PVS Pathway

OIE TOOL FOR THE EVALUATION OF PERFORMANCE OF AQUATIC ANIMAL HEALTH SERVICES

PVS TOOL AQUATIC

SECOND EDITION

2021

WORLD ORGANISATION FOR ANIMAL HEALTH
Protecting animals, preserving our future

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OIE *Tool for the Evaluation of Performance of Aquatic Animal Health Services*
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INTRODUCTION

Human consumption of *aquatic animals* is at historically high levels with *aquatic animal products* crucial for human nutrition, livelihoods, food security and poverty alleviation. Recent projections indicate that, to satisfy the growing global demand for *aquatic animal* food, global aquatic food production will have to double by 2050 to supply 20% of the world's protein needs, with the majority coming from *aquaculture*. *Aquaculture* is recognised as the fastest-growing, food animal production sector in the world, with nearly 50% of the global supply of *aquatic animals* for human consumption now derived from *aquaculture*.

Disease is a major threat to *aquatic animal* production and has caused extensive impacts on production, livelihoods and the environment. The *risk* of future *disease outbreaks* will increase as production grows, species are domesticated and trade increases. New *diseases* will emerge, some with significant consequences.

Efforts to manage *aquatic animal* health (AAH) have not kept pace with the growing *risk*. The growth of *aquatic animal* production has been rapid, as has the diversification of species, new production methods and new locations. However, *aquatic animal* health systems have not evolved as rapidly. There is a need to strengthen the governance of *Aquatic Animal Health Services* (*AAHS*), keeping in mind the rapid changes occurring in *aquatic animal* health and production systems, in order to protect against *disease* threats.

More than one-third of the total volume of *aquatic animal* production is traded internationally. Because of the rapid growth in *aquaculture* worldwide, and the *disease risks* associated with increasingly globalised trade in live *aquatic animals* and their products, OIE activities and standards in the field of *aquatic animal* health and the sanitary safety of global trade are important and relevant to all regions of the world. Effective implementation of the OIE international standards will contribute to ensuring a sustainable sector that can provide a key source of high-quality animal protein for the growing human population.

Whatever the nature of current and future challenges to national AAHS, the central features of effective AAHS remain the same – they should be independent and objective in their activities, and decisions should be based on sound science and immune from undue political pressure. The quality of education, both initial and continuing, is an essential building block of effective AAHS. Use of the OIE *Tool for the Evaluation of Performance of Aquatic Animal Health Services* (OIE *PVS Tool – Aquatic*) is a key element in the OIE PVS Pathway. Following this pathway allows countries to support AAHS in determining their current level of performance, identifying gaps and weaknesses in their ability to comply with OIE international standards and forming a shared vision with interested parties (including the private sector) to establish priorities and secure the investments needed to carry out strategic initiatives. The overall objective is to improve governance of AAHS to enable them to contribute effectively towards achieving the priorities of national government and to improve animal health and *welfare* and human health globally.

Today, AAHS are increasingly working in collaboration with other government agencies in the context of the global 'One Health' initiative, which calls for effective policies and actions at the human/animal/environment interface. To this end, AAHS must not only broaden the focus of many traditional activities, such as *disease surveillance* programmes, but also implement more holistic approaches to address interactions between farmed and wild animal populations. Collaboration with agencies responsible for public health and the environment is a high priority and other government agencies may also be important partners of the AAHS.

In some countries, the *Veterinary Authority* is the *Competent Authority* for the AAHS and, in others, the responsibilities considered within the veterinary domain are shared by different authorities and/or Ministries. Appropriate legislation and good governance are required to support AAHS in complying with OIE requirements, including those for *disease* prevention, detection, reporting and control. To operate under the tenets of good governance, AAHS must have the capacity to align with Section 3 on the 'Quality of *Aquatic Animal Health Services*' of the OIE *Aquatic Code*[1]. Compliance with the standards in these chapters forms the basis of the AAHS capacity to implement the other technical provisions of the OIE *Codes* to reduce spread of *aquatic animal diseases*, including prevention and/or early detection, reporting and control measures. Such compliance is monitored by the OIE, on a voluntary basis, through the PVS Pathway.

[1] Principles of Section 3 of the OIE *Terrestrial Code* may also be relevant.

In the *international trade* of *aquatic animals* and *aquatic animal products*, the OIE promotes animal health and public health (as it relates to the prevention and control of zoonoses, including foodborne *diseases* of animal origin) by issuing harmonised sanitary standards for *international trade* and *disease* control, by working to improve the resources and legal framework of AAHS, and by helping Members to comply with the OIE standards, guidelines and recommendations, consistent with the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) of the World Trade Organization (WTO).

Under the WTO SPS Agreement, each WTO Member has the right to impose SPS measures to protect plant, animal and human life or health, but measures should be based on science and *risk analysis* and implemented transparently. For animal health and zoonoses, the OIE is recognised as the reference organisation for measures relating to *international trade* in animals and animal products (including *aquatic animals* and their products). The implementation of the OIE international standards, including those on the quality and evaluation of AAHS, is the best way to facilitate safe and fair *international trade*, as well as appropriate prevention and control of animal *diseases*, and *animal welfare*.

To address the rapidly changing *aquaculture* sector and the challenges posed, the AAHS should adopt an appropriate mandate and vision and provide services that respond to the needs and expectations of all stakeholders. This will entail stronger alliances and closer cooperation with national stakeholders, trading partners and national governmental counterparts, and relevant intergovernmental organisations.

In recognition of the importance of good governance of the AAHS, the OIE has developed the second edition of the OIE *PVS Tool – Aquatic* in 2021 to be used in evaluating the performance of national AAHS, whether those services are the responsibility of the *Veterinary Authority* or of another *Competent Authority*.

Scope of the PVS Evaluation

The OIE has developed the *PVS Tool* and *PVS Tool – Aquatic* for the sustainable improvement of national AAHS by enabling Member Countries to take ownership of their animal health system and to prioritise improvements.

A PVS Evaluation using the *PVS Tool – Aquatic* is undertaken at the request of a country as part of the PVS Pathway, to identify gaps and weaknesses in the ability of the AAHS to comply with OIE international standards in Member Countries, to share a common vision with stakeholders, and to establish priorities and carry out strategic initiatives. An external expert perspective can reveal gaps, inefficiencies and opportunities for innovation.

A PVS Evaluation covers the *aquatic animal* health domain. The *aquatic animal* health domain means all of the activities that are directly or indirectly related to *aquatic animals*, their products and by-products, which help to protect, maintain and improve the health and *welfare* of humans, including by means of the protection of *aquatic animal* health and *welfare*, and food safety. It covers the key steps of *aquatic animal* value chains,[2] such as *feed* production, farming, killing, processing, waste disposal, transport, import and export.[3] It comprises several cross-cutting or transversal elements that are the basic requirements for functioning AAHS. These include adequate human and financial resources, quality veterinary/*aquatic animal* health education, effective laboratory services, interaction with stakeholders and supporting legislation.

[2] Aquatic animals and their products are processed into food and aquatic animal waste through slaughter or harvest; consequently, aquatic animal products are traded, transported and consumed. The *One Health* concept reflects the need to integrate aquatic animal, human and environmental health issues, particularly in relation to the interface between aquatic animals and humans. Aquatic animal welfare is relevant in transport, production systems, killing and slaughter.

[3] For successful exports, a robust certification system must be able to confidently assert the integrity of the system at all points, to produce aquatic animals and aquatic animal products that can be traded safely, without unacceptable risks to importing countries in terms of aquatic animal and public health.

There are many sources of *disease* and other health *risks* within the *aquatic animal* health domain. Threats to the health of a country's *aquatic animals* and people are divided into:

- threats through insufficient measures to prevent, detect and control *aquatic animal diseases*, and the incorrect use of veterinary medicines;

- threats through in-country trade and movements of *aquatic animals* and *aquatic animal products*;

- threats through imports of *aquatic animals, aquatic animal products, feed*, and veterinary medicines.

OIE PVS *Tool – Aquatic*

The AAH domain is complex and all its various elements are synthesised into component parts for assessment and planning along the OIE PVS Pathway via the *PVS Tool – Aquatic*.

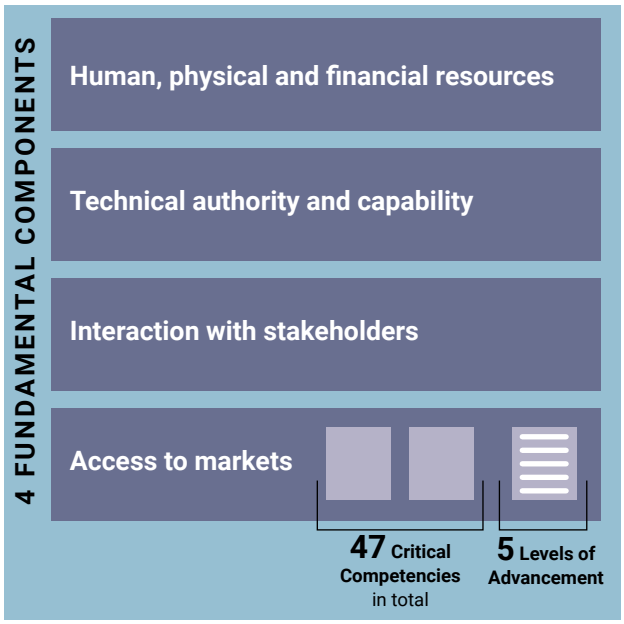
The *PVS Tool – Aquatic* has four Fundamental Components and 47 Critical Competencies. The four Fundamental Components are as follows:

1) the **human, physical and financial resources** to effectively plan, coordinate and implement activities within the AAH domain, covering all necessary elements and at all levels, in the national interest;

2) the **technical authority and capability** to address current and new veterinary and *aquatic animal* health issues based on scientific principles, including preparedness for and prevention, detection and control of *aquatic animal diseases*; addressing public health *risks,* including those from zoonoses, and in regard to food safety; and improving *aquatic animal welfare*;

3) the sustained **interaction with non-government stakeholders** to harness non-governmental expertise and support the growth and protection of *aquatic animal* production and markets in the country, based on stakeholders' needs; and

4) the ability to **access markets** by harmonising with existing international standards and demonstrating the overall integrity and transparency of the system, to inspire confidence in trading partners.



Applying the OIE PVS *Tool – Aquatic*

To establish the current level of performance, Critical Competencies (CCs), with five possible Levels of Advancement, are identified within each of the four Fundamental Components. A higher Level of Advancement assumes that the *Aquatic Animal Health Services* already comply with the preceding Levels (e.g. Level 3 assumes compliance with Level 2 criteria). For each CC, the OIE provides its PVS teams with suggested sources of verification, based on the OIE's extensive experience with countries following the PVS Pathway.

Section 3 of the *Aquatic Animal Health Code* (*Aquatic Code*) provides the OIE international standards on the quality requirements for AAHS and for the PVS evaluation. Relevant definitions from the glossary of the *Aquatic Code* may be found in the *PVS Tool* Glossary of Terms. The most important *Aquatic Code* references are quoted under each Critical Competency. Where an appropriate reference does not exist in the *Aquatic Code*, relevant references in the *Terrestrial Animal Health Code* are included.

Using the results

More than a diagnostic instrument, the OIE *PVS Tool – Aquatic* promotes a culture of raising awareness and continuous improvement, which can be employed according to the level of interest, priorities and commitment of the AAHS and stakeholders. The OIE *PVS Tool – Aquatic* helps to improve understanding by all sectors, including other administrations, of the Fundamental Components and Critical Competencies for effective performance and good governance of national AAHS. The results of a PVS Evaluation of the AAHS can also be used more proactively to establish strategic priorities, agree on necessary investments and make commitments to take recommended actions. The continuity of this process requires a true partnership between the public and private sectors. Leadership on the part of the public sector is a fundamental and critical determinant of success.

An OIE PVS Evaluation via the *PVS Tool – Aquatic* is also often expected to provide international benchmarks, and make comparisons **between** national AAHS, for example for the purposes of decision-making on trade. While PVS Evaluation does provide an indication of relative international performance, it is in this area that care must be taken, particularly in any attempt to benchmark national performance through a 'scorecard' of CC Levels of Advancement, especially if such CC Levels are viewed in isolation from their accompanying text and the full context of the PVS Evaluation report.

The benefits and outcomes of using the OIE *PVS Tool – Aquatic* include:

- an indication of overall performance for each of the four Fundamental Components and a relative performance rating within each of the Critical Competencies;
- a basis for comparing the performance of the AAHS with that of other relevant government services in the region or globally, to explore areas for cooperation or negotiation. It should be noted that OIE standards provide a framework for importing countries to conduct audits of exporting countries and, in particular, to check the compliance of exporting countries with OIE standards on the quality and evaluation of AAHS;
- a process for verifying compliance with OIE standards and for undertaking assessments of AAHS, performed by independent, OIE-accredited experts, under the auspices of the OIE;
- the fact that the report can be used to identify specific follow-up activities and to secure the investments needed to help improve compliance with the OIE standards for good governance.

Second edition of the OIE *PVS Tool – Aquatic*

To help countries and AAHS to address evolving challenges and priorities in *aquatic animal* and public health, some Critical Competencies have been modified in this, the second edition of the OIE *PVS Tool*. The modifications had two aims: first, the need to more clearly **categorise** and **define** the Critical Competencies so that the *PVS Tool – Aquatic* is more user-friendly. This included the aim of ensuring that those who are less familiar with the *PVS Tool – Aquatic* can still make good use of it, such as at the national level for PVS self-evaluation, or for nominees being trained as new PVS Team observers or trainee experts.

The new edition also improves **coverage**, with a clearer incorporation of contemporary aquatic animal health issues relating to antimicrobial resistance (AMR) and use (AMU), One Health approach and bio-threat reduction. The new edition also covers *biosecurity*, the implementation of standards for *disease* investigation and tracing, *aquatic animal product* markets (domestic trade), and public–private partnerships.

The PVS Pathway

The *PVS Tool – Aquatic* forms the fundamental methodological basis of the OIE's multi-stage PVS Pathway cycle of AAHS support, represented by the following cycle diagram:

An OIE PVS Evaluation using the *PVS Tool – Aquatic* is a mechanism to ensure full coverage of the AAH domain. Its primary purpose is to identify areas of relative strength and weakness **within** a national AAHS, against relevant international standards. The primary client of a PVS Evaluation is the targeted country's AAHS, not the OIE or other regional or international partners or donors. The objective of the PVS Evaluation report is to provide the targeted country's national AAHS with a form of self-awareness to guide the prioritisation of their policy, programme, resourcing and/or restructuring activities in line

The PVS Pathway Cycle includes four stages; Orientation, Evaluation, Planning and Targeted Support. The *PVS Tool – Aquatic* is the basis of PVS Pathway Orientation Training, PVS Evaluation and related activities/options, and PVS Gap Analysis and Strategic Planning support. Targeted support is more specific support for countries, provided by the OIE and based on PVS Pathway mission findings at the national, regional and global levels. Further details on the PVS Pathway Cycle are available at https://www.oie.int/en/what-we-offer/improving-veterinary-services/pvs-pathway/.

with international standards. A further planning and resourcing phase, based on such relative strengths, weaknesses and national priorities, can be undertaken via an OIE PVS Gap Analysis, with or without Strategic Planning support, developed within the target country, or with the assistance of external partners. In addition, the OIE has developed its own forms of PVS Targeted Support to assist countries in key areas, such as One Health collaboration, *aquatic animal* health and *welfare* legislation, laboratories, education and the training of OIE Focal Points.

