

Commission Regulation

Amending Commission Regulation X/2008¹ laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control

Chapter I Introductory provisions

Article 1

Subject matter and scope

This Regulation lays down specific rules for products originating from aquaculture and seaweed. The rules cover the production of phytoplankton for aquaculture feed but exclude certain microalgae produced by industrial processes for uses not connected with aquaculture.

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Article 2

Definitions

List & definitions to be completed:

'Pollution' means the introduction into the marine environment of the items listed in Article 3, paragraph (8) of Directive 2008/56/EC. In the case of freshwaters it results from the introduction of pollutants listed in Annex VIII of Directive 2000/60/EC .

'Renewable energy'

('Sustainable fisheries' already covered by Article 5(o) of R. 837/2007)

'Sustainable aquaculture'

'Stocking density'

'Indigenous species'

'Wild animal'

'hypophysis'

¹ Adopted by the Commission on 5.9.08 and due for publication in OJ in late September – commonly known by acronym 'NIROF' – new implementing rules for organic farming. It shall be referred to here as 'R. X/2008 NIROF'

'Production cycle'

'Direct flame' means
a flame which comes into direct contact with a foodstuff

Article 3

Suitability of aquatic medium and environmental sustainability

With reference to Articles 13 and 15 of Regulation 834/2007 and having regard to Community water legislation, including the Water Framework Directive 2000/60, the Marine Strategy Directive 2008/56 and also legislation on contaminants in food, Member State authorities may designate areas which they judge to be unsuitable for organic aquaculture or seaweed production from an environmental point of view.

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Operations shall be situated in locations that are not subject to undue levels of contamination by unauthorised products or substances from non-organic agriculture or aquaculture, or pollutants that would compromised the organic nature of the products. An environmental assessment shall be required for all new operations applying for organic certification as from 1 January 2009 to ascertain the conditions of the site and its immediate environment and likely effects of its operation.

A sustainable management plan must be established for existing and planned aquaculture and seaweed farming operations, detailing the environmental effects of the operation, the environmental monitoring to be undertaken and listing measures to be taken to minimise negative impacts on the surrounding aquatic and terrestrial environments, including, where applicable, nutrient discharge into the environment per production cycle or per annum.

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The plan shall include the surveillance of technical equipment and provisions for its repair and for defensive and preventive measures as regards predators. Where more than one operation is based in an area, coordination should take place between operators in drawing up their management plans. The sustainable management plan shall be agreed by the competent authority.

For aquaculture in ponds, tanks or raceways, effluent monitoring shall be carried out at regular intervals and farms shall be equipped with either natural filter beds, settlement ponds, or biological filters to collect waste nutrients.

For seaweed harvesting a once-off biomass estimate shall be undertaken at the outset.

Aquaculture and seaweed business operators shall use renewable energy sources and re-cycle materials where possible and shall draw up a waste reduction plan to be put in place at the commencement of operations. For farming operations the waste reduction plan shall form part of the sustainable management plan. The use of residual heat from nuclear power plants is prohibited.

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Chapter II

Seaweeds

Article 4

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Conversion

The conversion period for a seaweed harvesting site shall be six months. Where it can be demonstrated that the minimum control requirements in Article 63-~~67~~ of Regulation X/2008 NIROF have been satisfied for the previous 12-month period, and that there is no source of pollution, a reduced conversion period of three months shall apply.

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For farmed seaweed, the conversion period shall be the longer of six months or one full production cycle.

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Sustainable harvesting

Seaweed harvesting is permitted using methods, tools and equipment that are effective for harvest of the target species, that are not unduly damaging to the natural resources while ensuring biodiversity is preserved.

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Harvesting shall only be carried out by trained harvesters. There shall be written contracts between the seaweed business operator and the harvesters.

Deleted: Below the mean low tide mark of spring tides, harvesting by mechanical means is permitted

Harvesting or gathering the product shall not exceed the sustainable yield of the ecosystem, or threaten the existence of seaweed or animal species.

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Measures shall be taken to ensure that seaweed can regenerate, such as harvest technique, minimum sizes, ages, reproductive cycles or size of remaining seaweed. Consignment notes shall be retained for inspection by the control authority or control body which shall also be responsible for the list of measures to be taken.

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If seaweed is harvested from a shared or common harvest area, evidence must be available that the total harvest complies with these rules.

With respect to Article 9 b) and c), these records must provide evidence of sustainable management and of no long-term impact on the harvesting areas.

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Article 6

Seaweed Culture

Deleted: With respect to the natural aquatic nature of seaweeds, Article 4 of ¶ Regulation X /2008 (prohibition of hydroponic production) shall not apply to seaweed

Seaweed juveniles may be grown in land-based hatcheries and nurseries whereas on-growing to market size shall take place in the sea or in contained land-based systems.

