

Friend of the Sea Standard

FOS-Aqua - Prawns **Criteria and indicators for the Certification** **of sustainable farmed crustaceans**

| REV | DATE | REASON | VALIDATION | APPROVAL |
|-----|------------|---|------------|----------|
| 1 | 18/01/2013 | First Issue | | |
| 2 | 18/05/2016 | Review of quantitative parameters, and auditor guidelines | | |

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Foreword

Friend of the Sea is a non-governmental organisation established in 2008, whose aim is to safeguard the marine environment and its resources incentivising a sustainable market and implementing specific protection and preservation projects.

The certification diagram of Friend of the Sea assesses according to sustainability criteria and indicators fishing and aquaculture projects. The certification, granted by Independent Certification Bodies following an audit, ensures that a product complies with sustainability requirements.

The Friend of the Sea certification diagram for sustainable aquaculture is structured in order to **comply with "Technical Guidelines on Aquaculture Certification - Version Approved by the 29th Session of Committee on Fisheries (COFI) - held in Rome, Italy from 31 January to 04 February 2011"**. Therefore, all indicators refer to criteria that comply with the "Minimum substantive criteria for addressing environmental and social integrity in aquaculture certification schemes".

"44. Environmental impact assessments should be conducted, according to national legislation, prior to approval of establishment of aquaculture operations.

45. Regular monitoring of on-farm and off-farm environmental quality should be carried out, combined with good record keeping and use of appropriate methodologies.

46. Evaluation and mitigation of the adverse impacts on surrounding natural ecosystems, including fauna, flora and habitats should be carried out.

47. Measures should be adopted to promote efficient water management and use as well as proper management of effluents to reduce impacts on surrounding land and water resources should be adopted.

48. Where possible, hatchery produced seed should be used for culture. When wild seeds are used, they should be collected using responsible practices.

49. Exotic species are to be used only when they pose an acceptable level of risk to the natural environment, biodiversity and ecosystem health.

50. With reference to paragraph 9.3.1 of the Code of Conduct for Responsible Fisheries, where genetic material of an aquatic organism has been altered in a way that does not occur naturally, science-based risk assessment should be used to address possible risks on a case-by-case basis. Induction of polyploidy is not included.

51. Infrastructure construction and waste disposal should be conducted responsibly.

52. Feeds, feed additives, chemicals, veterinary drugs including antimicrobials, manure and fertilizer should be used responsibly to minimize their adverse impacts on the environment and to promote economic viability.

55. Workers should be treated responsibly and in accordance with national labour rules and regulations and, where appropriate, relevant ILO conventions.

56. Workers should be paid wages and provided benefits and working conditions according to national laws and regulations.

57. Child labor should not be used in a manner inconsistent with ILO conventions and international standards."

Friend of the Sea criteria and their compliance with Minimum Substantive Criteria (FAO)

Following the reference Friend of the Sea Criteria used during the audit. For each criterion, the respective Minimum Substantive Criterion observed is mentioned in brackets.

1. Management of sustainable aquaculture system (45)
2. Location of the site and environmental footprint Assessment (44,49)
3. Infrastructure (44, 51)
4. Fattening (48)
5. Feeding (52)
6. OGM and growth hormones (50)
7. Prevention of diseases and use of drugs (30)
8. Management of waters and wastewaters (47)
9. Hazardous substances (45, 51)
10. Management of energy
11. Social Accountability (55, 56, 57)
12. Traceability (126, 33)

Each one of these criteria contains essential or important indicators or recommendations.

- **Essential requirements** companies shall be 100% compliant with essential requirements to be recommended for certification by the certification bodies (CB). Failure to comply with essential requirements is a major NC. To achieve certification, corrective actions (CA) shall be implemented within three months from the date of assessment of NCs. The company shall provide the CB with satisfactory evidence of correction of all Major NCs, if necessary, with additional audits.
- **Important requirements** COs shall be 100% compliant with important requirements for the company to be recommended for certification. Failure to comply with important requirements is a minor NC. Proposals to carry out CAs shall be submitted to the CB within maximum three weeks from the date of assessment of the NCs. In the proposal, the company shall include the timeframe for the implementation of each corrective action.

