where an official stamping-out policy is being carried out for a disease of concern, the Competent Authority should require that an infected aquaculture establishment, and all other aquaculture establishments in an officially established infected zone, be subjected to a required period of fallowing, if necessary synchronised.

Article 1.7.1.2.

Legal powers

In cases where fallowing may be a compulsory measure, for instance in the establishment or restoration of a disease-free zone, countries should establish a legal framework for the implementation of fallowing procedures in aquaculture establishments. Legal provisions could include:

1. defining the disease circumstances when fallowing or synchronised fallowing is required;
2. defining mechanisms based on risk assessment where individual disease-specific measures may be determined, including disinfection and the length of the fallowing period prior to the re-introduction of susceptible species;
3. following permission by the Competent Authority to restock with susceptible species, defining a period of surveillance and diagnosis to verify freedom from the specified disease.
Article 1.7.1.3.

**Technical parameters for the implementation of a statutory fallowing plan**

Fallowing of a farm should start immediately after:

1. removal of all susceptible species of aquatic animals for the disease of concern; and
2. removal of all species capable of acting as carriers of the disease of concern; and
3. if appropriate, removal of other species; and
4. removal of water in which infected stocks have been held, where feasible; and
5. equipment and other materials contaminated or otherwise capable of harbouring infection have either been removed or subjected to disinfection to standards approved by the Competent Authority.

The length of the statutory fallowing period should be based on scientific evidence of the likelihood of a disease agent remaining infective outside its aquaculture host(s) in the local environment, at a level likely to cause an unacceptable risk of re-infection of the aquaculture establishment. Account should be taken of the extent of the disease outbreak, local availability of alternative hosts, the survival and infectivity characteristics of the disease agent and the local climatological, geographical and hydrographical factors. In addition, the level of risk to the local aquaculture industry and wider aquatic resources may be included. A scientifically based risk assessment approach should be used to determine the length of the fallowing period.

Article 1.7.1.4.

**Instructions**

Countries establishing fallowing procedures should develop a detailed set of instructions for disinfection of aquaculture establishments prior to fallowing. For this purpose, the instructions set out in Section 3.2. of the Aquatic Code and Chapter 1.1.5. of the Aquatic Manual should be used as guidelines, taking into account current scientific knowledge on the efficacy of the treatments for the disease agent of concern.

Article 1.7.1.5.

**Restocking**

No aquaculture establishment that has been under compulsory fallowing should be restocked until the fallowing period has been completed and permission from the Competent Authority has been received. When restocking, care should be taken not to use stocks of aquatic animals that would compromise the objectives of the fallowing procedure.

To increase confidence in the effectiveness of the fallowing procedures, all farms subjected to compulsory fallowing should have a period of high level official surveillance after susceptible species have been restocked. The duration and intensity of the surveillance should be appropriate for the disease of concern and local conditions.
PART 2

RECOMMENDATIONS APPLICABLE TO SPECIFIC DISEASES
SECTION 2.1.

DISEASES OF FISH

CHAPTER 2.1.1.

EPIZOOTIC HAEMATOPOIETIC NECROSIS

Article 2.1.1.1.

For the purposes of the Aquatic Code, epizootic haematopoietic necrosis (EHN) means infection with EHN virus (EHNV) of the genus Ranavirus of the family Iridoviridae.

Methods for surveillance and diagnosis are provided in the Aquatic Manual.

Article 2.1.1.2.

Scope

The recommendations in this Chapter apply to: redfin perch (Perca fluviatilis) and rainbow trout (Oncorhynchus mykiss). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.1.1.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any EHN related conditions, regardless of the EHN status of the exporting country, zone or compartment:
   a) From the species in Article 2.1.1.2., for any purpose:
      i) commercially sterile canned fish;
      ii) leather made from fish skin.
   b) The following commodities destined for human consumption from the species referred to in Article 2.1.1.2. which have been prepared in such a way as to minimise the likelihood of alternative uses:
      i) chemically preserved products (e.g. smoked, salted, pickled, marinated, etc.);
      ii) products (e.g. ready prepared meals, fish oil) that have been heat treated in a manner to ensure the inactivation of the pathogen;
      iii) eviscerated fish (chilled or frozen) packaged for direct retail trade;
      iv) fillets or cutlets (chilled or frozen);
v) dried eviscerated fish (including air dried, flame dried and sun dried).

For the commodities referred to in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.1.1.2., other than those referred to in point 1 of Article 2.1.1.3., the Competent Authorities should require the conditions prescribed in Articles 2.1.1.7. to 2.1.1.12. relevant to the EHN status of the exporting country, zone or compartment.

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of EHN of a live commodity of a species not covered in Article 2.1.1.2., the Competent Authorities should conduct an analysis of the risk of introduction, establishment and spread of EHNV and the potential consequences associated with the importation of the commodity, prior to a decision. The exporting country should be informed of the outcome of this assessment.

Article 2.1.1.4.

Epizootic haematopoietic necrosis free country

A country may make a self-declaration of freedom from EHN if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from EHN if all the areas covered by the shared water are declared EHN free countries or zones (see Article 2.1.1.5.).

1. A country where none of the susceptible species is present may make a self-declaration of freedom from EHN when basic biosecurity conditions have been met continuously in the country for at least the past 2 years.

OR

2. A country where the species referred to in Article 2.1.1.2. are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.1. of the Aquatic Manual, may make a self-declaration of freedom from EHN when basic biosecurity conditions have been met continuously in the country for at least the past 10 years.

OR

3. A country where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.1. of the Aquatic Manual, may make a self-declaration of freedom from EHN when:
   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.1. of the Aquatic Manual, has been in place for at least the last 2 years without detection of EHNV.

OR

4. A country that has made a self-declaration of freedom from EHN but in which the disease is subsequently detected may not make a self-declaration of freedom from EHN again until the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.1. of the Aquatic Manual, has been in place for at least the last 2 years without detection of EHNV.

In the meantime, part of the non-affected area may be declared a free zone provided that it meets the conditions in point 3 of Article 2.1.1.5.

Article 2.1.1.5.

Epizootic haematopoietic necrosis free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from EHN may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared an EHN free zone or compartment if all the Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species is present may be declared free from EHN when basic biosecurity conditions have been met continuously in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the species referred to in Article 2.1.1.2. are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.1. of the Aquatic Manual, may be declared free from EHN when basic biosecurity conditions have been met continuously in the zone or compartment for at least the past 10 years.

OR

3. A zone or compartment where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.1. of the Aquatic Manual, may be declared free from EHN when:

   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and
   
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.1. of the Aquatic Manual, has been in place for at least the last 2 years without detection of EHNV.

OR

4. A zone previously declared free from EHN but in which the disease is detected may not be declared free from EHN again until the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.1. of the Aquatic Manual, has been in place for at least the last 2 years without detection of EHNV.
Article 2.1.1.6.

Maintenance of free status

A country, zone or compartment that is declared free from EHN following the provisions of points 1 or 2 of Articles 2.1.1.4. or 2.1.1.5. (as relevant) may maintain its status as EHN free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from EHN following the provisions of point 3 of Articles 2.1.1.4. or 2.1.1.5. (as relevant) may discontinue targeted surveillance and maintain its status as EHN free provided that conditions that are conducive to clinical expression of EHN, as described in Chapter 2.1.1. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of EHN, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.1.1.7.

Importation of live aquatic animals from a country, zone or compartment declared free from epizootic haematopoietic necrosis

When importing live aquatic animals of the species referred to in Article 2.1.1.2. from a country, zone or compartment declared free from EHN, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.1.4. or 2.1.1.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from EHN.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.1.3.

Article 2.1.1.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from epizootic haematopoietic necrosis

When importing, for aquaculture, live aquatic animals of the species referred to in Article 2.1.1.2. from a country, zone or compartment not declared free from EHN, the Competent Authority of the importing country should assess the risk and apply risk mitigation measures such as:

1. the direct delivery into and holding of the consignment in quarantine facilities;
2. the continuous isolation of the imported aquatic animals and their first generation progeny from the local environment;
3. the treatment of all effluent and waste material in a manner that ensures inactivation of EHNV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.1.3.
Article 2.1.1.9.

Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from epizootic haematopoietic necrosis

When importing, for processing for human consumption, live aquatic animals of the species referred to in Article 2.1.1.2. from a country, zone or compartment not declared free from EHN, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to one of the products referred to in point 1 of Article 2.1.1.3. or other products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of EHNV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.1.3.

Article 2.1.1.10.

Importation of live aquatic animals intended for use in animal feed, or for agricultural, industrial or pharmaceutical use from a country, zone or compartment not declared free from epizootic haematopoietic necrosis

When importing, for use in animal feed, or for agricultural, industrial or pharmaceutical use, live aquatic animals of the species referred to in Article 2.1.1.2. from a country, zone or compartment not declared free from EHN, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of EHNV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.1.3.

Article 2.1.1.11.

Importation of aquatic animal products from a country, zone or compartment declared free from epizootic haematopoietic necrosis

When importing aquatic animal products of the species referred to in Article 2.1.1.2. from a country, zone or compartment declared free from EHN, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.1.4. or 2.1.1.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from EHN.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.1.3.
Article 2.1.1.12.

Importation of aquatic animal products from a country, zone or compartment not declared free from epizootic haematopoietic necrosis

When importing aquatic animal products of the species referred to in Article 2.1.1.2. from a country, zone or compartment not declared free from EHN, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

In the case of dead fish, whether eviscerated or uneviscerated, such risk mitigation measures may include:

1. the direct delivery into and holding of the consignment in facilities for processing to one of the products referred to in point 1 of Article 2.1.1.3. or other products authorised by the Competent Authority;
2. the treatment of all effluent and waste material in a manner that ensures inactivation of EHNV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.1.3.
CHAPTER 2.1.2.

INFECTIONOUS HAEMATOPOIETIC NECROSIS

Article 2.1.2.1.

For the purposes of the Aquatic Code, infectious haematopoietic necrosis (IHN) means infection with IHN virus (IHNV) of the genus Novirhabdovirus of the family Rhabdoviridae.

Methods for surveillance and diagnosis are provided in the Aquatic Manual.

Article 2.1.2.2.

Scope

The recommendations in this Chapter apply to: rainbow trout or steelhead (Oncorhynchus mykiss), the Pacific salmon species (chinook [O. tshawytscha], sockeye [O. nerka], chum [O. keta], masou [O. masou], pink [O. rhodurus] and coho [O. kisutch]), and Atlantic salmon (Salmo salar). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.1.2.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any IHN related conditions, regardless of the IHN status of the exporting country, zone or compartment:

   a) From the species in Article 2.1.2.2., for any purpose:
      i) commercially sterile canned fish;
      ii) leather made from fish skin.

   b) The following commodities destined for human consumption from the species referred to in Article 2.1.2.2. which have been prepared in such a way as to minimise the likelihood of alternative uses:
      i) chemically preserved products (e.g. smoked, salted, pickled, marinated, etc.);
      ii) products (e.g. ready prepared meals, fish oil) that have been heat treated in a manner to ensure the inactivation of the pathogen;
      iii) eviscerated fish (chilled or frozen) packaged for direct retail trade;
      iv) fillets or cutlets (chilled or frozen);
      v) dried eviscerated fish (including air dried, flame dried and sun dried).

   For the commodities referred to in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.1.2.2., other than those referred to in point 1 of Article 2.1.2.3., the Competent Authorities should require the conditions prescribed in Articles 2.1.2.7. to 2.1.2.12. relevant to the IHN status of the exporting country, zone or compartment.
3. When considering the importation/transit from an exporting country, zone or compartment not declared free of IHN of a live commodity of a species not covered in Article 2.1.2.2., the Competent Authorities should conduct an analysis of the risk of introduction, establishment and spread of IHNV and the potential consequences associated with the importation of the commodity, prior to a decision. The exporting country should be informed of the outcome of this assessment.

**Article 2.1.2.4.**

**Infectious haematopoietic necrosis free country**

A country may make a self-declaration of freedom from IHN if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from IHN if all the areas covered by the shared water are declared IHN free countries or zones (see Article 2.1.2.5.).

1. A country where none of the susceptible species is present may make a self-declaration of freedom from IHN when basic biosecurity conditions have been met continuously in the country for at least the past 2 years.

OR

2. A country where the species referred to in Article 2.1.2.2. are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.2. of the Aquatic Manual, may make a self-declaration of freedom from IHN when basic biosecurity conditions have been met continuously in the country for at least the past 10 years.

OR

3. A country where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.2. of the Aquatic Manual, may make a self-declaration of freedom from IHN when:

   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.2. of the Aquatic Manual, has been in place for at least the last 2 years without detection of IHNV.

OR

4. A country that has made a self-declaration of freedom from IHN but in which the disease is subsequently detected may not make a self-declaration of freedom from IHN again until the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.2. of the Aquatic Manual, has been in place for at least the last 2 years without detection of IHNV.

In the meantime, part of the non-affected area may be declared a free zone provided that it meets the conditions in point 3 of Article 2.1.2.5.
Infectious haematopoietic necrosis free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from IHN may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared an IHN free zone or compartment if all the Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species is present may be declared free from IHN when basic biosecurity conditions have been met continuously in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the species referred to in Article 2.1.2.2. are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.2. of the Aquatic Manual, may be declared free from IHN when basic biosecurity conditions have been met continuously in the zone or compartment for at least the past 10 years.

OR

3. A zone or compartment where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.2. of the Aquatic Manual, may be declared free from IHN when:
   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.2. of the Aquatic Manual, has been in place for at least the last 2 years without detection of IHNV.

OR

4. A zone previously declared free from IHN but in which the disease is detected may not be declared free from IHN again until the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.2. of the Aquatic Manual, has been in place for at least the last 2 years without detection of IHNV.

Maintenance of free status

A country, zone or compartment that is declared free from IHN following the provisions of points 1 or 2 of Articles 2.1.2.4. or 2.1.2.5. (as relevant) may maintain its status as IHN free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from IHN following the provisions of point 3 of Articles 2.1.2.4. or 2.1.2.5. (as relevant) may discontinue targeted surveillance and maintain its status as IHN free provided that conditions that are conducive to clinical expression of IHN, as described in Chapter 2.1.2. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.
However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of IHN, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.1.2.7.

Importation of live aquatic animals from a country, zone or compartment declared free from infectious haematopoietic necrosis

When importing live aquatic animals of the species referred to in Article 2.1.2.2. from a country, zone or compartment declared free from IHN, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.2.4. or 2.1.2.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from IHN.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.2.3.

Article 2.1.2.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from infectious haematopoietic necrosis

When importing, for aquaculture, live aquatic animals of the species referred to in Article 2.1.2.2. from a country, zone or compartment not declared free from IHN, the Competent Authority of the importing country should assess the risk and apply risk mitigation measures such as:

1. the direct delivery into and holding of the consignment in quarantine facilities;
2. the continuous isolation of the imported aquatic animals and their first generation progeny from the local environment;
3. the treatment of all effluent and waste material in a manner that ensures inactivation of IHNV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.2.3.

Article 2.1.2.9.

Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from infectious haematopoietic necrosis

When importing, for processing for human consumption, live aquatic animals of the species referred to in Article 2.1.2.2. from a country, zone or compartment not declared free from IHN, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to one of the products referred to in point 1 of Article 2.1.2.3. or other products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of IHNV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.2.3.
Article 2.1.2.10.

Importation of live aquatic animals intended for use in animal feed, or for agricultural, industrial or pharmaceutical use from a country, zone or compartment not declared free from infectious haematopoietic necrosis

When importing, for use in animal feed, or for agricultural, industrial or pharmaceutical use, live aquatic animals of the species referred to in Article 2.1.2.2. from a country, zone or compartment not declared free from IHN, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of IHNV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.2.3.

Article 2.1.2.11.

Importation of aquatic animal products from a country, zone or compartment declared free from infectious haematopoietic necrosis

When importing aquatic animal products of the species referred to in Article 2.1.2.2. from a country, zone or compartment declared free from IHN, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.2.4. or 2.1.2.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from IHN.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.2.3.

Article 2.1.2.12.

Importation of aquatic animal products from a country, zone or compartment not declared free from infectious haematopoietic necrosis

When importing aquatic animal products of the species referred to in Article 2.1.2.2. from a country, zone or compartment not declared free from IHN, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

In the case of dead fish, whether eviscerated or uneviscerated, such risk mitigation measures may include:

1. the direct delivery into and holding of the consignment in biosecure/quarantine facilities for processing to one of the products referred to in point 1 of Article 2.1.2.3. or other products authorised by the Competent Authority;
2. the treatment of all effluent and waste material in a manner that ensures inactivation of IHNV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.2.3.
CHAPTER 2.1.3.

ONCORHYNCHUS MASOU VIRUS DISEASE
(Salmonid herpesvirus type 2 disease)

Article 2.1.3.1.

For the purposes of the Aquatic Code, susceptible host species for Oncorhynchus masou virus disease are: kokanee salmon (Oncorhynchus nerka), masou salmon (O. masou), chum salmon (O. keta), coho salmon (O. kisutch) and rainbow trout (O. mykiss).

Standards for diagnostic tests are described in the Aquatic Manual.

Article 2.1.3.2.

Oncorhynchus masou virus disease free country

A country may be considered free from Oncorhynchus masou virus disease when:

1. no cases of the disease are known to have occurred within its territory for at least the previous two years; and

2. no Oncorhynchus masou virus has been detected in any fish belonging to the susceptible host species referred to in Article 2.1.3.1. tested during operation of an official fish health surveillance scheme for a period of at least two years using the procedures described in the Aquatic Manual; and

3. it is observing the conditions referred to in Articles 2.1.3.6. and 2.1.3.7.

Article 2.1.3.3.

Oncorhynchus masou virus disease free zone

An Oncorhynchus masou virus disease free zone may be established within the territory of one or more countries if within the zone:

1. no cases of the disease are known to have occurred for at least the previous two years; and

2. aquaculture establishments and wild populations containing fish belonging to the susceptible host species referred to in Article 2.1.3.1. have been tested in an official fish health surveillance scheme for at least the previous two years using the procedures described in the Aquatic Manual; and

3. no Oncorhynchus masou virus has been detected during this two-year period. Such Oncorhynchus masou virus disease free zones must comprise: one or more entire water catchment area(s) from the sources of the waterways to the sea, or part of a catchment area from the source(s) to a natural or artificial barrier that prevents the upward migration of fish from lower stretches of the waterway. Such zones must be clearly delineated on a map of the territory of the country concerned by the Competent Authority; and

4. it is observing the conditions referred to in Articles 2.1.3.6. and 2.1.3.7.
Article 2.1.3.4.

Oncorhynchus masou virus disease free aquaculture establishment

An Oncorhynchus masou virus disease free aquaculture establishment may be located not only within a salmonid herpesvirus free country or zone but also within an Oncorhynchus masou virus disease infected zone provided that:

1. no cases of the disease are known to have occurred within the aquaculture establishment for at least the previous two years; and

2. it has been tested in an official fish health surveillance scheme for at least the previous two years using the procedures described in the Aquatic Manual, without detection of Oncorhynchus masou virus; and

3. it is supplied by water from a spring, well or borehole only and is free from stocks of wild fish; and

4. there is a natural or artificial barrier that prevents the migration of fish from lower stretches of the waterway into the aquaculture establishment or its water supply; and

5. it is observing the conditions referred to in Articles 2.1.3.6. and 2.1.3.7.

Article 2.1.3.5.

Restoration of free status

A country, a zone or an aquaculture establishment may be restored to Oncorhynchus masou virus disease free status if it has been subjected to a stamping-out policy or effective disease eradication measures and if Oncorhynchus masou virus has not been detected for the last two years of a surveillance scheme using the procedures described in the Aquatic Manual.

A newly constructed aquaculture establishment, or one that has undergone a thorough stamping-out policy under supervision of the Competent Authority and has been restocked from a source with documented freedom, may achieve Oncorhynchus masou virus disease free status within a period specified in Chapter I.1 of the Aquatic Manual if it otherwise meets all the requirements for an Oncorhynchus masou virus disease free aquaculture establishment.

Article 2.1.3.6.

When importing live fish of any susceptible species, or their sexual products (eggs and gametes), the Competent Authority of the importing country should require that the consignment be accompanied by an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of an official fish health surveillance scheme comprising inspection and laboratory tests on susceptible species conducted according to the procedures described in the Aquatic Manual, whether or not the place of production of the consignment is a country officially declared free from Oncorhynchus masou virus disease.

If the place of production of the consignment is not a country officially declared Oncorhynchus masou virus disease free, the certificate must state whether the place of production of the consignment is:

1. a zone officially declared Oncorhynchus masou virus disease free; or

2. an aquaculture establishment officially declared Oncorhynchus masou virus disease free.

The certificate shall be in accordance with the Model Certificate given in Appendix 4.1.1.
Article 2.1.3.7.

The Competent Authorities in countries officially declared Oncorhynchus masou virus disease free should demand that dead fish for importation from countries not free from Oncorhynchus masou virus disease be eviscerated before transit.

The Competent Authority of a country importing uneviscerated dead fish should require that the consignment be accompanied by an international aquatic animal health certificate, conforming to the Model Certificate given in Appendix 4.2.1., issued by the Competent Authority in the country of origin.

This certificate should declare the health status of the place of production in respect of Oncorhynchus masou virus disease and the other fish diseases referred to in the Aquatic Code.

1 This disease does not meet the listing criteria in Chapter 1.2.2. Nevertheless, reporting requirements for non listed diseases apply in regard to significant epidemiological events (see point 1e) of Article 1.2.1.3.).


**CHAPTER 2.1.4.**

**SPRING VIRAEMIA OF CARP**

Article 2.1.4.1.

For the purposes of the Aquatic Code, spring viraemia of carp (SVC) means infection with the viral species SVC virus (SVCV) tentatively placed in the genus Vesiculovirus of the family Rhabdoviridae.

Methods for surveillance and diagnosis are provided in the Aquatic Manual.

Article 2.1.4.2.

**Scope**

The recommendations in this Chapter apply to: common carp (Cyprinus carpio carpio) and koi carp (Cyprinus carpio koi), crucian carp (Carassius carassius), sheatfish (also known as European catfish or wels) (Silurus glanis), silver carp (Hypophthalmichthys molitrix), bighead carp (Aristichthys nobilis), grass carp (white amur) (Ctenopharyngodon idellus), goldfish (Carassius auratus), orfe (Leuciscus idus), and tench (Tinca tinca). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.1.4.3.

**Commodities**  
1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any SVC related conditions, regardless of the SVC status of the exporting country, zone or compartment:
   a) From the species in Article 2.1.4.2., for any purpose:
      i) commercially sterile canned fish;
      ii) leather made from fish skin.
   b) The following commodities destined for human consumption from the species referred to in Article 2.1.4.2. which have been prepared in such a way as to minimise the likelihood of alternative uses:
      i) chemically preserved products (e.g. smoked, salted, pickled, marinated, etc.);
      ii) products (e.g. ready prepared meals, fish oil) that have been heat treated in a manner to ensure the inactivation of the pathogen;
      iii) eviscerated fish (chilled or frozen) packaged for direct retail trade;
      iv) fillets or cutlets (chilled or frozen);
      v) dried eviscerated fish (including air dried, flame dried and sun dried).

   For the commodities referred to in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.1.4.2., other than those referred to in point 1 of Article 2.1.4.3., the Competent Authorities should require the
conditions prescribed in Articles 2.1.4.7. to 2.1.4.12. relevant to the SVC status of the exporting country, zone or compartment.

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of SVC of a live commodity of a species not covered in Article 2.1.4.2., the Competent Authorities should conduct an analysis of the risk of introduction, establishment and spread of SVCV and the potential consequences associated with the importation of the commodity, prior to a decision. The exporting country should be informed of the outcome of this assessment.

Article 2.1.4.4.

Spring viraemia of carp free country

A country may make a self-declaration of freedom from SVC if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from SVC if all the areas covered by the shared water are declared SVC free countries or zones (see Article 2.1.4.5.).

1. A country where none of the susceptible species is present may make a self-declaration of freedom from SVC when basic biosecurity conditions have been met continuously in the country for at least the past 2 years.

OR

2. A country where the species referred to in Article 2.1.4.2. are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.4. of the Aquatic Manual, may make a self-declaration of freedom from SVC when basic biosecurity conditions have been met continuously in the country for at least the past 10 years.

OR

3. A country where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.4. of the Aquatic Manual, may make a self-declaration of freedom from SVC when:
   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.4. of the Aquatic Manual, has been in place for at least the last 2 years without detection of SVCV.

OR

4. A country that has made a self-declaration of freedom from SVC but in which the disease is subsequently detected may not make a self-declaration of freedom from SVC again until the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.4. of the Aquatic Manual, has been in place for at least the last 2 years without detection of SVCV.

In the meantime, part of the non-affected area may be declared a free zone provided that it meets the conditions in point 3 of Article 2.1.4.5.
Article 2.1.4.5.

Spring viraemia of carp free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from SVC may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared an SVC free zone or compartment if all the Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species is present may be declared free from SVC when basic biosecurity conditions have been met continuously in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the species referred to in Article 2.1.4.2. are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.4. of the Aquatic Manual, may be declared free from SVC when basic biosecurity conditions have been met continuously in the zone or compartment for at least the past 10 years.

OR

3. A zone or compartment where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.4. of the Aquatic Manual, may be declared free from SVC when:
   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.4. of the Aquatic Manual, has been in place for at least the last 2 years without detection of SVCV.

OR

4. A zone previously declared free from SVC but in which the disease is detected may not be declared free from SVC again until the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.4. of the Aquatic Manual, has been in place for at least the last 2 years without detection of SVCV.

Article 2.1.4.6.

Maintenance of free status

A country, zone or compartment that is declared free from SVC following the provisions of points 1 or 2 of Articles 2.1.4.4. or 2.1.4.5. (as relevant) may maintain its status as SVC free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from SVC following the provisions of point 3 of Articles 2.1.4.4. or 2.1.4.5. (as relevant) may discontinue targeted surveillance and maintain its status as SVC free provided that conditions that are conducive to clinical expression of SVC, as described in Chapter 2.1.4. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.
However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of SVC, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.1.4.7.