GLOSSARY OF TERMS

Terms defined in the *Aquatic Animal Health Code* that are used in this publication are reprinted here for reference, as at 2021. Users are advised to refer to the latest version of the Glossary within the *Code* to ensure they are using the most up to date definitions).

ANTIMICROBIAL AGENT
means a naturally occurring, semi-synthetic or synthetic substance that at *in vivo* concentrations, exhibits antimicrobial activity (kill or inhibit the growth of microorganisms). Anthelmintics and substances classed as disinfectants or antiseptics are excluded from this definition.

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 amphibians, fish, molluscs or crustaceans for breeding, stocking or sale are raised or kept.

AQUATIC ANIMAL HEALTH PROFESSIONAL
means a person who, for the purposes of the *Aquatic Code*, is authorised by the *Competent Authority* to carry out certain designated tasks in a *territory* and has the appropriate qualifications and training to perform the designated tasks.

AQUATIC ANIMAL HEALTH SERVICES (AAHS)
means the governmental and non-governmental organisations that implement animal health and *welfare* measures and other standards and recommendations in the *Aquatic Code* in the territory. The *Aquatic Animal Health Services* are under the overall control and direction of the *Competent Authority*. Private sector organisations, *veterinarians* or *aquatic animal health professionals* are normally accredited or approved by the *Competent Authority* to deliver the delegated functions.

AQUATIC ANIMAL HEALTH STATUS
means the status of a country, *zone* or *compartment* with respect to a *disease* in accordance with the criteria listed in the relevant *disease*-specific chapter or Chapter 1.4. of the *Aquatic Code*.

AQUATIC ANIMAL PRODUCTS
means non-viable *aquatic animals*, parts of *aquatic animals*, or manufactured goods containing any material derived from *aquatic animals* that are intended for sale or trade.

AQUATIC ANIMAL WASTE
means entire carcasses of *aquatic animals*, parts of *aquatic animals*, or associated liquids which are intended for disposal.

AQUATIC ANIMALS
means all viable life stages (including *eggs* and *gametes*) of fish, molluscs, crustaceans and amphibians originating from *aquaculture establishments* or from the wild.

AQUATIC CODE
means the OIE *Aquatic Animal Health Code*.

AQUATIC MANUAL
means the OIE *Manual of Diagnostic Tests for Aquatic Animals*.

BASIC BIOSECURITY CONDITIONS
means a minimum set of conditions required to ensure *biosecurity* for a particular *disease*, in a country, *zone* or *compartment*, that should include:

a) compulsory *notification* of the *disease* or suspicion of the *disease* to the *Competent Authority*; and
b) an *early detection system*; and
c) requirements to prevent the introduction of the *pathogenic agent* into a *free country*, *zone* or *compartment*, or the spread within or from *infected zones* and *protection zones*, in accordance with the relevant *disease*-specific chapter.

BIOSECURITY
means a set of management and physical measures designed to mitigate the *risk* of introduction of *pathogenic agents* into, or spread within, or release from, *aquatic animal* populations.

BIOSECURITY PLAN

means a document that identifies potential pathways for the introduction of *pathogenic agents* into, or spread within, or release from, a *zone*, *compartment* or *aquaculture establishment* and describes the measures applied to mitigate the identified *risk*, in accordance with the recommendations in the *Aquatic Code*.

CASE

means an individual *aquatic animal* infected by a *pathogenic agent*, with or without clinical signs.

CASE DEFINITION

is a set of criteria used to distinguish a *case* animal or an *epidemiological unit* from a non-*case*.

CERTIFYING OFFICIAL

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

COMPARTMENT

means one or more *aquaculture establishments* under a common *biosecurity* management system containing an *aquatic animal* 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 must be clearly documented by the *Competent Authority(ies)*.

COMPETENT AUTHORITY

means the *Veterinary Authority* or other Governmental Authority of a Member Country having the responsibility and competence for ensuring or supervising the implementation of *aquatic animal* health and *welfare* measures, international health certification and other standards and recommendations in the *Aquatic Code* in the whole territory.

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*.

DISEASE

means clinical or non-clinical *infection* with one or more *pathogenic agents*.

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 by the *Aquatic Animal Health Services* 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 professionals* trained in recognising and reporting suspicions of *disease* occurrence;

c) ability of the *Aquatic Animal Health Services* to undertake rapid and effective *disease* investigation based on a national chain of command;

d) access by the *Aquatic Animal Health Services* to laboratories with the facilities for diagnosing and differentiating *listed diseases* and *emerging diseases*;

e) the legal obligation of private *veterinarians* or *aquatic animal health professionals* to report suspicions of *disease* occurrence to the *Competent Authority*.

EMERGING DISEASE

means a *disease*, other than *listed diseases*, which has a significant impact on *aquatic animal* or public health resulting from:

a) a change of known *pathogenic agent* or its spread to a new geographic area or species; or

b) a newly recognised or suspected *pathogenic agent*.

EPIDEMIOLOGICAL UNIT
means a group of animals that share approximately the same *risk* of exposure to a *pathogenic agent* with a defined location. This may be because they share a common aquatic environment (e.g. fish in a pond, caged fish in a lake), or because management practices make it likely that a *pathogenic agent* in one group of animals would quickly spread to other animals (e.g. all the ponds on a farm, all the ponds in a village system).

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

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 *pathogenic agent*, and, where feasible, of the carrying water. For *aquatic animals* of unknown susceptibility and those agreed not to be capable of acting as *vectors* of a *disease* of concern, decisions on *fallowing* should be based on a *risk assessment*.

FEED
means any material (single or multiple), whether processed, semi-processed or raw, as well as live organisms, which is intended to be fed directly to *aquatic animals*.

HAZARD
means a biological, chemical or physical agent in, or a condition of, an *aquatic animal* or *aquatic animal product* with the potential to cause an adverse effect on *aquatic animal* health or public health.

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

INFECTED ZONE
means a *zone* in which a *disease* has been diagnosed.

INFECTION
means the presence of a multiplying or otherwise developing or latent *pathogenic agent* in a host. This term is understood to include infestation where the *pathogenic agent* is a parasite in or on a host.

INTERNATIONAL AQUATIC ANIMAL HEALTH CERTIFICATE
means a certificate, issued in conformity with the provisions of Chapter 5.11., describing the *aquatic animal* health and/or public health requirements that should be fulfilled prior to export of commodity.

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

LISTED DISEASES
means *diseases* that are referred to in Chapter 1.3. of the *Aquatic Code* (Synonym: diseases listed by the OIE).

NOTIFICATION
means the procedure by which:

a) the *Competent Authority* informs the Headquarters,

b) the Headquarters inform *Competent Authorities* of Member Countries of the occurrence of a *disease* in accordance with the provisions of Chapter 1.1. of the *Aquatic Code*.

OUTBREAK
means an occurrence of one or more *cases* in an *epidemiological unit*.

PATHOGENIC AGENT
means an organism that causes or contributes to the development of a *disease*.

PROTECTION 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 *pathogenic agent* into a *free country* or *free zone*. These measures may include, but are not limited to, vaccination, movement control and an intensified degree of *surveillance*.

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 biological and economic consequences of an adverse event or effect to animal or human health.

RISK ANALYSIS
means the process composed of *hazard* identification, *risk assessment*, *risk management* and *risk communication*.

RISK ASSESSMENT
means the scientific evaluation of the likelihood and the biological and economic consequences of entry, establishment and spread of a *hazard*.

RISK COMMUNICATION
is the interactive exchange of information and opinions throughout the *risk analysis* process concerning *risk, risk*-related factors and *risk* perceptions among *risk* assessors, *risk* managers, *risk* communicators, the general public 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 a measure, such as those described in various chapters of the *Aquatic Code*, destined to protect *aquatic animal* or human health or life within the *territory* of the Member Country from *risks* arising from the entry, establishment and/or spread of a *hazard*.

SELF-DECLARATION OF FREEDOM FROM DISEASE
means declaration by the *Competent Authority* of the Member 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*. *[NOTE: The Member Country is encouraged to inform the OIE of its claimed status and the OIE may publish the claim but publication does not imply OIE endorsement of the claim.]*

STAMPING-OUT POLICY
means the carrying out under the authority of the *Competent Authority*, on confirmation of a *disease*, of preventive a*quatic 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* by direct or indirect contact of a kind likely to cause the transmission of the *pathogenic 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* 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*.

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.

SUSCEPTIBLE SPECIES
means species of *aquatic animals* that have been demonstrated as susceptible to *infection* with a specific *pathogenic agent*, in accordance with Chapter 1.5. of the *Aquatic Code*.

VETERINARIAN
means a person with appropriate education, registered or licensed by the relevant *veterinary statutory body* of a country to practise veterinary medicine/science in that country.

VETERINARY AUTHORITY
means the Governmental Authority of a Member Country, comprising *veterinarians*, other professionals and paraprofessionals, having the responsibility and competence for ensuring or supervising the implementation of *aquatic animal* health and *welfare* measures, *international aquatic animal health certification* and other standards and recommendations in the *Aquatic Code* in the whole *territory*.

VETERINARY STATUTORY BODY
means an autonomous authority regulating *veterinarians* and *veterinary paraprofessionals*.

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 an area in one or more countries containing an *aquatic animal* population with a specific *aquatic animal health status* with respect to a *disease*, in which *surveillance* and control measures and *basic biosecurity conditions* are applied. The *zone* should be defined by the *Competent Authority*.

Terms defined in the *Terrestrial Animal Health Code* that are used in this publication are reprinted here for reference, as at 2021. Users are advised to refer to the latest version of the Glossary within the *Code* to ensure they are using the most up to date definitions).

ANIMAL WELFARE
means the physical and mental state of an *animal* in relation to the conditions in which it lives and dies.

BORDER POST
means any airport, or any port, railway station or road check-point open to *international trade* of *commodities*, where import veterinary inspections can be performed.

LABORATORY
means a properly equipped institution staffed by technically competent personnel under the control of a specialist in veterinary diagnostic methods, who is responsible for the validity of the results. The *Veterinary Authority* approves and monitors such *laboratories* with regard to the diagnostic tests required for *international trade*.

MONITORING
means the intermittent performance and analysis of routine measurements and observations, aimed at detecting changes in the environment or health status of a *population*.

OFFICIAL VETERINARIAN
means a *veterinarian* authorised by the *Veterinary Authority* of the country to perform certain designated official tasks associated with animal health or public health and inspections of *commodities* and, when appropriate, to certify in accordance with Chapters 5.1. and 5.2. of the *Terrestrial Code*.

TERRESTRIAL CODE
means the OIE *Terrestrial Animal Health Code*.

TERRESTRIAL MANUAL
means the OIE *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals*.

VETERINARY LEGISLATION
means laws, regulations and all associated legal instruments that pertain to the veterinary domain.

VETERINARY PARAPROFESSIONAL
means a person who, for the purposes of the *Terrestrial Code*, is authorised by the *veterinary statutory body* to carry out certain designated tasks (dependent upon the category of *veterinary paraprofessional*) in a territory, and delegated to them under the responsibility and direction of a veterinarian. The tasks for each category of *veterinary paraprofessional* should be defined by the *veterinary statutory body* depending on qualifications and training, and in accordance with need.

VETERINARY SERVICES
means the governmental and non-governmental organisations that implement animal health and *welfare* measures and other standards and recommendations in the *Terrestrial Code* and the OIE *Aquatic Animal Health Code* in the territory. The *Veterinary Services* are under the overall control and direction of the *Veterinary Authority*. Private sector organisations, *veterinarians*, *veterinary paraprofessionals* or *aquatic animal health professionals* are normally accredited or approved by the *Veterinary Authority* to deliver the delegated functions.

CHAPTER I
HUMAN, PHYSICAL AND FINANCIAL RESOURCES

This Fundamental Component relates to institutional and financial sustainability, as evidenced by the level of human, physical and financial resources available and their efficient application.

CRITICAL COMPETENCIES:

I-1 PROFESSIONAL AND TECHNICAL STAFFING OF THE AQUATIC ANIMAL HEALTH SERVICES 20

I-2 COMPETENCIES AND EDUCATION OF VETERINARIANS OR AQUATIC ANIMAL HEALTH PROFESSIONALS, AND TECHNICAL PERSONNEL 22

I-3 CONTINUING EDUCATION (CE) 24

I-4 TECHNICAL INDEPENDENCE 25

I-5 PLANNING, SUSTAINABILITY AND MANAGEMENT OF POLICIES AND PROGRAMMES 26

I-6 COORDINATION CAPABILITY OF THE AQUATIC ANIMAL HEALTH SERVICES 27

I-7 PHYSICAL RESOURCES AND CAPITAL INVESTMENT 29

I-8 OPERATIONAL FUNDING 30

I-9 EMERGENCY FUNDING 31

***Aquatic Code* references:**[4]

Points 1–7, 9 and **14** of **Article 3.1.2.** on Fundamental principles of quality: Professional judgement/Independence/Impartiality/Integrity/Objectivity/Aquatic animal health legislation and regulations/General organisation/Procedures and standards/Human and financial resources.

***Terrestrial Code* references:**

Article 3.2.1. on General considerations.

Article 3.2.2. on Fundamental operating principles.

Article 3.2.3. on Policy and management.

Article 3.2.4. on Personnel and resources.

Article 3.2.5. on The veterinary profession.

Article 3.2.6. on Stakeholders.

Article 3.2.10. on Laboratories.

Article 3.2.12. on International trade.

Chapter 3.5. on Communication.

***Terrestrial Manual* reference:**

Chapter 1.1.1. on Management of veterinary diagnostic laboratories.

[4] Disclaimer: All OIE *Aquatic Code* and *Terrestrial Code* References are based on the 2021 versions of the *Codes*. Users are advised to refer to the latest version of the (available online), and they are invited to contact the PVS Pathway Secretariat if they require further information relating to references that may have changed.

I-1. PROFESSIONAL AND TECHNICAL STAFFING OF THE AQUATIC ANIMAL HEALTH SERVICES (AAHS)

DEFINITION	LEVELS OF ADVANCEMENT
The appropriate staffing of the AAHS to allow for veterinary and *aquatic animal health professional* functions to be undertaken efficiently and effectively. **A. *Veterinarians* or *aquatic animal health professionals* (university qualification)**	**1.** The majority of positions requiring veterinary and *aquatic animal health professional* skills are not occupied by appropriately qualified personnel.
	2. The majority of positions requiring veterinary and *aquatic animal health professional* skills are occupied by appropriately qualified personnel at central and state/provincial levels.
	3. The majority of positions requiring veterinary and *aquatic animal health professional* skills are occupied by appropriately qualified personnel at local (field) levels.
	4. There is a systematic approach to defining job descriptions and formal, merit-based appointment and promotion procedures for *veterinarians* and *aquatic animal health professionals*.
	5. There are effective procedures for formal performance assessment and performance management of *veterinarians* and *aquatic animal health professionals*.

***Aquatic Code* references:**

Points 1–7, **9** and **14** of **Article 3.1.2.** on Fundamental principles of quality: Professional judgement/Independence/Impartiality/Integrity/Objectivity/Aquatic animal health legislation and regulations/General organisation/Procedures and standards/Human and financial resources.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.4. on Personnel and resources.

Article 3.2.5. on The veterinary profession.

Article 3.2.10. on Laboratories.