The certification can only be granted after the CB has accepted the corrective actions and their implementation times. Proposals to carry out CAs shall include statements of intent and an action plan. Certificates cannot be issued if there are outstanding NCs.

- **Recommended Indicators:** It is not compulsory for COs to comply with recommended indicators to achieve certification. Nonetheless, all the aspects related to these requirements will be reviewed and any NCs will be highlighted in the audit report as a 'recommendation'. The company should consider the necessity of CAs and, during the next inspection, inform the CB about the CAs undertaken.

If a requirement is not applicable for the audited Organization, it should be marked with N.A.

Description of the organisation

This document must be compiled only by the Certifying Body and the Auditor in charge of the inspection; it must be filled in the mother tongue or in English only if spoken fluently.

| |
|---|
| a) NAME OF THE ORGANIZATION TO BE AUDITED: |
| b) NAME OF THE ORGANIZATION THAT REQUESTED THE AUDIT: |
| c) IS THE ORGANIZATION TO BE AUDITED PART OF A GROUP? |
| d) ADDRESS OF THE ORGANIZATION TO BE AUDITED: |
| e) NAME AND CONTACTS OF THE PERSON RESPONSIBLE FOR THE ORGANIZATION TO BE AUDITED: |
| f) COMMON NAME OF THE SPECIES BRED: |
| g) SCIENTIFIC NAME OF THE SPECIES BRED: |

h) AUDITED SITES:

(list name of the site and location)

i) SITES VISITED BY THE AUDTIOR:

(if different from f) sites to be audited)

j) DESCRIPTION OF THE AQUACULTURE SYSTEM:

*(E.g.: land, bay, offshore, extensive, intensive, basin, tank, cage, nets, etc.
Geographical extension, other. If available include a map)*

k) DESCRIPTION OF BREEDING TECHNIQUES:

(Summary of breeding techniques from reproduction stock, to egg etching to the finished product)

l) ACTIVITY OF THE ORGANIZATION TO BE AUDITED:

- breeding**
- pre-transformation**
- final transformation**
- import**
- export**
- distribution**
- other (description):**

m) DESCRIPTION OF THE FINAL PRODUCT:

(e.g.: fresh, frozen, canned, other)

n) BRANDS OF FINISHED PRODUCTS:

(List of brands under which the product is sold. If available include images of the brands)

o) DESCRIPTION AND LOCATION OF FREEZERS AND WAREHOUSES, IF ANY:

(For product traceability purposes)

p) TOTAL NUMBER OF EMPLOYEES:

optional

q) ENVIRONMENTAL CERTIFICATIONS AND AWARDS:

r) ADDITIONAL INFORMATION:

The Friend of the Sea project was presented

(If not, the Auditor must provide a short description)

The Organization was informed of the possibility, in case of approval, of using the Friend of the Sea logo on the certified products

The Organization has a document certifying the roles of the staff carrying out the audit

The duration of the Audit was agreed

The information included in the Preliminary Information have been confirmed: (in case of changes send an update promptly)

| | | |
|------------------------------|--|----------------------------------|
| CERTIFICATION BODY | AUDIT TEAM: | AUDIT START AND END DATE: |
| SIGNATURE OF AUDITOR: | NAME OF THE RESPONSIBLE PERSON FROM THE ORGANIZATION ACCOMPANYING THE AUDITOR DURING THE AUDIT: | AUDIT CODE: |

NOTES FOR THE AUDITOR

- 1) The auditor must fill-in all the fields in the checklist
- 2) The directions to fill-in the checklist are written in the blue fields
- 3) The Auditor must explain when the qualification requirements are not applicable
- 4) The Auditor must write YES when the Organisation complies with a requirement and NO when it doesn't
- 5) The Auditor must comment and explain the positive or negative answers. YES, NO, N.A. are not enough
- 6) Each relevant document must be added to the final Audit Report in a separate and numbered Attachment
- 7) Photographic explanations added to the checklist and/or attached are appreciated

