

# Import of live sturgeon

# Implementation statement

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#### **Acknowledgement of Country**

We acknowledge the Traditional Custodians of Australia and their continuing connection to land and sea, waters, environment and community. We pay our respects to the Traditional Custodians of the lands we live and work on, their culture, and their Elders past and present.

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## Summary

There are a number of different pieces of legislation that regulate the import of live animals, or their reproductive material, into Australia.

Live animals must be listed in the *List of specimens taken to be suitable for live import (Live Import List*) under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) before they can be imported into Australia. If a specimen is not in the *Live Import List*, the list must be amended to include that specimen before it can be imported. This is done through a science-based assessment of the environmental impacts associated with the import of a specimen on the Australian environment and is managed by the Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW).

In addition to inclusion in the *Live Import List*, the biosecurity risks of the importation of live animals must be assessed by the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF). This is done through a biosecurity import risk analysis (BIRA). A BIRA is a science-based assessment of the biosecurity risks associated with the import of a particular good, which is provided for under law. Under the <u>Biosecurity Act 2015</u>, a BIRA must be conducted in accordance with the process prescribed in the <u>Biosecurity Regulation 2016</u> and takes into account the matters set out in the BIRA Guidelines 2016.

An import permit application to import live sturgeon and their reproductive material for aquaculture purposes cannot be considered by DAFF or DCCEEW until all activities in this statement have been completed, and the final import conditions for live sturgeon and their reproductive material have been published on DAFF's <u>Australian Biosecurity Import Conditions</u> (BICON) webpage.

Before import conditions can be published on BICON, several activities remain to be undertaken to develop finalised import conditions. These include development of relevant aquaculture facility standards (for biosecurity and physical containment), development of diagnostic tests, and competent authority assessment(s). This will require significant work by any prospective importer and the exporting country as well as the relevant state or territory jurisdiction, Australian Centre for Disease Preparedness, DCCEEW and DAFF.

This document outlines the activities and intersecting responsibilities of the relevant parties in developing and implementing import conditions for live sturgeon and their reproductive material.

## 1 Introduction

In 2015, the then-Australian Government Department of the Environment and Energy, added *Acipenser baerii* (Siberian sturgeon) and *Huso huso* (beluga sturgeon) to Part 2 of the *List of specimens taken to be suitable for live import (Live Import List*) under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Under the EPBC Act, importation of *A. baerii* and *H. huso* into Australia is permitted only for commercial aquaculture in a secure recirculating aquaculture system (RAS) to manage the risk of sturgeon establishing as a pest species in the wild. Additionally, imported live sturgeon and their reproductive material require an export permit, identifying the sturgeon to species level, issued by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Management Authority of the exporting country, and a corresponding import permit, issued through the Department of Climate Change, Energy, the Environment and Water (DCCEEW) as the CITES Management Authority of Australia, and an Import Declaration lodged with Australian Border Force.

In 2022 the Department of Agriculture, Fisheries and Forestry (DAFF) released a Notice of Intention to conduct a biosecurity import risk analysis of live sturgeon for aquaculture purposes (the sturgeon BIRA) under the <u>Biosecurity Act 2015</u> and the Biosecurity Regulation 2016. The sturgeon BIRA assessed whether the import of live sturgeon (all *Acipenser* and *Huso* species), or their reproductive material, posed an acceptable biosecurity risk, and because it did not, recommended risk management measures to manage the risks to a level that achieves Australia's appropriate level of protection (ALOP). DAFF released the final BIRA report in the week commencing 20 May 2024 and it is available on the <u>Import of live sturgeon for aquaculture</u> webpage.

An import permit application to import live sturgeon and their reproductive material for aquaculture purposes cannot be considered by DAFF or DCCEEW until all activities in this statement have been completed, and the final import conditions for live sturgeon and their reproductive material have been published on DAFF's <u>Australian Biosecurity Import Conditions</u> webpage.

## 1.1 Purpose

The purpose of this implementation statement is to outline the activities and intersecting responsibilities of DAFF, DCCEEW, relevant states and territories, intended importers and exporters, and trading partners in developing and implementing import conditions for live sturgeon and their reproductive material. Figure 1 is a summary of the steps required to import live sturgeon into Australia for aquaculture, including the legislation and import requirements.