I-1. PROFESSIONAL AND TECHNICAL STAFFING OF THE AQUATIC ANIMAL HEALTH SERVICES (AAHS)

DEFINITION	LEVELS OF ADVANCEMENT
B. *Aquatic animal* health technical personnel, including *veterinary paraprofessionals* The appropriate level of staffing of the AAHS to enable *aquatic animal health professional* functions to be undertaken efficiently and effectively. This covers *aquatic animal* health technical personnel trained at dedicated educational institutions with formal qualifications which are recognised by the government or the *Veterinary Statutory Body* or other official body for veterinary specialisation.	**1.** The majority of positions requiring *aquatic animal* health technical skills are not occupied by personnel holding appropriate qualifications.
	2. Some positions requiring technical skills are occupied by personnel holding appropriate qualifications. There is little or no veterinary or *aquatic animal health professional* (university-level qualification) supervision.
	3. The majority of positions requiring technical skills are occupied by personnel holding appropriate qualifications. There is a variable level of veterinary or *aquatic animal health professional* (university-level qualification) supervision.
	4. The majority of technical positions are effectively supervised on a regular basis by *veterinarians* or *aquatic animal health professionals* (university-level qualification).
	5. There are effective management procedures for formal appointment and promotion, as well as performance assessment and performance management of technical positions (non-university-level qualification).

***Aquatic Code* references:**

Points 1–5, **7** and **14** of **Article 3.1.2.** on Fundamental principles of quality: Professional judgement/Independence/Impartiality/Integrity/Objectivity/General organisation/Human and financial resources.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.4. on Personnel and resources.

Article 3.2.5. on The veterinary profession.

Article 3.2.10. on Laboratories.

I-2. COMPETENCIES AND EDUCATION OF VETERINARIANS OR AQUATIC ANIMAL HEALTH PROFESSIONALS, AND TECHNICAL PERSONNEL

DEFINITION	LEVELS OF ADVANCEMENT
The capability of the AAHS to effectively carry out their veterinary or *aquatic animal health professional* practices and technical functions, as indicated by the level and quality of the qualifications of their personnel in veterinary or *aquatic animal health professional* positions. **A. *Veterinarians* and *aquatic animal health professionals* (university qualification) including the OIE Day 1 competencies for *veterinarians*** This references the OIE recommendations on the Competencies of Graduating *Veterinarians* (Day 1 Graduates) and the OIE Guidelines on Veterinary Education Core Curiculum.[5] Specific competencies in *aquatic animal* health should also be considered.	**1.** The knowledge, skills and practices of *veterinarians* or *aquatic animal health professionals* are of a variable standard that allow for elementary clinical and administrative activities of the AAHS. **2.** The knowledge, skills and practices of *veterinarians* or *aquatic animal health professionals* are of a uniform standard sufficient for accurate and appropriate clinical and administrative activities of the AAHS. **3.** The knowledge, skills and practices of *veterinarians* or *aquatic animal health professionals* are sufficient for all professional/technical activities of the AAHS (e.g. *surveillance*, treatment and control of *aquatic animal disease*, including conditions of public health significance). **4.** The knowledge, skills and practices of *veterinarians* or *aquatic animal health professionals* are sufficient for specialised activities (e.g. higher-level epidemiological analysis, *disease* modelling, *animal welfare* science) as may be needed by the AAHS, supported by post-graduate-level training. **5.** The knowledge, skills and practices of *veterinarians* or *aquatic animal health professionals* are subject to regular updating, and are internationally recognised, for example through formal evaluation and/or the granting of international equivalence with other recognised veterinary or AAH membership qualifications.

[5] Reference can be made to the *Recommendations on Competencies of graduating veterinarians ('Day 1 graduates')* to assure National Veterinary Services of quality and the *OIE Guidelines on Veterinary Education Core Curriculum* both available on the OIE website at https://www.oie.int/en/what-we-offer/improving-veterinary-services/pvs-pathway/targeted-support/veterinary-and-veterinary-paraprofessional-education/

***Aquatic Code* references:**

Points 1–5, 7 and **14** of **Article 3.1.2.** on Fundamental principles of quality: Professional judgement/Independence/Impartiality/Integrity/Objectivity/General organisation/Human and financial resources.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.4. on Personnel and resources.

Article 3.2.5. on The veterinary profession.

Article 3.2.10. on Laboratories.

I-2. COMPETENCIES AND EDUCATION OF VETERINARIANS OR AQUATIC ANIMAL HEALTH PROFESSIONALS, AND TECHNICAL PERSONNEL	
DEFINITION	**LEVELS OF ADVANCEMENT**
B. *Aquatic animal* health technical personnel, including *veterinary paraprofessionals*[6]	**1.** Positions requiring technical personnel skills are generally occupied by those having no formal training or qualifications from dedicated educational institutions.
	2. The training and qualifications of those in positions requiring technical personnel skills are of a variable standard and allow for the development of only basic competencies.
	3. The training and qualifications of technical personnel are of a fairly uniform standard that allows the development of some specific competencies (e.g. supervised treatment administration on farms, *aquatic animal product* hygiene control, basic *laboratory* tests).
	4. The training and qualifications of technical personnel are of a uniform standard that allows the development of more advanced competencies (e.g. tissue sample collection on farms, supervised aquatic *animal product* inspection, complex *laboratory* testing).
	5. The training and qualifications of technical personnel are of a uniform standard and are subject to regular evaluation and/or updating.

[6] Reference can be made to the *OIE Competency Guidelines for Veterinary Paraprofessionals* (2018) and *OIE Curricula Guidelines for Veterinary Paraprofessionals* (2019) available on the OIE website at https://www.oie.int/en/what-we-offer/improving-veterinary-services/pvs-pathway/targeted-support/veterinary-and-veterinary-paraprofessional-education/

***Aquatic Code* references:**

Points 1–5, 7 and **14** of **Article 3.1.2.** on Fundamental principles of quality: Professional judgement/Independence/Impartiality/Integrity/Objectivity/General organisation/Human and financial resources.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.4. on Personnel and resources.

Article 3.2.5. on The veterinary profession.

Article 3.2.10. on Laboratories.

I-3. CONTINUING EDUCATION (CE)[7]	
DEFINITION	**LEVELS OF ADVANCEMENT**
The capability of the AAHS to maintain, update and improve knowledge, attitudes and skills of their personnel, through an ongoing staff training and development programme assessed on a regular basis for relevance and targeted skills development.	**1.** The AAHS have no access to veterinary, professional or technical CE.
	2. The AAHS have access to CE (internal and/or external training and development programmes) on an irregular basis but it does not take needs into account, or new information, or understanding.
	3. The AAHS have access to CE that is reviewed and sometimes updated, but it is implemented only for some categories of the relevant personnel.
	4. The AAHS have access to CE that is reviewed annually and updated as necessary, and is implemented for all categories of the relevant personnel.
	5. The AAHS have up-to-date CE that is implemented or is a requirement for all relevant personnel and is subject to dedicated planning and regular evaluation of effectiveness.

[7] Continuing education includes continuous professional development (CPD) for veterinary or aquatic animal health professional and other technical personnel.

***Aquatic Code* references:**

Points 1, 7 and **14** of **Article 3.1.2.** on Fundamental principles of quality: Professional judgement/General organisation/Human and financial resources.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.4. on Personnel and resources.

Article 3.2.6. on Stakeholders.

I-4. TECHNICAL INDEPENDENCE	
DEFINITION	**LEVELS OF ADVANCEMENT**
The capability of the AAHS to carry out their duties with autonomy and without undue commercial, financial, hierarchical and political influences that may affect technical decisions in a manner contrary to the provisions of the OIE (and of the WTO SPS Agreement, where applicable).	**1.** The technical decisions made by the AAHS are generally not based on scientific considerations.
	2. The technical decisions consider the scientific evidence but are routinely modified to conform to non-scientific considerations.
	3. The technical decisions are based on scientific evidence but are subject to review and possible modification based on non-scientific considerations.
	4. The technical decisions are made and generally implemented in accordance with the country's OIE obligations (and with the country's WTO SPS Agreement obligations, where applicable).
	5. The technical decisions are based on a high level of scientific evidence, which is both nationally relevant and internationally respected, and are not unduly changed to meet non-scientific considerations.

***Aquatic Code* reference:**

Point 2 of **Article 3.1.2.** on Fundamental principles of quality: Independence.

I-5. PLANNING, SUSTAINABILITY AND MANAGEMENT OF POLICIES AND PROGRAMMES	
DEFINITION	**LEVELS OF ADVANCEMENT**
The capability of the AAHS leadership and organisation to develop, document and sustain strategic policies and programmes, and to report on, review and evolve them, as appropriate over time.	**1.** Policies and programmes are insufficiently developed and documented. Substantial changes to the organisational structure and/or leadership of the public sector of the AAHS frequently occur (e.g. annually), resulting in a lack of sustainability of policies and programmes.
	2. Some basic policy and programme development and documentation exist, with some reporting on implementation. Sustainability of policies and programmes is negatively impacted by changes in the political leadership or other changes affecting the structure and leadership of the AAHS.
	3. There is well-developed and stable policy and programme documentation covering most relevant areas. Reports on programme implementation are available. Sustainability of policies and programmes is generally maintained during changes in the political leadership and/or changes to the structure and leadership of the AAHS.
	4. Policies or programmes are sustained, but also reviewed (using data collection and analysis) and updated appropriately over time, through formal national strategic planning cycles, to improve effectiveness and address emerging concerns. Planning cycles continue despite changes in the political leadership and/or changes to the structure and leadership of the AAHS.
	5. Effective policies and programmes are sustained over time and the structure and leadership of the AAHS is strong and stable. Modifications to strategic and operational planning are based on a robust evaluation or audit process, using evidence, to support the continual improvement of policies and programmes over time.

***Terrestrial Code* reference:**

Article 3.2.3. on Policy and management.

I-6. COORDINATION CAPABILITY OF THE AAHS	
DEFINITION	**LEVELS OF ADVANCEMENT**
A. Internal coordination (chain of command) The capability of the *Competent Authority* to coordinate its mandated activities with a clear chain of command, from the central level (the Chief Veterinary Officer or equivalent) to the field level of the AAHS, as relevant to the OIE *Aquatic Code* (i.e. *surveillance, disease* control, eradication, food, emergency preparedness and response).	**1.** There is no formal internal coordination and the chain of command is not clear.
	2. There are internal coordination mechanisms for some activities, but the chain of command is not clear.
	3. There are internal coordination mechanisms and a clear and effective chain of command for some activities, such as export certification, border control and/or emergency response.
	4. There are formal, internal coordination mechanisms and a clear and effective chain of command for most activities, including *surveillance* (and reporting) and *disease* control programmes.
	5. There are formal, documented, internal coordination mechanisms and a clear and effective chain of command for all activities, and these are periodically reviewed/audited and updated to re-define roles and optimise efficiency, as necessary.

***Aquatic Code* references:**

Points 6, 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

***Terrestrial Code* references:**

Article 3.2.1. on General considerations.

Article 3.2.3. on Policy and management.

Article 3.2.5. on The veterinary profession.

Article 3.2.6. on Stakeholders.

I-6. COORDINATION CAPABILITY OF THE AAHS	
DEFINITION	**LEVELS OF ADVANCEMENT**
B. External coordination (including the One Health approach) The capability of the *Competent Authority* to coordinate its resources and activities at all levels with other relevant government authorities with responsibilities within the AAH domain,[8] in order to implement all national activities relevant to the OIE *Aquatic Code*, especially those not under the direct line authority of the Chief Veterinary Officer (or equivalent). Relevant authorities include other Ministries and *Competent Authorities*, such as government partners in public health (e.g. zoonoses, food safety, drug regulation and antimicrobial resistance), environment (e.g. wildlife health), Customs and border police (e.g. border security), Defence/Intelligence (e.g. bio-threats[9]), or municipalities/ local councils.	**1.** There is no external coordination with other government authorities. **2.** There are informal external coordination mechanisms for some activities at national level, but the procedures are not clear and/ or external coordination occurs irregularly. **3.** There are formal, external coordination mechanisms with clearly described procedures or agreements (e.g. Memoranda of Understanding) for some activities and/or sectors at the national level. **4.** There are formal external coordination mechanisms with clearly described procedures or agreements at the national level for most activities (such as for One Health), and these are uniformly implemented throughout the country, including at state/provincial level. **5.** There are national external coordination mechanisms for all activities, from national to field, and these are periodically reviewed and updated to re-clarify roles and optimise efficiency.

[8] See definition (Introduction).
[9] Recommended Reading: *OIE Biological Threats Reduction Strategy* 2015 at https://www.oie.int/en/what-we-do/global-initiatives/biological-threat-reduction/.

***Aquatic Code* references:**

Points 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: General organisation/Procedures and standards.

***Terrestrial Code* references:**

Article 3.2.1. on General considerations.
Article 3.2.3. on Policy and management.
Article 3.2.4. on Personnel and resources.
Article 3.2.5. on The veterinary profession.
Article 3.2.6. on Stakeholders.
Article 3.2.12. on International trade.

I-7. PHYSICAL RESOURCES AND CAPITAL INVESTMENT	
DEFINITION	**LEVELS OF ADVANCEMENT**
The access of the AAHS to functional and well-maintained resources, including buildings, transport, information technology (e.g. Internet access), cold chains, and other necessary equipment or structures. This includes whether major capital investment is available.	**1.** The AAHS have no or unsuitable physical resources at almost all levels, and maintenance of existing infrastructure is poor or non-existent.
	2. The AAHS have suitable physical resources at the national (central) level and at some regional levels, and maintenance and replacement of obsolete items occur only occasionally.
	3. The AAHS have suitable physical resources at national, regional and some state/provincial levels, but maintenance, as well as replacement of obsolete items, occurs rarely.
	4. The AAHS have suitable physical resources at all levels and these are regularly maintained. Major capital investments occur occasionally to improve the AAHS operational infrastructure over time.
	5. The AAHS have suitable physical resources at all levels (national, state/provincial and local) and these are regularly maintained and updated as more advanced items become available. Major capital investments occur regularly to improve the AAHS operational capability and infrastructure.

***Terrestrial Code* references:**

Article 3.2.2. on Fundamental operating principles.

Article 3.2.3. on Policy and management.

Article 3.2.4. on Personnel and resources.

Article 3.2.5. on The veterinary profession.

Article 3.2.6. on Stakeholders.

Article 3.2.10. on Laboratories.

Chapter 3.5. on Communication.

I-8. OPERATIONAL FUNDING	
DEFINITION	**LEVELS OF ADVANCEMENT**
The ability of the AAHS to access financial resources adequate for their planned and continued activities (e.g. salaries, contracts, fuel, vaccines, diagnostic reagents, personal protective equipment, per diem or allowances for field work).	**1.** Operational funding for the AAHS is neither stable nor clearly defined but depends on the irregular allocation of resources.
	2. Operational funding for the AAHS is clearly defined and regular but is inadequate for their required baseline operations (i.e. *disease surveillance, disease* control and/or public health).
	3. Operational funding for the AAHS is clearly defined and regular, and is adequate for their baseline operations, but there is no provision for new or expanded operations.
	4. Operational funding for new or expanded operations is on a case-by-case basis, and not always based on *risk analysis* and/or cost–benefit analysis.
	5. Operational funding for all aspects of AAHS activities is adequate. All funding, including for new or expanded operations, is provided via a transparent process that allows technical independence, based on *risk analysis* and/or cost–benefit analysis.

***Aquatic Code* references:**

Points 6 and **14** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/Human and financial resources.

***Terrestrial Code* references:**

Article 3.2.4. on Personnel and resources.