1 - MANAGEMENT OF THE AQUACULTURE SYSTEM

| No. | Requirement | Level | Reference quantity parameters | Y/N | Comments (State the number of the relevant procedure and the manual, if any, (quality, environment or other) where it is included.) |
|---|--|-----------|--|-----|--|
| 1.1 | A sustainable aquaculture system must implement management procedures for the following aspects: | | | | |
| 1.1.1 | responsibility and authority of the environmental management of the company | Important | The organisation must have appointed at least one employee as responsible of the environmental management of the company | | |
| 1.1.2 | control of documents and registers (including the update of the environmental laws to comply with) | Important | The procedure must require at least one yearly check and update of the environmental laws. Documents and registers must be kept for at least 6 years. | | |
| 1.1.3 | control of monitoring systems and measurement of environmental footprint parameters | Important | Control and measurement of environmental footprint must be carried out at least every six months. | | |
| 1.1.4 | control and maintenance of infrastructures | Important | Control and maintenance of infrastructures must be carried out at least every six months. | | |
| 1.1.5 | readiness for environmental emergencies and capability to address to them | Important | The procedure must require a simulation of environmental emergency at least once a year. | | |
| 1.1.6 | management of corrective measures (due to non-conformities and recommendations) | Important | The procedure must require the correction of non-conformities and recommendations within at least 6 months from the detection or notification of the non-conformity. | | |
| The Auditor must check the procedures adopted by the Organization, report the number of the relevant procedure and the manual, if any, (quality, environment or other) that includes it. | | | | | |

2 - LOCATION OF THE SITE

| No. | Requirement | Level | Reference quantity parameters | Y/N | Comments (Provide documental evidence. Specify expiry, validity of permit or licence. Specify title, date, author and relevant conclusions of EFA or footprint study pursuant to point 2.3) |
|---|---|-----------|--|-----|--|
| 2.1 | The organization obtained a licence or permit for the development of the site, if required by the national regulation. | Essential | The Organization provides evidence of valid and up-to-date permit or licence. | | |
| 2.2 | An Environmental Footprint Assessment (EFA) was carried out with a positive outcome, if required by the national regulation. | Essential | The organization provides evidence of a positive EFA. | | |
| The auditor must check if prior to the realization of the system an environmental footprint assessment was carried out. The Auditor must specify title, date, author and conclusions concerning the EFA examined. Since in many countries an environmental footprint assessment is not mandatory before the realization of a system, this requirement can be balanced with a full conformity with the requirement 2.3. | | | | | |
| 2.3 | In case the national regulations do not require an Environmental Footprint Assessment, the Organization shall arrange a footprint study carried out by a third party and such study must verify that critical ecosystems, such mangroves, rivers, lakes, bays, estuaries, wet areas, swamps and morasses have not been altered. | Essential | <p>1. The Organization provides evidence of footprint study carried out by a third party, that must have kept into consideration at least the following parameters:</p> <ul style="list-style-type: none"> 1.1 technical-scientific data on condition, structure and functioning of the environment; 1.2 data on the technological characteristics of the system; 1.3 forecast on the behaviour of the environment and interactions between project and environmental components; 1.4 summary and comparison of footprint and direct/indirect benefits of the system. <p>The study must assess and calculate environmental footprint</p> | | |

| No. | Requirement | Level | Reference quantity parameters | Y/N | Comments (Provide documental evidence. Specify expiry, validity of permit or licence. Specify title, date author and relevant conclusions of VIA or footprint study pursuant to point 2.3) |
|-----|-------------|-------|---|-----|---|
| | | | <p>direct or indirect, short or long term, permanent or temporary, single or cumulative.</p> <p>2. The study takes into consideration the following environmental factors, also in connection to each other: 2.1 human being, 2.2 fauna, 2.3 flora, 2.4 soil, 2.5 water, 2.6 air, 2.7 climatic factors and 2.8 landscape; 2.9 cultural heritage.</p> | | |