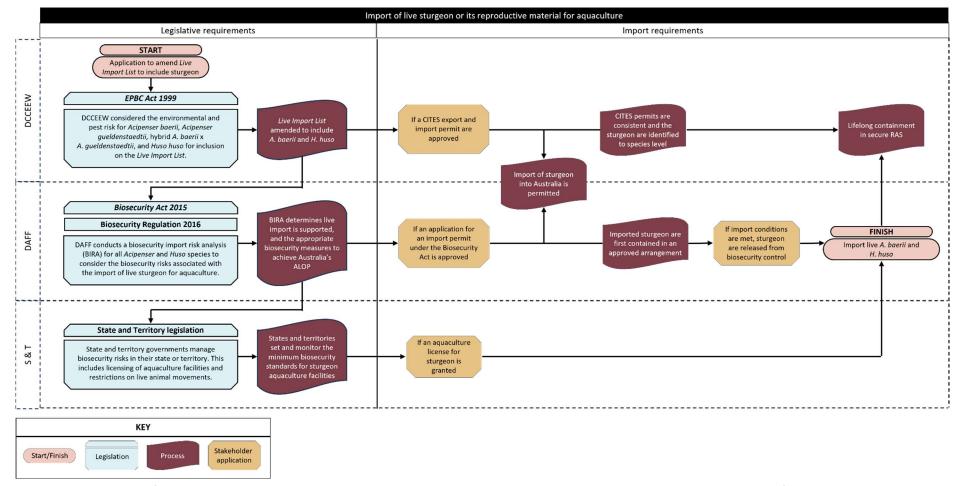


Figure 1 Summary of the steps required to import live sturgeon into Australia for aquaculture

**ALOP** Appropriate level of protection. **BIRA** Biosecurity import risk analysis. **CITES** Convention on International Trade in Endangered Species of Wild Fauna and Flora **DAFF**Department of Agriculture, Fisheries and Forestry. **DCCEEW** Department of Climate Change, Energy, the Environment and Water. **EPBC Act 1999** *Environment Protection and Biodiversity Conservation Act 1999*. **Live Import List** List of specimens taken to be suitable for live import. **RAS** recirculating aquaculture systems **S & T** Australian states and territories.

### 1.2 Amendment of the Live Import List

Plant and animal specimens considered to be suitable for live import into Australia are listed on the Live Import List. If a specimen is not on the Live Import List, the list must be amended to include that specimen before it can be imported. The list is available at Live Import List (Federal Register of Legislation - List of Specimens Taken to be Suitable for Live Import (29/11/2001). Further information on the science-based environmental assessment process to amend the Live Import List can be found at the DCCEEW website. Since A. baerii and H. huso are the only sturgeon species on the Live Import List, they are the only sturgeon species currently permitted import into Australia. Crosses or hybrids of A. baerii and H. huso, irrespective of generational distance from the original mating or wild ancestor, are prohibited import unless the specific hybrid type is added to the Live Import List.

Under the EPBC Act, importation of *A. baerii* and *H. huso* is only permitted for commercial aquaculture in a secure recirculating aquaculture system (RAS) to manage the risk of sturgeon establishing as a pest species in the wild. Sturgeon aquaculture facilities in Australia will need to demonstrate they are able to meet the EPBC Act's requirements and DCCEEW will monitor and enforce these requirements.