Importation of live aquatic animals from a country, zone or compartment declared free from spring viraemia of carp

When importing live aquatic animals of the species referred to in Article 2.1.4.2. from a country, zone or compartment declared free from SVC, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.4.4. or 2.1.4.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from SVC.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.4.3.

Article 2.1.4.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from spring viraemia of carp

When importing, for aquaculture, live aquatic animals of the species referred to in Article 2.1.4.2. from a country, zone or compartment not declared free from SVC, the Competent Authority of the importing country should assess the risk and apply risk mitigation measures such as:

1. the direct delivery into and holding of the consignment in quarantine facilities;
2. the continuous isolation of the imported aquatic animals and their first generation progeny from the local environment;
3. the treatment of all effluent and waste material in a manner that ensures inactivation of SVCV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.4.3.

Article 2.1.4.9.

Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from spring viraemia of carp

When importing, for processing for human consumption, live aquatic animals of the species referred to in Article 2.1.4.2. from a country, zone or compartment not declared free from SVC, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to one of the products referred to in point 1 of Article 2.1.4.3. or other products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of SVCV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.4.3.
Article 2.1.4.10.

Importation of live aquatic animals intended for use in animal feed, or for agricultural, industrial or pharmaceutical use from a country, zone or compartment not declared free from spring viraemia of carp

When importing, for use in animal feed, or for agricultural, industrial or pharmaceutical use, live aquatic animals of the species referred to in Article 2.1.4.2. from a country, zone or compartment not declared free from SVC, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of SVCV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.4.3.

Article 2.1.4.11.

Importation of aquatic animal products from a country, zone or compartment declared free from spring viraemia of carp

When importing aquatic animal products of the species referred to in Article 2.1.4.2. from a country, zone or compartment declared free from SVC, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.4.4. or 2.1.4.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from SVC.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.4.3.

Article 2.1.4.12.

Importation of aquatic animal products from a country, zone or compartment not declared free from spring viraemia of carp

When importing aquatic animal products of the species referred to in Article 2.1.4.2. from a country, zone or compartment not declared free from SVC, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

In the case of dead fish, whether eviscerated or uneviscerated, such risk mitigation measures may include:

1. the direct delivery into and holding of the consignment in biosecure/quarantine facilities for processing to one of the products referred to in point 1 of Article 2.1.4.3. or other products authorised by the Competent Authority;
2. the treatment of all effluent and waste material in a manner that ensures inactivation of SVCV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.4.3.
CHAPTER 2.1.5.

VIRAL HAEMORRHAGIC SEPTICAEMIA

Article 2.1.5.1.

For the purposes of the Aquatic Code, viral haemorrhagic septicaemia (VHS) means infection with VHS virus (VHSV, synonym: Egtved virus) of the genus Novirhabdovirus of the family Rhabdoviridae.

Methods for surveillance and diagnosis are provided in the Aquatic Manual.

Article 2.1.5.2.

Scope

The recommendations in this Chapter apply to: rainbow trout (Oncorhynchus mykiss), brown trout (Salmo trutta), grayling (Thymallus thymallus), white fish (Coregonus spp.), pike (Esox lucius), turbot (Scophthalmus maximus), herring and sprat (Clupea spp.), Pacific salmon (Oncorhynchus spp.), Atlantic cod (Gadus morhua), Pacific cod (G. macrocephalus), haddock (G. aeglefinus) and rockling (Onos mustelus). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.1.5.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any VHS related conditions, regardless of the VHS status of the exporting country, zone or compartment:
   a) From the species in Article 2.1.5.2., for any purpose:
      i) commercially sterile canned fish;
      ii) leather made from fish skin.
   b) The following commodities destined for human consumption from the species referred to in Article 2.1.5.2. which have been prepared in such a way as to minimise the likelihood of alternative uses:
      i) chemically preserved products (e.g. smoked, salted, pickled, marinated, etc.);
      ii) products (e.g. ready prepared meals, fish oil) that have been heat treated in a manner to ensure the inactivation of the pathogen;
      iii) eviscerated fish (chilled or frozen) packaged for direct retail trade;
      iv) fillets or cutlets (chilled or frozen);
      v) dried eviscerated fish (including air dried, flame dried and sun dried).

   For the commodities referred to in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.1.5.2., other than those referred to in point 1 of Article 2.1.5.3., the Competent Authorities should require the
conditions prescribed in Articles 2.1.5.7. to 2.1.5.12. relevant to the VHS status of the exporting country, zone or compartment.

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of VHS of a live commodity of a species not covered in Article 2.1.5.2., the Competent Authorities should conduct an analysis of the risk of introduction, establishment and spread of VHSV and the potential consequences associated with the importation of the commodity, prior to a decision. The exporting country should be informed of the outcome of this assessment.

Article 2.1.5.4.

Viral haemorrhagic septicaemia free country

A country may make a self-declaration of freedom from VHS if it meets the conditions in points 1, 2 or 3 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from VHS if all the areas covered by the shared water are declared VHS free countries or zones (see Article 2.1.5.5.).

1. A country where the susceptible species are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.5. of the Aquatic Manual, may make a self-declaration of freedom from VHS when basic biosecurity conditions have been met continuously in the country for at least the past 10 years.

OR

2. A country where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.5. of the Aquatic Manual, may make a self-declaration of freedom from VHS when:

   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.5. of the Aquatic Manual, has been in place for at least the last 2 years without detection of VHSV.

OR

3. A country that has made a self-declaration of freedom from VHS but in which the disease is subsequently detected may not make a self-declaration of freedom from VHS again until the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.5. of the Aquatic Manual, has been in place for at least the last 2 years without detection of VHSV.

In the meantime, part of the non-affected area may be declared a free zone provided that it meets the conditions in point 2 of Article 2.1.5.5.
Article 2.1.5.5.

Viral haemorrhagic septicaemia free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from VHS may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2 or 3 below.

If a zone or compartment extends over more than one country, it can only be declared an VHS free zone or compartment if all the Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where the susceptible species are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.5. of the Aquatic Manual, may be declared free from VHS when basic biosecurity conditions have been met continuously in the zone or compartment for at least the past 10 years.

OR

2. A zone or compartment where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.5. of the Aquatic Manual, may be declared free from VHS when:
   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.5. of the Aquatic Manual, has been in place for at least the last 2 years without detection of VHSV.

OR

3. A zone previously declared free from VHS but in which the disease is detected may not be declared free from VHS again until the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.5. of the Aquatic Manual, has been in place for at least the last 2 years without detection of VHSV.

Article 2.1.5.6.

Maintenance of free status

A country, zone or compartment that is declared free from VHS following the provisions of point 1 of Articles 2.1.5.4. or 2.1.5.5. (as relevant) may maintain its status as VHS free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from VHS following the provisions of point 2 of Articles 2.1.5.4. or 2.1.5.5. (as relevant) may discontinue targeted surveillance and maintain its status as VHS free provided that conditions that are conducive to clinical expression of VHS, as described in Chapter 2.1.5. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of VHS, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.
Article 2.1.5.7.

Importation of live aquatic animals from a country, zone or compartment declared free from viral haemorrhagic septicaemia

When importing live aquatic animals of the species referred to in Article 2.1.5.2. from a country, zone or compartment declared free from VHS, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.5.4 or 2.1.5.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from VHS.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.5.3.

Article 2.1.5.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from viral haemorrhagic septicaemia

When importing, for aquaculture, live aquatic animals of the species referred to in Article 2.1.5.2. from a country, zone or compartment not declared free from VHS, the Competent Authority of the importing country should assess the risk and apply risk mitigation measures such as:

1. the direct delivery into and holding of the consignment in quarantine facilities;
2. the continuous isolation of the imported aquatic animals and their first generation progeny from the local environment;
3. the treatment of all effluent and waste material in a manner that ensures inactivation of VHSV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.5.3.

Article 2.1.5.9.

Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from viral haemorrhagic septicaemia

When importing, for processing for human consumption, live aquatic animals of the species referred to in Article 2.1.5.2. from a country, zone or compartment not declared free from VHS, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to one of the products referred to in point 1 of Article 2.1.5.3. or other products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of VHSV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.5.3.
Article 2.1.5.10.

Importation of live aquatic animals intended for use in animal feed, or for agricultural, industrial or pharmaceutical use from a country, zone or compartment not declared free from viral haemorrhagic septicaemia

When importing, for use in animal feed, or for agricultural, industrial or pharmaceutical use, live aquatic animals of the species referred to in Article 2.1.5.2. from a country, zone or compartment not declared free from VHS, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of VHSV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.5.3.

Article 2.1.5.11.

Importation of aquatic animal products from a country, zone or compartment declared free from viral haemorrhagic septicaemia

When importing aquatic animal products of the species referred to in Article 2.1.5.2. from a country, zone or compartment declared free from VHS, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.5.4. or 2.1.5.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from VHS.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.5.3.

Article 2.1.5.12.

Importation of aquatic animal products from a country, zone or compartment not declared free from viral haemorrhagic septicaemia

When importing aquatic animal products of the species referred to in Article 2.1.5.2. from a country, zone or compartment not declared free from VHS, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

In the case of dead fish, whether eviscerated or uneviscerated, such risk mitigation measures may include:

1. the direct delivery into and holding of the consignment in biosecure/quarantine facilities for processing to one of the products referred to in point 1 of Article 2.1.5.3. or other products authorised by the Competent Authority;
2. the treatment of all effluent and waste material in a manner that ensures inactivation of VHSV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.5.3.
CHAPTER 2.1.6.  
CHANNEL CATFISH VIRUS DISEASE  
(Herpesvirus of Ictaluridae type 1)  

Article 2.1.6.1.  
Standards for diagnostic tests are described in the Aquatic Manual.  

Article 2.1.6.2.  
When importing live or dead uneviscerated fish of a susceptible species or their gametes or eggs, the Competent Authority of the importing country with an official control policy for channel catfish virus disease¹ may wish to require the presentation of an international aquatic animal health certificate issued by the Competent Authority in the exporting country, attesting that the country, zone or aquaculture establishment of origin has been regularly subjected to appropriate tests for channel catfish virus disease with negative results.  

¹ This disease does not meet the listing criteria in Chapter 1.2.2. Nevertheless, reporting requirements for non listed diseases apply in regard to significant epidemiological events (see point 1e) of Article 1.2.1.3.).
CHAPTER 2.1.7.

VIRAL ENCEPHALOPATHY AND RETINOPATHY

Article 2.1.7.1.

Standards for diagnostic tests are described in the Aquatic Manual.

Article 2.1.7.2.

When importing live or dead uneviscerated fish of a susceptible species or their gametes or eggs, the Competent Authority of the importing country with an official control policy for viral encephalopathy and retinopathy may wish to require the presentation of an international aquatic animal health certificate issued by the Competent Authority in the exporting country attesting that the country, zone or aquaculture establishment of origin has been regularly subjected to appropriate tests for viral encephalopathy and retinopathy with negative results.

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1 This disease does not meet the listing criteria in Chapter 1.2.2. Nevertheless, reporting requirements for non listed diseases apply in regard to significant epidemiological events (see point 1e) of Article 1.2.1.3.).

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CHAPTER 2.1.8.

INFECTIOUS PANCREATIC NECROSIS

Article 2.1.8.1.

Standards for diagnostic tests are described in the Aquatic Manual.

Article 2.1.8.2.

When importing live or dead uneviscerated fish of a susceptible species or their gametes or eggs, the Competent Authority of the importing country with an official control policy for infectious pancreatic necrosis may wish to require the presentation of an international aquatic animal health certificate issued by the Competent Authority in the exporting country, attesting that the country, zone or aquaculture establishment of origin has been regularly subjected to appropriate tests for infectious pancreatic necrosis with negative results.

1 This disease does not meet the listing criteria in Chapter 1.2.2. Nevertheless, reporting requirements for non listed diseases apply in regard to significant epidemiological events (see point 1e) of Article 1.2.1.3.).
CHAPTER 2.1.9.
INFECTIONOUS SALMON ANAEMIA

Article 2.1.9.1.

For the purposes of the Aquatic Code, infectious salmon anaemia (ISA) means infection with ISA virus (ISAV) of the genus *Isavirus* of the family *Orthomyxoviridae*.

Methods for surveillance and diagnosis are provided in the Aquatic Manual.

Article 2.1.9.2.

Scope

The recommendations in this Chapter apply to: Atlantic salmon (*Salmo salar*), brown and sea trout (*S. trutta*) and rainbow trout (*Oncorhynchus mykiss*). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.1.9.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any ISA related conditions, regardless of the ISA status of the exporting country, zone or compartment:
   a) From the species in Article 2.1.9.2., for any purpose:
      i) commercially sterile canned fish;
      ii) leather made from fish skin.
   b) The following commodities destined for human consumption from the species referred to in Article 2.1.9.2. which have been prepared in such a way as to minimise the likelihood of alternative uses:
      i) chemically preserved products (e.g. smoked, salted, pickled, marinated, etc.);
      ii) products (e.g. ready prepared meals, fish oil) that have been heat treated in a manner to ensure the inactivation of the pathogen;
      iii) eviscerated fish (chilled or frozen) packaged for direct retail trade;
      iv) fillets or cutlets (chilled or frozen);
      v) dried eviscerated fish (including air dried, flame dried and sun dried).

For the commodities referred to in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.1.9.2., other than those referred to in point 1 of Article 2.1.9.3., the Competent Authorities should require the conditions prescribed in Articles 2.1.9.7. to 2.1.9.12. relevant to the ISA status of the exporting country, zone or compartment.
3. When considering the importation/transit from an exporting country, zone or compartment not declared free of ISA of a live commodity of a species not covered in Article 2.1.9.2., the Competent Authorities should conduct an analysis of the risk of introduction, establishment and spread of ISAV and the potential consequences associated with the importation of the commodity, prior to a decision. The exporting country should be informed of the outcome of this assessment.

**Article 2.1.9.4.**

**Infectious salmon anaemia free country**

A country may make a self-declaration of freedom from ISA if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from ISA if all the areas covered by the shared water are declared ISA free countries or zones (see Article 2.1.9.5.).

1. A country where none of the susceptible species is present may make a self-declaration of freedom from ISA when basic biosecurity conditions have been met continuously in the country for at least the past 2 years.

OR

2. A country where the species referred to in Article 2.1.9.2. are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.9. of the Aquatic Manual, may make a self-declaration of freedom from ISA when basic biosecurity conditions have been met continuously in the country for at least the past 10 years.

OR

3. A country where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.9. of the Aquatic Manual, may make a self-declaration of freedom from ISA when:

   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.9. of the Aquatic Manual, has been in place for at least the last 2 years without detection of ISAV.

OR

4. A country that has made a self-declaration of freedom from ISA but in which the disease is subsequently detected may not make a self-declaration of freedom from ISA again until the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.9. of the Aquatic Manual, has been in place for at least the last 2 years without detection of ISAV.

In the meantime, part of the non-affected area may be declared a free zone provided that it meets the conditions in point 3 of Article 2.1.9.5.
Article 2.1.9.5.

Infectious salmon anaemia free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from ISA may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared an ISA free zone or compartment if all the Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species is present may be declared free from ISA when basic biosecurity conditions have been met continuously in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the species referred to in Article 2.1.9.2. are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.9. of the Aquatic Manual, may be declared free from ISA when basic biosecurity conditions have been met continuously in the zone or compartment for at least the past 10 years.

OR

3. A zone or compartment where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.9. of the Aquatic Manual, may be declared free from ISA when:
   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.9. of the Aquatic Manual, has been in place for at least the last 2 years without detection of ISAV.

OR

4. A zone previously declared free from ISA but in which the disease is detected may not be declared free from ISA again until the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.9. of the Aquatic Manual, has been in place for at least the last 2 years without detection of ISAV.

Article 2.1.9.6.

Maintenance of free status

A country, zone or compartment that is declared free from ISA following the provisions of points 1 or 2 of Articles 2.1.9.4. or 2.1.9.5. (as relevant) may maintain its status as ISA free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from ISA following the provisions of point 3 of Articles 2.1.9.4. or 2.1.9.5. (as relevant) may discontinue targeted surveillance and maintain its status as ISA free provided that conditions that are conducive to clinical expression of ISA, as described in Chapter 2.1.9. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.
However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of ISA, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.1.9.7.

Importation of live aquatic animals from a country, zone or compartment declared free from infectious salmon anaemia

When importing live aquatic animals of the species referred to in Article 2.1.9.2. from a country, zone or compartment declared free from ISA, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.9.4. or 2.1.9.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from ISA.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.9.3.

Article 2.1.9.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from infectious salmon anaemia

When importing, for aquaculture, live aquatic animals of the species referred to in Article 2.1.9.2. from a country, zone or compartment not declared free from ISA, the Competent Authority of the importing country should assess the risk and apply risk mitigation measures such as:

1. the direct delivery into and holding of the consignment in quarantine facilities;
2. the continuous isolation of the imported aquatic animals and their first generation progeny from the local environment;
3. the treatment of all effluent and waste material in a manner that ensures inactivation of ISAV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.9.3.

Article 2.1.9.9.

Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from infectious salmon anaemia

When importing, for processing for human consumption, live aquatic animals of the species referred to in Article 2.1.9.2. from a country, zone or compartment not declared free from ISA, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to one of the products referred to in point 1 of Article 2.1.9.3. or other products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of ISAV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.9.3.
Chapter 2.1.9. - Infectious salmon anaemia

Article 2.1.9.10.

Importation of live aquatic animals intended for use in animal feed, or for agricultural, industrial or pharmaceutical use from a country, zone or compartment not declared free from infectious salmon anaemia

When importing, for use in animal feed, or for agricultural, industrial or pharmaceutical use, live aquatic animals of the species referred to in Article 2.1.9.2. from a country, zone or compartment not declared free from ISA, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of ISAV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.9.3.

Article 2.1.9.11.

Importation of aquatic animal products from a country, zone or compartment declared free from infectious salmon anaemia

When importing aquatic animal products of the species referred to in Article 2.1.9.2. from a country, zone or compartment declared free from ISA, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.9.4. or 2.1.9.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from ISA.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.9.3.

Article 2.1.9.12.

Importation of aquatic animal products from a country, zone or compartment not declared free from infectious salmon anaemia

When importing aquatic animal products of the species referred to in Article 2.1.9.2. from a country, zone or compartment not declared free from ISA, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

In the case of dead fish, whether eviscerated or uneviscerated, such risk mitigation measures may include:

1. the direct delivery into and holding of the consignment in biosecure/quarantine facilities for processing to one of the products referred to in point 1 of Article 2.1.9.3. or other products authorised by the Competent Authority;
2. the treatment of all effluent and waste material in a manner that ensures inactivation of ISAV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.9.3.
CHAPTER 2.1.10.

EPIZOOTIC ULCERATIVE SYNDROME

Article 2.1.10.1.

For the purposes of the Aquatic Code, epizootic ulcerative syndrome (EUS) means infection with the Oomycete fungus Aphanomyces invadans. Methods for surveillance and diagnosis are provided in the Aquatic Manual.

Article 2.1.10.2.

Scope

The recommendations in this Chapter apply to: yellowfin seabream (Acanthopagrus australis), climbing perch (Arapaima testudineus), eels (Anguillidae), bagrid catfishes (Bagridae), silver perch (Bidyanus bidyanus), Atlantic menhaden (Brevoortia tyrannus), jacks (Caranx spp.), catla (Catla catla), striped snakehead (Channa striatus), mrigal (Cirrhinus mirgala), torpedob-shaped catfishes (Clarius spp.), halfbeaks flying fishes (Exocoetidae), tank goby (Glossogobius giuris), marble goby (Oxyeleotris marmoratus), gobbies (Goioidae), rohu (Labeo rohita), rhinofishes (Labeo spp.), barramundi and giant sea perch (Lates calcarifer), striped mullet (Mugil cepalus), mullets (Mugilidae) (Mugil spp. and Liza spp.), ayu (Plecoglossus altivelis), pool barb (Puntius sophore), barcoo grunter (Scortum barcoo), sand whiting (Sillago dilata), wells catfishes (Siluridae), snakeskin gourami (Trichogaster pectoralis), common archer fish (Toxotes chatareus), silver barb (Puntius gonionotus), spotted scat (Scatophagus argus), giant gourami (Osphronemus goramy), dusky flathead (Platypocephalus fuscus), spiny turbot (Psettodes sp.), Tairiku-baratanago (Rhodeus ocellatus), Keti-Bangladeshi (Rohte sp.), rudd (Scardinius erythrophthalmus), therapon (Terapon sp.) and three-spot gouramy (Trichogaster trichopterus).

These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.1.10.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any EUS related conditions, regardless of the EUS status of the exporting country, zone or compartment:

   a) From the species in Article 2.1.10.2., for any purpose:

      i) commercially sterile canned fish;

      ii) leather made from fish skin.

   b) The following commodities destined for human consumption from the species referred to in Article 2.1.10.2. which have been prepared in such a way as to minimise the likelihood of alternative uses:

      i) chemically preserved products (e.g. smoked, salted, pickled, marinated, etc.);

      ii) products (e.g. ready prepared meals, fish oil) that have been heat treated in a manner to ensure the inactivation of the pathogen;

      iii) eviscerated fish (chilled or frozen) packaged for direct retail trade;
iv) fillets or cutlets (chilled or frozen);

v) dried eviscerated fish (including air dried, flame dried and sun dried).

For the commodities referred to in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.1.10.2., other than those referred to in point 1 of Article 2.1.10.3., the Competent Authorities should require the conditions prescribed in Articles 2.1.10.7. to 2.1.10.12. relevant to the EUS status of the exporting country, zone or compartment.

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of EUS of a live commodity of a species not covered in Article 2.1.10.2., the Competent Authorities should conduct an analysis of the risk of introduction, establishment and spread of A. invadans and the potential consequences associated with the importation of the commodity, prior to a decision. The exporting country should be informed of the outcome of this assessment.

Article 2.1.10.4.

**Epizootic ulcerative syndrome free country**

A country may make a self-declaration of freedom from EUS if it meets the conditions in points 1, 2 or 3 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from EUS if all the areas covered by the shared water are declared EUS free countries or zones (see Article 2.1.10.5.).

1. A country where the susceptible species are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.10. of the Aquatic Manual, may make a self-declaration of freedom from EUS when basic biosecurity conditions have been met continuously in the country for at least the past 10 years.

OR

2. A country where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.10. of the Aquatic Manual, may make a self-declaration of freedom from EUS when:

   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.10. of the Aquatic Manual, has been in place for at least the last 2 years without detection of A. invadans.

OR

3. A country that has made a self-declaration of freedom from EUS but in which the disease is subsequently detected may not make a self-declaration of freedom from EUS again until the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.10. of the Aquatic Manual, has been in place for at least the last 2 years without detection of A. invadans.
In the meantime, part of the non-affected area may be declared a free zone provided that it meets the conditions in point 2 of Article 2.1.10.5.

Article 2.1.10.5.

Epizootic ulcerative syndrome free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from EUS may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2 or 3 below.

If a zone or compartment extends over more than one country, it can only be declared an EUS free zone or compartment if all the Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where the susceptible species are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.10. of the Aquatic Manual, may be declared free from EUS when basic biosecurity conditions have been met continuously in the zone or compartment for at least the past 10 years.

OR

2. A zone or compartment where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.10. of the Aquatic Manual, may be declared free from EUS when:
   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.10. of the Aquatic Manual, has been in place for at least the last 2 years without detection of A. invadans.

OR

3. A zone previously declared free from EUS but in which the disease is detected may not be declared free from EUS again until the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.10. of the Aquatic Manual, has been in place for at least the last 2 years without detection of A. invadans.

Article 2.1.10.6.

Maintenance of free status

A country, zone or compartment that is declared free from EUS following the provisions of point 1 of Articles 2.1.10.4. or 2.1.10.5. (as relevant) may maintain its status as EUS free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from EUS following the provisions of point 2 of Articles 2.1.10.4. or 2.1.10.5. (as relevant) may discontinue targeted surveillance and maintain its status as EUS free provided that conditions that are conducive to clinical expression of EUS, as described in Chapter 2.1.10. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.
However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of EUS, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.1.10.7.

Importation of live aquatic animals from a country, zone or compartment declared free from epizootic ulcerative syndrome

When importing live aquatic animals of the species referred to in Article 2.1.10.2. from a country, zone or compartment declared free from EUS, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.10.4. or 2.1.10.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from EUS.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.1.
This Article does not apply to commodities referred to in point 1 of Article 2.1.10.3.

Article 2.1.10.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from epizootic ulcerative syndrome

When importing, for aquaculture, live aquatic animals of the species referred to in Article 2.1.10.2. from a country, zone or compartment not declared free from EUS, the Competent Authority of the importing country should assess the risk and apply risk mitigation measures such as:

1. the direct delivery into and holding of the consignment in quarantine facilities;
2. the continuous isolation of the imported aquatic animals and their first generation progeny from the local environment;
3. the treatment of all effluent and waste material in a manner that ensures inactivation of A. invadans.

This Article does not apply to commodities referred to in point 1 of Article 2.1.10.3.

Article 2.1.10.9.

Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from epizootic ulcerative syndrome

When importing, for processing for human consumption, live aquatic animals of the species referred to in Article 2.1.10.2. from a country, zone or compartment not declared free from EUS, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to one of the products referred to in point 1 of Article 2.1.10.3. or other products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of A. invadans.

This Article does not apply to commodities referred to in point 1 of Article 2.1.10.3.
Article 2.1.10.10.

**Importation of live aquatic animals intended for use in animal feed, or for agricultural, industrial or pharmaceutical use from a country, zone or compartment not declared free from epizootic ulcerative syndrome**

When importing, for use in animal feed, or for agricultural, industrial or pharmaceutical use, live aquatic animals of the species referred to in Article 2.1.10.2. from a country, zone or compartment not declared free from EUS, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of A. invadans.