I-9. EMERGENCY FUNDING	
DEFINITION	**LEVELS OF ADVANCEMENT**
The capability of the AAHS to access extraordinary financial resources in order to respond to emergency situations or emerging *aquatic animal* health issues, as measured by the ease with which contingency and related funding (e.g. arrangements for compensation to producers in emergency situations, disposal of dead animals, etc.) can rapidly be made available when required.	**1.** No emergency funding arrangements exist.
	2. Emergency funding arrangements with limited resources have been established, but these are inadequate for likely emergency situations (including newly emerging issues).
	3. Emergency funding arrangements with limited resources have been established; additional resources may be approved but approval is through a political process.
	4. Emergency funding arrangements with adequate resources have been established; their provision must be agreed through a non-political process on a case-by-case basis.
	5. Emergency funding arrangements with adequate resources have been established and their rules of operation documented and agreed with stakeholders.

***Aquatic Code* references:**

Points 6 and 14 of **Article 3.1.2. o**n Fundamental principles of quality: Aquatic animal health legislation and regulations/ Human and financial resources.

***Terrestrial Code* references:**

Article 3.2.4. on Personnel and resources.

***Terrestrial Manual* reference:**

Chapter 1.1.1. on Management of veterinary diagnostic laboratories.

CHAPTER II
TECHNICAL AUTHORITY AND CAPABILITY

This Fundamental Component relates to the authority and capability of the AAHS to develop and apply *sanitary measures* and science-based procedures supporting those measures.

For relevant sections of this chapter, the Critical Competency includes collaboration with relevant authorities, including other Ministries and *Competent Authorities*, national agencies and decentralised institutions that share authority or have a mutual interest in relevant areas, e.g. food safety, veterinary medicines and biologicals.

CRITICAL COMPETENCIES:

II-1 LABORATORY DIAGNOSIS **35**

II-2 RISK ANALYSIS AND EPIDEMIOLOGY **38**

II-3 QUARANTINE AND BORDER SECURITY **39**

II-4 SURVEILLANCE AND EARLY DETECTION **40**

II-5 EMERGENCY PREPAREDNESS AND RESPONSE **42**

II-6 DISEASE PREVENTION, CONTROL AND ERADICATION **43**

II-7 AQUATIC ANIMAL PRODUCTION FOOD SAFETY **45**

II-8 VETERINARY MEDICINES AND BIOLOGICALS FOR AQUATIC ANIMALS **47**

II-9 ANTIMICROBIAL RESISTANCE (AMR) AND ANTIMICROBIAL USE (AMU) **48**

II-10 RESIDUE TESTING, MONITORING AND MANAGEMENT **49**

II-11 AQUATIC ANIMAL FEED SAFETY **50**

II-12 IDENTIFICATION, TRACEABILITY AND MOVEMENT CONTROL **51**

II-13 WELFARE OF FARMED FISH **53**

***Aquatic Code* references:**

Chapter 1.4. on Aquatic animal health surveillance.

Section 2. on Risk analysis.

Points 6, 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

Chapter 4.1. on Biosecurity for aquaculture establishments.

Chapter 4.4. on Disinfection of aquaculture establishments and equipment.

Chapter 4.5. on Recommendations for surface disinfection of salmonid eggs.

Chapter 4.6. on Contingency planning.

Chapter 4.7. on Fallowing in aquaculture.

Chapter 4.8. on Handling, disposal and treatment of aquatic animal waste.

Chapter 4.9. on Control of pathogenic agents in aquatic animal feed.

Section 5. on Trade measures, importation/exportation procedures and health certification.

Section 6. on Antimicrobial use in aquatic animals.

Section 7. on Welfare of farmed fish.

***Terrestrial Code* references:**

Chapter 2.2. on Criteria applied by the OIE for assessing the safety of commodities.

Article 3.2.3. on Policy and management.

Article 3.2.4. on Personnel and resources.

Article 3.2.7. on Animal Health.

Article 3.2.8. on Animal production food safety.

Article 3.2.9. on Veterinary medicinal products.

Article 3.2.10. on Laboratories.

Article 3.2.11. on Animal welfare.

Article 3.2.12. on International trade.

Article 3.4.12. on Human food production chain.

Chapter 6.2. on The role of Veterinary Services in food safety systems.

Chapter 6.3. on Control of biological hazards of animal health and public health importance through ante- and post-mortem meat inspection.

Chapter 6.7. on Introduction to the recommendations for controlling antimicrobial resistance.

Chapter 6.8. on Harmonisation of national antimicrobial resistance surveillance and monitoring programmes.

Chapter 6.9. on Monitoring of the quantities and usage patterns of antimicrobial agents used in food-producing animals.

Chapter 6.10. on Responsible and prudent use of antimicrobial agents in veterinary medicine.

Chapter 6.11. on Risk analysis for antimicrobial resistance arising from the use of antimicrobial agents in animals.

References to *Codex Alimentarius Commission Standards:*

Code of Hygienic Practice for Meat (**CAC/RCP 58-2005**).

Code of Hygienic Practice for Milk and Milk Products (**CAC/RCP/ 57-2004**).

General Principles of Food Hygiene (**CAC/RCP 1-1969; amended 1999. Revisions 1997 and 2003**).

Guidelines for Risk Analysis of Foodborne Antimicrobial Resistance (**CAC/GL 77-2011**).

Code of Practice to Minimize and Contain Antimicrobial Resistance (**CAC/RCP 61-2005**).

Guidelines for the Design and Implementation of National Regulatory Food Safety Assurance Programmes Associated with the Use of Veterinary Drugs in Food Producing Animals (**CAC/GL 71-2009**).

Glossary of Terms and Definitions (Residues of Veterinary Drugs in Foods) (**CAC/MISC 5-1993**).

Maximum Residue Limits (MRLs) and Risk Management Recommendations (RMRs) for Residues of Veterinary Drugs in Foods (**CAC/MRL 2**).

General Standard for Contaminants and Toxins in Food and Feed (**CODEX STAN 193-1995**).

Code of Practice Concerning Source Directed Measures to Reduce Contamination of Foods with Chemicals (**CAC/RCP 49-2001**).

Code of Practice for Fish and Fishery Products (**CAC/RCP 52-2003**)

***Aquatic Manual* references:**

Chapters 1.1.1. to 1.1.2. on Quality management in veterinary testing laboratories/Principles and methods of validation of diagnostic assays for infectious diseases.

Part 2. on Recommendations applicable to specific diseases.

Part 3. On OIE expertise.

***Terrestrial Manual* references:**

Chapters 1.1.1. to 1.1.7. on Management of veterinary diagnostic laboratories/Collection, submission and storage of diagnostic specimens/Transport of biological materials/Biosafety and biosecurity: Standards for managing biological risk in the veterinary laboratory and animal facilities/Quality management in veterinary laboratories/Principles and methods of validation of diagnostic assays for infectious diseases/Standards for high throughput sequencing, bioinformatics and computational genomics.

Chapter 2.1.3. on Managing biorisk: examples of aligning risk management strategies with assessed biorisks.

Section 2.2. on Validation of diagnostic tests.

II-1. LABORATORY DIAGNOSIS

DEFINITION	LEVELS OF ADVANCEMENT
The authority and capability of the AAHS to effectively and efficiently use accurate *laboratory* diagnosis to support their aquatic animal and public health activities. **A. Access to *laboratory* diagnosis** The authority and capability of the AAHS to have access to *laboratory diagnosis* to identify and record *pathogenic agents*, including those relevant for public health, that can adversely affect *aquatic animals* and *aquatic animal products*.	**1.** *Disease* diagnosis is almost always conducted by clinical means only, with no access to or little use of a *laboratory* to obtain a correct diagnosis.
	2. For major *aquatic animal diseases* of national economic importance or potential zoonotic importance, and for the food safety of *aquatic animal products*, the AAHS have access to and use a *laboratory* to obtain a correct diagnosis.
	3. For *aquatic animal diseases* (and potential zoonoses) present in the country, and for *feed* safety and veterinary AMR *surveillance*, the AAHS have access to and use a *laboratory* to obtain a correct diagnosis.
	4. For *aquatic animal diseases* of economic or zoonotic importance not present in the country, but known to exist in the region and/or that could enter the country, the AAHS have access to and use a *laboratory* to obtain a correct diagnosis.
	5. In the case of *emerging diseases* in the region or worldwide, the AAHS have access to and use a network of national or international reference *laboratories* (e.g. an OIE or FAO Reference *Laboratory*) to obtain a correct diagnosis.

***Aquatic Code* reference:**

Point 9 of Article 3.1.2. on Fundamental principles of quality: Procedures and standards.

***Aquatic Manual* references:**

Chapters 1.1.1. to **1.1.2.** on Quality management in veterinary testing laboratories/Principles and methods of validation of diagnostic assays for infectious diseases.

Part 2. on Recommendations applicable to specific *diseases*.

Part 3. On OIE *expertise*.

***Terrestrial Code* references:**

Article 3.2.10. on Laboratories.

***Terrestrial Manual* references:**

Chapters 1.1.1. to **1.1.6.** on Management of veterinary diagnostic laboratories/Collection, submission and storage of diagnostic specimens/Transport of biological materials/Biosafety and biosecurity: Standards for managing biological risk in the veterinary laboratory and animal facilities/Quality management in veterinary laboratories/Principles and methods of validation of diagnostic assays for infectious diseases.

Section 2.2. on Validation of diagnostic tests.

II-1. LABORATORY DIAGNOSIS	
DEFINITION	**LEVELS OF ADVANCEMENT**
B. Suitability of the national *laboratory* system The sustainability, effectiveness, safety[10] and efficiency of the national (public and private) *laboratory* system (or network), including infrastructure, equipment, maintenance, consumables, personnel and sample throughput, to service the needs of the AAHS.	**1.** The national *laboratory* system does not meet the needs of the AAHS.
	2. The national *laboratory* system partially meets the needs of the AAHS, but is not sustainable, as the management and maintenance of resources and infrastructure are ineffective and/or inefficient. *Laboratory* biosafety and *biosecurity* measures do not exist or are very limited.
	3. The national *laboratory* system generally meets the needs of the AAHS. Resources and organisation are managed effectively and efficiently, but funding is insufficient for a sustainable system, and limits throughput. Some *laboratory* biosafety and *biosecurity* measures are in place.
	4. The national *laboratory* system generally meets the needs of the AAHS, including for *laboratory* biosafety and *biosecurity*. There is sufficient sample throughput across the range of *laboratory* testing requirements. Occasionally, it is limited by delayed investment in certain aspects (e.g. personnel, maintenance or consumables).
	5. The national *laboratory* system meets the needs of the AAHS, has appropriate levels of *laboratory* biosafety and *biosecurity*, and is efficient and sustainable with a good throughput of samples. The *laboratory* system is regularly reviewed, audited and updated as necessary.

[10] Recommended Reading: *OIE Biological Threats Reduction Strategy 2015* at https://www.oie.int/en/what-we-do/global-initiatives/biological-threat-reduction/.

***Aquatic Code* reference:**

Point 9 of **Article 3.1.2.** on Fundamental principles of quality: Procedures and standards.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.10. on Laboratories.

***Terrestrial Manual* references:**

Chapters 1.1.1. to **1.1.7. o**n Management of veterinary diagnostic laboratories/ Collection, submission and storage of diagnostic specimens/Transport of biological materials/Biosafety and biosecurity: Standards for managing biological risk in the veterinary laboratory and animal facilities/Quality management in veterinary laboratories/Principles and methods of validation of diagnostic assays for infectious diseases/Standards for high throughput sequencing, bioinformatics and computational genomics.

Chapter 2.1.3. on **Managing biorisk:** examples of aligning risk management strategies with assessed biorisks.

II-1. LABORATORY DIAGNOSIS	
DEFINITION	**LEVELS OF ADVANCEMENT**
C. *Laboratory* quality management systems (QMS) The quality and reliability of *laboratory* testing that services the public-sector AAHS, as assessed using formal QMS, e.g. having a dedicated quality manager and quality manual. This includes, but is not limited to, attainment of ISO 17025 accreditation[11] and participation in proficiency-testing programmes.	**1.** No *laboratories* used by the public-sector AAHS are using formal QMS.
	2. One or more *laboratories* servicing the public-sector AAHS, including the major national *aquatic animal* health reference *laboratory,* are using formal QMS.
	3. Most major *laboratories* servicing the public-sector AAHS are using formal QMS.
	4. All the *laboratories* servicing the public-sector AAHS are using formal QMS, with regular use of multi-*laboratory* proficiency-testing programmes.
	5. All the *laboratories* servicing the public-sector AAHS are using formal QMS systems, which are regularly assessed via national, regional or international proficiency-testing programmes.

[11] Recommended reading: *ISO 17025 specifications* at www.iso.org/standard/39883.html and www.iso.org/standard/66912.html.

***Aquatic Code* reference:**

Point 9 of **Article 3.1.2.** on Fundamental principles of quality: Procedures and standards.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.10. on Laboratories.

***Terrestrial Manual* references:**

Chapter 1.1.5. on Quality management in veterinary testing laboratories.

Chapter 1.1.6. on Principles and methods of validation of diagnostic assays for infectious diseases.

Section 2.2. on Validation of diagnostic tests.

II-2. RISK ANALYSIS AND EPIDEMIOLOGY	
DEFINITION	**LEVELS OF ADVANCEMENT**
The authority and capability of the AAHS to base their *risk management* and *risk communication* measures on *risk assessment*, incorporating sound epidemiological principles.	**1.** *Risk management* and *risk communication* measures are not usually supported by *risk assessment*.
	2. The AAHS compile and maintain data but do not have the capability to carry out *risk analysis*. Some *risk management* and *risk communication* measures are based on *risk assessment* and some epidemiological principles.
	3. The AAHS compile and maintain data, and have the policy and capability to carry out *risk analysis*, incorporating epidemiological principles. The majority of *risk management* and *risk communication* measures are based on *risk assessment*.
	4. The AAHS conduct *risk analysis* in compliance with the relevant OIE standards and sound epidemiological principles and base their *risk management* and *risk communication* measures on the outcomes of *risk assessment*. There is a legislative basis (e.g. legal instrument) that supports the use of *risk analysis*.
	5. The AAHS are consistent and transparent in basing *aquatic animal* health and *sanitary measures* on *risk assessment* and best practice epidemiology, and in communicating and/or publishing their scientific procedures and outcomes internationally.

***Aquatic Code* reference:**

Article 4.1.8. on Risk analysis.

Section 2. on Risk analysis.

II-3. QUARANTINE AND BORDER SECURITY	
DEFINITION	**LEVELS OF ADVANCEMENT**
The authority and capability of the AAHS to prevent the entry and spread of *diseases* and other *hazards* of *aquatic animals*, *aquatic animal products* and veterinary products into their country.	**1.** The AAHS cannot apply any type of *quarantine* or border security procedures for *aquatic animals*, *aquatic animal products* or veterinary products with their neighbouring countries or trading partners.
	2. The AAHS can establish and apply minimal *quarantine* and border security procedures, or the AAHS can only apply *quarantine* and border security procedures effectively at some official entry points via *border posts*.
	3. The AAHS can establish and apply *quarantine* and border security procedures based on import protocols and international standards at all official entry points via *border posts*, but the procedures do not systematically address illegal activities[12] relating to the import of *aquatic animals*, *aquatic animal products* and veterinary products.
	4. The AAHS can establish and apply *quarantine* and border security procedures, which systematically address legal pathways and illegal activities (e.g. through effective partnerships with national Customs and border police).
	5. The AAHS can establish, apply and audit *quarantine* and border security procedures which systematically address all *risks* identified, including through collaboration with their neighbouring countries and trading partners.

[Note: This Critical Competency may in some countries be undertaken by an Authority other than the AAHS.]