Globally there has been a long history of commercial sturgeon fisheries, primarily for caviar products but also as food fish. Due to over-exploitation of both natural and enhanced sturgeon stocks for caviar production, along with serious habitat deterioration and loss of natural spawning sites, there has been a drastic decline in natural populations (Bronzi, Rosenthal & Gessner 2011; Jahrl 2013; Ruban & Khodorevskaya 2011). In 1997, the Conference of the Parties (CoP) to CITES decided to regulate the international trade in sturgeon. All Acipenseriformes sturgeons and parts or derivatives thereof (e.g. caviar, meat, skin, etc.) that enter international trade require the issuance of CITES permits or certificates. The permit system established by CITES allows regulation of trade and makes it easy to trace the source of any given shipment of caviar. Two species of sturgeon, Acipenser brevirostrum and Acipenser sturio are included in Appendix I while the remaining species are in Appendix II (CITES 2010). Appendix II includes species that are not necessarily now threatened with extinction but that may become so unless trade is closely controlled, and includes A. baerii and H. huso (CITES 2010). The export and import of species listed under CITES is regulated by a permitting system implemented by CITES member countries. The permitting system verifies that the international movement of a listed species is both legal and sustainable. Import of live sturgeon (A. baerii and H. huso), their reproductive material and any non-live sturgeon specimens into Australia will require an export permit, identifying the sturgeon to species level, issued by the CITES Management Authority of the exporting country and a corresponding import permit issued by DCCEEW as the CITES Management Authority of Australia.

## 1.3 Sturgeon BIRA

A BIRA is a science-based assessment of the biosecurity risks associated with the import of a particular good, which is provided for under law. Under the <u>Biosecurity Act 2015</u>, a BIRA must be conducted in accordance with the process prescribed in the <u>Biosecurity Regulation 2016</u> and takes into account the matters set out in the <u>BIRA Guidelines 2016</u>.

The sturgeon BIRA assessed the biosecurity risks for the importation of all *Acipenser* and *Huso* species (27 species) from all countries for aquaculture purposes into Australia. The final BIRA report recommended that live sturgeon and their reproductive material be permitted import into

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Australia for aquaculture purposes, provided they comply with appropriate biosecurity measures, and are included on the *Live Import List*. The biosecurity measures recommended are based on science, are the least trade restrictive to manage the risk, are practical and meet our rights and obligations under the World Trade Organization *Agreement on the application of sanitary and phytosanitary measures* (the SPS agreement). The biosecurity measures include:

- sourcing from disease-free stocks (a country, zone or compartment that is recognised by Australia to be free from the disease agents (freedom would need to be to a standard consistent with that recommended by World Organisation of Animal Health (WOAH) or equivalent)).
- sourcing from a premises under the supervision of the competent authority
- sourcing from a premises that cultures sturgeon only
- pre-export quarantine
- parasite treatment
- batch testing for disease agents
- egg disinfection
- post-arrival quarantine in an approved arrangement.

The biosecurity measures recommended in the sturgeon BIRA will form the basis of the required import conditions. However, the import of live sturgeon and their reproductive material cannot occur until suitable import conditions have been developed and finalised. These import conditions will be included on an import permit issued by the department under the *Biosecurity Act 2015*.

# 2 Development of import conditions

This statement outlines the activities and intersecting responsibilities of the Department of Agriculture, Fisheries and Forestry (DAFF), the Department of Climate Change, Energy, the Environment and Water (DCCEEW), relevant states and territories, intended importers and trading partners in developing and implementing import conditions for live sturgeon and their reproductive material. Figure 2 outlines the activities that need to be developed before import conditions for live sturgeon into Australia for aquaculture can be finalised and the parties responsible.

Figure 2 Activities required before live sturgeon can be imported into Australia



**DAFF** Department of Agriculture, Fisheries and Forestry. **DCCEEW** Department of Climate Change, Energy, the Environment and Water. **BICON** Biosecurity Import Conditions system. **CITES** Convention on International Trade in Endangered Species of Wild Fauna and Flora. **S & T** Australian states and territories.

An import permit application to import live sturgeon, including reproductive material for aquaculture purposes cannot be considered by DAFF or DCCEEW until all activities in this statement have been completed, and the final import conditions for live sturgeon and its reproductive material, including requirements under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), have been published on DAFF's <u>Australian Biosecurity Import Conditions</u> webpage.

## 2.1 Assess disease freedom in exporting country

#### 2.1.1 Identification of preferred exporting country

Import of live sturgeon and their reproductive material is a commercial decision. It is the intended importer's responsibility to identify their preferred exporting country (and export premises). The importer should contact their preferred exporting country(ies) and request that they send a formal market access request to Australia.