This Article does not apply to commodities referred to in point 1 of Article 2.1.10.3.

Article 2.1.10.11.

**Importation of aquatic animal products from a country, zone or compartment declared free from epizootic ulcerative syndrome**

When importing aquatic animal products of the species referred to in Article 2.1.10.2. from a country, zone or compartment declared free from EUS, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.10.4. or 2.1.10.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from EUS.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.10.3.

Article 2.1.10.12.

**Importation of aquatic animal products from a country, zone or compartment not declared free from epizootic ulcerative syndrome**

When importing aquatic animal products of the species referred to in Article 2.1.10.2. from a country, zone or compartment not declared free from EUS, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

In the case of dead fish, whether eviscerated or uneviscerated, such risk mitigation measures may include:

1. the direct delivery into and holding of the consignment in biosecure/quarantine facilities for processing to one of the products referred to in point 1 of Article 2.1.10.3. or other products authorised by the Competent Authority;
2. the treatment of all effluent and waste material in a manner that ensures inactivation of A. invadans.

This Article does not apply to commodities referred to in point 1 of Article 2.1.10.3.
CHAPTER 2.1.11.

BACTERIAL KIDNEY DISEASE
(Renibacterium salmoninarum)

Article 2.1.11.1.
Standards for diagnostic tests are described in the Aquatic Manual.

Article 2.1.11.2.

When importing live or dead uneviscerated fish of a susceptible species or their gametes or eggs, the Competent Authority of the importing country with an official control policy for bacterial kidney disease\(^1\) may wish to require the presentation of an international aquatic animal health certificate issued by the Competent Authority in the exporting country, attesting that the country, zone or aquaculture establishment of origin has been regularly subjected to appropriate tests for bacterial kidney disease with negative results.

\(^1\) This disease does not meet the listing criteria in Chapter 1.2.2. Nevertheless, reporting requirements for non listed diseases apply in regard to significant epidemiological events (see point 1e) of Article 1.2.1.3.).
CHAPTER 2.1.12.

ENTERIC SEPTICAEMIA OF CATFISH
(Edwardsiella ictaluri)

Article 2.1.12.1.

Standards for diagnostic tests are described in the Aquatic Manual.

Article 2.1.12.2.

When importing live or dead uneviscerated fish of a susceptible species or their gametes or eggs, the Competent Authority of the importing country with an official control policy for enteric septicaemia of catfish may wish to require the presentation of an international aquatic animal health certificate issued by the Competent Authority in the exporting country, attesting that the country, zone or aquaculture establishment of origin has been regularly subjected to appropriate tests for enteric septicaemia of catfish with negative results.

1 This disease does not meet the listing criteria in Chapter 1.2.2. Nevertheless, reporting requirements for non listed diseases apply in regard to significant epidemiological events (see point 1e) of Article 1.2.1.3.).
CHAPTER 2.1.13.

PISCIRICKETTSIOSIS
(Piscirickettsia salmonis)

Article 2.1.13.1.

Standards for diagnostic tests are described in the Aquatic Manual.

Article 2.1.13.2.

When importing live or dead uneviscerated fish of a susceptible species or their gametes or eggs, the Competent Authority of the importing country with an official control policy for piscirickettsiosis may wish to require the presentation of an international aquatic animal health certificate issued by the Competent Authority in the exporting country, attesting that the country, zone or aquaculture establishment of origin has been regularly subjected to appropriate tests for piscirickettsiosis with negative results.

1 This disease does not meet the listing criteria in Chapter 1.2.2. Nevertheless, reporting requirements for non listed diseases apply in regard to significant epidemiological events (see point 1e) of Article 1.2.1.3.).
CHAPTER 2.1.14.

GYRODACtylosis
(Gyrodyctylus salaris)


Standards for diagnostic tests are described in the Aquatic Manual.

Article 2.1.14.2.

When importing live salmonids or other fish from sites where salmonids are present, the Competent Authority of the importing country with an official control policy for Gyrodactylus salaris may wish to require the presentation of an international aquatic animal health certificate issued by the Competent Authority in the exporting country, attesting that the site of origin:

1. has been regularly subjected to tests for Gyrodactylus salaris with negative results for at least the previous two years;

and

2. is situated in a water catchment area or part of a water catchment area free from Gyrodactylus salaris;

or

3. is supplied by water from a water catchment area or part of a water catchment area free from stocks of live salmonids, whether farmed or wild;

and

4. has not introduced live salmonids from aquaculture establishments or sites of a lesser fish health status for at least the previous two years;

OR

5. is supplied with sea water with a salinity of at least 20 parts per thousand and no live salmonids have been introduced for the previous 14 days from a site of a lesser health status.
CHAPTER 2.1.15.

RED SEA BREAM IRIDOVIRAL DISEASE

Article 2.1.15.1.

For the purposes of the Aquatic Code, red sea bream iridoviral disease (RSIVD) means infection with red sea bream iridovirus (RSIV) of the family Iridoviridae.

Methods for surveillance and diagnosis are provided in the Aquatic Manual.

Article 2.1.15.2.

Scope

The recommendations in this Chapter apply to: red sea bream (Pagrus major), yellowtail (Seriola quinqueradiata), amberjack (Seriola dumerili), sea bass (Lateolabrax sp. and Lates calcarifer), Albacore (Thunnus thynnus), Japanese parrotfish (Oplegnathus fasciatus), striped jack (Caranx delatissimus), mandarin fish (Siniperca chuatsi), red drum (Sciaenops ocellatus), mullet (Mugil cephalus) and groupers (Epinephelus spp.). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.1.15.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any RSIVD related conditions, regardless of the RSIVD status of the exporting country, zone or compartment:

   a) From the species in Article 2.1.15.2., for any purpose:
      i) commercially sterile canned fish;
      ii) leather made from fish skin.

   b) The following commodities destined for human consumption from the species referred to in Article 2.1.15.2. which have been prepared in such a way as to minimise the likelihood of alternative uses:
      i) chemically preserved products (e.g. smoked, salted, pickled, marinated, etc.);
      ii) products (e.g. ready prepared meals, fish oil) that have been heat treated in a manner to ensure the inactivation of the pathogen;
      iii) eviscerated fish (chilled or frozen) packaged for direct retail trade;
      iv) fillets or cutlets (chilled or frozen);
      v) dried eviscerated fish (including air dried, flame dried and sun dried).

   For the commodities referred to in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.1.15.2., other than those referred to in point 1 of Article 2.1.15.3., the Competent Authorities should require the
conditions prescribed in Articles 2.1.15.7. to 2.1.15.12. relevant to the RSIVD status of the exporting country, zone or compartment.

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of RSIVD of a live commodity of a species not covered in Article 2.1.15.2., the Competent Authorities should conduct an analysis of the risk of introduction, establishment and spread of RSIV and the potential consequences associated with the importation of the commodity, prior to a decision. The exporting country should be informed of the outcome of this assessment.

Article 2.1.15.4.

Red sea bream iridovirus free country

A country may make a self-declaration of freedom from RSIVD if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from RSIVD if all the areas covered by the shared water are declared RSIVD free countries or zones (see Article 2.1.15.5.).

1. A country where none of the susceptible species is present may make a self-declaration of freedom from RSIVD when basic biosecurity conditions have been met continuously in the country for at least the past 2 years.

OR

2. A country where the species referred to in Article 2.1.15.2. are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.15. of the Aquatic Manual, may make a self-declaration of freedom from RSIVD when basic biosecurity conditions have been met continuously in the country for at least the past 10 years.

OR

3. A country where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.15. of the Aquatic Manual, may make a self-declaration of freedom from RSIVD when:

   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.15. of the Aquatic Manual, has been in place for at least the last 2 years without detection of RSIV.

OR

4. A country that has made a self-declaration of freedom from RSIVD but in which the disease is subsequently detected may not make a self-declaration of freedom from RSIVD again until the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.15. of the Aquatic Manual, has been in place for at least the last 2 years without detection of RSIV.

In the meantime, part of the non-affected area may be declared a free zone provided that it meets the conditions in point 3 of Article 2.1.15.5.
Article 2.1.15.5.

Red sea bream iridovirus free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from RSIVD may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared an RSIVD free zone or compartment if all the Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species is present may be declared free from RSIVD when basic biosecurity conditions have been met continuously in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the species referred to in Article 2.1.15.2. are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.15. of the Aquatic Manual, may be declared free from RSIVD when basic biosecurity conditions have been met continuously in the zone or compartment for at least the past 10 years.

OR

3. A zone or compartment where the last observed occurrence of the disease was within the past 25 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.1.15. of the Aquatic Manual, may be declared free from RSIVD when:
   a) basic biosecurity conditions have been met continuously for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.15. of the Aquatic Manual, has been in place for at least the last 2 years without detection of RSIV.

OR

4. A zone previously declared free from RSIVD but in which the disease is detected may not be declared free from RSIVD again until the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.15. of the Aquatic Manual, has been in place for at least the last 2 years without detection of RSIV.

Article 2.1.15.6.

Maintenance of free status

A country, zone or compartment that is declared free from RSIVD following the provisions of points 1 or 2 of Articles 2.1.15.4. or 2.1.15.5. (as relevant) may maintain its status as RSIVD free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from RSIVD following the provisions of point 3 of Articles 2.1.15.4. or 2.1.15.5. (as relevant) may discontinue targeted surveillance and maintain its status as RSIVD free provided that conditions that are conducive to clinical expression of RSIVD, as described in Chapter 2.1.15. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.
However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of RSIVD, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.1.15.7.

Importation of live aquatic animals from a country, zone or compartment declared free from red sea bream iridovirus

When importing live aquatic animals of the species referred to in Article 2.1.15.2. from a country, zone or compartment declared free from RSIVD, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.15.4. or 2.1.15.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from RSIVD.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.15.3.

Article 2.1.15.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from red sea bream iridovirus

When importing, for aquaculture, live aquatic animals of the species referred to in Article 2.1.15.2. from a country, zone or compartment not declared free from RSIVD, the Competent Authority of the importing country should assess the risk and apply risk mitigation measures such as:

1. the direct delivery into and holding of the consignment in quarantine facilities;
2. the continuous isolation of the imported aquatic animals and their first generation progeny from the local environment;
3. the treatment of all effluent and waste material in a manner that ensures inactivation of RSIV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.15.3.

Article 2.1.15.9.

Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from red sea bream iridovirus

When importing, for processing for human consumption, live aquatic animals of the species referred to in Article 2.1.15.2. from a country, zone or compartment not declared free from RSIVD, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to one of the products referred to in point 1 of Article 2.1.15.3. or other products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of RSIV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.15.3.
Article 2.1.15.10.

Importation of live aquatic animals intended for use in animal feed, or for agricultural, industrial or pharmaceutical use from a country, zone or compartment not declared free from red sea bream iridovirus

When importing, for use in animal feed, or for agricultural, industrial or pharmaceutical use, live aquatic animals of the species referred to in Article 2.1.15.2. from a country, zone or compartment not declared free from RSIVD, the Competent Authority of the importing country should require that:

1. the consignment is delivered directly to and held in quarantine facilities for slaughter and processing to products authorised by the Competent Authority; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of RSIV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.15.3.

Article 2.1.15.11.

Importation of aquatic animal products from a country, zone or compartment declared free from red sea bream iridovirus

When importing aquatic animal products of the species referred to in Article 2.1.15.2. from a country, zone or compartment declared free from RSIVD, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 2.1.15.4. or 2.1.15.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from RSIVD.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.15.3.

Article 2.1.15.12.

Importation of aquatic animal products from a country, zone or compartment not declared free from red sea bream iridovirus

When importing aquatic animal products of the species referred to in Article 2.1.15.2. from a country, zone or compartment not declared free from RSIVD, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

In the case of dead fish, whether eviscerated or uneviscerated, such risk mitigation measures may include:

1. the direct delivery into and holding of the consignment in biosecure/quarantine facilities for processing to one of the products referred to in point 1 of Article 2.1.15.3. or other products authorised by the Competent Authority;
2. the treatment of all effluent and waste material in a manner that ensures inactivation of RSIV.

This Article does not apply to commodities referred to in point 1 of Article 2.1.15.3.
CHAPTER 2.1.16.

WHITE STURGEON IRIDOVIRAL DISEASE

Article 2.1.16.1.
Standards for diagnostic tests are described in the Aquatic Manual.

Article 2.1.16.2.

When importing live or dead uneviscerated fish of a susceptible species or their gametes or eggs, the Competent Authority of the importing country with an official control policy for white sturgeon iridoviral disease may wish to require the presentation of an international aquatic animal health certificate issued by the Competent Authority in the exporting country, attesting that the country, zone or aquaculture establishment of origin has been regularly subjected to appropriate tests for white sturgeon iridoviral disease with negative results.

1 This disease does not meet the listing criteria in Chapter 1.2.2. Nevertheless, reporting requirements for non listed diseases apply in regard to significant epidemiological events (see point 1e) of Article 1.2.1.3.).
CHAPTER 2.1.17.

KOI HERPESVIRUS DISEASE

Article 2.1.17.1.

For the purposes of the Aquatic Code, koi herpesvirus disease (KHVD) means infection with the viral species koi herpesvirus (KHV) tentatively placed in the sub-family Cyprinid herpesvirus of the family Herpesviridae.

Methods for conducting surveillance and diagnosis of koi herpesvirus disease are provided in the Aquatic Manual.

Article 2.1.17.2.

Scope

The recommendations in this Chapter apply to: common carp (Cyprinus carpio carpio), ghost carp (Cyprinus carpio gibelio), koi carp (Cyprinus carpio koi) and common carp hybrids (e.g. Cyprinus carpio x Carassius auratus). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.1.17.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any KHVD related conditions, regardless of the KHVD status of the exporting country, zone or compartment:

   a) For the species referred to in Article 2.1.17.2. being used for any purpose:
      i) commodities treated in a manner that kills the host and inactivates the disease agent e.g. leather made from fish skin, pasteurised products and ready to eat meals; and fish oil and fish meal intended for use in animal feeds;
      ii) biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent.

   b) The following commodities destined for human consumption from the species referred to in Article 2.1.17.2. which have been prepared and packaged for direct retail trade:
      i) eviscerated fish (chilled or frozen);
      ii) fillets or cutlets (chilled or frozen);
      iii) dried eviscerated fish (including air dried, flame dried and sun dried).

   For the commodities referred to in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.1.17.2., other than those referred to in point 1 of Article 2.1.17.3., the Competent Authorities should require the conditions prescribed in Articles 2.1.17.7. to 2.1.17.12. relevant to the KHVD status of the exporting country, zone or compartment.
3. When considering the importation/transit from an exporting country, zone or compartment not declared free of KHVD of a live commodity of a species not covered in Article 2.1.17.2. but which could reasonably be expected to be a potential KHV vector, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

Article 2.1.17.4.

Koi herpesvirus disease free country

A country may make a self-declaration of freedom from KHVD if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from KHVD if all the areas covered by the shared water are declared KHVD free countries or zones (see Article 2.1.17.5.).

1. A country where none of the susceptible species referred to in Article 2.1.17.2. is present may make a self-declaration of freedom from KHVD when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

2. A country where the susceptible species referred to in Article 2.1.17.2. are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.17. of the Aquatic Manual, may make a self-declaration of freedom from KHVD when basic biosecurity conditions have been continuously met in the country for at least the past 10 years.

OR

3. A country where the last observed occurrence of the disease was within the past 25 years, or where the infection status prior to targeted surveillance was unknown (e.g. the absence of conditions conducive to its clinical expression as described in Chapter 2.1.17. of the Aquatic Manual), may make a self-declaration of freedom from KHVD when:
   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.17. of the Aquatic Manual, has been in place for at least the last 2 years without detection of KHV.

OR

4. A country that has previously made a self-declaration of freedom from KHVD but in which the disease is subsequently detected may make a self-declaration of freedom from KHVD again when the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.17. of the Aquatic Manual, has been in place for at least the last 2 years without detection of KHV; and
   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

In the meantime, part of the non-affected area may be declared a free zone provided that such part meets the conditions in point 3 of Article 2.1.17.5.
Article 2.1.17.5.

Koi herpesvirus disease free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from KHVD may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a KHVD free zone or compartment if all the Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species referred to in Article 2.1.17.2. is present may be declared free from KHVD when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the susceptible species referred to in Article 2.1.17.2. are present but there has never been any observed occurrence of the disease for at least the past 25 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.1.17. of the Aquatic Manual, may be declared free from KHVD when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 10 years.

OR

3. A zone or compartment where the last observed occurrence of the disease was within the past 25 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in Chapter 2.1.17. of the Aquatic Manual), may be declared free from KHVD when:

   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.1.17. of the Aquatic Manual, has been in place for at least the last 2 years without detection of KHV.

OR

4. A zone previously declared free from KHVD but in which the disease is subsequently detected may be declared free from KHVD again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.1.17. of the Aquatic Manual, has been in place for at least the last 2 years without detection of KHV; and

   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

Article 2.1.17.6.

Maintenance of free status

A country, zone or compartment that is declared free from KHVD following the provisions of points 1 or 2 of Articles 2.1.17.4. or 2.1.17.5. (as relevant) may maintain its status as KHVD free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from KHVD following the provisions of point 3 of Articles 2.1.17.4. or 2.1.17.5. (as relevant) may discontinue targeted surveillance and maintain its status as
KHVD free provided that conditions that are conducive to clinical expression of KHVD, as described in Chapter 2.1.17. of the Aquatic Manual, exist, and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of KHVD, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

**Article 2.1.17.7.**

**Importation of live aquatic animals from a country, zone or compartment declared free from koi herpesvirus disease**

When importing live aquatic animals of species referred to in Article 2.1.17.2. from a country, zone or compartment declared free from KHVD, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.1.17.4. or 2.1.17.5. (as applicable), the place of production of the commodity is a country, zone or compartment declared free from KHVD.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.17.3.

**Article 2.1.17.8.**

**Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from koi herpesvirus disease**

1. When importing, for aquaculture, live aquatic animals of species referred to in Article 2.1.17.2. from a country, zone or compartment not declared free from KHVD, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
   a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
   b) the treatment of all effluent and waste materials in a manner that ensures inactivation of koi herpesvirus.

2. If the intention of the introduction is the establishment of a new stock, international standards, such as the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES), should be followed.

3. For the purposes of the Aquatic Code, the ICES Code may be summarised to the following main points:
   a) identify stock of interest (cultured or wild) in its current location;
   b) evaluate stock health/disease history;
   c) take and test samples for KHV, pests and general health/disease status;
   d) import and quarantine in a secure facility a founder (F-0) population;
   e) produce F-1 generation from the F-0 stock in quarantine;
   f) culture F-1 stock and at critical times in its development (life cycle) sample and test for KHV and perform general examinations for pests and general health/disease status;
   g) if KHV is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as KHVD free or specific pathogen free (SPF) for KHV;
h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities referred to in point 1 of Article 2.1.17.3.

Article 2.1.17.9.

Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from koi herpesvirus disease

When importing, for processing for human consumption, live aquatic animals of species referred to in Article 2.1.17.2. from a country, zone or compartment not declared free from KHVD, the Competent Authority of the importing country should assess the risk and, if justified, require that:

1. the consignment be delivered directly to and held in quarantine facilities for slaughter and processing to one of the products referred to in point 1 of Article 2.1.17.3. or other products authorised by the Competent Authority; and

2. all effluent and waste materials from the processing be treated in a manner that ensures inactivation of koi herpesvirus.

This Article does not apply to commodities referred to in point 1 of Article 2.1.17.3.

Article 2.1.17.10.

Importation of live aquatic animals intended for use in animal feed, or for agricultural, industrial or pharmaceutical use, from a country, zone or compartment not declared free from koi herpesvirus disease

When importing, for use in animal feed, or for agricultural, industrial or pharmaceutical use, live aquatic animals of species referred to in Article 2.1.17.2. from a country, zone or compartment not declared free from KHVD, the Competent Authority of the importing country should require that:

1. the consignment be delivered directly to and held in quarantine facilities for slaughter and processing to products authorised by the Competent Authority; and

2. all effluent and waste materials from the processing be treated in a manner that ensures inactivation of koi herpesvirus.

This Article does not apply to commodities referred to in point 1 of Article 2.1.17.3.

Article 2.1.17.11.

Importation of aquatic animal products from a country, zone or compartment declared free from koi herpesvirus disease

When importing aquatic animal products of species referred to in Article 2.1.17.2. from a country, zone or compartment declared free from KHVD, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.1.17.4. or 2.1.17.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from KHVD.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.1.

This Article does not apply to commodities referred to in point 1 of Article 2.1.17.3.
Article 2.1.17.12.

Importation of aquatic animal products from a country, zone or compartment not declared free from koi herpesvirus disease

When importing aquatic animal products of species referred to in Article 2.1.17.2. from a country, zone or compartment not declared free from KHVD, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

In the case of dead aquatic animals, whether eviscerated or uneviscerated, such risk mitigation measures may include:

1. the direct delivery into and holding of the consignment in biosecure/quarantine facilities for processing to one of the products referred to in point 1 of Article 2.1.17.3. or other products authorised by the Competent Authority;

2. the treatment of all effluent and waste materials in a manner that ensures inactivation of koi herpesvirus.

This Article does not apply to commodities referred to in point 1 of Article 2.1.17.3.
CHAPTER 2.2.1.

INFECTION WITH BONAMIA OSTREAE

Article 2.2.1.1.

For the purposes of the Aquatic Code, infection with Bonamia ostreae means infection only with Bonamia ostreae.

Methods for conducting surveillance, diagnosis and confirmatory identification of infection with Bonamia ostreae are provided in the Aquatic Manual.

Article 2.2.1.2.

Scope

The recommendations in this Chapter apply to: European flat oyster (Ostrea edulis), Australian mud oyster (O. angasi), Argentinean flat oyster (O. puelchana), Chilean flat oyster (O. chilensis), Asiatic oyster (O. denselamellosa) and Suminon oyster (Crassostrea ariakensis). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.2.1.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any Bonamia ostreae related conditions, regardless of the Bonamia ostreae status of the exporting country, zone or compartment:

   a) For the species referred to in Article 2.2.1.2. being used for any purpose:

      i) commodities treated in a manner that kills the host (and thereby inactivates the disease agent) e.g. canned or pasteurised products;

      ii) larvae;

      iii) biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent.

   b) All commodities from Crassostrea gigas, C. virginica, Ruditapes decussatus, R. philippinarum, Mytilus galloprovincialis and M. edulis, including the live aquatic animal.
c) The following commodities destined for human consumption from the species referred to in Article 2.2.1.2., which have been prepared and packaged for direct retail trade:

i) off the shell (chilled or frozen);

ii) half-shell (chilled).

For the commodities referred to in point 1c), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.2.1.2., other than commodities referred to in point 1 of Article 2.2.1.3., the Competent Authorities should require the conditions prescribed in Articles 2.2.1.7. to 2.2.1.11. relevant to the Bonamia ostreae status of the exporting country, zone or compartment.

3. When considering the importation/ transit from an exporting country, zone or compartment not declared free of infection with Bonamia ostreae of a commodity from bivalve species not covered in Article 2.2.1.2. or in point 1b) of Article 2.2.1.3. but which could reasonably be expected to be a potential Bonamia ostreae vector, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

Article 2.2.1.4.

Bonamia ostreae free country

A country may make a self-declaration of freedom from Bonamia ostreae if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from Bonamia ostreae if all the areas covered by the shared water are declared Bonamia ostreae free zones (see Article 2.2.1.5.).

1. A country where none of the susceptible species referred to in Article 2.2.1.2. is present may make a self-declaration of freedom from Bonamia ostreae when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

2. A country where any susceptible species referred to in Article 2.2.1.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions - in all areas where the species are present - that are conducive to its clinical expression, as described in Chapter 2.2.1. of the Aquatic Manual, may make a self-declaration of freedom from Bonamia ostreae when basic biosecurity conditions have been continuously met in the country for at least the past 2 years and infection with Bonamia ostreae is not known to be established in wild populations.

OR

3. A country where the last known clinical occurrence was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in Chapter 2.2.1. of the Aquatic Manual), may make a self-declaration of freedom from Bonamia ostreae when:

a) basic biosecurity conditions have been continuously met for at least the past 2 years; and

b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.1. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Bonamia ostreae.
Chapter 2.2.1. - Infection with Bonamia ostreae

4. A country that has previously made a self-declaration of freedom from Bonamia ostreae but in which the disease is subsequently detected may make a self-declaration of freedom from Bonamia ostreae again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.1. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Bonamia ostreae; and

   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

In the meantime, part of the non-affected area may be declared a free zone provided that such part meets the conditions in point 3 of Article 2.2.1.5.

Article 2.2.1.5.

Bonamia ostreae free zone or free compartment

A zone or compartment free from Bonamia ostreae may be established within the territory of one or more countries of infected or unknown status for infection with Bonamia ostreae and declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a Bonamia ostreae free zone or compartment if the conditions outlined below apply to all areas of the zone or compartment.

1. In a country of unknown status for Bonamia ostreae, a zone or compartment where none of the susceptible species referred to in Article 2.2.1.2. is present may be declared free from Bonamia ostreae when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

2. In a country of unknown status for Bonamia ostreae, a zone or compartment where any susceptible species referred to in Article 2.2.1.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions - in all areas where the species are present - that are conducive to its clinical expression, as described in Chapter 2.2.1. of the Aquatic Manual, may be declared free from Bonamia ostreae when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years and infection with Bonamia ostreae is not known to be established in wild populations.

OR

3. A zone or compartment where the last known clinical occurrence was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in Chapter 2.2.1. of the Aquatic Manual), may be declared free from Bonamia ostreae when:

   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.1. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Bonamia ostreae.
4. A zone previously declared free from *Bonamia ostreae* but in which the disease is subsequently detected may be declared free from *Bonamia ostreae* again when the following conditions have been met:

a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease and the appropriate disinfection procedures (see *Aquatic Manual*) have been completed; and

c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.1. of the *Aquatic Manual*, has been in place for at least the past 2 years without detection of *Bonamia ostreae*; and

d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

Article 2.2.1.6.