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Heating or cooling of water shall only be permitted to within 5°C of ambient temperature. Artificial light shall be permitted in nurseries. Where external nutrient sources are used in indoor facilities, nutrient levels in the effluent water shall be verifiably the same, or lower, than the inflowing water.

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Deleted: Collection of wild spawning stock, or wild juvenile seaweed must comply with Article 6 on wild harvesting of seaweed. ¶

Seaweed culture in the sea shall utilise nutrients naturally occurring in the environment, or from organic aquaculture production.

Culture density or operational intensity shall be recorded and shall maintain the integrity of the aquatic environment, and not exceed its carrying capacity.

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Biofouling organisms shall be removed by physical means or by hand and returned to the sea at a distance from the farm; chemical anti-foulants are not permitted unless listed in R X/2008 NIROF, Annex VII.

Cultivation in open water shall be carried out in a fashion which minimises the visual impact on the surrounding area.

Ropes and other equipment used for growing seaweed shall be re-used or recycled where possible.

Article 7

Post-harvest handling and processing

Flushing of freshly harvested seaweed shall use seawater where the final produce is fresh seaweed. If the final product is dehydrated seaweed, potable water may also be used for flushing. Salt may be used for removal of moisture.

Dehydrated seaweed shall be made using procedures not altering the product. In particular, the use of direct flames shall be prohibited. If ropes or other equipment are used in the drying process they must be free of anti-fouling treatments which are not listed in R X/2008 NIROF, Annex VII.

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Article 8

Controls for seaweed

The control requirements mentioned in Articles 63 – 67 of Regulation X shall apply to seaweed farming as well as to wild collection. In particular, there shall be one annual physical

inspection of the onshore facility as well as at least one production site (bed) and one harvester per year.

Article 9

Controls for collection of wild seaweeds

Collection of wild spawning stock, or wild juvenile seaweed must comply with Article 5 on wild harvesting of seaweed.

The seaweed business operator shall draw up a full description and a map of shore and sea collection areas and land areas where post collection activities take place and include information on the following items:

- a) list of species to be harvested;
- b) history of harvesting activity for each species in named beds;
- c) harvest estimate (volumes) per season;
- d) sources of possible pollution for harvest beds;
- e) sustainable annual yield for each bed .

Chapter III

Part A

Aquaculture animals

Article 10

Organic Aquaculture Production

These specifications in this chapter apply to all cultivated species of fish, crustaceans, echinoderms and molluscs. Technical rules are specified in the Annexes for the main species or group of species. The Annexes shall be updated periodically to ensure their representative nature. For species not currently listed, the criteria for the biologically most closely related species and the most relevant production method, as determined by the competent authority shall apply.

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Article 11

Origin of organic animals

1. Preference shall be given to local species and strains and juvenile stock shall originate from organic broodstock and organic hatcheries or nurseries.

Nevertheless, given the current state of technical knowledge and that the organization of organic aquaculture is still at an early stage, when organic animals are not available in sufficient numbers, wild caught or non-organic animals may be brought into a holding for breeding, or for supplementing genetic stock. Such introductions shall take place in the first one-third of the production cycle only. In the case of fish, this will be reviewed by 2013 with a view to phasing it out, in the case of other species it shall be reviewed by 2016. Care shall be taken not to deplete the wild resource. According to species, at least the latter two thirds of the duration of the production cycle, shall be managed under organic management. 2.

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Breeding shall aim to give species which are more adapted to farming conditions, good health and good utilisation of feed resources.

3. Species shall be chosen which can be farmed with minimum harm to wild stocks.

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4. Collection of wild aquatic juveniles for organic production ; is restricted to the following cases:

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a) natural influx of fish or crustacean larvae and juveniles when filling ponds, containment systems and enclosures;

b) glass eel, so long as artificial reproduction of eel is not an option;

b) shellfish seed from settlement beds which are unlikely to survive winter weather or are surplus to requirements;

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c) natural settlement of shellfish juveniles on collectors.

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Article 12

Conversion

1. An organic aquaculture production unit shall be run according to the principles of organic production in its entirety and the conversion period shall correspond to the species and the type of facility. The following conversion periods shall apply: (a) for facilities that cannot be drained, dried out, cleaned or disinfected, a conversion period of 24 months shall apply;

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(b) for facilities capable of being drained, dried out or fallowed, a conversion period of 12 months shall apply;

(c) for facilities capable of being drained, cleaned and disinfected a conversion period of 6 months shall apply;

(d) for open water facilities including those farming bivalve molluscs, a three month conversion period shall apply.