When determining the preferred exporting country(ies), the importer should note that approval of a country to export live sturgeon and their reproductive material to Australia will require an in-country verification audit by DAFF officers. Travel by DAFF officers to countries listed on <a href="Smartraveller">Smartraveller</a> as "Do not travel" or "Reconsider your need to travel" is only approved in exceptional circumstances. Countries rated as such, will not therefore be considered as source countries for live sturgeon or their reproductive material until the security situation in those countries improves.

When determining the preferred exporting country(ies), the importer should also consider selecting countries which are most likely able to achieve the import condition of sourcing sturgeon from disease-free stocks as well as the other import conditions recommended in the final BIRA report.

# 2.1.2 Formal market access request must be sent from the competent authority of the exporting country to Australia

The exporting country(ies) will need to provide a formal market access request to DAFF outlining the appropriate competent authority (CA), confirming that they are willing to work with DAFF to provide the regulatory oversight that is needed to manage the biosecurity risks of these products and the intended scope of the export being proposed (e.g. country, zone or compartment freedom and live sturgeon or their reproductive material).

The market access request should be provided to:

Dr Peter Finnin
Assistant Secretary
Animal Biosecurity
Department of Agriculture, Fisheries and Forestry
GPO Box 858
Canberra ACT 2601
AUSTRALIA

Email: animalbiosecurity@aff.gov.au

On receipt of the request, DAFF will contact the CA to further discuss the requirements for disease freedom such as the surveillance activities. DAFF will provide detail on the sampling design, the diagnostic tests to be used and the testing parameters, which will be based on those recommended by the World Organisation for Animal Health (WOAH), or equivalent.

#### 2.1.3 DAFF assessment of exporting country

DAFF will work with the relevant CA of the exporting country to evaluate their capacity for disease control, monitoring and surveillance as described in the final BIRA report. This will include:

- DAFF evaluating the country, zone or compartment for freedom from disease agents to a standard consistent with that recommended by WOAH, or equivalent.
- CA completing a questionnaire (provided by DAFF) seeking information on which DAFF will
  conduct a desk audit.
- CA providing information on sturgeon aquaculture farming practices, biosecurity management systems and disease surveillance activities in the country, zone or compartment of export.
- DAFF conducting an in-country verification audit to verify the information regarding the sturgeon production systems and associated biosecurity measures in the exporting country.
- DAFF providing the CA with a draft report of its findings. Where non-compliances are identified,
  DAFF will request that the CA develop an action plan, including a timetable for the completion of
  relevant corrective actions to address identified non-compliances. DAFF will consider the CA's
  action plan to determine its effectiveness in addressing any identified non-compliances and
  assuring biosecurity plans are implemented and maintained.
- DAFF and the CA collaborating on development of pre-export risk management options for sturgeon exports to Australia such as inspection, disease surveillance and certification requirements.

DAFF negotiating health certification.

**Note:** Exporting country surveillance activities will significantly affect the ability of DAFF to undertake an assessment of the country. A minimum of 2 years active surveillance (or 10 years passive surveillance) is required for several disease agents. Assessment of country, zone or compartment freedom cannot be undertaken by DAFF until these minimum surveillance timeframes have been met.

### 2.2 Develop diagnostic testing for disease agents

The detail of the sampling design, the confidence and prevalence parameters to be applied, the samples required and the diagnostic tests to be used (including their sensitivity and specificity) was not provided in the final BIRA report because this information is yet to be determined.

DAFF will determine the sampling design, the samples required and the testing confidence and prevalence parameters to be applied. Intended importers and their relevant state or territory governments should work in collaboration with the Australian Centre for Disease Preparedness (ACDP) to develop diagnostic testing capability in Australia for relevant disease agents. DAFF will be available to ACDP, the importer, and the relevant state or territory to provide input and ensure the testing being developed will meet the import conditions.

The final BIRA report requires on-arrival batch testing and negative test results for:

- Acipenserid herpesvirus 1 and 2 ((AciHV1 and AciHV2) required if sturgeon were not certified as free of AciHV1 and AciHV2)
- typical Aeromonas salmonicida
- cyprinid herpesvirus 3 (koi herpesvirus) (CyHV-3)
- frog virus 3 (FV3)
- infectious haematopoietic necrosis virus (IHNV)
- spring viremia of carp virus (SVCV)
- sturgeon nucleocytoplasmic large DNA viruses ((sNCLDV) required if sturgeon were not certified as free of sNCLDV)
- viral haemorrhagic septicaemia virus (VHSV)
- Yersinia ruckeri (Hagerman strain).