[12] *Illegal activities include attempts to gain entry for animals or animal products other than through legal entry points and/or using certification and/or other procedures not meeting the country's requirements.*

***Aquatic Code* references:**

Points 6 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/ Procedures and standards.

Chapter 4.1. on Biosecurity for aquaculture establishments.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.7. on Animal Health.

Article 3.2.8. on Animal production food safety.

Article 3.2.9. on Veterinary medicinal products.

Article 3.2.11. on Animal welfare.

Article 3.2.12. on International trade.

II-4. SURVEILLANCE [13] AND EARLY DETECTION

DEFINITION	LEVELS OF ADVANCEMENT
The authority and capability of the AAHS to determine, verify and report on the sanitary status of *aquatic animal* populations, including wild *aquatic animal* populations, in a timely manner. **A. Passive *surveillance*[14]** A *surveillance* system based on a field *aquatic animal* health network, capable of reliably detecting (by clinical or post-mortem signs), diagnosing, reporting and investigating legally *notifiable diseases* and *emerging diseases* in a timely manner.	**1.** The AAHS have very limited passive *surveillance* capacity, with no formal *disease* list, little training/awareness and/or inadequate national coverage. *Disease outbreaks* are not reported, or reporting is delayed.
	2. The AAHS have basic passive *surveillance* authority and capacity. There is a formal *aquatic animal disease* list with some training/awareness and some national coverage. The speed of detection and level of investigation are variable. *Disease outbreak* reports are available for some species and *diseases*.
	3. The AAHS conduct some passive *surveillance* with some sample collection and *laboratory* testing. There is a list of notifiable *diseases* with trained field staff covering most areas. The speed of reporting and investigation is timely in most production systems. *Disease outbreak* investigation reports are available for most species and diseases.
	4. The AAHS have effective passive *surveillance*, with routine *laboratory* confirmation and epidemiological *disease* investigation (including tracing and *pathogenic agent* characterisation), in most sectors, covering wild *aquatic animal* populations, producers, markets and processing establishments. There are high levels of awareness and compliance with the need for prompt reporting from all *aquatic animal* producers/farmers and the field AAHS.
	5. The AAHS have comprehensive passive *surveillance* nationwide, providing confidence in the country's notifiable *disease* status in real time. The AAHS routinely report *surveillance* information to producers, the industry and other stakeholders. Full epidemiological *disease* investigations are undertaken in all relevant cases with tracing and active follow up of at-*risk* establishments.

[13] Recommended reading:
OIE Guide to Terrestrial Animal Health Surveillance (2014) at https://www.oie.int/en/a-new-oie-guide-to-better-surveillance-and-detection-of-health-risks-related-to-animals/.
Guide for Aquatic Animal Health Surveillance at https://www.oie.int/en/what-we-do/standards/codes-and-manuals/aquatic-code-online-access/?id=169&L=1&htmfile=chapitre_aqua_ani_surveillance.htm.

[14] Another term for passive surveillance is 'general surveillance'.

***Aquatic Code* references:**

Points 6, **7** and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

Chapter 1.4. on Aquatic animal health surveillance.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.7. on Animal Health.

Article 3.2.12. on International trade.

II-4. SURVEILLANCE AND EARLY DETECTION	
DEFINITION	**LEVELS OF ADVANCEMENT**
B. Active *surveillance* and monitoring[15] *Surveillance* targeting a specific *disease* or *hazard* to determine its prevalence, measure progress in *disease control*, or support the demonstration of *disease* freedom (combined with passive *surveillance*), most often in the form of pre-planned surveys with structured sampling and *laboratory* testing.	**1.** The AAHS have no active *surveillance* programme.
	2. The AAHS conduct active *surveillance* for one or a few *diseases* or *hazards* of economic, environmental or zoonotic importance, but the *surveillance* is not representative of the population and the *surveillance* methodology is not revised regularly. The results are reported with limited analysis.
	3. The AAHS conduct active *surveillance* using scientific principles and OIE standards for some *diseases* or *hazards*, but it is not representative of the susceptible populations and/or is not updated regularly. The results are analysed and reported to stakeholders.
	4. The AAHS conduct active *surveillance* in compliance with scientific principles and OIE standards for some relevant *diseases* or *hazards*, which is representative of all susceptible populations, including wild populations, and is updated regularly. Results are routinely analysed, reported and used to guide further *surveillance* activities, *disease* control priorities, etc.
	5. The AAHS conduct ongoing active *surveillance* for most significant *diseases* and *hazards* and apply it to all susceptible populations, including wild populations. The results are routinely analysed and used to guide *disease* control and other activities. The active *surveillance* programmes are regularly reviewed and updated to ensure that they meet country needs and OIE reporting obligations.

[15] Other terms for active surveillance include 'targeted surveillance' or 'specific surveillance'.

***Aquatic Code* references:**

Points 6, 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

Chapter 1.4. on Aquatic animal health surveillance.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.7. on Animal Health.

Article 3.2.12. on International trade.

II-5. EMERGENCY PREPAREDNESS AND RESPONSE	
DEFINITION	**LEVELS OF ADVANCEMENT**
The authority and capability of the AAHS to be prepared and respond rapidly to a sanitary emergency threat (such as a significant *aquatic animal disease outbreak* or food safety emergency).	**1.** The AAHS have no field network or established procedure to determine whether a sanitary emergency exists nor the authority to declare such an emergency and respond appropriately.
	2. The AAHS have a field network and an established procedure to determine whether a sanitary emergency exists, but lack the legal and financial support to respond appropriately. The AAHS may have basic emergency management planning, but this usually targets one or a few *diseases* and may not reflect the national capacity to respond.
	3. The AAHS have the legal framework and financial support to respond rapidly to sanitary emergency threats, but the response is not well coordinated through an effective chain of command. They may have national *contingency plans* for some *aquatic animal diseases* of concern, but they are not updated/tested.
	4. The AAHS have an established procedure to make timely decisions on whether a sanitary emergency exists. The AAHS have the legal framework and financial support to respond rapidly to sanitary emergencies through an effective chain of command. They have national emergency management plans for major *aquatic animal diseases* of concern, but they are not updated/tested.
	5. The AAHS have national emergency management plans for all *aquatic animal diseases* of concern, (and possible *emerging diseases*), that include coordination with national disaster agencies, relevant *Competent Authorities*, producers and other non-government stakeholders. Emergency management planning and response capacity is regularly tested, audited and updated, for example through simulation exercises that test the response at all levels. Following emergency events, the AAHS have a formal 'After-Action Review' process as part of their continuous improvement.

***Aquatic Code* references:**

Points 6, 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

Chapter 4.1. on Biosecurity for aquaculture establishments.

Chapter 4.6. on Contingency planning.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.7. on Animal Health.

Article 3.2.12. on International trade.

II-6. DISEASE PREVENTION, CONTROL AND ERADICATION	
DEFINITION	**LEVELS OF ADVANCEMENT**
A. *Disease* prevention **The authority and capability of the AAHS to prevent the spread of *aquatic animal diseases* through a combination of official controls and practices that reduce the *risk* of *pathogenic agent* exposure or transmission, including *biosecurity*.**	**1.** The AAHS have no capability to implement *aquatic animal disease* prevention programmes.
	2. The AAHS have established general prevention programmes including basic *biosecurity* measures but no verification of implementation and/or compliance.
	3. The AAHS have established prevention programmes and selected *disease*-specific programmes, including basic *biosecurity* and a method of verification for high-*risk* activities only, but no enforcement of the programmes or evaluation of the effectiveness of the practices. Industry practices generally do not exceed basic *biosecurity* practices.
	4. The AAHS have established general and *disease*-specific prevention programmes for many *diseases* based on their informally assessed potential impact, including basic and advanced *biosecurity* practices consistent with OIE international standards. A method of verification for unacceptable *risk* activities and ongoing evaluation of the effectiveness of practices are in place. Industry practices generally exceed regulated minimal *biosecurity* practices.
	5. *Disease* prevention programmes are effective.

***Aquatic Code* references:**

Points 6, 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

Chapter 4.1. on Biosecurity for aquaculture establishments.

Chapter 4.4. on Disinfection of aquaculture establishments and equipment.

Chapter 4.5. on Recommendations for surface disinfection of salmonid eggs.

Chapter 4.8. on Handling, disposal and treatment of aquatic animal waste.

Section 5. on Trade measures, importation/exportation procedures and health certification.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.7. on Animal Health.

Article 3.2.12. on International trade.

II-6. DISEASE PREVENTION, CONTROL AND ERADICATION	
DEFINITION	**LEVELS OF ADVANCEMENT**
B. *Disease* control or eradication **The authority and capability of the AAHS to control or eradicate nationally important *aquatic animal diseases* present in the country; for example through a combination of *treatments*, domestic movement control, establishment of containment *zones*, *biosecurity* measures, isolation and/or killing and emergency slaughtering/stamping out.**	**1.** The AAHS have no capability to implement *aquatic animal disease* control or eradication programmes.
	2. The AAHS implement control or eradication programmes for some *aquatic animal diseases* and/or in some areas or populations,[16] but with little or no epidemiological, *risk*-based planning or evaluation of their effectiveness.
	3. The AAHS implement control or eradication programmes for some priority *aquatic animal* diseases in some areas or populations. There is variable, epidemiological, *risk*-based planning and evaluation of effectiveness, with limited progress towards programme goals.
	4. The AAHS implement nationwide control or eradication programmes for priority *aquatic animal diseases* with a high degree of epidemiological, *risk*-based planning, and continual evaluation of programme effectiveness. They have or are progressing towards programmes to self-declare freedom from relevant OIE-*listed diseases*. They can demonstrate some progress towards programme goals in reducing prevalence or eradicating *disease*.
	5. The AAHS implement control or eradication programmes for all priority *aquatic animal diseases*, with scientific evaluation of their effectiveness consistent with the relevant OIE international standards. They can demonstrate clear progress towards programme goals in reducing prevalence or eradicating *disease*, including achieving or progressing towards official recognition of freedom from relevant *diseases*.

[16] It may be necessary to cross-reference this *Critical Competency with the Critical Competencies on Zoning and Compartmentalisation*, as appropriate.

***Aquatic Code* references:**

Points 6, 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

Chapter 4.1. on Biosecurity for aquaculture establishments.

Chapter 4.7. on Fallowing in aquaculture.

Chapter 4.8. on Handling, disposal and treatment of aquatic animal waste.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.7. on Animal Health.

Article 3.2.12. on International trade.

II-7. AQUATIC ANIMAL PRODUCTION FOOD SAFETY

DEFINITION	LEVELS OF ADVANCEMENT
The authority and capability of the AAHS to assure the safety of *aquatic animal products* for domestic and export markets. **A. Regulation, inspection (including audits), authorisation and supervision of establishments for the production and processing of *aquatic animal products*** The authority and capability of the AAHS to establish and enforce sanitary and food hygiene standards for establishments that produce, process and distribute *aquatic animal products*. Includes the regulation and initial authorisation of establishments, and the ongoing inspection of establishments and processes, including the identification of and response to non-compliance, based on Hazard Analysis and Critical Control Point (HACCP) principles. It also includes external coordination between *Competent Authorities*, as may be required.	**1.** Regulation, authorisation and inspection of relevant establishments are generally not undertaken in conformity with international standards. **2.** Regulation, authorisation and inspection of relevant establishments and processes are undertaken in conformity with international standards at some selected premises (e.g. export premises). **3.** Regulation, authorisation and inspection of relevant establishments are undertaken in conformity with international standards at large premises that supply major cities and/or the national market. **4.** Regulation, authorisation and inspection of relevant establishments and processes (and coordination, as required) are undertaken in conformity with international standards for premises supplying national and local markets. There are some reports of dealing with non-compliance. **5.** Regulation, authorisation, inspection and audits of relevant establishments and processes (and coordination, as required) are undertaken in conformity with international standards at all premises. There are documented cases of the identification of and effective response to non-compliance.

[Note: This Critical Competency primarily refers to the inspection of processed aquatic animal products. It may, in some countries, be undertaken by an authority other than the AAHS.]

***Terrestrial Code* references:**

Article 3.4.12. on Human food production chain.

Chapter 6.2. on The role of Veterinary Services in food safety systems.

References *to Codex Alimentarius Commission Standards*:

General Principles of Food Hygiene (**CAC/RCP 1-1969**; **amended 1999. Revisions 1997** and **2003**).

Code of Practice for Fish and Fishery Products (**CAC/RCP 52-2003**).

II-7. AQUATIC ANIMAL PRODUCTION FOOD SAFETY

DEFINITION	LEVELS OF ADVANCEMENT
B. Inspection of collection/ slaughter, processing and distribution of *aquatic animal products*	**1.** Inspection, management, implementation and coordination (as appropriate) are generally not undertaken in conformity with international standards, including collection of *disease* information.
The authority and capability of the AAHS to inspect, manage, implement and coordinate *aquatic animal* production and food safety in relation to the collection, slaughter, processing and distribution of *aquatic animal products*.	**2.** Inspection, management, implementation and coordination (as appropriate) are generally undertaken in conformity with international standards only for export purposes, including the collection of *disease* information.
	3. Inspection, management, implementation and coordination (as appropriate) are generally undertaken in conformity with international standards only for export purposes and for *aquatic animal products* that are distributed throughout the national market, including the collection of *disease* information.
	4. Inspection, management, implementation and coordination (as appropriate) are generally undertaken in conformity with international standards for export purposes and for *aquatic animal products* that are distributed throughout the national and local markets, including the collection of *disease* information.
	5. Inspection, management, implementation and coordination (as appropriate) are undertaken in full conformity with international standards for *aquatic animal products* at all levels of distribution (including national and local markets and direct sales), including the collection of *disease* information.

[Note: This Critical Competency primarily refers to the inspection of processed aquatic animal products. It may, in some countries, be undertaken by an authority other than the AAHS.]

***Aquatic Code* references:**

Points 6, 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/ General organisation/Procedures and standards.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.4. on Personnel and resources.

Article 3.2.7. on Animal Health.

Article 3.2.8. on Animal production food safety.

Article 3.2.9 on Veterinary medicinal products.

Article 3.2.11. on Animal welfare.

Article 3.2.12. on International trade.

Chapter 6.2. on The role of Veterinary Services in food safety systems.

Chapter 6.3. on Control of biological hazards of animal health and public health importance through ante- and post-mortem meat inspection.

References *to Codex Alimentarius Commission Standards*:

General Principles of Food Hygiene (**CAC/ RCP 1-1969**; **amended 1999. Revisions 1997 and 2003**).

Code of Practice for Fish and Fishery Products (**CAC/RCP 52-2003**).

II-8. VETERINARY MEDICINES AND BIOLOGICALS FOR AQUATIC ANIMALS

DEFINITION	LEVELS OF ADVANCEMENT
The authority and capability of the AAHS to regulate veterinary medicines and biologicals, to ensure their quality and safety, as well as their responsible and prudent use, including as medicated *feed*. **This includes the marketing authorisation/ registration, import, manufacture, quality control, export, labelling, advertising, distribution, sale (includes dispensing) and use (includes prescribing) of these products.**	**1.** The AAHS cannot regulate veterinary medicines and biologicals for *aquatic animals*.
	2. The AAHS have some capability to exercise regulatory and administrative control over the import, manufacture and market authorisation (registration) of veterinary medicines and veterinary biologicals to ensure their quality and safety, but cannot ensure their responsible and prudent use for *aquatic animals* in the field.
	3. The AAHS exercise effective regulatory and administrative control over the market authorisation of veterinary medicines and biologicals and have some capacity to regulate these to ensure their responsible and prudent use for *aquatic animals* in the field, including reducing the *risk* from illegal imports.[17]
	4. The AAHS exercise comprehensive and effective regulatory and administrative control of veterinary medicines and biologicals, including market authorisation, responsible and prudent use for *aquatic animals* in the field, and reducing the *risks* of illegal distribution and use.
	5. The control systems for veterinary medicines and biologicals for *aquatic animals* are regularly audited, tested and updated when necessary, including via an effective pharmacovigilance programme.