The Auditor shall specify title, date, author and conclusions concerning the Environmental Footprint Assessment examined. The Auditor must confirm that the environmental footprint assessment kept into account all the factors mentioned in the Reference Quantitative Parameters

3 - INFRASTRUCTURES

| No. | Requirement | Level | Reference quantity parameters | Y/N | Comments (State the number of the required procedures and the reference Manual. Describe the systems implemented (filters, screens, nets, etc.) and attach technical documents (relevant photos or videos)). |
|-------|--|-----------|---|-----|---|
| 3.1 | The average yearly percentage of fish escape assessed is not higher than 0.5% of the total of bred fish. | Important | The organization must provide evidence of the compliance with the maximum limit of 0.5% of fish escape of the total of bred fish and undertakes not to exceed such average. | | |
| 3.2 | In order to minimize the leakage of eggs, larvae and bred species, the Organization implemented: | | | | |
| 3.2.1 | screens, filters or similar | Essential | The Organization must have a technical declaration of the supplier that certifies the suitability | | |

| | | | | | |
|--------------|--|-----------|--|--|--|
| | | | of nets, filters and other structures for the reduction of the leakage of eggs, larvae and bred species. | | |
| 3.2.2 | control and maintenance procedures | Essential | The procedures must require control and maintenance to be performed at least every six months. | | |
| 3.2.3 | procedures and alert systems in case of exceptional atmospheric events | Essential | The procedures must require at least a yearly simulation. | | |
| 3.3 | In order to prevent other organisms, such as birds or other predators, from entering the system, the Organization implemented: | | | | |
| 3.3.1 | screens, filters, cover-up nets or similar | Essential | The organisation must have a technical declaration of the supplier that certifies the suitability of nets, filters, and other structures for preventing other organisms such as birds or other predators from entering the system. | | |
| 3.3.2 | control and maintenance procedures | Essential | The procedures must require control and maintenance to be performed at least every six months. | | |
| 3.4 | In case of escapes of animals, the organization provided procedures for: | | | | |
| 3.4.1 | recording escapes | Essential | The records must be carried out at least once a week also stating the absence of escapes. | | |
| 3.4.2 | promptly notify the competent local authorities | Essential | The procedure must include telephone number and email address of the competent authorities to be contacted in case of fish escape. The procedure must require that the Competent Authorities are alerted within a maximum of 30 minutes from detecting the escape. | | |

| | | | | | |
|---|---|-----------|--|--|--|
| 3.4.3 | implement corrective measures addressed to reduce future risks of further escapes due to similar causes | Essential | The procedure must require the implementation of corrective actions within 6 months from the detection of notification of the issue. | | |
| The Auditor must state the number of the required procedures and the reference Manual. The Auditor must describe the systems implemented (filters, screens, nets, etc.) and attach technical documents (relevant photos or videos). | | | | | |
| 3.5 | The Organisation does not use toxic anti-vegetative paint. | Essential | The organisation must provide an independent scientific assessment that proves non-toxicity. | | |
| In case the Organisation declares they use anti-vegetative paint, the Auditor must request a copy of the technical characteristic of the paint used, proving their non-toxicity. In case the Organisation declares they do not use anti-vegetative paint, the Auditor must request evidence of the alternative methods used. | | | | | |

4 - FATTENING

| No. | Requirement | Level | Reference quantity parameters | Y/N | Comments |
|--|---|-----------|---|-----|----------|
| 4.1 | Species that may be fished for fattening must originate from fishing activities approved by Friend of the Sea. http://www.friendofthesea.org/fisheries.asp | Essential | The updated list of the fleet approved by Friend of the Sea is available on http://www.friendofthesea.org/fisheries.asp | | |
| Fattening refers to the aquaculture method that involves feeding and breeding of individuals fished in nature (e.g.: Red tuna and Eel). The Auditor must describe the origins (area of fishing, fishing method, flag of the fleet) of the fished species. | | | | | |

