

ANNEX I

APPLICATION

(Indicative guidelines for the dossier to be completed by applicant as foreseen under Article 6)

Wherever possible, information is to be supported with references from the scientific literature, and notations to personal communications with scientific authorities and fisheries experts. Applicants are advised to distinguish between movements to 'open' or 'closed' aquaculture facilities.

For the purpose of this Annex when an application refers to a proposed translocation, rather than an introduction, the terms introduction/introduced are to be replaced by translocation/translocated.

A. Executive summary

Provide a brief summary of the document including a description of the proposal, the potential impacts on native species and their habitats and mitigation steps to minimise the potential impacts on native species.

B. Introduction

- (1) Name (common and scientific) of the organism proposed for introduction or translocation, indicating the genus, species, subspecies or lower taxonomic classification where applicable.
- (2) Describe the characteristics, including distinguishing characteristics, of the organism. Include a scientific drawing or photograph.
- (3) Describe the history in aquaculture, enhancement or other introductions (if appropriate).
- (4) Describe the objectives and rationale for the proposed introduction, including an explanation as to why such an objective cannot be met through the utilisation of an indigenous species.
- (5) What alternate strategies have been considered in order to meet the objectives of the proposal?
- (6) What is the geographic area of the proposed introduction? Describe the habitats, ecosystem and protection status of the receiving environment. Include a map.
- (7) Describe the numbers of organisms it is proposed to introduce (initially, ultimately). Can the project be broken down into different sub-components? If so, how many organisms are involved in each sub-component?
- (8) Describe the source(s) of the stock (facility) and genetic stock (if known).

C. Life history information of the species to be introduced — for each life history stage

- (1) Describe the native range and range changes due to introductions.
- (2) Does the stock from which the introduction/translocation will be made have a link with any known non-target species?
- (3) What is the distribution of such non-target species within the area of origin of the stock to be introduced/translocated?

- (4) Record where the species was introduced previously and describe the ecological effects on the environment of the receiving area (predator, prey, competitor, and/or structural/functional elements of the habitat).
 - (5) What factors limit the species in its native range.
 - (6) Describe the physiological tolerances (water quality, temperature, oxygen, and salinity) at each life history stage (early life-history stages, adult and reproductive stages).
 - (7) Describe the habitat preferences and tolerances for each life-history stage.
 - (8) Describe the reproductive biology.
 - (9) Describe the migratory behaviour.
 - (10) Describe the food preferences for each life-history stage.
 - (11) Describe the growth rate and lifespan (also in the area of the proposed introduction, if known).
 - (12) What is the age or age-range of the species concerned?
 - (13) Describe the behavioural traits (social, territorial, aggressive).
- D. Interaction with native species
- (1) What is the potential for survival and establishment of the introduced organism if it escapes? (This question applies to movements into open and closed aquaculture facilities.)
 - (2) What habitat(s) will the introduced species be likely to occupy in the proposed area of introduction and will this overlap with any vulnerable, threatened or endangered species? (Indicate if the proposed area of introduction also includes contiguous waters.)
 - (3) With which native species will there be a niche overlap? Are there any unused ecological resources of which the species would take advantage?
 - (4) What will the introduced organism eat in the receiving environment?
 - (5) Will this predation cause any adverse impacts on the receiving ecosystem?
 - (6) Will the introduced organisms survive and successfully reproduce in the proposed area of introduction or will annual stocking be required? (This question applies to species not intended for closed aquaculture facilities.)
 - (7) Will the introduced organisms hybridise with native species? Is local extinction of any native species or stocks possible as a result of the proposed introduction? Are there any possible effects of the introduced organisms on the spawning behaviour and spawning grounds of local species?
 - (8) Are there any potential impacts on habitat or water quality as a result of the proposed introduction?
- E. Receiving environment and contiguous waters
- (1) Provide physical information on the receiving environment and contiguous waterbodies such as seasonal water temperatures, salinity, and turbidity, dissolved

oxygen, pH, nutrients and metals. Do those parameters match the tolerances/preferences of the species to be introduced, including conditions needed for reproduction?

- (2) List species composition (major aquatic vertebrates, invertebrates and plants) of the receiving waters.
- (3) Provide information on habitat in the area of introduction, including contiguous waters, and identify critical habitat. Which of those parameters match the tolerances/preferences of the organisms to be introduced? Can the introduced organisms disturb any of the habitats described?
- (4) Describe the natural or man-made barriers that should prevent the movement of the introduced organisms to adjacent waters.

F. Monitoring

Describe the plans for follow-up assessments of the proposed introduced species' success and how any negative impacts on native species and their habitats will be assessed.

G. Management plan

- (1) Describe the management plan for the proposed introduction. This should include, but not be restricted to, the following information:
 - (a) measures taken to ensure that no other species (non-target species) accompany the shipment;
 - (b) who will be permitted to use the proposed organisms and under what terms and conditions;
 - (c) will there be a pre-commercial phase for the proposed introduction?
 - (d) description of the contingency plan for the removal of species;
 - (e) description of the quality assurance plan for the proposal, and,
 - (f) other legislative requirements that need to be met.
- (2) Describe the chemical, biophysical and management measures being taken to prevent accidental escape of the organism and non-target species, to and their establishment in, non-target recipient ecosystems. Give details of the water source, effluent destination, any effluent treatment, proximity to storm sewers, predator control, site security and measures to prevent escapes, if necessary.
- (3) Describe contingency plans in the event of an unintentional, accidental or unauthorised liberation of the organisms from rearing and hatchery facilities or an accidental or unexpected expansion of the range of colonisation after release.
- (4) If this proposal is intended to create a fishery, give details of the fishery objective. Who would benefit from such a fishery? Give details of the management plan and, if appropriate, include changes in the management plans for species which will be impacted.

H. Business data

- (1) Provide the name of the owner and/or company, the aquaculture licence number and the business licence (if applicable) or the name of the government agency or department with a contact name, telephone, fax and e-mail information.

Status: This is the original version (as it was originally adopted).

- (2) Provide an indication as to the economic viability of the proposed project.
- I. References
 - (1) Provide a detailed bibliography of all references cited in the course of preparing the application.
 - (2) Provide a list of names, including addresses, of scientific authorities and fisheries experts consulted.