[Note: This Critical Competency may in some countries be undertaken by an authority other than the AAHS.]

[17] Illegal veterinary medicines and biologicals importation and use covers risks from online drug sales and the import and/or sale of counterfeit or sub-standard drugs.

***Aquatic Code* references:**

Points 6 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Veterinary legislation and regulations/Procedures and standards.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.8. on Animal production food safety.

Article 3.2.9. on Veterinary medicinal products.

Article 3.2.11. on Animal welfare.

II-9. ANTIMICROBIAL RESISTANCE (AMR) AND ANTIMICROBIAL USE (AMU)

DEFINITION	LEVELS OF ADVANCEMENT
The authority and capability of the AAHS to manage AMU and AMR, and to undertake *surveillance* and control of the development and spread of AMR pathogens in *aquatic animal production* and *aquatic animal products*, as well as aquatic animal production environments, via a One Health approach.[18]	**1.** The AAHS cannot regulate AMU and AMR and have not developed or contributed to an AMR action plan covering the *aquatic animal* health domain.
	2. The AAHS are contributing or have contributed to a national AMR action plan. The action plan has initiated some activities to collect AMU/AMR data or control AMR, e.g. awareness campaigns targeting *veterinarians/aquatic animal health professionals* or farmers on the prudent use of *antimicrobial agents* in *aquatic animals*. The use of antimicrobials for growth promotion and indiscriminate prophylaxis for *disease* prevention is discouraged.
	3. The AAHS have defined a national AMR action plan in coordination with the public health authorities and other stakeholders and are implementing some AMU/AMR *surveillance* and regulations. The use of *antimicrobial agents* for growth promotion and indiscriminate prophylaxis for disease prevention is prohibited.
	4. The AAHS are implementing a comprehensive AMR action plan based on *risk*, including AMR *surveillance* of the most important *pathogenic agents* for *aquatic animal* health or foodborne *diseases*, the *monitoring* of AMU, and the prudent use of *antimicrobial agents* in *aquatic animals* (especially the use of critically important antimicrobials). The use of *antimicrobial agents* for growth promotion and indiscriminate prophylaxis for *disease* prevention does not occur.
	5. An effective national AMR action plan covering the *aquatic animal* health domain is regularly audited, reviewed and updated by the AAHS with public health authorities and other stakeholders, using the results of AMU/AMR *surveillance*. The scale and type of antimicrobial use in *aquatic animals* poses minimal *risk* of AMR and alternative solutions for the control of *diseases* in *aquatic animals* are being implemented.

[18] Recommended reading:
WHO Global Action Plan (2015) at: https://www.who.int/publications/i/item/9789241509763 and *OIE Strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials* (2016) at: www.oie.int/fileadmin/Home/eng/Media_Center/docs/pdf/PortailAMR/EN_OIE-AMRstrategy.pdf

***Aquatic Code* references:**

Points 6 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/ Procedures and standards.

Section 6. on Antimicrobial use in aquatic animals.

***Terrestrial Code* references:**

Chapter 6.7. on Introduction to the recommendations for controlling antimicrobial resistance.

Chapter 6.8. on Harmonisation of national antimicrobial resistance surveillance and monitoring programmes.

Chapter 6.9. on Monitoring of the quantities and usage patterns of antimicrobial agents used in food-producing animals.

Chapter 6.10. on Responsible and prudent use of antimicrobial agents in veterinary medicine.

Chapter 6.11. on Risk analysis for antimicrobial resistance arising from the use of antimicrobial agents in animals.

References *to Codex Alimentarius Commission Standards:*

Guidelines for Risk Analysis of Foodborne Antimicrobial Resistance (**CAC/GL 77-2011**).

Code of Practice to Minimize and Contain Antimicrobial Resistance (**CAC/RCP 61-2005**).

II-10. RESIDUE TESTING, MONITORING AND MANAGEMENT	
DEFINITION	**LEVELS OF ADVANCEMENT**
The capability of the AAHS to undertake residue testing and *monitoring* programmes for veterinary medicines (e.g. *antimicrobials* and hormones), chemicals, pesticides, radionuclides, heavy metals, toxins, etc. and respond appropriately to adverse findings.	**1.** No residue testing for *aquatic animal products* is being undertaken.
	2. Some residue testing is being undertaken, such as for research or pilot purposes, and/or is conducted only on specific *aquatic animal products* for export.
	3. A comprehensive residue monitoring programme is conducted for all *aquatic animal products* for export and some for domestic consumption, based on limited *risk analysis*. Documented protocols exist for preventing residue *risks* (e.g. withholding periods for veterinary drugs) and for responding to breaches of Maximum Residue Limits.
	4. A comprehensive residue *monitoring* programme is conducted for all *aquatic animal products* for export and domestic consumption based on *risk analysis*. Effective protocols both reduce residue *risks* and respond to breaches of Maximum Residue Limits, including traceback and follow up.
	5. The residue *monitoring* and *risk management* programme is subject to routine quality assurance and regular evaluation/ audit.

[Note: This Critical Competency may in some countries be undertaken by an authority other than the AAHS.]

***Terrestrial Code* References:**

Chapter 2.2. on Criteria applied by the OIE for assessing the safety of commodities.

Article 3.2.8. on Animal production food safety.

Article 3.2.9. on Veterinary medicinal products.

References *to Codex Alimentarius Commission Standards:*

Guidelines for the Design and Implementation of National Regulatory Food Safety Assurance Programmes Associated with the Use of Veterinary Drugs in Food Producing Animals **(CAC/GL 71-2009).**

Glossary of Terms and Definitions (Residues of Veterinary Drugs in Foods) **(CAC/MISC 5-1993)**.

Maximum Residue Limits (MRLs) and Risk Management Recommendations (RMRs) for Residues of Veterinary Drugs in Foods **(CAC/MRL 2)**.

General Standard for Contaminants and Toxins in Food and Feed **(CODEX STAN 193-1995).**

Code of Practice Concerning Source Directed Measures to Reduce Contamination of Foods with Chemicals **(CAC/RCP 49-2001)**.

Guidelines for Risk Analysis of Foodborne Antimicrobial Resistance **(CAC/GL 77-2011)**.

Code of Practice to Minimize and Contain Antimicrobial Resistance **(CAC/RCP 61-2005)**.

II-11. AQUATIC ANIMAL FEED SAFETY	
DEFINITION	**LEVELS OF ADVANCEMENT**
The authority and capability of the AAHS to regulate *aquatic animal feed* safety, e.g. processing, handling, storage, distribution and use of both commercial and on-farm produced *aquatic animal feed* and *feed* ingredients. **This includes *feed* safety *risks* such as: feeding by-products, live *feed*, *feed* bans, the use of *antimicrobial agents* in *feed*, and managing *risks* of microbial, physical and toxin contamination of *feed*.**	**1.** The AAHS cannot regulate *aquatic animal feed* safety.
	2. The AAHS have some capability to exercise regulatory and administrative control over *aquatic animal feed* safety.
	3. The AAHS exercise regulatory and administrative control for most aspects of *aquatic animal feed* safety.
	4. The AAHS exercise comprehensive and effective regulatory and administrative control of *aquatic animal feed* safety.
	5. The control systems are regularly audited, tested and updated when necessary.

***Aquatic Code* reference:**

Chapter 4.9. on Control of pathogenic agents in aquatic animal feed.

II-12. IDENTIFICATION, TRACEABILITY AND MOVEMENT CONTROL	
DEFINITION	**LEVELS OF ADVANCEMENT**
A. *Aquaculture establishment* identification, batch and *aquatic animal* movement control The authority and capability of the AAHS, in coordination with producers and other stakeholders, to regulate the identification of *aquatic animals*, to trace their history and location(s), and to control domestic movements for the purpose of *aquatic animal disease* control, food safety, trade or other legal requirements under the AAHS mandate.	**1.** The AAHS do not have the authority or the capability to regulate the identification of *aquatic animals*, either by batch or by *aquaculture establishment*, or to trace and control their movements.
	2. The AAHS can identify some *aquatic animals* by *aquaculture establishments* or location, and control some movements, using traditional methods, and can demonstrate the ability to deal with a specific problem (e.g. to trace sampled or vaccinated *aquatic animals* for follow up, or to prevent theft).
	3. The AAHS implement a system for *aquatic animal* traceability and movement control for specific animal subpopulations (e.g. for export, at borders, in specified *zones* or markets), as required for traceability and/or *disease* control, in accordance with international standards.
	4. The AAHS implement appropriate and effective *aquatic animal* traceability and movement control procedures for some *aquatic animal* species at national level, in accordance with international standards.
	5. The AAHS carry out periodic audits of the effectiveness of their traceability and movement control systems. These systems have been demonstrated as effective in dealing with a problem (e.g. tracing a *disease outbreak*, residue or other food safety incident).

***Aquatic Code* references:**

Point 6 of Article 3.1.2. on Aquatic animal health legislation and regulations.

Chapters 5.5 to 5.9. on Control of aquatic animal health risks associated with transport of aquatic animals/Aquatic animal health measures applicable before and at departure/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/Frontier posts in the importing country/Aquatic animal health measures applicable on arrival.

II-12. IDENTIFICATION, TRACEABILITY AND MOVEMENT CONTROL	
DEFINITION	**LEVELS OF ADVANCEMENT**
B. Identification, traceability and control of *aquatic animal products* The authority and capability of the AAHS, in coordination with other *Competent Authorities* (such as food safety authorities) and other stakeholders, as appropriate, to achieve whole-of-chain traceability, including the identification, tracing and control of *aquatic animal products* for the purpose of food safety, *aquatic animal* health or trade.	**1.** The AAHS do not have the capability or access to information to identify or trace *aquatic animal products*.
	2. The AAHS can identify and trace some *aquatic animal products* through coordination between *Competent Authorities*, to deal with a specific problem (e.g. high-*risk* products traced back to premises of origin).
	3. The AAHS have implemented procedures to identify and trace some *aquatic animal products*, in cooperation with *Competent Authorities*, for food safety, *aquatic animal* health and trade purposes, in accordance with international standards.
	4. The AAHS have implemented national programmes enabling them to identify and trace all *aquatic animal products* and respond to threats, in coordination with *Competent Authorities* and in accordance with international standards.
	5. The AAHS periodically audit the effectiveness of their identification and traceability procedures, in coordination with *Competent Authorities*. The procedures have been demonstrated as being effective for traceback and response to a relevant food safety incident (e.g. foodborne zoonoses or residue incidents).

[Note: This Critical Competency may in some countries be undertaken by an authority other than the AAHS.]

***Aquatic Code* references:**

Point 6 of Article 3.1.2. on Fundamental principles of quality: Aquatic animal health legislation and regulations.

Chapters 5.5. to 5.9. on Control of aquatic animal health risks associated with transport of aquatic animals/Aquatic animal health measures applicable before and at departure/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/Frontier posts in the importing country/Aquatic animal health measures applicable on arrival.

II-13. WELFARE OF FARMED FISH

DEFINITION	LEVELS OF ADVANCEMENT
The authority and capability of the AAHS to legislate and implement the OIE international standards for the *welfare* of farmed fish, as published in the *Aquatic Code*. **This requires consultation and coordination with *Competent Authorities*, non-governmental organisations and other stakeholders, as appropriate.**	**1.** There is no national legislation or regulation of the *welfare* of farmed fish.
	2. There is national legislation or regulation of the *welfare* of farmed fish that covers some of the OIE international standards, with limited stakeholder or public awareness.
	3. The national legislation and regulations on the *welfare* of farmed fish cover most of the OIE international standards, with some awareness programmes and implementation, but are in conformity with international standards in only some sectors (e.g. for the export sector).
	4. *Welfare* of farmed fish programmes, supported by suitable legislation and regulations, are being implemented in conformity with relevant international standards and are applied to most sectors and species with stakeholder and public awareness.[19] Documented compliance programmes, including consequences for non-compliance, are available.
	5. *Welfare* of farmed fish programmes, supported by suitable legislation and regulations, are being implemented in conformity with relevant international standards. Comprehensive national programmes are applied to all sectors and species with the active involvement of stakeholders. *Welfare* of farmed fish programmes, including non-compliance issues, are subject to regular audit and review, with documented cases of responding effectively to non-compliance.

[19] Recommended reading:
ISO Technical specification TS/34700 (2016) at https://www.iso.org/standard/64749.html
OIE Global Animal Welfare Strategy (2017) at https://www.oie.int/app/uploads/2021/03/en-oie-aw-strategy.pdf.
OIE Guidelines on Disaster Management and Risk Reduction in Relation to Animal Health and Welfare and Veterinary Public Health: at https://www.oie.int/en/document/disastermanagement-ang/

***Aquatic Code* reference:**

Section 7. on Welfare of farmed fish.

CHAPTER III
INTERACTION WITH STAKEHOLDERS

This Fundamental Component relates to the capability of the AAHS to collaborate with and involve non-governmental stakeholders, including the private sector, non-governmental organisations (NGOs) and civil society organisations (including consumer organisations), in the implementation of programmes and activities. This also includes relevant state-owned enterprises, research institutions, universities and other training establishments.

CRITICAL COMPETENCIES:

III-1 COMMUNICATION **56**

III-2 CONSULTATION WITH STAKEHOLDERS **57**

III-3 OFFICIAL REPRESENTATION AND INTERNATIONAL COLLABORATION **58**

III-4 ACCREDITATION/AUTHORISATION/DELEGATION **59**

III-5 VETERINARY STATUARY BODY (VSB) AND OTHER PROFESSIONAL AUTHORITIES **60**

III-6 PARTICIPATION OF PRODUCERS AND OTHER STAKEHOLDERS IN JOINT PROGRAMMES **62**

III-7 AQUATIC ANIMAL HEALTH MANAGEMENT AND CLINICAL SERVICES **63**

***Aquatic Code* references:**

Points 6, 7, 9, and **13** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/ General organisation/Procedures and standards/Communication.

Chapter 3.2. on Communication.

***Terrestrial Code* references:**

Chapter 1.4. on Animal health surveillance.

Article 3.2.3. on Policy and management.

Article 3.2.4. on Personnel and resources.

Article 3.2.5. on The veterinary profession.

Article 3.2.6. on Stakeholders.

Article 3.2.7. on Animal Health.

Article 3.2.8. on Animal production food safety.

Article 3.2.9. on Veterinary medicinal products.

Article 3.2.11. on Animal welfare.

Article 3.2.12. on International trade.

Point 4 of Article 3.4.3. on General principles: Consultation.

Article 3.4.5. on Competent Authorities.

Article 3.4.6. on Veterinarians and veterinary paraprofessionals.

Chapter 3.5. on Communication.