5 - FEEDING

| No. | Requirement | Level | Reference quantity parameters | Y/N | Comments (refer the name of the supplier, name of the product and formulation of the food. Include conversion index analysis). |
|-----|--|----------------|--|-----|--|
| 5.1 | The Organisation uses animal feed certified by Friend of the Sea, when available on the market for the species bred. http://www.friendofthesea.org/certified-products.asp Alternatively the Organization uses edible products process trimmings. | Recommendation | The updated list is available on the Friend of the Sea website http://www.friendofthesea.org/certified-products.as | | |

| | | | | | |
|---|--|------------|--|--|--|
| 5.2 | The Organization uses animal feed produced by IFFO certified plants such as Responsible Sourcing / Responsible Production. | Essential | The updated list of the plants certified by IFFO is available on http://www.iffonet/default.asp?contentID=742 | | |
| The Auditor must provide a list of all the animal feeds used by the Organization, stating name of supplier, name of product and formulation. | | | | | |
| 5.3 | The Organization records historical data concerning the conversion index of the food. | Important: | The records must be carried out at least every six months | | |
| The Auditor must attach a copy of such analysis to the 'Audit Report. | | | | | |

6 – OGM/GMO AND GROWTH HORMONES

| No. | Requirement | Level | Reference quantity parameters | Y/N | Comments (verify drug purchase register and related documents) |
|-----|---|-----------|---------------------------------|-----|--|
| 6.1 | The use of OGM/GMO fish species is not allowed. | Essential | Absence of OGM/GMO fish species | | |
| 6.2 | The use of growth hormones is not allowed. | Essential | Absence of growth hormones | | |

7 - DISEASE PREVENTION AND USE OF DRUGS

| No. | Requirement | Level | Reference quantity parameters | Y/N | Comments (report on the control of drug use register) |
|---|--|-----------|---|-----|---|
| 7.1 | The Organization does not use drugs for preventive measures. | Essential | Such commitment must be formally specified in the Company Policies | | |
| 7.2 | The use of drugs allowed by the regulation and other chemical compounds is only justified in case of specific issues. http://www.fao.org/fishery/nalo/search/en | Essential | As reference to the existing international regulation, refer to http://www.fao.org/fishery/nalo/search/en | | |
| The Auditor requests to see drug use procedures and registers. | | | | | |

8 - MANAGEMENT OF WATERS AND WASTEWATERS

| No. | Requirement | Level | Reference quantity parameters | Y/N | Comments (Attach a copy of the latest analysis of the effluents performed by the Competent National Bodies, completed with official declaration of conformity with the regulation) |
|---|---|----------------|---|-----|---|
| 8.1 | The qualitative parameters of the effluents and the sediment under the sea cages must comply with the provisions of the existing regulations. | Essential | As reference to the existing international regulation, refer to http://www.fao.org/fishery/nalo/search/en | | |
| <i>The Auditor encloses a copy of the latest analysis of the effluents carried out by the competent national bodies completed with official declaration of conformity with the regulation.</i> | | | | | |
| 8.2 | The qualitative parameters of the effluents must comply with the following parameters | | | | |
| 8.2.1 | N2 | Essential | <=0.5 mg/lit | | |
| 8.2.2 | NH3 | Essential | <=0.2 mg/lit | | |
| 8.2.3 | NO2 | Essential | <=0.14 mg/lit | | |
| 8.2.4 | PO4 | Essential | <=0.20 mg/lit | | |
| 8.2.5 | Dissolved Oxygen | Essential | >=5ppml | | |
| 8.2.6 | CO2 | Essential | < 2.0ppm | | |
| 8.2.7 | Coliform bacteria and/or sulphite reducers | Essential | None | | |
| 8.2.8 | Cd | Essential | < =0.05 mg/kg | | |
| 8.2.9 | Pb | Essential | < =0.03 mg/kg | | |
| 8.2.10 | Zn | Essential | < =0.02 mg/kg | | |
| 8.2.11 | Cu | Essential | < =0.01 mg/kg | | |
| 8.2.12 | Trophic Index value | Recommendation | <6 | | |
| 8.3 | The effluents must be monitored at least once every six months. | Important | The monitoring must be carried out at least every six months. | | |
| 8.4 | The company keeps the results of the analysis carried out. | Important | The registers must be kept for at least 5 years. | | |
| 8.5 | The distance between the lower part of the cage and the bottom must be at least 15 metres | Essential | The organisation must provide evidence that the cages are placed at least 15 metres from the sea-bottom. | | |
| <p>The Auditor requests to examine the monitoring frequency and method procedure and takes note of the number of the procedure and the manual that includes it. The auditor requests to view the previous yearly analysis of waters and sediments.</p> <p>* Trophic index= $\log((\text{CHL} * \text{DO} * \text{N} * \text{P}) + 1.5) / 1.2$ (CHL: chlorophyll ,DO: dissolved O2).</p> | | | | | |