**Maintenance of free status**

A country, zone or compartment that is declared free from *Bonamia ostreae* following the provisions of points 1 or 2 of Articles 2.2.1.4. or 2.2.1.5. (as relevant) may maintain its status as *Bonamia ostreae* free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from *Bonamia ostreae* following the provisions of point 3 of Articles 2.2.1.4. or 2.2.1.5. (as relevant) may discontinue targeted surveillance and maintain its status as *Bonamia ostreae* free provided that conditions that are conducive to clinical expression of infection with *Bonamia ostreae*, as described in Chapter 2.2.1. of the *Aquatic Manual*, exist and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of infection with *Bonamia ostreae*, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.2.1.7.

**Importation of live aquatic animals from a country, zone or compartment declared free from *Bonamia ostreae***

When importing live aquatic animals of species referred to in Article 2.2.1.2. from a country, zone or compartment declared free from *Bonamia ostreae*, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.1.4. or 2.2.1.5. (as applicable), whether the place of production of the commodity is a country, zone or compartment declared free from *Bonamia ostreae*.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.2.

This Article does not apply to commodities referred to in point 1 of Article 2.2.1.3.
Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from Bonamia ostreae

1. When importing, for aquaculture, live aquatic animals of species referred to in Article 2.2.1.2. from a country, zone or compartment not declared free from Bonamia ostreae, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
   a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
   b) the treatment of all effluent and waste material in a manner that ensures inactivation of Bonamia ostreae.

2. If the intention of the introduction is the establishment of a new stock, international standards, such as the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES), should be followed.

3. For the purposes of the Aquatic Code, the ICES Code may be summarised to the following main points:
   a) identify stock of interest (cultured or wild) in its current location;
   b) evaluate stock health/disease history;
   c) take and test samples for Bonamia ostreae, pests and general health/disease status;
   d) import and quarantine in a secure facility a founder (F-0) population;
   e) produce F-1 generation from the F-0 stock in quarantine;
   f) culture F-1 stock and at critical times in its development (life cycle) sample and test for Bonamia ostreae and perform general examinations for pests and general health/disease status;
   g) if Bonamia ostreae is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as free of infection with Bonamia ostreae or specific pathogen free (SPF) for Bonamia ostreae;
   h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities referred to in point 1 of Article 2.2.1.3.

Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from Bonamia ostreae

When importing, for processing for human consumption, live aquatic animals of species referred to in Article 2.2.1.2. from a country, zone or compartment not declared free from Bonamia ostreae, the Competent Authority of the importing country should assess the risk and, if justified, require that:

1. the consignment be delivered directly to and held in quarantine facilities until processing and/or consumption; and

2. all effluent and waste material from the processing be treated in a manner that ensures inactivation of Bonamia ostreae.

This Article does not apply to commodities referred to in point 1 of Article 2.2.1.3.
Article 2.2.1.10.

Importation of aquatic animal products from a country, zone or compartment declared free from Bonamia ostreae

When importing aquatic animal products of species referred to in Article 2.2.1.2. from a country, zone or compartment declared free from Bonamia ostreae, the Competent Authority of the importing country should require that the consignment be accompanied by an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.1.4. or 2.2.1.5. (as applicable), whether or not the place of production of the consignment is a country, zone or compartment declared free from Bonamia ostreae.

The certificate should be in accordance with the Model Certificate in Appendix X.X.X. (under study).

This Article does not apply to commodities referred to in point 1 of Article 2.2.1.3.

Article 2.2.1.11.

Importation of aquatic animal products from a country, zone or compartment not declared free from Bonamia ostreae

When importing aquatic animal products of species referred to in Article 2.2.1.2. from a country, zone or compartment not declared free from Bonamia ostreae, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

This Article does not apply to commodities referred to in point 1 of Article 2.2.1.3.
CHAPTER 2.2.2.

INFECTION WITH BONAMIA EXITIOSA

Article 2.2.2.1.

For the purposes of the Aquatic Code, infection with Bonamia exitiosa means infection only with Bonamia exitiosa.

Methods for conducting surveillance, diagnosis and confirmatory identification of infection with Bonamia exitiosa are provided in the Aquatic Manual.

Article 2.2.2.2.

Scope

The recommendations in this Chapter apply to: Australian mud oyster (Ostrea angasi) and Chilean flat oyster (O. chilensis). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.2.2.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any Bonamia exitiosa related conditions, regardless of the Bonamia exitiosa status of the exporting country, zone or compartment:
   a) For the species referred to in Article 2.2.2.2. being used for any purpose:
      i) commodities treated in a manner that kills the host (and thereby inactivates the disease agent) e.g. canned or pasteurised products;
      ii) larvae;
      iii) biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent.
   b) All commodities from Crassostrea gigas and Saccostrea glomerata, including the live aquatic animal.
   c) The following commodities destined for human consumption from the species referred to in Article 2.2.2.2. which have been prepared and packaged for direct retail trade:
      i) off the shell (chilled or frozen);
      ii) half-shell (chilled).

For the commodities referred to in point 1c), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.2.2.2., other than commodities referred to in point 1 of Article 2.2.2.3., the Competent Authorities should require the conditions prescribed in Articles 2.2.2.7. to 2.2.2.11. relevant to the Bonamia exitiosa status of the exporting country, zone or compartment.
3. When considering the importation/transit from an exporting country, zone or compartment not declared free of infection with Bonamia exitiosa of a commodity from bivalve species not covered in Article 2.2.2.2. or in point 1b) of Article 2.2.2.3. but which could reasonably be expected to be a potential Bonamia exitiosa vector, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

**Article 2.2.2.4.**

**Bonamia exitiosa free country**

A country may make a self-declaration of freedom from Bonamia exitiosa if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from Bonamia exitiosa if all the areas covered by the shared water are declared Bonamia exitiosa free zones (see Article 2.2.2.5.).

1. A country where none of the susceptible species referred to in Article 2.2.2.2. is present may make a self-declaration of freedom from Bonamia exitiosa when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

2. A country where any susceptible species referred to in Article 2.2.2.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions - in all areas where the species are present - that are conducive to its clinical expression, as described in Chapter 2.2.2. of the Aquatic Manual, may make a self-declaration of freedom from Bonamia exitiosa when basic biosecurity conditions have been continuously met in the country for at least the past 2 years and infection with Bonamia exitiosa is not known to be established in wild populations.

OR

3. A country where the last known clinical occurrence was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in Chapter 2.2.2. of the Aquatic Manual), may make a self-declaration of freedom from Bonamia exitiosa when:
   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.2. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Bonamia exitiosa.

OR

4. A country that has previously made a self-declaration of freedom from Bonamia exitiosa but in which the disease is subsequently detected may make a self-declaration of freedom from Bonamia exitiosa again when the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.2. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Bonamia exitiosa; and
   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.
In the meantime, part of the non-affected area may be declared a free zone provided that such part meets the conditions in point 3 of Article 2.2.2.5.

Article 2.2.2.5.

**Bonamia exitiosa free zone or free compartment**

A zone or compartment free from Bonamia exitiosa may be established within the territory of one or more countries of infected or unknown status for infection with Bonamia exitiosa and declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a Bonamia exitiosa free zone or compartment if the conditions outlined below apply to all areas of the zone or compartment.

1. In a country of unknown status for Bonamia exitiosa, a zone or compartment where none of the susceptible species referred to in Article 2.2.2. is present may be declared free from Bonamia exitiosa when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

**O R**

2. In a country of unknown status for Bonamia exitiosa, a zone or compartment where any susceptible species referred to in Article 2.2.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions – in all areas where the species are present – that are conducive to its clinical expression, as described in Chapter 2.2.2. of the Aquatic Manual, may be declared free from Bonamia exitiosa when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years and infection with Bonamia exitiosa is not known to be established in wild populations.

**O R**

3. A zone or compartment where the last known clinical occurrence was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in Chapter 2.2.2. of the Aquatic Manual), may be declared free from Bonamia exitiosa when:
   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.2. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Bonamia exitiosa.

**O R**

4. A zone previously declared free from Bonamia exitiosa but in which the disease is subsequently detected may be declared free from Bonamia exitiosa again when the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.2. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Bonamia exitiosa; and
   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.
Article 2.2.2.6.

**Maintenance of free status**

A country, zone or compartment that is declared free from *Bonamia exitiosa* following the provisions of points 1 or 2 of Articles 2.2.2.4. or 2.2.2.5. (as relevant) may maintain its status as *Bonamia exitiosa* free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from *Bonamia exitiosa* following the provisions of point 3 of Articles 2.2.2.4. or 2.2.2.5. (as relevant) may discontinue targeted surveillance and maintain its status as *Bonamia exitiosa* free provided that conditions that are conducive to clinical expression of infection with *Bonamia exitiosa*, as described in Chapter 2.2.2. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of infection with *Bonamia exitiosa*, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.2.2.7.

**Importation of live aquatic animals from a country, zone or compartment declared free from *Bonamia exitiosa***

When importing live aquatic animals of species referred to in Article 2.2.2.2. from a country, zone or compartment declared free from *Bonamia exitiosa*, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.2.4. or 2.2.2.5. (as applicable), whether the place of production of the commodity is a country, zone or compartment declared free from *Bonamia exitiosa*.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.2.

This Article does not apply to commodities referred to in point 1 of Article 2.2.2.3.

Article 2.2.2.8.

**Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from *Bonamia exitiosa***

1. When importing, for aquaculture, live aquatic animals of species referred to in Article 2.2.2.2. from a country, zone or compartment not declared free from *Bonamia exitiosa*, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
   a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
   b) the treatment of all effluent and waste material in a manner that ensures inactivation of *Bonamia exitiosa*.

2. If the intention of the introduction is the establishment of a new stock, international standards, such as the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES), should be followed.

3. For the purposes of the Aquatic Code, the ICES Code may be summarised to the following main points:
   a) identify stock of interest (cultured or wild) in its current location;
b) evaluate stock health/disease history;

c) take and test samples for Bonamia exitiosa, pests and general health/disease status;

d) import and quarantine in a secure facility a founder (F-0) population;

e) produce F-1 generation from the F-0 stock in quarantine;

f) culture F-1 stock and at critical times in its development (life cycle) sample and test for Bonamia exitiosa and perform general examinations for pests and general health/disease status;

g) if Bonamia exitiosa is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as free of infection with Bonamia exitiosa or specific pathogen free (SPF) for Bonamia exitiosa;

h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities referred to in point 1 of Article 2.2.2.3.

Article 2.2.2.9.

**Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from Bonamia exitiosa**

When importing, for processing for human consumption, live aquatic animals of species referred to in Article 2.2.2.2. from a country, zone or compartment not declared free from Bonamia exitiosa, the Competent Authority of the importing country should assess the risk and, if justified, require that:

1. the consignment be delivered directly to and held in quarantine facilities until processing and/or consumption; and

2. all effluent and waste material from the processing be treated in a manner that ensures inactivation of Bonamia exitiosa.

This Article does not apply to commodities referred to in point 1 of Article 2.2.2.3.

Article 2.2.2.10.

**Importation of aquatic animal products from a country, zone or compartment declared free from Bonamia exitiosa**

When importing aquatic animal products of species referred to in Article 2.2.2.2. from a country, zone or compartment declared free from Bonamia exitiosa, the Competent Authority of the importing country should require that the consignment be accompanied by an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.2.4. or 2.2.2.5. (as applicable), whether or not the place of production of the consignment is a country, zone or compartment declared free from Bonamia exitiosa.

The certificate should be in accordance with the Model Certificate in Appendix X.X.X. (under study).

This Article does not apply to commodities referred to in point 1 of Article 2.2.2.3.
Article 2.2.2.11.

Importation of aquatic animal products from a country, zone or compartment not declared free from *Bonamia exitiosa*

When importing aquatic animal products of species referred to in Article 2.2.2.2. from a country, zone or compartment not declared free from *Bonamia exitiosa*, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

This Article does not apply to commodities referred to in point 1 of Article 2.2.2.3.
CHAPTER 2.2.3.

INFECTION WITH HAPLOSPORIDIUM NELSONI

Article 2.2.3.1.

For the purposes of the Aquatic Code, infection with Haplosporidium nelsoni means infection only with Haplosporidium nelsoni.

Methods for conducting surveillance, diagnosis and confirmatory identification of infection with Haplosporidium nelsoni are provided in the Aquatic Manual (under study).

Article 2.2.3.2.

Scope

The recommendations in this Chapter apply to: Pacific oyster (Crassostrea gigas) and Eastern oyster (C. virginica). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.2.3.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any Haplosporidium nelsoni related conditions, regardless of the Haplosporidium nelsoni status of the exporting country, zone or compartment:
   a) For the species referred to in Article 2.2.3.2. being used for any purpose:
      i) commodities treated in a manner that kills the host (and thereby inactivates the disease agent) e.g. canned or pasteurised products;
      ii) larvae;
      iii) biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent.
   b) All commodities from Crassostrea ariakensis, including the live aquatic animal.
   c) The following commodities destined for human consumption from the species referred to in Article 2.2.3.2. which have been prepared and packaged for direct retail trade:
      i) off the shell (chilled or frozen);
      ii) half-shell (chilled).

   For the commodities referred to in point 1c), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.2.3.2., other than commodities referred to in point 1 of Article 2.2.3.3., the Competent Authorities should require the conditions prescribed in Articles 2.2.3.7. to 2.2.3.11. relevant to the Haplosporidium nelsoni status of the exporting country, zone or compartment.
Chapter 2.2.3. - Infection with Haplosporidium nelsoni

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of infection with Haplosporidium nelsoni of a commodity from bivalve species not covered in Article 2.2.3.2. or in point 1b) of Article 2.2.3.3. but which could reasonably be expected to be a potential Haplosporidium nelsoni vector, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

Article 2.2.3.4.

Haplosporidium nelsoni free country

A country may make a self-declaration of freedom from Haplosporidium nelsoni if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from Haplosporidium nelsoni if all the areas covered by the shared water are declared Haplosporidium nelsoni free zones (see Article 2.2.3.5.).

1. A country where none of the susceptible species referred to in Article 2.2.3.2. is present may make a self-declaration of freedom from Haplosporidium nelsoni when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

2. A country where any susceptible species referred to in Article 2.2.3.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions - in all areas where the species are present - that are conducive to its clinical expression, as described in Chapter 2.2.3. of the Aquatic Manual, may make a self-declaration of freedom from Haplosporidium nelsoni when basic biosecurity conditions have been continuously met in the country for at least the past 2 years and infection with Haplosporidium nelsoni is not known to be established in wild populations.

OR

3. A country where the last known clinical occurrence was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in Chapter 2.2.3. of the Aquatic Manual), may make a self-declaration of freedom from Haplosporidium nelsoni when:

   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.3. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Haplosporidium nelsoni.

OR

4. A country that has previously made a self-declaration of freedom from Haplosporidium nelsoni but in which the disease is subsequently detected may make a self-declaration of freedom from Haplosporidium nelsoni again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.3. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Haplosporidium nelsoni; and

   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.
In the meantime, part of the non-affected area may be declared a free zone provided that such part meets the conditions in point 3 of Article 2.2.3.5.

Article 2.2.3.5.

Haplosporidium nelsoni free zone or free compartment

A zone or compartment free from Haplosporidium nelsoni may be established within the territory of one or more countries of infected or unknown status for infection with Haplosporidium nelsoni and declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a Haplosporidium nelsoni free zone or compartment if the conditions outlined below apply to all areas of the zone or compartment.

1. In a country of unknown status for Haplosporidium nelsoni, a zone or compartment where none of the susceptible species referred to in Article 2.2.3.2. is present may be declared free from Haplosporidium nelsoni when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

2. In a country of unknown status for Haplosporidium nelsoni, a zone or compartment where any susceptible species referred to in Article 2.2.3.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions - in all areas where the species are present - that are conducive to its clinical expression, as described in Chapter 2.2.3. of the Aquatic Manual, may be declared free from Haplosporidium nelsoni when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years and infection with Haplosporidium nelsoni is not known to be established in wild populations.

OR

3. A zone or compartment where the last known clinical occurrence was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in Chapter 2.2.3. of the Aquatic Manual), may be declared free from Haplosporidium nelsoni when:

   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.3. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Haplosporidium nelsoni.

OR

4. A zone previously declared free from Haplosporidium nelsoni but in which the disease is subsequently detected may be declared free from Haplosporidium nelsoni again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.3. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Haplosporidium nelsoni; and
   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.
Article 2.2.3.6.

Maintenance of free status

A country, zone or compartment that is declared free from Haplosporidium nelsoni following the provisions of points 1 or 2 of Articles 2.2.3.4. or 2.2.3.5. (as relevant) may maintain its status as Haplosporidium nelsoni free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from Haplosporidium nelsoni following the provisions of point 3 of Articles 2.2.3.4. or 2.2.3.5. (as relevant) may discontinue targeted surveillance and maintain its status as Haplosporidium nelsoni free provided that conditions that are conducive to clinical expression of infection with Haplosporidium nelsoni, as described in Chapter 2.2.3. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of infection with Haplosporidium nelsoni, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.2.3.7.

Importation of live aquatic animals from a country, zone or compartment declared free from Haplosporidium nelsoni

When importing live aquatic animals of species referred to in Article 2.2.3.2. from a country, zone or compartment declared free from Haplosporidium nelsoni, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.3.4. or 2.2.3.5. (as applicable), whether the place of production of the commodity is a country, zone or compartment declared free from Haplosporidium nelsoni.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.2.

This Article does not apply to commodities referred to in point 1 of Article 2.2.3.3.

Article 2.2.3.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from Haplosporidium nelsoni

1. When importing for aquaculture, live aquatic animals of species referred to in Article 2.2.3.2. from a country, zone or compartment not declared free from Haplosporidium nelsoni, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
   a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
   b) the treatment of all effluent and waste material in a manner that ensures inactivation of Haplosporidium nelsoni.

2. If the intention of the introduction is the establishment of a new stock, international standards, such as the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES), should be followed.
3. For the purposes of the Aquatic Code, the ICES Code may be summarised to the following main points:
   a) identify stock of interest (cultured or wild) in its current location;
   b) evaluate stock health/disease history;
   c) take and test samples for Haplosporidium nelsoni, pests and general health/disease status;
   d) import and quarantine in a secure facility a founder (F-0) population;
   e) produce F-1 generation from the F-0 stock in quarantine;
   f) culture F-1 stock and at critical times in its development (life cycle) sample and test for Haplosporidium nelsoni and perform general examinations for pests and general health/disease status;
   g) if Haplosporidium nelsoni is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as free of infection with Haplosporidium nelsoni or specific pathogen free (SPF) for Haplosporidium nelsoni;
   h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities referred to in point 1 of Article 2.2.3.3.

Article 2.2.3.9.

Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from Haplosporidium nelsoni

When importing, for processing for human consumption, live aquatic animals of species referred to in Article 2.2.3.2. from a country, zone or compartment not declared free from Haplosporidium nelsoni, the Competent Authority of the importing country should assess the risk and, if justified, require that:
1. the consignment be delivered directly to and held in quarantine facilities until processing and/or consumption; and
2. all effluent and waste material from the processing be treated in a manner that ensures inactivation of Haplosporidium nelsoni.

This Article does not apply to commodities referred to in point 1 of Article 2.2.3.3.

Article 2.2.3.10.

Importation of aquatic animal products from a country, zone or compartment declared free from Haplosporidium nelsoni

When importing aquatic animal products of species referred to in Article 2.2.3.2. from a country, zone or compartment declared free from Haplosporidium nelsoni, the Competent Authority of the importing country should require that the consignment be accompanied by an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.3.4. or 2.2.3.5. (as applicable), whether or not the place of production of the consignment is a country, zone or compartment declared free from Haplosporidium nelsoni.

The certificate should be in accordance with the Model Certificate in Appendix X.X.X. (under study).

This Article does not apply to commodities referred to in point 1 of Article 2.2.3.3.
Article 2.2.3.11.

Importation of aquatic animal products from a country, zone or compartment not declared free from Haplosporidium nelsoni

When importing aquatic animal products of species referred to in Article 2.2.3.2. from a country, zone or compartment not declared free from Haplosporidium nelsoni, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

This Article does not apply to commodities referred to in point 1 of Article 2.2.3.3.

1 This disease does not meet the listing criteria in Chapter 1.2.2. Nevertheless, reporting requirements for non listed diseases apply in regard to significant epidemiological events (see point 1e) of Article 1.2.1.3.
CHAPTER 2.2.4.

INFECTION WITH MARTIELIA REFRINGENS

Article 2.2.4.1.

For the purposes of the Aquatic Code, infection with Marteilia refringens means infection only with Marteilia refringens.

Methods for conducting surveillance, diagnosis and confirmatory identification of infection with Marteilia refringens are provided in the Aquatic Manual.

Article 2.2.4.2.

Scope

The recommendations in this Chapter apply to: European flat oyster (Ostrea edulis), Australian mud oyster (O. angasi), Argentinean oyster (O. puelchana), Chilean flat oyster (O. chilensis), blue mussel (Mytilus edulis) and Mediterranean mussel (M. galloprovincialis). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.2.4.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any Marteilia refringens related conditions, regardless of the Marteilia refringens status of the exporting country, zone or compartment:

   a) For the species referred to in Article 2.2.4.2. being used for any purpose:
      i) commodities treated in a manner that kills the host (and thereby inactivates the disease agent) e.g. canned or pasteurised products;
      ii) larvae;
      iii) biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent.

   b) All commodities from Crassostrea gigas, including the live aquatic animal.

   c) The following commodities destined for human consumption from the species referred to in Article 2.2.4.2. which have been prepared and packaged for direct retail trade:
      i) off the shell (chilled or frozen);
      ii) half-shell (chilled).

   For the commodities referred to in point 1c), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.2.4.2., other than commodities referred to in point 1 of Article 2.2.4.3., the Competent Authorities should require the conditions prescribed in Articles 2.2.4.7. to 2.2.4.11. relevant to the Marteilia refringens status of the exporting country, zone or compartment.
3. When considering the importation/transit from an exporting country, zoning or compartment not declared free of infection with Marteilia refringens of a commodity from bivalve species not covered in Article 2.2.4.2. or in point 1b) of Article 2.2.4.3. but which could reasonably be expected to be a potential Marteilia refringens vector, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

Article 2.2.4.4.

Marteilia refringens free country

A country may make a self-declaration of freedom from Marteilia refringens if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from Marteilia refringens if all the areas covered by the shared water are declared Marteilia refringens free zones (see Article 2.2.4.5.).

1. A country where none of the susceptible species referred to in Article 2.2.4.2. is present may make a self-declaration of freedom from Marteilia refringens when basic biosecurity conditions have been continuously met in the country for at least the past 3 years.

OR

2. A country where any susceptible species referred to in Article 2.2.4.2. is present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions - in all areas where the species are present - that are conducive to its clinical expression, as described in Chapter 2.2.4. of the Aquatic Manual, may make a self-declaration of freedom from Marteilia refringens when basic biosecurity conditions have been continuously met in the country for at least the past 3 years and infection with Marteilia refringens is not known to be established in wild populations.

OR

3. A country where the last known clinical occurrence was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in Chapter 2.2.4. of the Aquatic Manual), may make a self-declaration of freedom from Marteilia refringens when:
   a) basic biosecurity conditions have been continuously met for at least the past 3 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.4. of the Aquatic Manual, has been in place for at least the last 2 of the past 3 years without detection of Marteilia refringens.

OR

4. A country that has previously made a self-declaration of freedom from Marteilia refringens but in which the disease is subsequently detected may make a self-declaration of freedom from Marteilia refringens again when the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.4. of the Aquatic Manual, has been in place for at least the last 2 of the past 3 years without detection of Marteilia refringens; and
   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 3 years.
In the meantime, part of the non-affected area may be declared a free zone provided that such part meets the conditions in point 3 of Article 2.2.4.5.

Article 2.2.4.5.

**Marteilia refringens free zone or free compartment**

A zone or compartment free from Marteilia refringens may be established within the territory of one or more countries of infected or unknown status for infection with Marteilia refringens and declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a Marteilia refringens free zone or compartment if the conditions outlined below apply to all areas of the zone or compartment.

1. In a country of unknown status for Marteilia refringens, a zone or compartment where none of the susceptible species referred to in Article 2.2.4.2. is present may be declared free from Marteilia refringens when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 3 years.

OR

2. In a country of unknown status for Marteilia refringens, a zone or compartment where any susceptible species referred to in Article 2.2.4.2. is present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions - in all areas where the species are present - that are conducive to its clinical expression, as described in Chapter 2.2.4. of the Aquatic Manual, may be declared free from Marteilia refringens when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 3 years and infection with Marteilia refringens is not known to be established in wild populations.

OR

3. A zone or compartment where the last known clinical occurrence was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in Chapter 2.2.4. of the Aquatic Manual), may be declared free from Marteilia refringens when:

   a) basic biosecurity conditions have been continuously met for at least the past 3 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.4. of the Aquatic Manual, has been in place for at least the last 2 of the past 3 years without detection of Marteilia refringens.

OR

4. A zone previously declared free from Marteilia refringens but in which the disease is subsequently detected may be declared free from Marteilia refringens again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.4. of the Aquatic Manual, has been in place for at least the last 2 of the past 3 years without detection of Marteilia refringens; and

   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 3 years.
Article 2.2.4.6.

Maintenance of free status

A country, zone or compartment that is declared free from Marteilia refringens following the provisions of points 1 or 2 of Articles 2.2.4.4. or 2.2.4.5. (as relevant) may maintain its status as Marteilia refringens free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from Marteilia refringens following the provisions of point 3 of Articles 2.2.4.4. or 2.2.4.5. (as relevant) may discontinue targeted surveillance and maintain its status as Marteilia refringens free provided that conditions that are conducive to clinical expression of infection with Marteilia refringens, as described in Chapter 2.2.4. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of infection with Marteilia refringens, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.2.4.7.