III-1. COMMUNICATION[20]	
DEFINITION	**LEVELS OF ADVANCEMENT**
The capability of the AAHS to keep non-governmental stakeholders [21] aware and informed, in a transparent, effective and timely manner, of AAHS activities and programmes, and of developments in *aquatic animal* health, *welfare* of farmed fish and public health. **This Competency includes communication with all non-government stakeholders, including farmers, *aquaculture establishments*, and trading groups, as well as relevant NGOs and the general public, for example through communication campaigns and the media, including social media.**	**1.** The AAHS do not inform stakeholders of AAHS activities and programmes.
	2. The AAHS have informal communication mechanisms with some stakeholders, e.g. with the larger commercial *aquaculture* or related companies.
	3. The AAHS maintain a dedicated and specialist communications function which communicates with stakeholders occasionally, but it is not always up to date or pro-active in providing information.
	4. The AAHS contact point for communication provides up-to-date information to most relevant stakeholders. This information is aligned with a well-developed communications plan, and accessible through the Internet and other appropriate channels targeted to the audience, and covers relevant events, activities and programmes, including during crises.
	5. The AAHS have a well-developed communication plan, and regularly provides information to all relevant stakeholders, well targeted to the audience, via the full range of communications media, including social media. The AAHS regularly evaluate and revise their communications plan.

[20] Recommended reading:
OIE Communication Handbook: Veterinary Services (2015) at: https://www.oie.int/fileadmin/Home/eng/Media_Center/docs/pdf/EN_Guide_de_Communication_FINAL.pdf

[21] Communication and consultation with government stakeholders should be captured under *CCI-6 on Coordination Capability of the Veterinary Services*, and particularly CCI-6B on *External Coordination*.

***Aquatic Code* references:**

Point 13 of **Article 3.1.2.** on Fundamental principles of quality: Communication.

Chapter 3.2. on Communication.

***Terrestrial Code* references:**

Article 3.2.4. on Personnel and resources.

Chapter 3.5. on Communication.

III-2. CONSULTATION WITH STAKEHOLDERS

DEFINITION	LEVELS OF ADVANCEMENT
The capability of the AAHS to consult effectively with non-government stakeholders[22] on AAHS activities and programmes, and on developments in aquatic animal health and food safety. **This Competency includes consultation with all non-government stakeholders, including farmers, the *aquaculture* sector, and trading groups or associations, as well as interested NGOs and members of the public.** **Unlike communication (CCIII-1), consultation is two-way and should involve mechanisms that not only inform but actively seek the views of consulted parties, for consideration and response.**	**1.** The AAHS have no mechanisms for consultation with non-government stakeholders.
	2. The AAHS maintain informal channels of consultation with some non-government stakeholders (e.g. only the larger commercial *aquaculture* or related companies).
	3. The AAHS hold formal consultations with non-government stakeholders, usually represented by industry groups or associations.
	4. The AAHS regularly hold workshops and meetings with non-government stakeholders, who are organised to have broad representation, such as through elected, self-financed industry groups or associations. Consultation outcomes are documented, and the views of stakeholders are considered and occasionally incorporated.
	5. The AAHS actively consult with non-government stakeholders, including representatives of smaller producers, on current and proposed activities and programmes, developments in *aquatic animal* health and food safety, and proposed interventions at the OIE, Codex Alimentarius Commission, WTO SPS Committee, etc. The consultation results in improved, better-adapted activities and greater stakeholder support.

[22] Communication and consultation with government stakeholders should be captured under *CCI-6 on Coordination Capability of the Veterinary Services*, and particularly *CCI-6B on External Coordination*.

***Aquatic Code* references:**

Point 13 of **Article 3.1.2.** on Fundamental principles of quality: Communication.

Chapter 3.2. on Communication.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.4. on Personnel and resources.

Article 3.2.5. on The veterinary profession.

Article 3.2.6. on Stakeholders.

Chapter 3.5. on Communication.

III-3. OFFICIAL REPRESENTATION AND INTERNATIONAL COLLABORATION	
DEFINITION	**LEVELS OF ADVANCEMENT**
The capability of the AAHS to regularly and actively participate in, coordinate with and provide follow-up on relevant meetings and activities of regional and international organisations, including the OIE, Codex Alimentarius Commission, WTO SPS Committee, World Health Organization (WHO), Food and Agriculture Organization of the United Nations (FAO) and Regional Economic Communities.	**1.** The AAHS do not participate in or follow up on relevant meetings or activities of regional or international organisations.
	2. The AAHS sporadically participate in relevant meetings or activities and/or make a limited contribution.
	3. The AAHS actively participate[23] in the majority of relevant meetings and activities and provide some feedback to national colleagues.
	4. The AAHS consult with non-government stakeholders and take into consideration their opinions when developing papers and making interventions in relevant meetings and in following up on meeting outcomes at the national or regional level.
	5. The AAHS consult with non-government stakeholders to provide leadership, to ensure that strategic issues are identified, and to ensure coordination among national delegations as part of their participation in relevant meetings, including following up on meeting outcomes at national and/or regional levels. The AAHS collaborate internationally by sharing information and assisting to build capacity where appropriate.

[23] Active participation refers to preparation in advance of, and contributing during the meetings in question, including exploring common solutions and generating proposals and compromises for possible adoption.

***Terrestrial Code* references:**

Article 3.2.4. on Personnel and resources.

Article 3.2.12. on International trade.

Chapter 3.5. on Communication.

III-4. ACCREDITATION/AUTHORISATION/ DELEGATION	
DEFINITION	**LEVELS OF ADVANCEMENT**
The authority and capability of the public sector of the AAHS to accredit/ authorise/delegate to private sector or NGO expertise (e.g. private *veterinarians*, *aquatic animal health professionals* and *laboratories*, NGOs), to carry out official tasks on its behalf, usually via a formal agreement (i.e. public–private partnership).[24]	**1.** The public sector of the AAHS has neither the authority nor the capability to accredit/authorise/delegate official tasks to the private sector or NGOs.
	2. The public sector of the AAHS has the authority and capability to accredit/authorise/delegate official tasks to the private sector or NGOs, but there are currently no accreditation/authorisation/ delegation activities.
	3. The public sector of the AAHS develops accreditation/ authorisation/delegation programmes for certain tasks using formal agreements, but these activities are not routinely reviewed.
	4. The public sector of the AAHS develops and implements accreditation/authorisation/delegation programmes using formal agreements, and these activities are routinely reviewed to maintain standards and manage performance.
	5 The public sector of the AAHS carries out audits of its accreditation/authorisation/delegation programmes, to maintain the trust of its trading partners and other stakeholders.

[24] Recommended reading:
The *OIE PPP Handbook: guidelines for public–private partnerships in the veterinary domain* at:. https://www.oie.int/app/uploads/2021/03/oie-ppp-handbook-20190419-enint-bd.pdf

***Aquatic Code* references:**

Points 6, 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

***Terrestrial Code* references:**

Article 3.2.6. on Stakeholders.

Article 3.4.5. on Competent Authorities.

III-5. VETERINARY STATUTORY BODY (VSB)[25]	
DEFINITION	**LEVELS OF ADVANCEMENT**
Regulation and professional standards for *veterinarians* and other *aquatic animal health professionals* working in *aquatic animal* health. **A. *Veterinarians* working in *aquatic animal* health** **The authority and capacity of the VSB to effectively and independently maintain educational and professional standards for *veterinarians* working in *aquatic animal* health.** **Regulation includes licensing or registration of those *veterinarians* who meet educational standards, and the ongoing oversight of their professional competence and conduct.**	**1.** There is no VSB. **2.** The VSB exists, but does not register or regulate any *veterinarians* working in *aquatic animal* health. **3.** The VSB registers and regulates *veterinarians* working in *aquatic animal* health, but they are subject only to generic veterinary educational and professional standards. **4.** The VSB or other official body for veterinary specialisation (e.g. College membership/fellowship system) has introduced some *aquatic-animal*-health-specific educational or professional standards applicable to *veterinarians* working in *aquatic animal* health. **5.** The VSB regulates and applies disciplinary measures to *veterinarians* working in *aquatic animal* health. *Veterinarians* working in *aquatic animal* health are required to undertake continuing education to maintain their professional registration.

[25] Recommended reading:
Focus on Veterinary Statutory Bodies, Dec 2014 at: http://www.oie.int/fileadmin/vademecum/pdf/Veterinary%20statutory%20bodies.pdf

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.5. on The veterinary profession.

Article 3.4.6. on Veterinarians and veterinary paraprofessionals.

III-5. VETERINARY STATUTORY BODY (VSB)	
DEFINITION	**LEVELS OF ADVANCEMENT**
B. *Aquatic animal health professionals* (non-*veterinarians*) **The authority and capacity of an independent body (VSB or other body) to effectively maintain educational and professional standards for *aquatic animal health professionals* (non-*veterinarians*).** **Regulation includes licensing or registration of those *aquatic animal health professionals* who meet educational standards, and the ongoing oversight of their professional competence and conduct.**	**1.** There is no professional, regulatory body or informal system maintaining educational or professional standards for *aquatic animal health professionals* (non-veterinarians).
	2. There is no professional regulatory body registering *aquatic animal health professionals*, but an informal system, such as specialised post-graduate courses with aligned government or private-sector career pathways, does maintain a level of educational standards for *aquatic animal health professionals*.
	3. A professional regulatory body (either the VSB or other body) registers *aquatic animal health professionals* to maintain educational standards.
	4. A professional, regulatory body (either the VSB or other body) has the authority to maintain ongoing professional standards, but there have been no disciplinary measures applied to *aquatic animal health professionals*.
	5. A professional regulatory body (either the VSB or other body) applies disciplinary measures and requires that *aquatic animal health professionals* undertake continuing education to maintain their professional registration.

***Aquatic Code* references:**

Points 6, 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

***Terrestrial Code* reference:**

Article 3.4.6. on Veterinarians and veterinary paraprofessionals.

III-6. PARTICIPATION OF PRODUCERS AND OTHER STAKEHOLDERS IN JOINT PROGRAMMES	
DEFINITION	**LEVELS OF ADVANCEMENT**
The capability of the AAHS to develop joint programmes (public–private partnerships)[26] with regard to *aquatic animal* health, and food safety and/or *welfare* of farmed fish outcomes.	**1.** Producers and other non-government stakeholders may comply with, but do not actively participate in, programmes.
	2. Producers and other non-government stakeholders are informed of programmes and informally assist the AAHS in programme delivery in the field (e.g. industry groups helping to communicate the programme to their membership).
	3. Producers and other non-government stakeholders formally participate with the AAHS in the delivery of joint programmes and advise of needed changes and improvements.
	4. Representatives of producers and other non-government stakeholders actively partner with the AAHS to plan, manage and implement joint programmes.
	5. Producers and other non-government stakeholders contribute resources and may lead the development and delivery of effective joint programmes with the AAHS. They also actively participate in their regular review, audit and revision.

[26] Recommended reading:
The *OIE PPP Handbook: guidelines for public–private partnerships in the veterinary domainat* https://www.oie.int/app/uploads/2021/03/oie-ppp-handbook-20190419-enint-bd.pdf

***Aquatic Code* references:**

Points 6 and **13** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/ Communication.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.
Article 3.2.5. on The veterinary profession.
Article 3.2.6. on Stakeholders.
Article 3.2.7. on Animal Health.
Article 3.2.8. on Animal production food safety.
Article 3.2.9. on Veterinary medicinal products.
Article 3.2.11. on Animal welfare.
Point 4 of **Article 3.4.3.** on General principles: Consultation.

III-7. AQUATIC ANIMAL HEALTH MANAGEMENT AND CLINICAL SERVICES	
DEFINITION	**LEVELS OF ADVANCEMENT**
The availability and quality of *aquatic animal* health management and clinical services to meet the needs of *aquaculture establishments*, including their access to *aquatic animal disease* diagnosis, treatment and prevention.	**1.** There are no/few *aquatic animal* health management or clinical services provided by either the public or private sector.
	2. *Aquatic animal* health management or clinical services are available to *aquaculture establishments* in some areas, but the quality and coverage are highly variable.
	3. *Aquatic animal* health management or clinical services are available to most *aquaculture establishments* from the public and/or private sector. In some areas there may be limited access or limited services.
	4. *Aquatic animal* health management or clinical services are available to all *aquaculture establishments* via an efficient network of qualified *veterinarians/aquatic animal health professionals* assisted by *veterinary paraprofessionals/aquatic animal* health technical personnel. Diagnoses are generally made before treatment, with supporting *laboratory* tests where appropriate, and professional standards are maintained by a well-functioning VSB or other professional authorities.
	5. *Aquatic animal* health management or clinical services are available to all *aquaculture establishments* through qualified *veterinarians/aquatic animal health professionals*, with appropriate diagnostic capability, treatments and the opportunity for specialist support if required.

***Aquatic Code* references:**

Points 6, 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

***Terrestrial Code* references:**

Chapter 1.4. on Animal health surveillance.

Article 3.2.3. on Policy and management.

Article 3.2.7. on Animal Health.

Article 3.2.9. on Veterinary medicinal products.

Article 3.2.12. on International trade.

CHAPTER IV
ACCESS TO MARKETS

This Fundamental Component relates to the authority and capability of the AAHS to provide support by demonstrating the overall integrity of the animal health and veterinary public health system in order to access, expand and retain regional and international markets for animals and animal products.

CRITICAL COMPETENCIES:

IV-1 AQUATIC ANIMAL HEALTH LEGISLATION **66**

IV-2 INTERNATIONAL HARMONISATION **68**

IV-3 INTERNATIONAL CERTIFICATION **69**

IV-4 EQUIVALENCE AND OTHER TYPES OF SANITARY AGREEMENTS **70**

IV-5 TRANSPARENCY **71**

IV-6 ZONING **72**

IV-7 COMPARTMENTALISATION **73**

***Aquatic Code* references:**

Points 6, 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

Chapter 4.1. on Biosecurity for aquaculture establishments.

Chapter 4.2. on Zoning and compartmentalisation.

Chapter 4.3. on Application of compartmentalisation.

Chapter 5.1. on General obligations related to certification.

Chapter 5.2. on Certification procedures.

Chapter 5.3. on OIE procedures relevant to the Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization.

Chapter 5.11. on Model health certificates for international trade in live aquatic animals and products of aquatic animal origin.

***Terrestrial Code* references:**

Chapter 3.4. on Veterinary legislation.

Article 3.2.3. on Policy and management.

Article 3.2.4. on Personnel and resources.

Article 3.2.7. on Animal Health.

Article 3.2.8. on Animal production food safety.

Article 3.2.9. on Veterinary medicinal products.

Article 3.2.11. on Animal welfare.

Article 3.2.12. on International trade.

IV-I. AQUATIC ANIMAL HEALTH LEGISLATION[27]

DEFINITION	LEVELS OF ADVANCEMENT
The effectiveness of AAH legislation and regulations. **A. Legal quality and coverage** The authority and capability of the AAHS to develop or update AAH legislation to ensure its quality and coverage of the AAH domain. This Competency covers the quality of legislation, considering the principles of legal drafting, its impact, and suitability for implementation. This Competency includes formal collaboration with other legal drafting professionals, other relevant Ministries and *Competent Authorities*, national agencies and decentralised institutions that share authority or have a mutual interest in relevant areas of the AAH domain. It also covers stakeholder consultation relevant to AAH legislation.	**1.** *Aquatic animal* health legislation is lacking, outdated or of poor quality. The AAHS do not have the authority or capability to develop and update AAH legislation. **2.** *Aquatic animal* health legislation covers some fields of the AAH domain. The AAHS, working occasionally with expert legal drafters and lawyers, have some authority and capability to develop and update AAH legislation. **3.** *Aquatic animal* health legislation covers most fields of the AAH domain, including those fields under other *Competent Authorities*. The AAHS, working in formal partnership with expert legal drafters and lawyers, have the authority and capability to develop and update national AAH legislation, including through consultation with stakeholders, to ensure its legal quality and applicability. **4.** *Aquatic animal* health legislation covers the entire AAH domain. The AAHS have the authority and capability to develop and update AAH legislation at the national (and sub-national where relevant) level, using a formal methodology which considers international standards, other relevant existing national legislation, consultation with stakeholders, legal quality and applicability, and regulatory impact. **5.** AAH legislation comprehensively covers the entire AAH domain. The AAHS regularly evaluate and update AAH legislation at the national (and sub-national where relevant) level, with reference to ongoing effectiveness and changing international standards and science.