9 - HAZARDOUS SUBSTANCES

| No. | Requirement | Level | Reference quantity parameters | Y/N | Comments (Report on the control of the relevant purchase register) |
|--|--|-----------|--|-----|--|
| 9.1 | Using toxic and persistent chemical compounds (e.g. TBT, Malachite Green, DDT) is forbidden. The use of forbidden substances must occur in compliance with the safety regulations. | Essential | As reference to the existing international regulation verify http://www.fao.org/fishery/nalo/search/en | | |
| <i>The Auditor requests to view the use procedures of the hazardous substances contained in the Safety Manuals and reports the number of the procedure. The Auditor must also verify its compliance during the inspection.</i> | | | | | |

10 - MANAGEMENT OF ENERGY

| No. | Requirement | Level | Reference quantity parameters | Y/N | Comments |
|--|--|----------------|---|-----|----------|
| 10.1 | The Organization must keep a register of the energy consumption, updated at least once a year. | Important | The at least-yearly frequency of the energy consumption records must be included in the procedure. The register must state at least the following parameters : 1. incoming energy sources, 2. energy consumption values and 3. consumption per production phase and 4. per product unit. | | |
| 10.2 | The Organization undertakes to achieve a yearly energy consumption reduction per product unit. | Recommendation | | | |
| <i>The Auditor must request copies of the registers.</i> | | | | | |

11 - SOCIAL ACCOUNTABILITY

| No. | Requirement | Level | Reference quantity parameters | Y/N | Comments (Report on documental evidence provided by the organization and evidence collected on-site through interviews with employees) |
|--------|--|----------------|--|-----|---|
| 11.1 | The Organization must respect human rights, complying with the following requirements: | | | | |
| 11.1.1 | comply with national regulations and ILO on child labour | Essential | Refer to ILO: http://www.ilo.org/global/standards/introduction-to-international-labour-standards/language/index.htm | | |
| | | | | | |
| 11.1.2 | pay the workers adequate salaries compliant at least with minimum legal wages | Essential | Minimum wages vary depending on the country. The Auditor must verify the Organization knows about it. | | |
| 11.1.3 | grant their workers access to healthcare | Essential | | | |
| 11.1.4 | apply the safety measures required by the law | Essential | | | |
| 11.2 | The organization should be SA8000-certified. | Recommendation | | | |

The Auditor must verify the compliance with the requirements through documental evidence (work-contract samples) and on-site observation.

12- TRACEABILITY

| No. | Requirement | Level | Y/N | Comments |
|------|--|-----------|-----|----------|
| 12.1 | The Company must implement a traceability system that allows verifying that the certified products come from approved systems and there is no possibility of exchange with products coming from non-certified systems. | Essential | | |

Further comments:

The Auditor must also fill-in the following fields

- **The products of Organization come from an aquaculture system which COMPLIES with Friend of the Sea requirements.**

- **The products of Organization come from an aquaculture system which DOES NOT COMPLY with Friend of the Sea requirements.**

The Auditor found the following non-conformities:

MAJOR NON-CONFORMITIES (to be conformed within 3 months)

Specify the points

MINOR NON-CONFORMITIES (to be reported within 3 weeks and confirmed within 1 year)

Specify the points

RECOMMENDATIONS (to be communicated within the next inspection)

Specify the points