Importation of live aquatic animals from a country, zone or compartment declared free from Marteilia refringens

When importing live aquatic animals of species referred to in Article 2.2.4.2. from a country, zone or compartment declared free from Marteilia refringens, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.4.4. or 2.2.4.5. (as applicable), whether the place of production of the commodity is a country, zone or compartment declared free from Marteilia refringens.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.2.

This Article does not apply to commodities referred to in point 1 of Article 2.2.4.3.

Article 2.2.4.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from Marteilia refringens

1. When importing, for aquaculture, live aquatic animals of species referred to in Article 2.2.4.2. from a country, zone or compartment not declared free from Marteilia refringens, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
   a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
   b) the treatment of all effluent and waste material in a manner that ensures inactivation of Marteilia refringens.

2. If the intention of the introduction is the establishment of a new stock, international standards, such as the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES), should be followed.

3. For the purposes of the Aquatic Code, the ICES Code may be summarised to the following main points:
   a) identify stock of interest (cultured or wild) in its current location;
b) evaluate stock health/ disease history;

c) take and test samples for Martelia refringens, pests and general health/ disease status;

d) import and quarantine in a secure facility a founder (F-0) population;

e) produce F-1 generation from the F-0 stock in quarantine;

f) culture F-1 stock and at critical times in its development (life cycle) sample and test for Martelia refringens and perform general examinations for pests and general health/ disease status;

g) if Martelia refringens is not detected, pests are not present, and the general health/ disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as free of infection with Martelia refringens or specific pathogen free (SPF) for Martelia refringens;

h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities referred to in point 1 of Article 2.2.4.3.

Article 2.2.4.9.

Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from Martelia refringens

When importing, for processing for human consumption, live aquatic animals of species referred to in Article 2.2.4.2. from a country, zone or compartment not declared free from Martelia refringens, the Competent Authority of the importing country assess the risk and, if justified, require that:

1. the consignment be delivered directly to and held in quarantine facilities until processing and/ or consumption; and

2. all effluent and waste material from the processing be treated in a manner that ensures inactivation of Martelia refringens.

This Article does not apply to commodities referred to in point 1 of Article 2.2.4.3.

Article 2.2.4.10.

Importation of aquatic animal products from a country, zone or compartment declared free from Martelia refringens

When importing aquatic animal products of species referred to in Article 2.2.4.2. from a country, zone or compartment declared free from Martelia refringens, the Competent Authority of the importing country should require that the consignment be accompanied by an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.4.4. or 2.2.4.5. (as applicable), whether or not the place of production of the consignment is a country, zone or compartment declared free from Martelia refringens.

The certificate should be in accordance with the Model Certificate in Appendix X.X.X. (under study).

This Article does not apply to commodities referred to in point 1 of Article 2.2.4.3.
Importation of aquatic animal products from a country, zone or compartment not declared free from Martelia refringens

When importing aquatic animal products of species referred to in Article 2.2.4.2. from a country, zone or compartment not declared free from Martelia refringens, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

This Article does not apply to commodities referred to in point 1 of Article 2.2.4.3.
CHAPTER 2.2.5.

INFECTION WITH MIKROCYTOS MACKINI

Article 2.2.5.1.

For the purposes of the Aquatic Code, infection with Mikrocytos mackini\(^1\) means infection only with Mikrocytos mackini.

Methods for conducting surveillance, diagnosis and confirmatory identification of infection with Mikrocytos mackini are provided in the Aquatic Manual (under study).

Article 2.2.5.2.

Scope

The recommendations in this Chapter apply to: European flat oyster (Ostrea edulis), Olympia oyster (O. conchaphila), Pacific oyster (Crassostrea gigas) and Eastern oyster (C. virginica). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.2.5.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any Mikrocytos mackini related conditions, regardless of the Mikrocytos mackini status of the exporting country, zone or compartment:
   a) For the species referred to in Article 2.2.5.2. being used for any purpose:
      i) commodities treated in a manner that kills the host (and thereby inactivates the disease agent) e.g. canned or pasteurised products;
      ii) larvae;
      iii) biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent.
   b) All commodities from Panope abrupta, including the live aquatic animal.
   c) The following commodities destined for human consumption from the species referred to in Article 2.2.5.2. which have been prepared and packaged for direct retail trade:
      i) off the shell (chilled or frozen).

For the commodities referred to in point 1c), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.2.5.2., other than commodities referred to in point 1 of Article 2.2.5.3., the Competent Authorities should require the conditions prescribed in Articles 2.2.5.7. to 2.2.5.11. relevant to the Mikrocytos mackini status of the exporting country, zone or compartment.

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of infection with Mikrocytos mackini of a commodity from bivalve species not covered in Article 2.2.5.2. or in point 1b) of Article 2.2.5.3. but which could reasonably be expected to be a...
Potential Mikrocytos mackini vector, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

Article 2.2.5.4.

Mikrocytos mackini free country

A country may make a self-declaration of freedom from Mikrocytos mackini if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from Mikrocytos mackini if all the areas covered by the shared water are declared Mikrocytos mackini free zones (see Article 2.2.5.5.).

1. A country where none of the susceptible species referred to in Article 2.2.5.2. is present may make a self-declaration of freedom from Mikrocytos mackini when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

2. A country where any susceptible species referred to in Article 2.2.5.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions - in all areas where the species are present - that are conducive to its clinical expression, as described in Chapter 2.2.5. of the Aquatic Manual, may make a self-declaration of freedom from Mikrocytos mackini when basic biosecurity conditions have been continuously met in the country for at least the past 2 years and infection with Mikrocytos mackini is not known to be established in wild populations.

OR

3. A country where the last known clinical occurrence was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in Chapter 2.2.5. of the Aquatic Manual), may make a self-declaration of freedom from Mikrocytos mackini when:

   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.5. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Mikrocytos mackini.

OR

4. A country that has previously made a self-declaration of freedom from Mikrocytos mackini but in which the disease is subsequently detected may make a self-declaration of freedom from Mikrocytos mackini again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.5. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Mikrocytos mackini; and

   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

In the meantime, part of the non-affected area may be declared a free zone provided that such part meets the conditions in point 3 of Article 2.2.5.5.
Mikrocytos mackini free zone or free compartment

A zone or compartment free from Mikrocytos mackini may be established within the territory of one or more countries of infected or unknown status for infection with Mikrocytos mackini and declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a Mikrocytos mackini free zone or compartment if the conditions outlined below apply to all areas of the zone or compartment.

1. In a country of unknown status for Mikrocytos mackini, a zone or compartment where none of the susceptible species referred to in Article 2.2.5.2. is present may be declared free from Mikrocytos mackini when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

2. In a country of unknown status for Mikrocytos mackini, a zone or compartment where any susceptible species referred to in Article 2.2.5.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions – in all areas where the species are present – that are conducive to its clinical expression, as described in Chapter 2.2.5. of the Aquatic Manual, may be declared free from Mikrocytos mackini when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years and infection with Mikrocytos mackini is not known to be established in wild populations.

OR

3. A zone or compartment where the last known clinical occurrence was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in Chapter 2.2.5. of the Aquatic Manual), may be declared free from Mikrocytos mackini when:

   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.5. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Mikrocytos mackini.

OR

4. A zone previously declared free from Mikrocytos mackini but in which the disease is subsequently detected may be declared free from Mikrocytos mackini again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.5. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Mikrocytos mackini; and

   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.
Article 2.2.5.6.

Maintenance of free status

A country, zone or compartment that is declared free from Mikrocytos mackini following the provisions of points 1 or 2 of Articles 2.2.5.4. or 2.2.5.5. (as relevant) may maintain its status as Mikrocytos mackini free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from Mikrocytos mackini following the provisions of point 3 of Articles 2.2.5.4. or 2.2.5.5. (as relevant) may discontinue targeted surveillance and maintain its status as Mikrocytos mackini free provided that conditions that are conducive to clinical expression of infection with Mikrocytos mackini, as described in Chapter 2.2.5. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of infection with Mikrocytos mackini, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.2.5.7.

Importation of live aquatic animals from a country, zone or compartment declared free from Mikrocytos mackini

When importing live aquatic animals of species referred to in Article 2.2.5.2. from a country, zone or compartment declared free from Mikrocytos mackini, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.5.4. or 2.2.5.5. (as applicable), whether the place of production of the commodity is a country, zone or compartment declared free from Mikrocytos mackini.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.2.

This Article does not apply to commodities referred to in point 1 of Article 2.2.5.3.

Article 2.2.5.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from Mikrocytos mackini

1. When importing, for aquaculture, live aquatic animals of species referred to in Article 2.2.5.2. from a country, zone or compartment not declared free from Mikrocytos mackini, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
   a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
   b) the treatment of all effluent and waste material in a manner that ensures inactivation of Mikrocytos mackini.

2. If the intention of the introduction is the establishment of a new stock, international standards, such as the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES), should be followed.

3. For the purposes of the Aquatic Code, the ICES Code may be summarised to the following main points:
   a) identify stock of interest (cultured or wild) in its current location;
b) evaluate stock health/disease history;

c) take and test samples for *Mikrocytos mackini*, pests and general health/disease status;

d) import and quarantine in a secure facility a founder (F-0) population;

e) produce F-1 generation from the F-0 stock in quarantine;

f) culture F-1 stock and at critical times in its development (life cycle) sample and test for *Mikrocytos mackini* and perform general examinations for pests and general health/disease status;

g) if *Mikrocytos mackini* is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as free of infection with *Mikrocytos mackini* or specific pathogen free (SPF) for *Mikrocytos mackini*;

h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities referred to in point 1 of Article 2.2.5.3.

**Article 2.2.5.9.**

**Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from *Mikrocytos mackini***

When importing, for processing for human consumption, live aquatic animals of species referred to in Article 2.2.5.2. from a country, zone or compartment not declared free from *Mikrocytos mackini*, the Competent Authority of the importing country should assess the risk and, if justified, require that:

1. the consignment be delivered directly to and held in quarantine facilities until processing and/or consumption; and
2. all effluent and waste material from the processing be treated in a manner that ensures inactivation of *Mikrocytos mackini*.

This Article does not apply to commodities referred to in point 1 of Article 2.2.5.3.

**Article 2.2.5.10.**

**Importation of aquatic animal products from a country, zone or compartment declared free from *Mikrocytos mackini***

When importing aquatic animal products of species referred to in Article 2.2.5.2. from a country, zone or compartment declared free from *Mikrocytos mackini*, the Competent Authority of the importing country should require that the consignment be accompanied by an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.5.4. or 2.2.5.5. (as applicable), whether or not the place of production of the consignment is a country, zone or compartment declared free from *Mikrocytos mackini*.

The certificate should be in accordance with the Model Certificate in Appendix X.X.X. (under study).

This Article does not apply to commodities referred to in point 1 of Article 2.2.5.3.
Article 2.2.5.11.

Importation of aquatic animal products from a country, zone or compartment not declared free from Mikrocytos mackini

When importing aquatic animal products of species referred to in Article 2.2.5.2. from a country, zone or compartment not declared free from Mikrocytos mackini, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

This Article does not apply to commodities referred to in point 1 of Article 2.2.5.3.

1 This disease does not meet the listing criteria in Chapter 1.2.2. Nevertheless, reporting requirements for non listed diseases apply in regard to significant epidemiological events (see point 1e) of Article 1.2.1.3.).
CHAPTER 2.2.6.

INFECTIO N WIT H PERKINSUS MARINUS

Article 2.2.6.1.

For the purposes of the Aquatic Code, infection with Perkinsus marinus means infection only with Perkinsus marinus.

Methods for conducting surveillance, diagnosis and confirmatory identification of infection with Perkinsus marinus are provided in the Aquatic Manual.

Article 2.2.6.2.

Scope

The recommendations in this Chapter apply to: Eastern oyster (Crassostrea virginica), Pacific oyster (C. gigas), Suminoe oyster (C. ariakensis), soft shell clam (Mya arenaria), Baltic clam (Macoma balthica) and hard shell clam (Mercenaria mercenaria). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.2.6.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any Perkinsus marinus related conditions, regardless of the Perkinsus marinus status of the exporting country, zone or compartment:
   a) For the species referred to in Article 2.2.6.2. being used for any purpose:
      i) commercially sterile canned or other heat treated products.
   b) The following commodities destined for human consumption from the species referred to in Article 2.2.6.2. which have been prepared in such a way as to minimise the likelihood of alternative uses:
      i) chemically preserved products (e.g. smoked, salted, pickled, marinated);
      ii) non commercially sterile products (e.g. ready prepared meals) that have been heat treated in a manner to ensure the inactivation of the parasite.

For the commodities referred to in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.2.6.2., other than commodities referred to in point 1 of Article 2.2.6.3., the Competent Authorities should require the conditions prescribed in Articles 2.2.6.7. to 2.2.6.11. relevant to the Perkinsus marinus status of the exporting country, zone or compartment.

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of Perkinsus marinus of a commodity from bivalve species not covered in Article 2.2.6.2., the Competent Authorities should conduct an analysis of the risk of introduction, establishment and spread of Perkinsus marinus, and the potential consequences, associated with the importation of the commodity prior to a decision. The exporting country should be informed of the outcome of this assessment.
Article 2.2.6.4.

**Perkinsus marinus free country**

A country may make a self-declaration of freedom from *Perkinsus marinus* if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from *Perkinsus marinus* if all the areas covered by the shared water are declared *Perkinsus marinus* free zones (see Article 2.2.6.5).

1. A country where none of the susceptible species referred to in Article 2.2.6.2. is present may make a self-declaration of freedom from *Perkinsus marinus* when basic biosecurity conditions have been continuously met in the country for at least the past 3 years.

OR

2. A country where any susceptible species referred to in Article 2.2.6.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions – in all areas where the species are present – that are conducive to its clinical expression, as described in Chapter 2.2.6. of the *Aquatic Manual*, may make a self-declaration of freedom from *Perkinsus marinus* when basic biosecurity conditions have been continuously met in the country for at least the past 3 years and infection with *Perkinsus marinus* is not known to be established in wild populations.

OR

3. A country where the last known clinical occurrence was within the past 10 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.2.6. of the *Aquatic Manual*, may make a self-declaration of freedom from *Perkinsus marinus* when:
   a) basic biosecurity conditions have been continuously met for at least the past 3 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.6. of the *Aquatic Manual*, has been in place for at least the past 3 years without detection of *Perkinsus marinus*.

OR

4. A country that has previously made a self-declaration of freedom from *Perkinsus marinus* but in which the disease is subsequently detected may not make a self-declaration of freedom from *Perkinsus marinus* again until the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see *Aquatic Manual*) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.6. of the *Aquatic Manual*, has been in place for at least the past 3 years without detection of *Perkinsus marinus*.

In the meantime, part of the non-affected area may be declared a free zone provided that it meets the conditions in point 3 of Article 2.2.6.5.

Article 2.2.6.5.

**Perkinsus marinus free zone or free compartment**

A zone or compartment free from *Perkinsus marinus* may be established within the territory of one or more countries of infected or unknown status for infection with *Perkinsus marinus* and declared free by the
Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a Perkinsus marinus free zone or compartment if the conditions outlined below apply to all areas of the zone or compartment.

1. In a country of unknown status for Perkinsus marinus, a zone or compartment where none of the susceptible species referred to in Article 2.2.6.2. is present may be declared free from Perkinsus marinus when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 3 years.

OR

2. In a country of unknown status for Perkinsus marinus, a zone or compartment where any susceptible species referred to in Article 2.2.6.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions - in all areas where the species are present - that are conducive to its clinical expression, as described in Chapter 2.2.6. of the Aquatic Manual, may be declared free from Perkinsus marinus when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 3 years and infection with Perkinsus marinus is not known to be established in wild populations.

OR

3. A zone or compartment where the last known clinical occurrence was within the past 10 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.2.6. of the Aquatic Manual, may be declared free from Perkinsus marinus when:
   a) basic biosecurity conditions have been continuously met for at least the past 3 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.6. of the Aquatic Manual, has been in place for at least the past 3 years without detection of Perkinsus marinus.

OR

4. A zone previously declared free from Perkinsus marinus but in which the disease is subsequently detected may not be declared free from Perkinsus marinus again until the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.6. of the Aquatic Manual, has been in place for at least the past 3 years without detection of Perkinsus marinus.

Maintenance of free status

A country, zone or compartment that is declared free from Perkinsus marinus following the provisions of points 1 or 2 of Articles 2.2.6.4. or 2.2.6.5. (as relevant) may maintain its status as Perkinsus marinus free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from Perkinsus marinus following the provisions of point 3 of Articles 2.2.6.4. or 2.2.6.5. (as relevant) may discontinue targeted surveillance and maintain its status as Perkinsus marinus free provided that conditions that are conducive to clinical expression of infection with Perkinsus marinus, as described in Chapter 2.2.6. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.
However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of infection with *Perkinsus marinus*, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

**Article 2.2.6.7.**

**Importation of live aquatic animals from a country, zone or compartment declared free from *Perkinsus marinus***

When importing live aquatic animals of species referred to in Article 2.2.6.2. from a country, zone or compartment declared free from *Perkinsus marinus*, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.6.4. or 2.2.6.5. (as applicable), whether the place of production of the consignment is a country, zone or compartment declared free from *Perkinsus marinus*.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.2.

This Article does not apply to commodities referred to in point 1 of Article 2.2.6.3.

**Article 2.2.6.8.**

**Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from *Perkinsus marinus***

When importing, for aquaculture, live aquatic animals of species referred to in Article 2.2.6.2. from a country, zone or compartment not declared free from *Perkinsus marinus*, the Competent Authority of the importing country should assess the risk and apply risk mitigation measures such as:

1. the direct delivery into and holding of the consignment in quarantine facilities;
2. the continuous isolation of the imported aquatic animals from the local environment;
3. the treatment of all effluent and waste material from the processing in a manner that ensures inactivation of *Perkinsus marinus*.

This Article does not apply to commodities referred to in point 1 of Article 2.2.6.3.

**Article 2.2.6.9.**

**Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from *Perkinsus marinus***

When importing, for processing for human consumption, live aquatic animals of species referred to in Article 2.2.6.2. from a country, zone or compartment not declared free from *Perkinsus marinus*, the Competent Authority of the importing country should require that:

1. the consignment be delivered directly to and held in quarantine facilities until processing and/or consumption; and
2. all effluent and waste material from the processing be treated in a manner that ensures inactivation of *Perkinsus marinus*.

This Article does not apply to commodities referred to in point 1 of Article 2.2.6.3.
Article 2.2.6.10.

**Importation of aquatic animal products from a country, zone or compartment declared free from Perkinsus marinus**

When importing aquatic animal products of species referred to in Article 2.2.6.2. from a country, zone or compartment declared free from Perkinsus marinus, the Competent Authority of the importing country should require that the consignment be accompanied by an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.6.4. or 2.2.6.5. (as applicable), whether or not the place of production of the consignment is a country, zone or compartment declared free from Perkinsus marinus.

The certificate should be in accordance with the Model Certificate in Appendix X.X.X. (under study).

This Article does not apply to commodities referred to in point 1 of Article 2.2.6.3.

Article 2.2.6.11.

**Importation of aquatic animal products from a country, zone or compartment not declared free from Perkinsus marinus**

When importing aquatic animal products of species referred to in Article 2.2.6.2. from a country, zone or compartment not declared free from Perkinsus marinus, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures such:

1. the direct delivery into and holding of the consignment in biosecure/quarantine facilities for processing to one of the products referred to in point 1 of Article 2.2.6.3. or other products authorised by the Competent Authority;

2. the treatment of all effluent and waste material from the processing in a manner that ensures inactivation of Perkinsus marinus.

This Article does not apply to commodities referred to in point 1 of Article 2.2.6.3.
CHAPTER 2.2.7.

INFECTION WITH PERKINSUS OLSENI

Article 2.2.7.1.

For the purposes of the Aquatic Code, infection with Perkinsus olseni means infection only with Perkinsus olseni.

Methods for conducting surveillance, diagnosis and confirmatory identification of infection with Perkinsus olseni are provided in the Aquatic Manual.

Article 2.2.7.2.

Scope

The recommendations in this Chapter apply to: primarily venerid clams (Austrovenus stutchburyi, Venerupis pullastri, V. aures, Ruditapes decussatus and R. philippinarum), abalone (Haliotis rubra, H. laevigata, H. Cydopites and H. scolaris) and other species (A nadara trapezia, Barbatia novaeezelandiae, Macomona liliana, Paphies australis, Crassostrea gigas and C. ariakensis). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.2.7.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any Perkinsus olseni related conditions, regardless of the Perkinsus olseni status of the exporting country, zone or compartment:
   a) For the species referred to in Article 2.2.7.2. being used for any purpose:
      i) commercially sterile canned or other heat treated products.
   b) The following commodities destined for human consumption from the species referred to in Article 2.2.7.2. which have been prepared in such a way as to minimise the likelihood of alternative uses:
      i) chemically preserved products (e.g. smoked, salted, pickled, marinated);
      ii) non commercially sterile products (e.g. ready prepared meals) that have been heat treated in a manner to ensure the inactivation of the parasite.

   For the commodities referred to in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.2.7.2., other than commodities referred to in point 1 of Article 2.2.7.3., the Competent Authorities should require the conditions prescribed in Articles 2.2.7.7. to 2.2.7.11. relevant to the Perkinsus olseni status of the exporting country, zone or compartment.

3. When considering the importation or transit from an exporting country, zone or compartment not declared free of Perkinsus olseni of a commodity from bivalve and gastropod species not covered in Article 2.2.7.2., the Competent Authorities should conduct an analysis of the risk of introduction, establishment and spread of Perkinsus olseni, and the potential consequences, associated with the
importation of the commodity prior to a decision. The exporting country should be informed of the outcome of this assessment.

Article 2.2.7.4.

**Perkinsus olseni free country**

A country may make a self-declaration of freedom from Perkinsus olseni if it meets the conditions in points 1, 2 or 3 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from Perkinsus olseni if all the areas covered by the shared water are declared Perkinsus olseni free zones (see Article 2.2.7.5.).

1. A country where the susceptible species referred to in Article 2.2.7.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions - in all areas where the species are present - that are conducive to its clinical expression, as described in Chapter 2.2.7. of the Aquatic Manual, may make a self-declaration of freedom from Perkinsus olseni when:
   a) basic biosecurity conditions have been continuously met for at least the past 3 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.7. of the Aquatic Manual, has been in place for at least the past 3 years without detection of Perkinsus olseni.

   OR

2. A country where the last known clinical occurrence was within the past 10 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.2.7. of the Aquatic Manual, may make a self-declaration of freedom from Perkinsus olseni when:
   a) basic biosecurity conditions have been continuously met for at least the past 3 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.7. of the Aquatic Manual, has been in place for at least the past 3 years without detection of Perkinsus olseni.

   OR

3. A country that has previously made a self-declaration of freedom from Perkinsus olseni but in which the disease is subsequently detected may not make a self-declaration of freedom from Perkinsus olseni again until the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.7. of the Aquatic Manual, has been in place for at least the past 3 years without detection of Perkinsus olseni.

In the meantime, part of the non-affected area may be declared a free zone provided that it meets the conditions in point 2 of Article 2.2.7.5.

Article 2.2.7.5.

**Perkinsus olseni free zone or free compartment**

A zone or compartment free from Perkinsus olseni may be established within the territory of one or more countries of infected or unknown status for infection with Perkinsus olseni and declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2 or 3 below.
If a zone or compartment extends over more than one country, it can only be declared a Perkinsus olseni free zone or compartment if the conditions outlined below apply to all areas of the zone or compartment.

1. In a country of unknown status for Perkinsus olseni, a zone or compartment where the susceptible species referred to in Article 2.2.7.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions – in all areas where the species are present – that are conducive to its clinical expression, as described in Chapter 2.2.7. of the Aquatic Manual, may be declared free from Perkinsus olseni when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 3 years and infection with Perkinsus olseni is not known to be established in wild populations.

OR

2. A zone or compartment where the last known clinical occurrence was within the past 10 years or where the infection status prior to targeted surveillance was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter 2.2.7. of the Aquatic Manual, may be declared free from Perkinsus olseni when:

   a) basic biosecurity conditions have been continuously met for at least the past 3 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.7. of the Aquatic Manual, has been in place for at least the past 3 years without detection of Perkinsus olseni.

OR

3. A zone previously declared free from Perkinsus olseni but in which the disease is subsequently detected may not be declared free from Perkinsus olseni again until the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.7. of the Aquatic Manual, has been in place for at least the past 3 years without detection of Perkinsus olseni.

Article 2.2.7.6.

Maintenance of free status

A country, zone or compartment that is declared free from Perkinsus olseni following the provisions of point 1 of Articles 2.2.7.4. or 2.2.7.5. (as relevant) may maintain its status as Perkinsus olseni free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from Perkinsus olseni following the provisions of point 2 of Articles 2.2.7.4. or 2.2.7.5. (as relevant) may discontinue targeted surveillance and maintain its status as Perkinsus olseni free provided that conditions that are conducive to clinical expression of infection with Perkinsus olseni, as described in Chapter 2.2.7. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of infection with Perkinsus olseni, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.
Article 2.2.7.7.

Importation of live aquatic animals from a country, zone or compartment declared free from Perkinsus olseni

When importing live aquatic animals of species referred to in Article 2.2.7.2. from a country, zone or compartment declared free from Perkinsus olseni, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.7.4. or 2.2.7.5. (as applicable), whether the place of production of the consignment is a country, zone or compartment declared free from Perkinsus olseni.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.2.

This Article does not apply to commodities referred to in point 1 of Article 2.2.7.3.