The testing procedures applied will need to be based on methods listed in the WOAH *Manual of diagnostic tests for aquatic animals* (WOAH Manual) (WOAH 2023g) or scientific publications and be developed in partnership with ACDP.

## 2.3 Develop containment requirements

Sturgeon aquaculture facilities in Australia need to be aligned with DAFF, DCCEEW, and state and territory containment requirements.

On import into Australia, the sturgeon (or their progeny if reproductive material is imported) must remain in a DAFF approved arrangement (AA) to undergo post-arrival quarantine (PAQ) for a

minimum of 30 days as per the import requirements under the *Biosecurity Act 2015*. The sturgeon (or their progeny) must also enter a secure recirculating aquaculture system (RAS) as per the import requirements under the EPBC Act. Additionally, the RAS must meet the requirements of the relevant aquaculture license regulations of the state and territory in which it is located.

Importers will need to work with the relevant state or territory government, DAFF and DCCEEW to ensure the construction of the commercial sturgeon aquaculture facility will meet the requirements for holding live sturgeon and their reproductive material under all the relevant state and territory and Commonwealth legislation. Consideration should be given to potential impacts of the construction on matters of National Environmental Significance under the EPBC Act and, if required, a referral for assessment under that Act made prior to commencement of construction.

#### 2.3.1 Biosecurity containment / approved arrangement class development

On arrival, the imported live sturgeon will be placed under biosecurity control, inspected for signs of clinical infection or parasites and moved to an Approved Arrangement (AA) to undergo Post Arrival Quarantine (PAQ). At the end of the PAQ period, only live sturgeon that meet all biosecurity import conditions, including being free of clinical signs of disease and parasites and testing negative for disease agents, will be released from biosecurity control.

In the case of imported sturgeon reproductive material, it typically will not show any clinical signs of infection. However, the consignment will still be inspected after being placed under biosecurity control on arrival, followed by transfer to an AA for PAQ. During the PAQ period, the reproductive material will be used to produce sturgeon progeny. The sturgeon progeny will be grown out for an appropriate time to monitor for the appearance of clinical signs of disease and to batch test for disease agents. Only sturgeon progeny that show no signs of clinical disease, test negative for disease agents, and meet all other biosecurity import conditions will be released from biosecurity control.

Currently, there is no AA class for live fish being imported for commercial aquaculture. There is however an AA class for live aquarium fish (class 7.1) which will form the basis of the criteria for live sturgeon. The AA will also need to be a RAS to meet the import requirements under the EPBC Act. DAFF will develop the AA criteria for holding live sturgeon and their reproductive material in PAQ and these will be shared with DCCEEW, relevant state and territories and importers.

# 2.3.2 Physical containment / secure recirculating aquaculture system criteria development

The minimum biosecurity standards for the RAS will be determined by DCCEEW and the appropriate state and territory, in consultation with DAFF, under the Commonwealth and relevant state and territory and legislation.

## 2.4 Assess CITES certification requirements

Only two sturgeon species, *Acipenser baerii* (Siberian sturgeon) and *Huso huso* (beluga sturgeon) are on the *Live Import List* and permitted import under the EPBC Act. All commercially used Acipenseriformes sturgeon species world-wide are listed in either Appendix 1 or Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). CITES requirements state that the exporting country's CITES Management Authority must issue an export

permit, identifying the sturgeon to species level, for the export to proceed. A corresponding CITES import permit must be issued by DCCEEW, the CITES Management Authority of Australia.

If required, DCCEEW will work with the exporting country to determine the relevant CITES permit that needs to be issued for the export of live sturgeon and their reproductive material to Australia.

### 2.5 Determine identification methods for sturgeon

Under the EPBC Act, imported live sturgeon including reproductive material must be identified as *A. baerii* or *H. huso* on the CITES export and import permits. Other sturgeon species or crosses or hybrids of *A. baerii* and *H. huso*, irrespective of generational distance from the original mating or wild ancestor, are prohibited import unless they are added to the *Live Import List*.