[27] Aquatic animal health legislation needs to be harmonised with other relevant legislation, such as 'veterinary (terrestrial animal health) legislation' and public health legislation. As there are many shared issues/links between terrestrial and aquatic animal health (for example notifiable disease reporting), duplication of legislation should be avoided, so as not to undermine the quality of legal drafting or create uncertainty about which law prevails.

***Aquatic Code* references:**

Points 6, 7 and **9** of **Article 3.1.2. o**n Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.
Article 3.2.4. on Personnel and resources.
Article 3.2.7. on Animal Health.
Article 3.2.8. on Animal production food safety.
Article 3.2.9. on Veterinary medicinal products.
Article 3.2.11. on Animal welfare.
Article 3.2.12. on International trade.
Chapter 3.4. on Veterinary legislation.

IV-I. AQUATIC ANIMAL HEALTH LEGISLATION	
DEFINITION	**LEVELS OF ADVANCEMENT**
B. Implementation and compliance The authority and capability of the AAHS to ensure implementation of and compliance with AAH legislation across the AAH domain through communications, compliance and inspection activities. This Competency includes formal collaboration with other relevant Ministries and *Competent Authorities*, national agencies and decentralised institutions that share responsibility for implementation or have a mutual interest in relevant areas.	**1.** *Aquatic animal* health legislation is not implemented or is poorly implemented, and is not supported by communication, compliance or inspection activities.
	2. *Aquatic animal* health legislation is implemented through some communication and awareness-raising activities concerning stakeholders' legal obligations, but few compliance and inspection activities are conducted.
	3. *Aquatic animal* health legislation is implemented through a programme of communication and awareness-raising, and through formal, documented compliance and inspection activities. The AAHS undertake some legal action (e.g. administrative fines or prosecution) in instances of non-compliance in most relevant fields of activity.
	4. *Aquatic animal* health legislation is implemented across the entire AAH domain and is consistently applied. The AAHS work to minimise instances of non-compliance through multiple means, including through targeted communications, incentives and appropriate legal processes. They have documented reports of responding to non-compliance.
	5. *Aquatic animal* health legislation compliance programmes are regularly subjected to audit and review by the AAHS or external agencies.

***Aquatic Code* references:**

Points 6, 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.
Article 3.2.4. on Personnel and resources.
Article 3.2.7. on Animal Health.
Article 3.2.8. on Animal production food safety.
Article 3.2.9. on Veterinary medicinal products.
Article 3.2.11. on Animal welfare.
Article 3.2.12. on International trade.

IV-2. INTERNATIONAL HARMONISATION	
DEFINITION	**LEVELS OF ADVANCEMENT**
The authority and capability of the AAHS to be active in the harmonisation of national AAH legislation and *sanitary measures* to ensure that they take into account international standards, and/or related regional directives or guidelines.	**1.** National AAH legislation and *sanitary measures* under the mandate of the AAHS do not take international standards into account.
	2. The AAHS are aware of gaps, inconsistencies or non-conformities in national AAH legislation and *sanitary measures*, as compared to international standards, but do not have the capability or authority to rectify the problems.
	3. The AAHS monitor the establishment of new and revised international standards, and periodically review national AAH legislation and *sanitary measures* accordingly.
	4. The AAHS harmonise AAH legislation and *sanitary measures* and can demonstrate a level of alignment with changing international standards. The AAHS also review and comment on the draft standards of relevant intergovernmental organisations, and work through regional organisations, where available, to ensure better harmonisation with international standards.
	5. The AAHS actively and regularly participate at the international level in the formulation, negotiation and adoption of international standards,[28] and use these standards to harmonise national AAH legislation and *sanitary measures*.

[28] Recommended reading:
the *WTO SPS Agreement:* https://www.wto.org/english/tratop_e/sps_e/spsagr_e.htm

***Aquatic Code* reference:**

Point 6 of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.
Article 3.2.7. on Animal Health.
Article 3.2.8. on Animal production food safety.
Article 3.2.9. on Veterinary medicinal products.
Article 3.2.11. on Animal welfare.
Article 3.2.12. on International trade.

IV-3. INTERNATIONAL CERTIFICATION[29]

DEFINITION	LEVELS OF ADVANCEMENT
The authority and capability of the AAHS to certify *aquatic animals*, *aquatic animal products*, services and processes under their mandate for export, in accordance with the national AAH legislation and regulations, international standards, and the requirements of the importing country. **This refers to the country's AAH export certification processes. Issues such as the legislative basis, format and content of AAH certificates; who signs certificates and the confidence they have in what they are certifying; and the outcome in terms of meeting international standards and/or importing country requirements to facilitate exportation should all be considered.**	**1.** The AAHS have neither the authority nor the capability to certify *aquatic animals* and *aquatic animal products* for export. **2.** The AAHS have the authority to certify certain *aquatic animals* and *aquatic animal products* but are not always in compliance with the national AAH legislation and regulations, and international standards. **3.** The AAHS develop and carry out certification programmes for certain *aquatic animals*, *aquatic animal products*, services and processes under their mandate in compliance with international standards. **4.** The AAHS develop and carry out all relevant certification programmes for all *aquatic animals*, *aquatic animal products*, services and processes for export under their mandate in compliance with international standards. **5.** The AAHS carry out audits of their certification programmes to maintain national and international confidence in their system.

[29] Recommended reading: the WTO SPS Agreement available at: https://www.wto.org/english/tratop_e/sps_e/spsagr_e.htm

***Aquatic Code* references:**

Points 6, 7 and **9** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation/Procedures and standards.

Chapter 5.2. on Certification procedures.

Chapter 5.11. on Model health certificates for international trade in live aquatic animals and products of aquatic animal origin.

***Terrestrial Code* reference:**

Article 3.2.12. on International trade.

IV-4. EQUIVALENCE AND OTHER TYPES OF SANITARY AGREEMENTS	
DEFINITION	**LEVELS OF ADVANCEMENT**
The authority and capability of the AAHS to apply flexibility in negotiating, implementing and maintaining equivalence and other types of sanitary agreements with trading partners. **As a reference, Article 4 of the WTO SPS Agreement[30] states:** **'Member Countries shall accept the sanitary or phytosanitary measures of other Member Countries as equivalent, even if these measures differ from their own or from those used by other Member Countries trading in the same product, if the exporting Member Country objectively demonstrates to the importing Member Country that its measures achieve the importing Member Country's appropriate level of sanitary or phytosanitary protection. For this purpose, reasonable access shall be given, upon request, to the importing Member Country for inspection, testing and other relevant procedures.'**	**1.** The AAHS have neither the authority nor the capability to negotiate or approve equivalence or other types of sanitary agreements with other countries. **2.** The AAHS have the authority to negotiate and approve equivalence and other types of sanitary agreements with trading partners, but no such agreements have been implemented. **3.** The AAHS have implemented equivalence and other types of sanitary agreements with trading partners on selected *aquatic animals*, *aquatic animal products* and processes. **4.** The AAHS actively pursue the development, implementation and maintenance of equivalence and other types of sanitary agreements with trading partners on all matters relevant to *aquatic animals*, *aquatic animal products* and processes under their mandate. They publish their existing sanitary agreements in the public domain. **5.** The AAHS actively work with stakeholders and take account of developments in international standards in pursuing equivalence and other types of sanitary agreements with trading partners.

[30] Recommended reading:
WTO SPS Agreement - https://www.wto.org/english/tratop_e/sps_e/spsagr_e.htm
SPS Information Management System - https://www.wto.org/english/tratop_e/sps_e/spsims_e.htm

***Aquatic Code* references:**

Points 6 and **7** of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations/General organisation.

Chapter 5.3. on OIE procedures relevant to the Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization.

IV-5. TRANSPARENCY	
DEFINITION	**LEVELS OF ADVANCEMENT**
The authority and capability of the AAHS to notify [31] the OIE, WTO, trading partners and other relevant organisations of their *disease* status, regulations and *sanitary measures* and systems, in accordance with established procedures, as applicable to *international trade*.	**1.** The AAHS do not notify.
	2. The AAHS occasionally notify.
	3. The AAHS notify in compliance with the procedures established by these organisations.
	4. The AAHS regularly inform interested parties of changes in *disease* status, regulations and *sanitary measures* and systems, as applicable to *international trade*.
	5. The AAHS, in cooperation with their stakeholders, carry out audits of their *notification* procedures.

[31] Recommended reading:
WAHIS user interface/database at: https://wahis.oie.int/#/home
SPS Information Management System at: https://www.wto.org/english/tratop_e/sps_e/spsims_e.htm

***Aquatic Code* references:**

Point 6 of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations.

Chapter 5.1. on General obligations related to certification.

***Terrestrial Code* references:**

Article 3.2.3. on Policy and management.

Article 3.2.7. on Animal Health.

Article 3.2.12. on International trade.

IV-6. ZONING[32]	
DEFINITION	**LEVELS OF ADVANCEMENT**
The authority and capability of the AAHS to establish and maintain *disease*-free *zones*, as necessary and in accordance with the criteria established by the OIE (and by the WTO SPS Agreement, where applicable).	**1.** The AAHS do not have the authority or capability to initiate the establishment of *disease*-free *zones*.
	2. The AAHS have identified a geographical *aquatic animal* subpopulation or subpopulations as candidates to target for a specific health status, suitable for zoning.
	3. The AAHS are implementing *biosecurity* and *sanitary measures* with the intention of establishing a *disease*-free *zone* for selected *aquatic animals* and *aquatic animal products*.
	4. The AAHS have established at least one *disease*-free *zone* of selected *aquatic animals* and *aquatic animal products* with collaboration from producers and other stakeholders in alignment with OIE international standards.
	5. The AAHS can demonstrate the scientific basis for any *disease*-free *zone* and have gained recognition by trading partners that they meet the criteria established by the OIE (and by the WTO SPS Agreement, where applicable).

[32] One may need to cross-reference this CC with CCs on Disease prevention, control and eradication and Compartmentalisation as appropriate.

***Aquatic Code* references:**

Point 6 of Article 3.1.2. on Fundamental principles of quality: Aquatic animal health legislation and regulations.

Chapter 4.1. on Biosecurity for aquaculture establishments.

Chapter 4.2. on Zoning and compartmentalisation.

IV-7. COMPARTMENTALISATION[33]	
DEFINITION	**LEVELS OF ADVANCEMENT**
The authority and capability of the AAHS to establish and maintain *disease*-free *compartments* as necessary, and in accordance with the criteria established by the OIE.	**1.** The AAHS do not have the authority or capability to initiate the establishment of a*quatic animal disease*-free *compartments*.
	2. The AAHS can identify *aquatic animal* subpopulations as candidate establishments with a specific health status suitable for compartmentalisation, in partnership with interested stakeholders.
	3. The AAHS, working in close partnership with interested stakeholders, ensure that planned *biosecurity* measures to be implemented will enable the establishment and maintenance of *disease*-free *compartments* for selected *aquatic animals* and *aquatic animal products*.
	4. The AAHS collaborate with producers and other stakeholders to define responsibilities and undertake actions that enable the *aquaculture establishment* to maintain *disease*-free *compartments* for selected *aquatic animals* and *aquatic animal products*, approved and regulated by the *Competent Authority*.
	5. The AAHS can demonstrate the scientific basis for *disease*-free *compartments* and have gained recognition by other countries that they meet the criteria established by the OIE (and by the WTO SPS Agreement, where applicable).

[33] One may need to cross-reference this CC with CCs on Disease prevention, control and eradication and Zoning as appropriate.

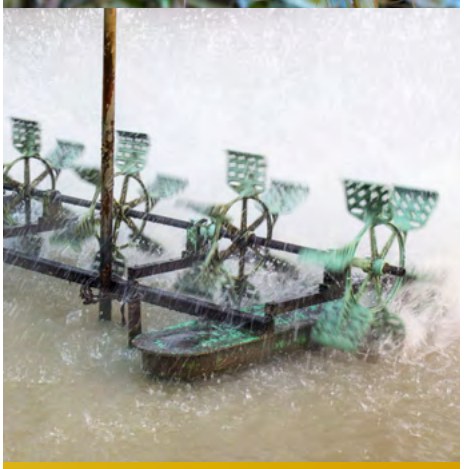
***Aquatic Code* references:**

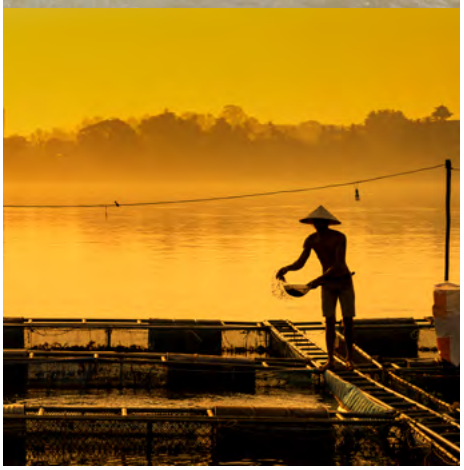
Point 6 of **Article 3.1.2.** on Fundamental principles of quality: Aquatic animal health legislation and regulations.

Chapter 4.1. on Biosecurity for aquaculture establishments.

Chapter 4.2. on Zoning and compartmentalisation.

Chapter 4.3. on Application of compartmentalisation.





I HUMAN, PHYSICAL AND FINANCIAL RESOURCES

- **I-1** Professional and technical staffing of the Aquatic Animal Health Services
- **I-2** Competencies and education of veterinarians or aquatic animal health professionals, and technical personnel
- **I-3** Continuing education
- **I-4** Technical independence
- **I-5** Planning, sustainability and management of policies and programmes
- **I-6** Coordination capability of the Aquatic Animal Health Services
- **I-7** Physical resources and capital investment
- **I-8** Operational funding
- **I-9** Emergency funding

II TECHNICAL AUTHORITY AND CAPABILITY

- **II-1** Laboratory diagnosis
- **II-2** Risk analysis and epidemiology
- **II-3** Quarantine and border security
- **II-4** Surveillance and early detection
- **II-5** Emergency preparedness and response
- **II-6** Disease prevention, control and eradication
- **II-7** Aquatic animal production food safety
- **II-8** Veterinary medicines and biologicals for aquatic animals
- **II-9** Antimicrobial resistance (AMR) and antimicrobial use (AMU)
- **II-10** Residue testing, monitoring and management
- **II-11** Aquatic animal feed safety
- **II-12** Identification, traceability and movement control
- **II-13** Welfare of farmed fish

III INTERACTION WITH STAKEHOLDERS

- **III-1** Communication
- **III-2** Consultation with stakeholders
- **III-3** Official representation and international collaboration
- **III-4** Accreditation/authorisation/delegation
- **III-5** Veterinary Statutory Body (VSB)
- **III-6** Participation of producers and other stakeholders in joint programmes
- **III-7** Aquatic animal health management and clinical services

IV ACCESS TO MARKETS

- **IV-1** Aquatic animal health legislation
- **IV-2** International harmonisation
- **IV-3** International certification
- **IV-4** Equivalence and other types of sanitary agreements
- **IV-5** Transparency
- **IV-6** Zoning
- **IV-7** Compartmentalisation

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