Article 2.2.7.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from Perkinsus olseni

When importing, for aquaculture, live aquatic animals of species referred to in Article 2.2.7.2. from a country, zone or compartment not declared free from Perkinsus olseni, the Competent Authority of the importing country should assess the risk and apply risk mitigation measures such as:

1. the direct delivery into and holding of the consignment in quarantine facilities;
2. the continuous isolation of the imported aquatic animals from the local environment;
3. the treatment of all effluent and waste material from the processing in a manner that ensures inactivation of Perkinsus olseni.

This Article does not apply to commodities referred to in point 1 of Article 2.2.7.3.

Article 2.2.7.9.

Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from Perkinsus olseni

When importing, for processing for human consumption, live aquatic animals of species referred to in Article 2.2.7.2. from a country, zone or compartment not declared free from Perkinsus olseni, the Competent Authority of the importing country should require that:

1. the consignment be delivered directly to and held in quarantine facilities until processing and/or consumption; and
2. all effluent and waste material from the processing be treated in a manner that ensures inactivation of Perkinsus olseni.

This Article does not apply to commodities referred to in point 1 of Article 2.2.7.3.
Chapter 2.2.7. - Infection with Perkinsus olseni

Article 2.2.7.10.

**Importation of aquatic animal products from a country, zone or compartment declared free from Perkinsus olseni**

When importing aquatic animal products of species referred to in Article 2.2.7.2. from a country, zone or compartment declared free from Perkinsus olseni, the Competent Authority of the importing country should require that the consignment be accompanied by an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.7.4. or 2.2.7.5. (as applicable), whether or not the place of production of the consignment is a country, zone or compartment declared free from Perkinsus olseni.

The certificate should be in accordance with the Model Certificate in Appendix X.X.X. (under study).

This Article does not apply to commodities referred to in point 1 of Article 2.2.7.3.

Article 2.2.7.11.

**Importation of aquatic animal products from a country, zone or compartment not declared free from Perkinsus olseni**

When importing aquatic animal products of species referred to in Article 2.2.7.2. from a country, zone or compartment not declared free from Perkinsus olseni, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures such as:

1. the direct delivery into and holding of the consignment in biosecure/quarantine facilities for processing to one of the products referred to in point 1 of Article 2.2.7.3. or other products authorised by the Competent Authority;

2. the treatment of all effluent and waste material from the processing in a manner that ensures inactivation of Perkinsus olseni.

This Article does not apply to commodities referred to in point 1 of Article 2.2.7.3.
CHAPTER 2.2.8.

INFECTION WITH XENOHALIOTIS CALIFORNIIENSIS

Article 2.2.8.1.

For the purposes of the Aquatic Code, infection with Xenohaliotis californiensis means infection only with Xenohaliotis californiensis.

Methods for conducting surveillance, diagnosis and confirmatory identification of infection with Xenohaliotis californiensis are provided in the Aquatic Manual.

Article 2.2.8.2.

Scope

The recommendations in this Chapter apply to: black abalone (Haliotis cracherodii), white abalone (H. sorenseni), red abalone (H. rufescens), pink abalone (H. aurarugata), green abalone (H. tuberulata and H. fulgens), flat abalone (H. wallalensis) and Japanese abalone (H. discus-hannai). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Article 2.2.8.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any Xenohaliotis californiensis related conditions, regardless of the Xenohaliotis californiensis status of the exporting country, zone or compartment:
   a) For the species referred to in Article 2.2.8.2, being used for any purpose:
      i) commodities treated in a manner that kills the host (and thereby inactivates the disease agent) e.g. canned or pasteurised products;
      ii) gametes, eggs and larvae;
      iii) shells;
      iv) biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent.
   b) The following commodities destined for human consumption from the species referred to in Article 2.2.8.2, which have been prepared and packaged for direct retail trade:
      i) off the shell, eviscerated abalone (chilled or frozen).

For the commodities referred to in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 2.2.8.2, other than commodities referred to in point 1 of Article 2.2.8.3, the Competent Authorities should require the conditions prescribed in Articles 2.2.8.7. to 2.2.8.11. relevant to the Xenohaliotis californiensis status of the exporting country, zone or compartment.

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of infection with Xenohaliotis californiensis of a commodity from mollusc species not covered in...
Article 2.2.8.2, but which could reasonably be expected to be a potential *Xenohaliotis californiensis* vector, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

Article 2.2.8.4.

*Xenohaliotis californiensis* free country

A country may make a self-declaration of freedom from *Xenohaliotis californiensis* if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from *Xenohaliotis californiensis* if all the areas covered by the shared water are declared *Xenohaliotis californiensis* free zones (see Article 2.2.8.5.).

1. A country where none of the susceptible species referred to in Article 2.2.8.2. is present may make a self-declaration of freedom from *Xenohaliotis californiensis* when basic biosecurity conditions have been continuously met in the country for at least the past 3 years.

OR

2. A country where any susceptible species referred to in Article 2.2.8.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions – in all areas where the species are present – that are conducive to its clinical expression, as described in Chapter 2.2.8. of the Aquatic Manual, may make a self-declaration of freedom from *Xenohaliotis californiensis* when basic biosecurity conditions have been continuously met in the country for at least the past 3 years and infection with *Xenohaliotis californiensis* is not known to be established in wild populations.

OR

3. A country where the last known clinical occurrence was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in Chapter 2.2.8. of the Aquatic Manual), may make a self-declaration of freedom from *Xenohaliotis californiensis* when:

   a) basic biosecurity conditions have been continuously met for at least the past 3 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.8. of the Aquatic Manual, has been in place for at least the past 2 years without detection of *Xenohaliotis californiensis*.

OR

4. A country that has previously made a self-declaration of freedom from *Xenohaliotis californiensis* but in which the disease is subsequently detected may make a self-declaration of freedom from *Xenohaliotis californiensis* again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.8. of the Aquatic Manual, has been in place for at least the past 2 years without detection of *Xenohaliotis californiensis*; and

   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 3 years.

In the meantime, part of the non-affected area may be declared a free zone provided that it meets the conditions in point 3 of Article 2.2.8.5.
Xenohaliotis californiensis free zone or free compartment

A zone or compartment free from Xenohaliotis californiensis may be established within the territory of one or more countries of infected or unknown status for infection with Xenohaliotis californiensis and declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a Xenohaliotis californiensis free zone or compartment if the conditions outlined below apply to all areas of the zone or compartment.

1. In a country of unknown status for Xenohaliotis californiensis, a zone or compartment where none of the susceptible species referred to in Article 2.2.8.2. is present may be declared free from Xenohaliotis californiensis when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 3 years.

OR

2. In a country of unknown status for Xenohaliotis californiensis, a zone or compartment where any susceptible species referred to in Article 2.2.8.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions – in all areas where the species are present – that are conducive to its clinical expression, as described in Chapter 2.2.8. of the Aquatic Manual, may be declared free from Xenohaliotis californiensis when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 3 years and infection with Xenohaliotis californiensis is not known to be established in wild populations.

OR

3. A zone or compartment where the last known clinical occurrence was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in Chapter 2.2.8. of the Aquatic Manual), may be declared free from Xenohaliotis californiensis when:

   a) basic biosecurity conditions have been continuously met for at least the past 3 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.2.8. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Xenohaliotis californiensis.

OR

4. A zone previously declared free from Xenohaliotis californiensis but in which the disease is subsequently detected may be declared free from Xenohaliotis californiensis again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.2.8. of the Aquatic Manual, has been in place for at least the past 2 years without detection of Xenohaliotis californiensis; and

   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 3 years.
Article 2.2.8.6.

Maintenance of free status

A country, zone or compartment that is declared free from Xenohaliotis californiensis following the provisions of points 1 or 2 of Articles 2.2.8.4. or 2.2.8.5. (as relevant) may maintain its status as Xenohaliotis californiensis free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from Xenohaliotis californiensis following the provisions of point 3 of Articles 2.2.8.4. or 2.2.8.5. (as relevant) may discontinue targeted surveillance and maintain its status as Xenohaliotis californiensis free provided that conditions that are conducive to clinical expression of infection with Xenohaliotis californiensis, as described in Chapter 2.2.8. of the Aquatic Manual, exist and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of infection with Xenohaliotis californiensis, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.2.8.7.

Importation of live aquatic animals from a country, zone or compartment declared free from Xenohaliotis californiensis

When importing live aquatic animals of species referred to in Article 2.2.8.2. from a country, zone or compartment declared free from Xenohaliotis californiensis, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.8.4. or 2.2.8.5. (as applicable), whether the place of production of the commodity is a country, zone or compartment declared free from Xenohaliotis californiensis.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.2.

This Article does not apply to commodities referred to in point 1 of Article 2.2.8.3.

Article 2.2.8.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from Xenohaliotis californiensis

1. When importing, for aquaculture, live aquatic animals of species referred to in Article 2.2.8.2. from a country, zone or compartment not declared free from Xenohaliotis californiensis, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
   a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
   b) the treatment of all effluent and waste material in a manner that ensures inactivation of Xenohaliotis californiensis.

2. If the intention of the introduction is the establishment of a new stock, international standards, such as the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES), should be followed.
3. For the purposes of the Aquatic Code, the ICES Code may be summarised to the following main points:

a) identify stock of interest (cultured or wild) in its current location;
b) evaluate stock health/disease history;
c) take and test samples for *Xenohaliotis californiensis*, pests and general health/disease status;
d) import and quarantine in a secure facility a founder (F-0) population;
e) produce F-1 generation from the F-0 stock in quarantine;
f) culture F-1 stock and at critical times in its development (life cycle) sample and test for *Xenohaliotis californiensis* and perform general examinations for pests and general health/disease status;
g) if *Xenohaliotis californiensis* is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as free of infection with *Xenohaliotis californiensis* or specific pathogen free (SPF) for *Xenohaliotis californiensis*;
h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities referred to in point 1 of Article 2.2.8.3.

**Article 2.2.8.9.**

*Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from *Xenohaliotis californiensis***

When importing, for processing for human consumption, live aquatic animals of species referred to in Article 2.2.8.2. from a country, zone or compartment not declared free from *Xenohaliotis californiensis*, the Competent Authority of the importing country should assess the risk and, if justified, require that:

1. the consignment be delivered directly to and held in quarantine facilities until processing and/or consumption; and
2. all effluent and waste material from the processing be treated in a manner that ensures inactivation of *Xenohaliotis californiensis*.

This Article does not apply to commodities referred to in point 1 of Article 2.2.8.3.

**Article 2.2.8.10.**

*Importation of aquatic animal products from a country, zone or compartment declared free from *Xenohaliotis californiensis***

When importing aquatic animal products of species referred to in Article 2.2.8.2. from a country, zone or compartment declared free from *Xenohaliotis californiensis*, the Competent Authority of the importing country should require that the consignment be accompanied by an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country.

This certificate must certify, on the basis of the procedures described in Articles 2.2.8.4. or 2.2.8.5. (as applicable), whether or not the place of production of the consignment is a country, zone or compartment declared free from *Xenohaliotis californiensis*.

The certificate should be in accordance with the Model Certificate in Appendix X.X.X. (under study).

This Article does not apply to commodities referred to in point 1 of Article 2.2.8.3.
Article 2.2.8.11.

Importation of aquatic animal products from a country, zone or compartment not declared free from Xenohaliotis californiensis

When importing aquatic animal products of species referred to in Article 2.2.8.2. from a country, zone or compartment not declared free from Xenohaliotis californiensis, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

This Article does not apply to commodities referred to in point 1 of Article 2.2.8.3.
SECTION 2.3.

DISEASES OF CRUSTACEANS

CHAPTER 2.3.1.

TAURA SYNDROME

Article 2.3.1.1.

For the purposes of the Aquatic Code, Taura syndrome (TS) means infection with Taura syndrome virus (TSV). Taura syndrome virus is classified as a species in the family Dicistroviridae. Common synonyms are listed in Chapter 2.3.1. of the Aquatic Manual.

Methods for conducting surveillance and diagnosis of TS are provided in the Aquatic Manual.

Article 2.3.1.2.

Scope

The recommendations in this Chapter apply to: Pacific white shrimp or whiteleg shrimp (Penaeus vannamei), blue shrimp (P. stylirostris), northern white shrimp (P. setiferus), southern white shrimp (P. schmitti), greasyback prawn (Metapenaeus ensis) and giant tiger prawn (P. monodon). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

For the purposes of this Chapter, the terms shrimp and prawn are used interchangeably.

Article 2.3.1.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any TS related conditions, regardless of the TS status of the exporting country, zone or compartment.

   a) For the species referred to in Article 2.3.1.2. being used for any purpose:

      i) commodities treated in a manner that inactivates the disease agent e.g. boiled, canned or pasteurised products and ready to eat meals; and crustacean oil and crustacean meal intended for use in animal feeds;

      ii) chemically extracted chitin;

      iii) crustacean products made non-infectious through processing as dry feeds (e.g. pelleted or extruded feeds);
iv) biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent (e.g. formalin or alcohol preserved samples).

b) The following products destined for human consumption from species referred to in Article 2.3.1.2. which have been prepared and packaged for direct retail trade:

i) chemically preserved products (e.g. salted, pickled, marinated, pastes, etc.).

For the commodities listed in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of the commodities of a species referred to in Article 2.3.1.2., other than those listed in point 1 of Article 2.3.1.3., the Competent Authorities should require the conditions prescribed in Articles 2.3.1.7. to 2.3.1.11. relevant to the TS status of the exporting country, zone or compartment.

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of TS of a commodity of a species not covered in Article 2.3.1.2. but which could reasonably be expected to be a potential TSV vector, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

Article 2.3.1.4.

Taura syndrome free country

A country may make a self-declaration of freedom from TS if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from TS if all the areas covered by the shared water are declared TS free countries or zones (see Article 2.3.1.5.).

1. A country where none of the susceptible species referred to in Article 2.3.1.2. is present may make a self-declaration of freedom from TS when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

2. A country where the susceptible species referred to in Article 2.3.1.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.3.1. of the Aquatic Manual, may make a self-declaration of freedom from TS when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

3. A country where the last observed occurrence of the disease was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in Chapter 2.3.1. of the Aquatic Manual), may make a self-declaration of freedom from TS when:

a) basic biosecurity conditions have been continuously met for at least the past 2 years; and

b) targeted surveillance, as described in Chapters 1.1.4. and 2.3.1. of the Aquatic Manual, has been in place for at least the last 2 years without detection of TSV.
4. A country that has previously made a self-declaration of freedom from TS but in which the disease is subsequently detected may make a self-declaration of freedom from TS again when the following conditions have been met:

a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

c) targeted surveillance, as described in Chapters 1.1.4. and 2.3.1. of the Aquatic Manual, has been in place for at least the past 2 years without detection of TSV; and

d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

In the meantime, part of the non-affected area may be declared a free zone provided that such part meets the conditions in point 3 of Article 2.3.1.5.

Article 2.3.1.5.

Taura syndrome free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from TS may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a TS free zone or compartment if all the relevant Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species referred to in Article 2.3.1.2. is present may be declared free from TS when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the susceptible species referred to in Article 2.3.1.2. are present but in which there has not been any observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.3.1. of the Aquatic Manual, may be declared free from TS when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

3. A zone or compartment where the last observed occurrence of the disease was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in Chapter 2.3.1. of the Aquatic Manual), may be declared free from TS when:

a) basic biosecurity conditions have been continuously met for at least the past 2 years; and

b) targeted surveillance, as described in Chapters 1.1.4. and 2.3.1. of the Aquatic Manual, has been in place, through the zone or compartment, for at least the past 2 years without detection of TSV.

OR

4. A zone previously declared free from TS but in which the disease is subsequently detected may be declared free from TS again when the following conditions have been met:

a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
Chapter 2.3.1. - Taura syndrome

b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

c) targeted surveillance, as described in Chapters 1.1.4. and 2.3.1. of the Aquatic Manual, has been in place for at least the past 2 years without detection of TSV; and

d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

Article 2.3.1.6.

Maintenance of free status

A country, zone or compartment that is declared free from TS following the provisions of points 1 or 2 of Articles 2.3.1.4. or 2.3.1.5. (as relevant) may maintain its status as TS free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from TS following the provisions of point 3 of Articles 2.3.1.4. or 2.3.1.5. (as relevant) may discontinue targeted surveillance and maintain its status as TS free provided that conditions that are conducive to clinical expression of TS, as described in Chapter 2.3.1. of the Aquatic Manual, exist, and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of TS, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.3.1.7.

Importation of live aquatic animals from a country, zone or compartment declared free from Taura syndrome

When importing live aquatic animals of species referred to in Article 2.3.1.2. from a country, zone or compartment declared free from TS, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.3.1.4. or 2.3.1.5. (as applicable), the place of production of the commodity is a country, zone or compartment declared free from TS.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.3.

This Article does not apply to commodities listed in point 1 of Article 2.3.1.3.

Article 2.3.1.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from Taura syndrome

1. When importing, for aquaculture, live aquatic animals of species referred to in Article 2.3.1.2. from a country, zone or compartment not declared free from TS, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:

a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and

b) the treatment of all effluent and waste materials in a manner that ensures inactivation of TSV.
2. If the intention of the introduction is the establishment of a new stock, international standards, such as the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES), should be followed.

3. For the purposes of the Aquatic Code, the ICES Code may be summarised to the following main points:
   a) identify stock of interest (cultured or wild) in its current location;
   b) evaluate stock health/disease history;
   c) take and test samples for TSV, pests and general health/disease status;
   d) import and quarantine in a secure facility a founder (F-0) population;
   e) produce F-1 generation from the F-0 stock in quarantine;
   f) culture F-1 stock and at critical times in its development (life cycle) sample and test for TSV and perform general examinations for pests and general health/disease status;
   g) if TSV is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as TS free or specific pathogen free (SPF) for TSV;
   h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities listed in point 1 of Article 2.3.1.3.

**Article 2.3.1.9.**

**Importation of live aquatic animals for human consumption from a country, zone or compartment not declared free from Taura syndrome**

When importing, for human consumption, live aquatic animals of species referred to in Article 2.3.1.2. from a country, zone or compartment not declared free from TS, the Competent Authority of the importing country should assess the risk and, if justified, require that:

1. the consignment be delivered directly to and held in isolation until consumption; and
2. all effluent, dead aquatic animals and waste materials from the processing be treated in a manner that ensures inactivation of TSV.

Member Countries should consider introducing internal measures to prevent such commodities being used for any purpose other than for human consumption.

This Article does not apply to commodities listed in point 1 of Article 2.3.1.3.

**Article 2.3.1.10.**

**Importation of aquatic animal products from a country, zone or compartment declared free from Taura syndrome**

When importing aquatic animal products of species referred to in Article 2.3.1.2. from a country, zone or compartment declared free from TS, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.3.1.4. or 2.3.1.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from TS.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.2.
This Article does not apply to commodities listed in point 1 of Article 2.3.1.3.

Article 2.3.1.11.

Importation of aquatic animal products from a country, zone or compartment not declared free from Taura syndrome

When importing aquatic animal products of species referred to in Article 2.3.1.2. from a country, zone or compartment not declared free from TS, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

This Article does not apply to commodities listed in point 1 of Article 2.3.1.3.
CHAPTER 2.3.2.

WHITE SPOT DISEASE

Article 2.3.2.1.

For the purposes of the Aquatic Code, white spot disease (WSD) means infection with white spot syndrome virus (WSSV). White spot syndrome virus 1 is classified as a species in the genus Whispovirus of the family Nimaviridae. Common synonyms are listed in Chapter 2.3.2. of the Aquatic Manual. Methods for conducting surveillance and diagnosis of WSD are provided in the Aquatic Manual.

Article 2.3.2.2.

Scope

The recommendations in this Chapter apply to all decapod (order Decapoda) crustaceans from marine, brackish and freshwater sources. These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

For the purposes of this Chapter, the terms shrimp and prawn are used interchangeably.

Article 2.3.2.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any WSD related conditions, regardless of the WSD status of the exporting country, zone or compartment.
   a) For the species referred to in Article 2.3.2.2. being used for any purpose:
      i) commodities treated in a manner that inactivates the disease agent e.g. boiled, canned or pasteurised products and ready to eat meals; and crustacean oil and crustacean meal intended for use in animal feeds;
      ii) chemically extracted chitin;
      iii) crustacean products made non-infectious through processing as dry feeds (e.g. pelleted or extruded feeds);
      iv) biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent (e.g. formalin or alcohol preserved samples).
   b) The following products destined for human consumption from species referred to in Article 2.3.2.2. which have been prepared and packaged for direct retail trade:
      i) chemically preserved products (e.g. salted, pickled, marinated, pastes, etc.).

For the commodities listed in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of the commodities of a species referred to in Article 2.3.2.2., other than those listed in point 1 of Article 2.3.2.3., the Competent Authorities should require the conditions prescribed in Articles 2.3.2.7. to 2.3.2.11. relevant to the WSD status of the exporting country, zone or compartment.
3. When considering the importation/transit from an exporting country, zone or compartment not declared free of WSD of a commodity of a species not covered in Article 2.3.2.2. but which could reasonably be expected to be a potential WSSV vector, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

Article 2.3.2.4.

White spot disease free country

A country may make a self-declaration of freedom from WSD if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from WSD if all the areas covered by the shared water are declared WSD free countries or zones (see Article 2.3.2.5.).

1. A country where none of the susceptible species referred to in Article 2.3.2.2. is present may make a self-declaration of freedom from WSD when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

2. A country where the susceptible species referred to in Article 2.3.2.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.3.2. of the Aquatic Manual, may make a self-declaration of freedom from WSD when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

3. A country where the last observed occurrence of the disease was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in Chapter 2.3.2. of the Aquatic Manual), may make a self-declaration of freedom from WSD when:
   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.3.2. of the Aquatic Manual, has been in place for at least the last 2 years without detection of WSSV.

OR

4. A country that has previously made a self-declaration of freedom from WSD but in which the disease is subsequently detected may make a self-declaration of freedom from WSD again when the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.3.2. of the Aquatic Manual, has been in place for at least the past 2 years without detection of WSSV; and
   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

In the meantime, part of the non-affected area may be declared a free zone provided that such part meets the conditions in point 3 of Article 2.3.2.5.
Article 2.3.2.5.

White spot disease free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from WSD may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a WSD free zone or compartment if all the relevant Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species referred to in Article 2.3.2.2. is present may be declared free from WSD when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the susceptible species referred to in Article 2.3.2.2. are present but in which there has not been any observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.3.2. of the Aquatic Manual, may be declared free from WSD when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

3. A zone or compartment where the last observed occurrence of the disease was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in Chapter 2.3.2. of the Aquatic Manual), may be declared free from WSD when:

   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.3.2. of the Aquatic Manual, has been in place, through the zone or compartment, for at least the past 2 years without detection of WSSV.

OR

4. A zone previously declared free from WSD but in which the disease is subsequently detected may be declared free from WSD again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.3.2. of the Aquatic Manual, has been in place for at least the past 2 years without detection of WSSV; and

   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

Article 2.3.2.6.

Maintenance of free status

A country, zone or compartment that is declared free from WSD following the provisions of points 1 or 2 of Articles 2.3.2.4. or 2.3.2.5. (as relevant) may maintain its status as WSD free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from WSD following the provisions of point 3 of Articles 2.3.2.4. or 2.3.2.5. (as relevant) may discontinue targeted surveillance and maintain its status as WSD
free provided that conditions that are conducive to clinical expression of WSD, as described in Chapter 2.3.2. of the Aquatic Manual, exist, and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of WSD, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

**Article 2.3.2.7.**

**Importation of live aquatic animals from a country, zone or compartment declared free from white spot disease**

When importing live aquatic animals of species referred to in Article 2.3.2.2. from a country, zone or compartment declared free from WSD, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.3.2.4. or 2.3.2.5. (as applicable), the place of production of the commodity is a country, zone or compartment declared free from WSD.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.3.

This Article does not apply to commodities listed in point 1 of Article 2.3.2.3.

**Article 2.3.2.8.**

**Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from white spot disease**

1. When importing, for aquaculture, live aquatic animals of species referred to in Article 2.3.2.2. from a country, zone or compartment not declared free from WSD, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
   
   a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
   
   b) the treatment of all effluent and waste materials in a manner that ensures inactivation of WSSV.

2. If the intention of the introduction is the establishment of a new stock, international standards, such as the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES), should be followed.

3. For the purposes of the Aquatic Code, the ICES Code may be summarised to the following main points:
   
   a) identify stock of interest (cultured or wild) in its current location;
   
   b) evaluate stock health/disease history;
   
   c) take and test samples for WSSV, pests and general health/disease status;
   
   d) import and quarantine in a secure facility a founder (F-0) population;
   
   e) produce F-1 generation from the F-0 stock in quarantine;
   
   f) culture F-1 stock and at critical times in its development (life cycle) sample and test for WSSV and perform general examinations for pests and general health/disease status;
   
   g) if WSSV is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as WSD free or specific pathogen free (SPF) for WSSV;
h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities listed in point 1 of Article 2.3.2.3.

Article 2.3.2.9.

Importation of live aquatic animals for human consumption from a country, zone or compartment not declared free from white spot disease

When importing, for human consumption, live aquatic animals of species referred to in Article 2.3.2.2. from a country, zone or compartment not declared free from WSD, the Competent Authority of the importing country should assess the risk and, if justified, require that:

1. the consignment be delivered directly to and held in isolation until consumption; and
2. all effluent, dead aquatic animals and waste materials from the processing be treated in a manner that ensures inactivation of WSSV.

Member Countries should consider introducing internal measures to prevent such commodities being used for any purpose other than for human consumption.

This Article does not apply to commodities listed in point 1 of Article 2.3.2.3.

Article 2.3.2.10.

Importation of aquatic animal products from a country, zone or compartment declared free from white spot disease

When importing aquatic animal products of species referred to in Article 2.3.2.2. from a country, zone or compartment declared free from WSD, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.3.2.4. or 2.3.2.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from WSD.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.2.

This Article does not apply to commodities listed in point 1 of Article 2.3.2.3.

Article 2.3.2.11.