Identification of imported live sturgeon (or the progeny from reproductive material) to the genera *Acipenser* or *Huso* is required under the *Biosecurity Act 2015* during the PAQ period. DAFF will determine the process for genera identification, which may include visual inspection or DNA testing.

## 3 Next steps

An import permit application to import live sturgeon and their reproductive material for aquaculture purposes cannot be considered by the Department of Agriculture, Fisheries and Forestry (DAFF) or the Department of Climate Change, Energy, the Environment and Water (DCCEEW) until all activities in this statement have been completed, and the final import conditions for live sturgeon and its reproductive material, including the *Environment Protection and Biodiversity Conservation Act 1999* requirements, have been published on the <u>Australian Biosecurity Import Conditions</u> webpage.

DAFF and DCCEEW look forward to engaging with all relevant parties in this complex process. It is anticipated it will take several years to complete all activities contained in this statement.

Prospective importers are asked to contact DAFF (<u>aquaticbiosecurity@aff.gov.au</u>) or DCCEEW <u>exoticspecies@dcceew.gov.au</u>) if they would like to discuss the next steps in this process.

# Glossary

Term	Definition
Appropriate level of protection (ALOP)	The <i>Biosecurity Act 2015</i> defines the appropriate level of protection (or ALOP) for Australia as a high level of sanitary and phytosanitary protection aimed at reducing biosecurity risks to very low, but not to zero.
Approved arrangement (AA)	Approved arrangement (AA) is defined in the <i>Biosecurity Act 2015</i> as an arrangement for which an approval is in force under paragraph 406(1)(a) (including a varied arrangement for which an approval is in force under that paragraph as it applies because of subsection 412(3)).
Biosecurity	The prevention of the entry, establishment or spread of unwanted pests and infectious disease agents to protect human, animal or plant health or life, and the environment.
Biosecurity import risk analysis (BIRA)	The <i>Biosecurity Act 2015</i> defines a BIRA as an evaluation of the level of biosecurity risk associated with particular goods, or a particular class of goods, that may be imported, or proposed to be imported, into Australian territory, including, if necessary, the identification of conditions that must be met to manage the level of biosecurity risk associated with the goods, or the class of goods, to a level that achieves the ALOP for Australia. The risk analysis process is regulated under legislation.
Biosecurity measures	The <i>Biosecurity Act 2015</i> defines biosecurity measures as measures to manage biosecurity risk, the risk of contagion of a listed human disease, the risk of listed human diseases entering, emerging, establishing themselves or spreading in Australian territory, and biosecurity emergencies and human biosecurity emergencies.
Biosecurity risk	The <i>Biosecurity Act 2015</i> refers to biosecurity risk as the likelihood of a disease or pest entering, establishing or spreading in Australian territory, and the potential for the disease or pest causing harm to human, animal or plant health, the environment, economic or community activities.
Competent Authority	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.
Health certificate	For an animal or part of an animal that is to be imported into Australian territory from a place outside Australian territory (the overseas place) means a certificate that is in a form approved by the Director of Biosecurity and has been signed by an approved officer from the overseas place.
Import permit	Official document authorising importation of a commodity in accordance with specified sanitary import requirements.
Quarantine	Official confinement of regulated articles for observation and research or for further inspection, testing or treatment.
Reproductive material	Sturgeon milt, unfertilised eggs and fertilised eggs
Risk analysis	Refers to the technical or scientific process for assessing the level of biosecurity risk associated with the goods, or the class of goods, and if necessary, the identification of conditions that must be met to manage the level of biosecurity risk associated with the goods, or class of goods to a level that achieves the ALOP for Australia.
Sensitivity	The proportion of true positive tests given in a diagnostic test, meaning the number of true positive results divided by the number of true positive and false negative results.
Specificity	The probability that absence of infection will be correctly identified by a diagnostic test, meaning the number of true negative results divided by the number of true negative and false positive results.
Unrestricted risk	Risk estimate without the application of biosecurity measures.
Zone	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

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Term	Definition
	measures and basic biosecurity conditions are applied. The zone should be defined by the competent authority.

## References

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