Importation of aquatic animal products from a country, zone or compartment not declared free from white spot disease

When importing aquatic animal products of species referred to in Article 2.3.2.2. from a country, zone or compartment not declared free from WSD, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

This Article does not apply to commodities listed in point 1 of Article 2.3.2.3.
CHAPTER 2.3.3.

YELLOWHEAD DISEASE

Article 2.3.3.1.

For the purposes of the Aquatic Code, yellowhead disease (YHD) means infection with yellow head virus (YHV). YHV and the related gill-associated virus are classified as a species in the genus Okavirus, family Roniviridae and order Nidovirales. Common synonyms are listed in Chapter 2.3.3. of the Aquatic Manual.

Methods for conducting surveillance and diagnosis of yellowhead disease are provided in the Aquatic Manual.

Article 2.3.3.2.

Scope

The recommendations in this Chapter apply to: giant tiger prawn (P. monodon), brown tiger prawn (P. esculentus) and Kuruma prawn (P. japonicus). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

Methods for conducting surveillance and diagnosis of YHD are provided in the Aquatic Manual.

Article 2.3.3.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any YHD related conditions, regardless of the YHD status of the exporting country, zone or compartment.

   a) For the species referred to in Article 2.3.3.2. being used for any purpose:

      i) commodities treated in a manner that inactivates the disease agent e.g. boiled, canned or pasteurised products and ready to eat meals; and crustacean oil and crustacean meal intended for use in animal feeds;

      ii) chemically extracted chitin;

      iii) crustacean products made non-infectious through processing as dry feeds (e.g. pelleted or extruded feeds);

      iv) biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent (e.g. formalin or alcohol preserved samples).

   b) The following products destined for human consumption from species referred to in Article 2.3.3.2. which have been prepared and packaged for direct retail trade:

      i) chemically preserved products (e.g. salted, pickled, marinated, pastes, etc.).

For the commodities listed in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of the commodities of a species referred to in Article 2.3.3.2., other than those listed in point 1 of Article 2.3.3.3., the Competent Authorities should
require the conditions prescribed in Articles 2.3.3.7. to 2.3.3.11. relevant to the YHD status of the exporting country, zone or compartment.

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of YHD of a commodity of a species not covered in Article 2.3.3.2. but which could reasonably be expected to be a potential YHV vector, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

Article 2.3.3.4.

**Yellowhead disease free country**

A country may make a self-declaration of freedom from YHD if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from YHD if all the areas covered by the shared water are declared YHD free countries or zones (see Article 2.3.3.5).

1. A country where none of the susceptible species referred to in Article 2.3.3.2. is present may make a self-declaration of freedom from YHD when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

2. A country where the susceptible species referred to in Article 2.3.3.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.3.3. of the Aquatic Manual, may make a self-declaration of freedom from YHD when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

3. A country where the last observed occurrence of the disease was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in Chapter 2.3.3. of the Aquatic Manual), may make a self-declaration of freedom from YHD when:

   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.3.3. of the Aquatic Manual, has been in place for at least the last 2 years without detection of YHV.

OR

4. A country that has previously made a self-declaration of freedom from YHD but in which the disease is subsequently detected may make a self-declaration of freedom from YHD again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.3.3. of the Aquatic Manual, has been in place for at least the past 2 years without detection of YHV; and
   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.
In the meantime, part of the non-affected area may be declared a free zone provided that such part meets the conditions in point 3 of Article 2.3.3.5.

Article 2.3.3.5.

Yellowhead disease free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from YHD may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a YHD free zone or compartment if all the relevant Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species referred to in Article 2.3.3.2. is present may be declared free from YHD when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the susceptible species referred to in Article 2.3.3.2. are present but in which there has not been any observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.3.3. of the Aquatic Manual, may be declared free from YHD when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

3. A zone or compartment where the last observed occurrence of the disease was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in Chapter 2.3.3. of the Aquatic Manual), may be declared free from YHD when:

   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.3.3. of the Aquatic Manual, has been in place, through the zone or compartment, for at least the past 2 years without detection of YHV.

OR

4. A zone previously declared free from YHD but in which the disease is subsequently detected may be declared free from YHD again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.3.3. of the Aquatic Manual, has been in place for at least the past 2 years without detection of YHV; and

   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.
Article 2.3.3.6.

Maintenance of free status

A country, zone or compartment that is declared free from YHD following the provisions of points 1 or 2 of Articles 2.3.3.4. or 2.3.3.5. (as relevant) may maintain its status as YHD free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from YHD following the provisions of point 3 of Articles 2.3.3.4. or 2.3.3.5. (as relevant) may discontinue targeted surveillance and maintain its status as YHD free provided that conditions that are conducive to clinical expression of YHD, as described in Chapter 2.3.3. of the Aquatic Manual, exist, and that basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of YHD, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.3.3.7.

Importation of live aquatic animals from a country, zone or compartment declared free from yellowhead disease

When importing live aquatic animals of species referred to in Article 2.3.3.2. from a country, zone or compartment declared free from YHD, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.3.3.4. or 2.3.3.5. (as applicable), the place of production of the commodity is a country, zone or compartment declared free from YHD.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.3. This Article does not apply to commodities listed in point 1 of Article 2.3.3.3.

Article 2.3.3.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from yellowhead disease

1. When importing, for aquaculture, live aquatic animals of species referred to in Article 2.3.3.2. from a country, zone or compartment not declared free from YHD, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
   a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
   b) the treatment of all effluent and waste materials in a manner that ensures inactivation of YHV.

2. If the intention of the introduction is the establishment of a new stock, international standards, such as the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES), should be followed.

3. For the purposes of the Aquatic Code, the ICES Code may be summarised to the following main points:
   a) identify stock of interest (cultured or wild) in its current location;
   b) evaluate stock health/disease history;
   c) take and test samples for YHV, pests and general health/disease status;
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d) import and quarantine in a secure facility a founder (F-0) population;

e) produce F-1 generation from the F-0 stock in quarantine;

f) culture F-1 stock and at critical times in its development (life cycle) sample and test for YHV and perform general examinations for pests and general health/disease status;

g) if YHV is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as YHD free or specific pathogen free (SPF) for YHV;

h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities listed in point 1 of Article 2.3.3.3.

Article 2.3.3.9.

Importation of live aquatic animals for human consumption from a country, zone or compartment not declared free from yellowhead disease

When importing, for human consumption, live aquatic animals of species referred to in Article 2.3.3.2. from a country, zone or compartment not declared free from YHD, the Competent Authority of the importing country should assess the risk and, if justified, require that:

1. the consignment be delivered directly to and held in isolation until consumption; and
2. all effluent, dead aquatic animals and waste materials from the processing be treated in a manner that ensures inactivation of YHV.

Member Countries should consider introducing internal measures to prevent such commodities being used for any purpose other than for human consumption.

This Article does not apply to commodities listed in point 1 of Article 2.3.3.3.

Article 2.3.3.10.

Importation of aquatic animal products from a country, zone or compartment declared free from yellowhead disease

When importing aquatic animal products of species referred to in Article 2.3.3.2. from a country, zone or compartment declared free from YHD, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.3.3.4. or 2.3.3.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from YHD.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.2.

This Article does not apply to commodities listed in point 1 of Article 2.3.3.3.
Article 2.3.3.11.

Importation of aquatic animal products from a country, zone or compartment not declared free from yellowhead disease

When importing aquatic animal products of species referred to in Article 2.3.3.2. from a country, zone or compartment not declared free from YHD, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

This Article does not apply to commodities listed in point 1 of Article 2.3.3.3.
CHAPTER 2.3.4.

TETRAHEDRAL BACULOVIROSIS

Article 2.3.4.1.

For the purposes of the Aquatic Code, tetrahedral baculovirosis means infection with Baculovirus penaei (BPV). This virus is closely related to Penaeus monodon baculovirus (Chapter 2.3.5.) which has been classified as a tentative species in the genus Nucleopolyhedrovirus. Common synonyms are listed in Chapter 2.3.4. of the Aquatic Manual.

Methods for conducting surveillance and diagnosis of tetrahedral baculovirosis are provided in the Aquatic Manual.

Article 2.3.4.2.

Scope

The recommendations in this Chapter apply to the following genera: Penaeus, Trachypenaeus and Protrachypene. These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

For the purposes of this Chapter, the terms shrimp and prawn are used interchangeably.

Article 2.3.4.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any tetrahedral baculovirosis related conditions, regardless of the tetrahedral baculovirosis status of the exporting country, zone or compartment.
   a) For the species referred to in Article 2.3.4.2. being used for any purpose:
      i) commodities treated in a manner that inactivates the disease agent e.g. boiled, canned or pasteurised products and ready to eat meals; and crustacean oil and crustacean meal intended for use in animal feeds;
      ii) chemically extracted chitin;
      iii) crustacean products made non-infectious through processing as dry feeds (e.g. pelleted or extruded feeds);
      iv) biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent (e.g. formalin or alcohol preserved samples).
   b) The following products destined for human consumption from species referred to in Article 2.3.4.2. which have been prepared and packaged for direct retail trade:
      i) chemically preserved products (e.g. salted, pickled, marinated, pastes, etc.);
      ii) de-headed and de-veined (intestine removed) shrimp tails.

For the commodities listed in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.
2. When authorising the importation or transit of the commodities of a species referred to in Article 2.3.4.2., other than those listed in point 1 of Article 2.3.4.3., the Competent Authorities should require the conditions prescribed in Articles 2.3.4.7. to 2.3.4.11. relevant to the tetrahedral baculovirosis status of the exporting country, zone or compartment.

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of tetrahedral baculovirosis of a commodity of a species not covered in Article 2.3.4.2. but which could reasonably be expected to be a potential BPV vector, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

Article 2.3.4.4.

**Tetrahedral baculovirosis free country**

A country may make a self-declaration of freedom from tetrahedral baculovirosis if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from tetrahedral baculovirosis if all the areas covered by the shared water are declared tetrahedral baculovirosis free countries or zones (see Article 2.3.4.5.).

1. A country where none of the susceptible species referred to in Article 2.3.4.2. is present may make a self-declaration of freedom from tetrahedral baculovirosis when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

   OR

2. A country where the susceptible species referred to in Article 2.3.4.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.3.4. of the Aquatic Manual, may make a self-declaration of freedom from tetrahedral baculovirosis when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

   OR

3. A country where the last observed occurrence of the disease was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in Chapter 2.3.4. of the Aquatic Manual), may make a self-declaration of freedom from tetrahedral baculovirosis when:

   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.3.4. of the Aquatic Manual, has been in place for at least the last 2 years without detection of BPV.

   OR

4. A country that has previously made a self-declaration of freedom from tetrahedral baculovirosis but in which the disease is subsequently detected may make a self-declaration of freedom from tetrahedral baculovirosis again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.3.4. of the Aquatic Manual, has been in place for at least the past 2 years without detection of BPV; and
d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

In the meantime, part of the non-affected area may be declared a free zone provided that such part meets the conditions in point 3 of Article 2.3.4.5.

Article 2.3.4.5.

Tetrahedral baculovirosis free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from tetrahedral baculovirosis may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a tetrahedral baculovirosis free zone or compartment if all the relevant Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species referred to in Article 2.3.4.2. is present may be declared free from tetrahedral baculovirosis when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the susceptible species referred to in Article 2.3.4.2. are present but in which there has not been any observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.3.4. of the Aquatic Manual, may be declared free from tetrahedral baculovirosis when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

3. A zone or compartment where the last observed occurrence of the disease was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in Chapter 2.3.4. of the Aquatic Manual), may be declared free from tetrahedral baculovirosis when:
   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.3.4. of the Aquatic Manual, has been in place, through the zone or compartment, for at least the past 2 years without detection of BPV.

OR

4. A zone previously declared free from tetrahedral baculovirosis but in which the disease is subsequently detected may be declared free from tetrahedral baculovirosis again when the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.3.4. of the Aquatic Manual, has been in place for at least the past 2 years without detection of BPV; and
   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.
Article 2.3.4.6.

Maintenance of free status

A country, zone or compartment that is declared free from tetrahedral baculovirosis following the provisions of points 1 or 2 of Articles 2.3.4.4. or 2.3.4.5. (as relevant) may maintain its status as tetrahedral baculovirosis free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from tetrahedral baculovirosis following the provisions of point 3 of Articles 2.3.4.4. or 2.3.4.5. (as relevant) may discontinue targeted surveillance and maintain its status as tetrahedral baculovirosis free provided that conditions that are conducive to clinical expression of tetrahedral baculovirosis, as described in Chapter 2.3.4. of the Aquatic Manual, exist, and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of tetrahedral baculovirosis, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.3.4.7.

Importation of live aquatic animals from a country, zone or compartment declared free from tetrahedral baculovirosis

When importing live aquatic animals of species referred to in Article 2.3.4.2. from a country, zone or compartment declared free from tetrahedral baculovirosis, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.3.4.4. or 2.3.4.5. (as applicable), the place of production of the commodity is a country, zone or compartment declared free from tetrahedral baculovirosis.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.3.

This Article does not apply to commodities listed in point 1 of Article 2.3.4.3.

Article 2.3.4.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from tetrahedral baculovirosis

1. When importing, for aquaculture, live aquatic animals of species referred to in Article 2.3.4.2. from a country, zone or compartment not declared free from tetrahedral baculovirosis, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:

   a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
   
   b) the treatment of all effluent and waste materials in a manner that ensures inactivation of BPV.

2. If the intention of the introduction is the establishment of a new stock, international standards, such as the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES), should be followed.

3. For the purposes of the Aquatic Code, the ICES Code may be summarised to the following main points:

   a) identify stock of interest (cultured or wild) in its current location;
   
   b) evaluate stock health/disease history;
c) take and test samples for BPV, pests and general health/disease status;
d) import and quarantine in a secure facility a founder (F-0) population;
e) produce F-1 generation from the F-0 stock in quarantine;
f) culture F-1 stock and at critical times in its development (life cycle) sample and test for BPV and perform general examinations for pests and general health/disease status;
g) if BPV is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as tetrahedral baculovirosis free or specific pathogen free (SPF) for BPV;
h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities listed in point 1 of Article 2.3.4.3.

Article 2.3.4.9.

Importation of live aquatic animals for human consumption from a country, zone or compartment not declared free from tetrahedral baculovirosis

When importing, for human consumption, live aquatic animals of species referred to in Article 2.3.4.2. from a country, zone or compartment not declared free from tetrahedral baculovirosis, the Competent Authority of the importing country should assess the risk and, if justified, require that:

1. the consignment be delivered directly to and held in isolation until consumption; and
2. all effluent, dead aquatic animals and waste materials from the processing be treated in a manner that ensures inactivation of BPV.

Member Countries should consider introducing internal measures to prevent such commodities being used for any purpose other than for human consumption.

This Article does not apply to commodities listed in point 1 of Article 2.3.4.3.

Article 2.3.4.10.

Importation of aquatic animal products from a country, zone or compartment declared free from tetrahedral baculovirosis

When importing aquatic animal products of species referred to in Article 2.3.4.2. from a country, zone or compartment declared free from tetrahedral baculovirosis, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.3.4.4. or 2.3.4.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from tetrahedral baculovirosis.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.2.

This Article does not apply to commodities listed in point 1 of Article 2.3.4.3.
Article 2.3.4.11.

Importation of aquatic animal products from a country, zone or compartment not declared free from tetrahedral baculovirosis

When importing aquatic animal products of species referred to in Article 2.3.4.2. from a country, zone or compartment not declared free from tetrahedral baculovirosis, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

This Article does not apply to commodities listed in point 1 of Article 2.3.4.3.
CHAPTER 2.3.5.

SPHERICAL BACULOVIRUS

Article 2.3.5.1.

For the purposes of the Aquatic Code, spherical baculovirosis means infection with Penaeus monodon baculovirus (MBV). Penaeus monodon baculovirus is classified as a tentative species in the genus Nucleopolyhedrovirus. Common synonyms are listed in Chapter 2.3.5. of the Aquatic Manual.

Methods for conducting surveillance and diagnosis of spherical baculovirosis are provided in the Aquatic Manual.

Article 2.3.5.2.

Scope

The recommendations in this Chapter apply to the following genera: Penaeus and Metapenaeus. These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

For the purposes of this Chapter, the terms shrimp and prawn are used interchangeably.

Article 2.3.5.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any spherical baculovirosis related conditions, regardless of the spherical baculovirosis status of the exporting country, zone or compartment.

   a) For the species referred to in Article 2.3.5.2. being used for any purpose:

      i) commodities treated in a manner that inactivates the disease agent e.g. boiled, canned or pasteurised products and ready to eat meals; and crustacean oil and crustacean meal intended for use in animal feeds;

      ii) chemically extracted chitin;

      iii) crustacean products made non-infectious through processing as dry feeds (e.g. pelleted or extruded feeds);

      iv) biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent (e.g. formalin or alcohol preserved samples).

   b) The following products destined for human consumption from species referred to in Article 2.3.5.2. which have been prepared and packaged for direct retail trade:

      i) chemically preserved products (e.g. salted, pickled, marinated, pastes, etc.);

      ii) de-headed and deveined (intestine removed) shrimp tails.

For the commodities listed in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.
2. When authorising the importation or transit of the commodities of a species referred to in Article 2.3.5.2., other than those listed in point 1 of Article 2.3.5.3., the Competent Authorities should require the conditions prescribed in Articles 2.3.5.7. to 2.3.5.11. relevant to the spherical baculovirosis status of the exporting country, zone or compartment.

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of spherical baculovirosis of a commodity of a species not covered in Article 2.3.5.2. but which could reasonably be expected to be a potential MBV vector, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

**Article 2.3.5.4.**

**Spherical baculovirosis free country**

A country may make a self-declaration of freedom from spherical baculovirosis if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from spherical baculovirosis if all the areas covered by the shared water are declared spherical baculovirosis free countries or zones (see Article 2.3.5.5.).

1. A country where none of the susceptible species referred to in Article 2.3.5.2. is present may make a self-declaration of freedom from spherical baculovirosis when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

2. A country where the susceptible species referred to in Article 2.3.5.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.3.5. of the Aquatic Manual, may make a self-declaration of freedom from spherical baculovirosis when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

3. A country where the last observed occurrence of the disease was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in Chapter 2.3.5. of the Aquatic Manual), may make a self-declaration of freedom from spherical baculovirosis when:
   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.3.5. of the Aquatic Manual, has been in place for at least the last 2 years without detection of MBV.

OR

4. A country that has previously made a self-declaration of freedom from spherical baculovirosis but in which the disease is subsequently detected may make a self-declaration of freedom from spherical baculovirosis again when the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.3.5. of the Aquatic Manual, has been in place for at least the past 2 years without detection of MBV; and
d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

In the meantime, part of the non-affected area may be declared a free zone provided that such part meets the conditions in point 3 of Article 2.3.5.5.

Article 2.3.5.5.

Spherical baculovirosis free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from spherical baculovirosis may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a spherical baculovirosis free zone or compartment if all the relevant Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species referred to in Article 2.3.5.2. is present may be declared free from spherical baculovirosis when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the susceptible species referred to in Article 2.3.5.2. are present but in which there has not been any observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.3.5. of the Aquatic Manual, may be declared free from spherical baculovirosis when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

3. A zone or compartment where the last observed occurrence of the disease was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in Chapter 2.3.5. of the Aquatic Manual), may be declared free from spherical baculovirosis when:

   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.3.5. of the Aquatic Manual, has been in place, through the zone or compartment, for at least the past 2 years without detection of MBV.

OR

4. A zone previously declared free from spherical baculovirosis but in which the disease is subsequently detected may be declared free from spherical baculovirosis again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.3.5. of the Aquatic Manual, has been in place for at least the past 2 years without detection of MBV; and
   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.
Article 2.3.5.6.

Maintenance of free status

A country, zone or compartment that is declared free from spherical baculovirosis following the provisions of points 1 or 2 of Articles 2.3.5.4. or 2.3.5.5. (as relevant) may maintain its status as spherical baculovirosis free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from spherical baculovirosis following the provisions of point 3 of Articles 2.3.5.4. or 2.3.5.5. (as relevant) may discontinue targeted surveillance and maintain its status as spherical baculovirosis free provided that conditions that are conducive to clinical expression of spherical baculovirosis, as described in Chapter 2.3.5. of the Aquatic Manual, exist, and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of spherical baculovirosis, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.3.5.7.

Importation of live aquatic animals from a country, zone or compartment declared free from spherical baculovirosis

When importing live aquatic animals of species referred to in Article 2.3.5.2. from a country, zone or compartment declared free from spherical baculovirosis, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.3.5.4. or 2.3.5.5. (as applicable), the place of production of the commodity is a country, zone or compartment declared free from spherical baculovirosis.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.3.

This Article does not apply to commodities listed in point 1 of Article 2.3.5.3.

Article 2.3.5.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from spherical baculovirosis

1. When importing, for aquaculture, live aquatic animals of species referred to in Article 2.3.5.2. from a country, zone or compartment not declared free from spherical baculovirosis, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
   a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
   b) the treatment of all effluent and waste materials in a manner that ensures inactivation of MBV.

2. If the intention of the introduction is the establishment of a new stock, international standards, such as the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES), should be followed.

3. For the purposes of the Aquatic Code, the ICES Code may be summarised to the following main points:
   a) identify stock of interest (cultured or wild) in its current location;
   b) evaluate stock health/ disease history;


c) take and test samples for MBV, pests and general health/disease status;
d) import and quarantine in a secure facility a founder (F-0) population;
e) produce F-1 generation from the F-0 stock in quarantine;
f) culture F-1 stock and at critical times in its development (life cycle) sample and test for MBV and perform general examinations for pests and general health/disease status;
g) if MBV is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as spherical baculovirosis free or specific pathogen free (SPF) for MBV;
h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities listed in point 1 of Article 2.3.5.3.

Article 2.3.5.9.
Importation of live aquatic animals for human consumption from a country, zone or compartment not declared free from spherical baculovirosis

When importing, for human consumption, live aquatic animals of species referred to in Article 2.3.5.2. from a country, zone or compartment not declared free from spherical baculovirosis, the Competent Authority of the importing country should assess the risk and, if justified, require that:

1. the consignment be delivered directly to and held in isolation until consumption; and
2. all effluent, dead aquatic animals and waste materials from the processing be treated in a manner that ensures inactivation of MBV.

Member Countries should consider introducing internal measures to prevent such commodities being used for any purpose other than for human consumption.

This Article does not apply to commodities listed in point 1 of Article 2.3.5.3.

Article 2.3.5.10.
Importation of aquatic animal products from a country, zone or compartment declared free from spherical baculovirosis

When importing aquatic animal products of species referred to in Article 2.3.5.2. from a country, zone or compartment declared free from spherical baculovirosis, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.3.5.4. or 2.3.5.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from spherical baculovirosis.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.2.

This Article does not apply to commodities listed in point 1 of Article 2.3.5.3.
Article 2.3.5.11.

Importation of aquatic animal products from a country, zone or compartment not declared free from Taura syndrome

When importing aquatic animal products of species referred to in Article 2.3.5.2. from a country, zone or compartment not declared free from spherical baculovirosis, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

This Article does not apply to commodities listed in point 1 of Article 2.3.5.3.
CHAPTER 2.3.6.

INFECTIOUS HYPODERMAL AND HAEMATOPOIETIC NECROSIS

Article 2.3.6.1.

For the purposes of the Aquatic Code, infectious hypodermal and haematopoietic necrosis (IHHN) means infection with infectious hypodermal and haematopoietic necrosis virus (IHHNV). IHHNV is classified as the species Penaeus stylirostris densovirus in the genus Breviendosovirus in the family Parvoviridae.

Methods for conducting surveillance and diagnosis of IHHN are provided in the Aquatic Manual.

Article 2.3.6.2.

Scope

The recommendations in this Chapter apply to: giant tiger prawn (Penaeus monodon), Pacific white shrimp (P. vannamei) and blue shrimp (P. stylirostris). These recommendations also apply to any other susceptible species referred to in the Aquatic Manual when traded internationally.

For the purposes of this Chapter, the terms shrimp and prawn are used interchangeably.

Article 2.3.6.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any IHHN related conditions, regardless of the IHHN status of the exporting country, zone or compartment.

   a) For the species referred to in Article 2.3.6.2. being used for any purpose:

      i) commodities treated in a manner that inactivates the disease agent e.g. boiled, canned or pasteurised products and ready to eat meals; and crustacean oil and crustacean meal intended for use in animal feeds;

      ii) chemically extracted chitin;

      iii) crustacean products made non-infectious through processing as dry feeds (e.g. pelleted or extruded feeds);

      iv) biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent (e.g. formalin or alcohol preserved samples).

   b) The following products destined for human consumption from species referred to in Article 2.3.6.2. which have been prepared and packaged for direct retail trade:

      i) chemically preserved products (e.g. salted, pickled, marinated, pastes, etc.).

For the commodities listed in point 1b), Member Countries should consider introducing internal measures to prevent the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of the commodities of a species referred to in Article 2.3.6.2., other than those listed in point 1 of Article 2.3.6.3., the Competent Authorities should
require the conditions prescribed in Articles 2.3.6.7. to 2.3.6.11. relevant to the IHHN status of the exporting country, zone or compartment.

3. When considering the importation/transit from an exporting country, zone or compartment not declared free of IHHN of a commodity of a species not covered in Article 2.3.6.2. but which could reasonably be expected to be a potential IHHNV vector, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

Article 2.3.6.4.

Infectious hypodermal and haematopoietic necrosis free country

A country may make a self-declaration of freedom from IHHN if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from IHHN if all the areas covered by the shared water are declared IHHN free countries or zones (see Article 2.3.6.5.).

1. A country where none of the susceptible species referred to in Article 2.3.6.2. is present may make a self-declaration of freedom from IHHN when basic biosecurity conditions have been continuously met in the country for at least the past 2 years. OR

2. A country where the susceptible species referred to in Article 2.3.6.2. are present but there has never been any observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.3.6. of the Aquatic Manual, may make a self-declaration of freedom from IHHN when basic biosecurity conditions have been continuously met in the country for at least the past 2 years. OR

3. A country where the last observed occurrence of the disease was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in Chapter 2.3.6. of the Aquatic Manual), may make a self-declaration of freedom from IHHN when:
   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and
   b) targeted surveillance, as described in Chapters 1.1.4. and 2.3.6. of the Aquatic Manual, has been in place for at least the last 2 years without detection of IHHNV. OR

4. A country that has previously made a self-declaration of freedom from IHHN but in which the disease is subsequently detected may make a self-declaration of freedom from IHHN again when the following conditions have been met:
   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
   c) targeted surveillance, as described in Chapters 1.1.4. and 2.3.6. of the Aquatic Manual, has been in place for at least the past 2 years without detection of IHHNV; and
   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.
In the meantime, part of the non-affected area may be declared a free zone provided that such part meets the conditions in point 3 of Article 2.3.6.5.

**Article 2.3.6.5.**

**Infectious hypodermal and haematopoietic necrosis free zone or free compartment**

A zone or compartment within the territory of one or more countries not declared free from IHHN may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a IHHN free zone or compartment if all the relevant Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species referred to in Article 2.3.6.2. is present may be declared free from IHHN when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the susceptible species referred to in Article 2.3.6.2. are present but in which there has not been any observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter 2.3.6. of the Aquatic Manual, may be declared free from IHHN when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

3. A zone or compartment where the last observed occurrence of the disease was within the past 10 years, or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in Chapter 2.3.6. of the Aquatic Manual), may be declared free from IHHN when:

   a) basic biosecurity conditions have been continuously met for at least the past 2 years; and

   b) targeted surveillance, as described in Chapters 1.1.4. and 2.3.6. of the Aquatic Manual, has been in place, through the zone or compartment, for at least the past 2 years without detection of IHHNV.

OR

4. A zone previously declared free from IHHN but in which the disease is subsequently detected may be declared free from IHHN again when the following conditions have been met:

   a) on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and

   b) infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and

   c) targeted surveillance, as described in Chapters 1.1.4. and 2.3.6. of the Aquatic Manual, has been in place for at least the past 2 years without detection of IHHNV; and

   d) previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.
Article 2.3.6.6.

Maintenance of free status

A country, zone or compartment that is declared free from IHHN following the provisions of points 1 or 2 of Articles 2.3.6.4. or 2.3.6.5. (as relevant) may maintain its status as IHHN free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from IHHN following the provisions of point 3 of Articles 2.3.6.4. or 2.3.6.5. (as relevant) may discontinue targeted surveillance and maintain its status as IHHN free provided that conditions that are conducive to clinical expression of IHHN, as described in Chapter 2.3.6. of the Aquatic Manual, exist, and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of IHHN, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 2.3.6.7.

Importation of live aquatic animals from a country, zone or compartment declared free from infectious hypodermal and haematopoietic necrosis

When importing live aquatic animals of species referred to in Article 2.3.6.2. from a country, zone or compartment declared free from IHHN, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.3.6.4. or 2.3.6.5. (as applicable), the place of production of the commodity is a country, zone or compartment declared free from IHHN.

The certificate should be in accordance with the Model Certificate in Appendix 4.1.3.

This Article does not apply to commodities listed in point 1 of Article 2.3.6.3.

Article 2.3.6.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from infectious hypodermal and haematopoietic necrosis

1. When importing, for aquaculture, live aquatic animals of species referred to in Article 2.3.6.2. from a country, zone or compartment not declared free from IHHN, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
   a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
   b) the treatment of all effluent and waste materials in a manner that ensures inactivation of IHHNV.

2. If the intention of the introduction is the establishment of a new stock, international standards, such as the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES), should be followed.

3. For the purposes of the Aquatic Code, the ICES Code may be summarised to the following main points:
   a) identify stock of interest (cultured or wild) in its current location;
   b) evaluate stock health/disease history;
c) take and test samples for IHHNV, pests and general health/disease status;
d) import and quarantine in a secure facility a founder (F-0) population;
e) produce F-1 generation from the F-0 stock in quarantine;
f) culture F-1 stock and at critical times in its development (life cycle) sample and test for IHHNV and perform general examinations for pests and general health/disease status;
g) if IHHNV is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as IHHN free or specific pathogen free (SPF) for IHHNV;
h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities listed in point 1 of Article 2.3.6.3.

Article 2.3.6.9.

Importation of live aquatic animals for human consumption from a country, zone or compartment not declared free from infectious hypodermal and haematopoietic necrosis

When importing, for human consumption, live aquatic animals of species referred to in Article 2.3.6.2. from a country, zone or compartment not declared free from IHHN, the Competent Authority of the importing country should assess the risk and, if justified, require that:

1. the consignment be delivered directly to and held in isolation until consumption; and
2. all effluent, dead aquatic animals and waste materials from the processing be treated in a manner that ensures inactivation of IHHNV.

Member Countries should consider introducing internal measures to prevent such commodities being used for any purpose other than for human consumption.

This Article does not apply to commodities listed in point 1 of Article 2.3.6.3.

Article 2.3.6.10.

Importation of aquatic animal products from a country, zone or compartment declared free from infectious hypodermal and haematopoietic necrosis

When importing aquatic animal products of species referred to in Article 2.3.6.2. from a country, zone or compartment declared free from IHHN, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 2.3.6.4. or 2.3.6.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from IHHN.

The certificate should be in accordance with the Model Certificate in Appendix 4.2.2.

This Article does not apply to commodities listed in point 1 of Article 2.3.6.3.
Article 2.3.6.11.

**Importation of aquatic animal products from a country, zone or compartment not declared free from infectious hypodermal and haematopoietic necrosis**

When importing aquatic animal products of species referred to in Article 2.3.6.2. from a country, zone or compartment not declared free from IHHN, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

This Article does not apply to commodities listed in point 1 of Article 2.3.6.3.
CHAPTER 2.3.7.

CRAYFISH PLAGUE
(Aphanomyces astaci)

Article 2.3.7.1.

Standards for diagnostic tests are described in the Aquatic Manual.

Article 2.3.7.2.

Competent Authorities in countries or zones where crayfish plague has never been reported should prohibit the importation of live crayfish (other than for direct human consumption) from countries or zones where the disease has been reported or where its absence cannot be guaranteed.
CHAPTER 2.3.8.

SPAWNER-ISOLATED MORTALITY VIRUS DISEASE

Article 2.3.8.1.

Standards for diagnostic tests are described in the Aquatic Manual.

Article 2.3.8.2.

Competent Authorities of importing countries may require:

for live postlarvae, juveniles, broodstock and dead crustaceans

the presentation of an international aquatic animal health certificate attesting that:

1. the crustaceans showed no sign of spawner-isolated mortality virus disease on the day of shipment;

2. randomly selected crustaceans showed no sign of spawner-isolated mortality virus disease using electron microscopy (or in-situ hybridisation by gene probe or polymerase chain reaction, if available).

1 This disease does not meet the listing criteria in Chapter 1.2.2. Nevertheless, reporting requirements for non listed diseases apply in regard to significant epidemiological events (see point 1e) of Article 1.2.1.3.).
PART 3

APPENDICES
SECTION 3.1.

BLOOD SAMPLING AND VACCINATION

APPENDIX 3.1.1.

HYGIENIC PRECAUTIONS

Article 3.1.1.1.

The use of needles and syringes in routine veterinary work in aquaculture establishments for procedures such as blood sampling and vaccination should be carried out in a highly professional manner, ensuring that appropriate hygienic precautions are observed.

These precautions have particular importance for teams of veterinarians and other aquatic animal health specialists, including vaccination service providers.
SECTION 3.2.

INACTIVATION OF PATHOGENS

APPENDIX 3.2.1.

GENERAL RECOMMENDATIONS ON DISINFECTION

Article 3.2.1.1.

Disinfection is employed as a common disease management tool in aquaculture. Disinfection procedures should be part of a disinfection programme designed for a specific purpose. Disinfection may be used in biosecurity programmes to eradicate or exclude specific diseases from aquaculture establishments, as well as a routine sanitary measure to reduce disease incidence within aquaculture establishments.

Disinfection of installations and equipment and transport units should be carried out using procedures that prevent the contamination of other water and other aquatic animal populations with infectious material. There is a great variety of products and procedures for washing and disinfecting installations or equipment used in aquaculture establishments or for treating effluents, and wastes from quarantine and processing plants. The decision on which product to use should take into account their microbiocidal efficacy, their safety for aquatic animals and the environment.

Article 3.2.1.2.

The manufacturer’s instructions for effective use of a disinfectant under aquaculture conditions should be followed. Disinfectants to be used in aquaculture should be evaluated/tested against relevant aquatic pathogens under relevant conditions. Approved procedures for the use of disinfectants in aquaculture should be established.

The efficacy of disinfection is affected by various factors, including temperature, pH, and the presence of organic matter. At high temperatures, the disinfecting action is faster as long as the decomposition of the disinfectant does not occur. At low temperatures, the biocidal efficacy of most disinfectants decreases. Many disinfectants have an optimum pH range/level, and product choice should depend on the pH of the diluent (water). For example, quaternary ammonia is more efficient at alkaline pH while iodine and iodophores are more efficient at neutral or acid pH. The presence of organic material and greasy substances may significantly reduce the efficacy of a disinfectant. Therefore, surfaces should be cleaned thoroughly before applying disinfectants.

The use of disinfectants may require measures to protect personnel, aquatic animals and the environment. The manufacturer’s instructions for safe use and disposal should be followed.
Article 3.2.1.3.

Specific disinfection procedures are provided in Chapter 1.1.5. of the Aquatic Manual.
APPENDIX 3.2.2.

DISINFECTION OF AQUACULTURE ESTABLISHMENTS

Under preparation.
LIVE FISH AND GAMETES

NOTE: Mark all the relevant items with a cross in the appropriate space.

I. Identification

<table>
<thead>
<tr>
<th>Cultured stocks</th>
<th>Wild stocks</th>
<th>Fish</th>
<th>Sperm</th>
<th>Unfertilised eggs</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Fertilised eggs</td>
<td>Larvae</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Species:
Scientific name: .................................................................
Common name: .................................................................
Age (years): [ ] Unknown [ ] 0+ [ ] 1+ [ ] 2+ [ ] >2+
Total weight (kg): .................................................................
OR
Number (x1000): .................................................................

II. Place of production

Country: .................................................................
Zone: ........................................................................
Aquaculture establishment/ Zone: .................................................................
Name: ........................................................................
Location: ........................................................................

III. Origin of consignment (if different from II)

Country: .................................................................
Zone: ........................................................................
Aquaculture establishment/ Zone: .................................................................
Name: ........................................................................
Location: ........................................................................

IV. Destination

Country: .................................................................
Zone: ........................................................................
Aquaculture establishment/ Zone: .................................................................
Name: ........................................................................
Location: ........................................................................
Nature and identification of means of transport: .................................................................
V. Declaration

I, the undersigned, certify that the live fish and/or fish larvae, fish gametes, ova and fertilised eggs in the present consignment have as their place of production: [ ] a Country, [ ] a Zone or [ ] an Aquaculture establishment that has been subjected to an official fish health surveillance scheme according to the procedures described in the OIE Manual of Diagnostic Tests for Aquatic Animals and that the Country, Zone or Aquaculture establishment identified in Sections II and III above has been declared free from the pathogens causing the diseases referred to in the OIE Aquatic Animal Health Code, as identified in the table below.

<table>
<thead>
<tr>
<th>Disease/Infection</th>
<th>Country</th>
<th>Zone</th>
<th>Aquaculture establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epizootic haematopoietic necrosis</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Infectious haematopoietic necrosis</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Oncorhynchus masu virus disease</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Spring viraemia of carp</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Viral haemorrhagic septicaemia</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Channel catfish virus disease</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Viral encephalopathy and retinopathy</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Infectious pancreatic necrosis</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Infectious salmon anaemia</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Epizootic ulcerative syndrome</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Bacterial kidney disease (Renibacterium salmoninarum)</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Enteric septicaemia of catfish (Edwardsiella ictaluri)</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Piscirickettsiosis (Piscirickettsia salmonis)</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Gyrodactylosis (Gyrodactylus salaris)</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Red sea bream iridoviral disease</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>White sturgeon iridoviral disease</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

Exporting country: ..................................................................................................................................................................................
Competent Authority: ....................................................................................................................................................................................

Stamp:

Issued at.................................... on ....................................................................................................................
Name and address of Certifying Official ....................................................................................................................
....................................................................................................................................................................................
Signature: ....................................................................................................................................................................................

IMPORTANT NOTE: This certificate must be completed no more than three days prior to shipment.
APPENDIX 4.1.2.
LIVE MOLLUSCS AND GAMETES
L I V E  M O L L U S C S  A N D  G A M E T E S

NOTE: Mark all the relevant items with a cross in the appropriate space.

I. Identification

[ ] Cultured stocks  [ ] Wild stocks
Species:
Scientific name: ..........................................................................................
Common name: ..........................................................................................
Age (years): [ ] Gametes [ ] Unknown [ ] >24 months
[ ] 12-24 months [ ] 0-11 months [ ] Larvae
Total weight (kg): ..........................................................................................
OR 
Number (x1000): ..........................................................................................

II. Place of production

Country: .................................................................................................
Zone: ...........................................................................................................
Aquaculture establishment/Zone:
Name: ..........................................................................................................
Location: .....................................................................................................

III. Origin of consignment (if different from II)

Country: .................................................................................................
Zone: ...........................................................................................................
Aquaculture establishment/Zone:
Name: ..........................................................................................................
Location: .....................................................................................................

IV. Destination

Country: .................................................................................................
Zone: ...........................................................................................................
Aquaculture establishment/Zone:
Name: ..........................................................................................................
Location: .....................................................................................................
Nature and identification of means of transport: ...............................................

V. Declaration

I, the undersigned, certify that the live molluscs and/or gametes in the present consignment have as their place of production: [ ] a Country, [ ] a Zone [ ] or [ ] an Aquaculture establishment that has been subjected to an official mollusc health surveillance scheme according to the procedures described in the OIE Manual of Diagnostic Tests for Aquatic Animals and that the Country, Zone or Aquaculture establishment identified in Sections II and III above has been declared free from the pathogens causing the diseases referred to in the OIE Aquatic Animal Health Code, as identified in the table below.
<table>
<thead>
<tr>
<th>Infection with Bonamia exitiosa</th>
<th>Country</th>
<th>Zone</th>
<th>Aquaculture establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infection with Bonamia ostreae</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infection with Haplosporidium nelsoni</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infection with Martelia refringens</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infection with Mikrocytos mackini</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infection with Perkinsus marinus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infection with Perkinsus olseni</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infection with Xenohaliotis californiensis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Exporting country: ..........................................................
Competent Authority: ..........................................................

Stamp:..........................................................................................................

Issued at........................................ on ..........................................................
Name and address of Certifying Official ..........................................................
..........................................................................................................

Signature: .....................................................................................................

IMPORTANT NOTE: This certificate must be completed no more than three days prior to shipment.
LIVE CRUSTACEANS

NOTE: Mark all the relevant items with a cross in the appropriate space.

I. Identification

[ ] Cultured stocks  [ ] Wild stocks

Species:
Scientific name: ..........................................................................................
Common name: ..........................................................................................
Age (years):
[ ] Fertilised eggs or nauplii [ ] Postlarvae
[ ] Juveniles [ ] Broodstock

Total weight (kg): ..........................................................................................
OR
Number (x1000): ..........................................................................................

II. Place of production

Country: ..........................................................................................
Zone: ..........................................................................................
Aquaculture establishment/ Zone:
Name: ..........................................................................................
Location: ..........................................................................................

III. Origin of consignment (if different from II)

Country: ..........................................................................................
Zone: ..........................................................................................
Aquaculture establishment/ Zone:
Name: ..........................................................................................
Location: ..........................................................................................

IV. Destination

Country: ..........................................................................................
Zone: ..........................................................................................
Aquaculture establishment/ Zone:
Name: ..........................................................................................
Location: ..........................................................................................
Nature and identification of means of transport: ..........................................

V. Declaration

I, the undersigned, certify that the live crustaceans in the present consignment have as their place of production: [ ] a Country, [ ] a Zone or [ ] an Aquaculture establishment that has been subjected to an official crustacean health surveillance scheme according to the procedures described in the OIE Manual of Diagnostic Tests for Aquatic Animals and that the Country, Zone or Aquaculture establishment identified in Sections II and III above has been declared free from the pathogens causing the diseases referred to in the OIE Aquatic Animal Health Code, as identified in the table below.
**Taura syndrome**

**White spot disease**

**Yellowhead disease**

**Tetrahedral baculovirosis**  
(Baculovirus penaei)

**Spherical baculovirosis**  
(Penaeus monodon-type baculovirus)

**Infectious hypodermal and haematopoietic necrosis**

**Crayfish plague**  
(Aphanomyces astaci)

**Spawner-isolated mortality virus disease**

<table>
<thead>
<tr>
<th>Disease</th>
<th>Country</th>
<th>Zone</th>
<th>Aquaculture establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taura syndrome</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>White spot disease</td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Yellowhead disease</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetrahedral baculovirosis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Baculovirus penaei)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spherical baculovirosis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Penaeus monodon-type baculovirus)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infectious hypodermal and haematopoietic necrosis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crayfish plague(Aphanomyces astaci)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spawner-isolated mortality virus disease</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Exporting country: .................................................................
Competent Authority: .................................................................

Stamp: .................................................................

Issued at:........................................ on .................................................................
Name and address of Certifying Official .................................................................
.................................................................
.................................................................
Signature: .................................................................

IMPORTANT NOTE: This certificate must be completed no more than three days prior to shipment.
SECTION 4.2.
INTERNATIONAL HEALTH CERTIFICATES FOR DEAD AQUATIC ANIMALS

APPENDIX 4.2.1.
DEAD FISH
### DEAD FISH

**NOTE:** Mark all the relevant items with a cross in the appropriate space.

#### I. Identification

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ] Eviscerated</td>
<td>[ ] Uneviscerated</td>
</tr>
<tr>
<td></td>
<td>[ ] Cultured stocks</td>
<td>[ ] Wild stocks</td>
</tr>
</tbody>
</table>

- **Species:**
- **Scientific name:**
- **Common name:**
- **Age (years):** [ ] Unknown [ ] 0+ [ ] 1+ [ ] 2+ [ ] >2+
- **Total weight (kg):**
- **OR**
- **Number (x1000):**

#### II. Place of production

- **Country:**
- **Zone:**
- **Aquaculture establishment/Zone:**
  - **Name:**
  - **Location:**

#### III. Destination

- **Country:**
- **Zone:**
- **Aquaculture establishment/Zone:**
  - **Name:**
  - **Location:**
  - **Nature and identification of means of transport:**

#### IV. Declaration

I, the undersigned, certify that the dead fish and/or fish products in the present consignment have as their place of production: [ ] a Country, [ ] a Zone [ ] or [ ] an Aquaculture establishment that has been subjected to an official fish health surveillance scheme according to the procedures described in the OIE Manual of Diagnostic Tests for Aquatic Animals and that the Country, Zone or Aquaculture establishment identified in Section II above has been declared free from the pathogens causing the diseases referred to in the OIE Aquatic Animal Health Code, as identified in the table below.
### Appendix 4.2.1. - Dead fish

<table>
<thead>
<tr>
<th>Condition</th>
<th>Country</th>
<th>Zone</th>
<th>Aquaculture establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epizootic haematopoietic necrosis</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Infectious haematopoietic necrosis</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Oncorhynchus masou virus disease</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Spring viraemia of carp</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Viral haemorrhagic septicemia</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Channel catfish virus disease</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Viral encephalopathy and retinopathy</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Infectious pancreatic necrosis</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Infectious salmon anaemia</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Epizootic ulcerative syndrome</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Bacterial kidney disease (Renibacterium salmoninarum)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Enteric septicemia of catfish (Edwardsiella ictaluri)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Piscirickettsiosis (Piscirickettsia salmonis)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Gyrodactylosis (Gyrodactylus salaris)</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Red sea bream iridoviral disease</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>White sturgeon iridoviral disease</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Exporting country:**

**Competent Authority:**

**Stamp:**

**Issued at**......................... on ..........................................................

**Name and address of Certifying Official** ..........................................................

**Signature:** ..........................................................

**IMPORTANT NOTE:** This certificate must be completed no more than three days prior to shipment.
APPENDIX 4.2.2.

DEAD CRUSTACEANS
DEAD CRUSTACEANS

NOTE: Mark all the relevant items with a cross in the appropriate space.

I. Identification

[ ] Cultured stocks [ ] Wild stocks

Species: ..............................................................................................................
Scientific name: ..................................................................................................
Common name: ..................................................................................................
Total weight (kg): ..............................................................................................
OR
Number (x1000): ...............................................................................................[ ] Head on animal [ ] Head off animals [ ] Peeled animals
[ ] Block frozen [ ] Individually quick frozen [ ] Other processing method

II. Place of production

Country: .............................................................................................................
Zone: ..................................................................................................................
Aquaculture establishment/ Zone: ........................................................................
Name: .................................................................................................................
Location: ..............................................................................................................

III. Origin of consignment (if different from II)

Country: .............................................................................................................
Zone: ..................................................................................................................
Aquaculture establishment/ Zone: ........................................................................
Name: .................................................................................................................
Location: ..............................................................................................................

IV. Destination

Country: .............................................................................................................
Zone: ..................................................................................................................
Company: ............................................................................................................
Nature and identification of means of transport: ...............................................}

V. Declaration

I, the undersigned, certify that the dead crustaceans in the present consignment have as their place of production: [ ] a Country, [ ] a Zone or [ ] an Aquaculture establishment that has been subjected to an official crustacean health surveillance scheme according to the procedures described in the OIE Manual of Diagnostic Tests for Aquatic Animals, that the Country, Zone or Aquaculture establishment identified in Sections II and III above has been declared free from the pathogens causing the diseases referred to in the OIE Aquatic Animal Health Code as identified in the table below and that the crustaceans have not been subjected to emergency harvest due to the suspicion or the confirmation of the presence of the diseases identified in the table below.
<table>
<thead>
<tr>
<th>Disease</th>
<th>Country</th>
<th>Zone</th>
<th>Aquaculture establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taura syndrome</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>White spot disease</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Yellowhead disease</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Tetrahedral baculovirosis</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>(Baculovirus penaei)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spherical baculovirosis</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>(Penaeus monodon-type baculovirus)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infectious hypodermal and haematopoietic necrosis</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Crayfish plague (Aphanomyces astaci)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Spawner-isolated mortality virus disease</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Exporting country: ..........................................................
Competent Authority: ..........................................................

Stamp: 

Issued at........................................ on ..........................................................
Name and address of Certifying Official ..........................................................
..........................................................

Signature: ..........................................................

IMPORTANT NOTE: This certificate must be completed no more than three days prior to shipment.
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<thead>
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<th>Index</th>
<th></th>
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<tbody>
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<td>Infectious salmon anaemia</td>
<td>96</td>
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<tr>
<td>International health certificates (model)</td>
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<tr>
<td>Dead crustaceans</td>
<td>233</td>
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<tr>
<td>Dead fish</td>
<td>229</td>
</tr>
<tr>
<td>Live crustaceans</td>
<td>225</td>
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<tr>
<td>Live fish and gametes</td>
<td>217</td>
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<td>Live molluscs and gametes</td>
<td>221</td>
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<tr>
<td>Koi herpesvirus disease</td>
<td>116</td>
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<td>141</td>
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<tr>
<td>Mikrocytos mackini</td>
<td>147</td>
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<td>Penaeus monodon-type baculovirus</td>
<td>192</td>
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<tr>
<td>Perkinsus marinus</td>
<td>153</td>
</tr>
<tr>
<td>Perkinsus olseni</td>
<td>158</td>
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<td>Piscirickettsia salmononis</td>
<td>108</td>
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<td>Piscirickettsiosis</td>
<td>108</td>
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<tr>
<td>Red sea bream iridoviral disease</td>
<td>110</td>
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<td>Renibacterium salmoninarum</td>
<td>106</td>
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<tr>
<td>Risk analysis</td>
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<tr>
<td>Evaluation of Competent Authorities</td>
<td>40</td>
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<tr>
<td>General considerations</td>
<td>31</td>
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<td>Risk assessment</td>
<td>34</td>
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<td>Risk communication</td>
<td>35</td>
</tr>
<tr>
<td>Risk management</td>
<td>34</td>
</tr>
<tr>
<td>Zoning</td>
<td>42</td>
</tr>
<tr>
<td>Salmonid herpesvirus type 2 disease</td>
<td>80</td>
</tr>
<tr>
<td>Spawner-isolated mortality virus disease</td>
<td>205</td>
</tr>
<tr>
<td>Spherical baculovirosis</td>
<td>192</td>
</tr>
<tr>
<td>Spring viraemia of carp</td>
<td>83</td>
</tr>
<tr>
<td>Taura syndrome</td>
<td>169</td>
</tr>
<tr>
<td>Tetrahedral baculovirosis</td>
<td>186</td>
</tr>
<tr>
<td>Transport</td>
<td></td>
</tr>
<tr>
<td>Aquatic animal disease agents</td>
<td>57</td>
</tr>
<tr>
<td>Pathological material</td>
<td>57</td>
</tr>
<tr>
<td>Viral encephalopathy and retinopathy</td>
<td>94</td>
</tr>
<tr>
<td>Viral haemorrhagic septicaemia</td>
<td>88</td>
</tr>
<tr>
<td>White spot disease</td>
<td>175</td>
</tr>
<tr>
<td>White sturgeon iridoviral disease</td>
<td>115</td>
</tr>
<tr>
<td>Xenohaliotis californiens</td>
<td>163</td>
</tr>
<tr>
<td>Yellowhead disease</td>
<td>180</td>
</tr>
</tbody>
</table>