The competent authority may decide to recognize retroactively as being part of the conversion period any previous period in which the facilities were not treated or exposed to products not authorized for organic production.

Article 12b

Simultaneous production of organic and non-organic livestock

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a) The conversion period shall correspond to the lifecycle of each species;¶

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Should the competent authority so permit, hatcheries and nurseries are allowed to rear both organic and non organic larvae and juveniles provided there is clear separation between both.

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By 2014, where not all production units or sites of an aquaculture holding, including hatcheries and nurseries, are organic, the non-organic production must involve different

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species from the organic production except in situations where there is adequate separation between the productions units. In all cases there shall be a separate water distribution system. For the same species to be used authorization shall be received in advance from the competent authority.

Article 13

General husbandry rules

1. The environment of the animals must be designed in such a way that, in accordance with their needs, the animals shall:

- a) have sufficient space for their wellbeing;
- b) have sufficient oxygen levels, and
- c) be kept in temperature and light conditions in accordance with the requirements of the species and the geographic location.

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Deleted: The stocking density shall provide for the comfort and well being of the animals which, in particular, shall depend on the species, the age of the animals and their behavioral needs. Therefore maximum densities are defined in the Annexes for the main species.¶

2. Stocking densities for organic farming by species and facility are set out in the appropriate Annexes of this Regulation.

3. The design and construction of aquatic containment units shall provide flow rates and physiochemical parameters that safeguard the animals' health and welfare and provide for their behavioral needs.

4. Containment systems shall be designed, located and operated to minimize the risk of animals escaping.

5. If fish escape, appropriate action must be taken to reduce the impact on the local ecosystem, including recapture and informing the control authority or control body.

Part B

Fish, Crustaceans and Echinoderms

Article 14

Containment systems - specific rules

1. Closed aquaculture facilities in which animals spend their entire lives indoors are not eligible for organic certification unless the roofs are made of translucent material, sufficient to provide ambient periods of darkness and light. Such facilities shall provide an environment which allows for behavior in keeping with the wellbeing of the species.

Deleted: 6. The stocking density or operational intensity shall maintain the integrity of the aquatic environment, and not exceed its carrying capacity.¶

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2. Rearing units on land shall meet the following conditions: _____

a) it shall be possible to monitor and control the flow rate and water quality of both in-flowing and out-flowing water;

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- b) at least five percent of the farm area shall be an undisturbed natural area. Deleted: reserve
- 3. Open-water containment systems shall:
 - a) be located where water flow, depth and water-body exchange rates are adequate to minimize the impact on the seabed and the surrounding water body; Deleted:
 - b) demonstrate the suitability of cage design, construction and maintenance to the exposure of the operating environment. Deleted: net-pen
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- 4. Antifoulants are not permitted unless listed in Annex VII of R X/2008 NIROF.
- 5. Closed aquaculture facilities without translucent roofs may be used for the hatchery and nursery stages. Deleted: Indoor production systems
- 6. Artificial heating or cooling of water shall be permitted in hatcheries and nurseries. Only natural borehole water may be used to heat or cool onshore rearing units. Deleted: only

Article 15

Management of animals

- 1. Handling of fish shall be minimized and proper equipment and protocols used to avoid stress and physical damage associated with handling procedures. Broodstock should be handled with the greatest care [under anaesthesia] to minimize physical damage and stress. For certain fish species, including salmon, single stripping followed by slaughter shall be used to avoid multiple usage and handling of males. Deleted: Spawning shall be carried out with minimal interference to the breeding stock. Animals which so require shall be anaesthetized before manual stripping using an approved product before manual stripping
- 2. The following restrictions shall apply to the use of artificial light:
 - a) for prolonging natural day-length it shall not exceed a maximum that respects the natural behaviour, geographical conditions and general health of the animals, this maximum should not as a guide exceed 16 hours per day; Deleted: Artificial light shall only be permitted in hatcheries, and used to influence reproduction and to improve survival and welfare of young stock
 - b) Abrupt changes in light intensity shall be avoided by the use of dimmable lights or background lighting. Deleted: the use of artificial light to
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¶ b) The use of artificial light shall be limited to prolonging natural light up to a maximum day length of 16 hours
- 3. The maximum densities specified in the relevant Annexes shall apply to the actual density at any point between stocking and harvest. Deleted: c)
- 4. Aeration shall not be used to raise the density above the permitted level but its non-routine use shall be permitted on the basis set out in Article 24. The use of liquid oxygen is prohibited except for serious emergencies and for transport. Deleted: When aquatic animals are grown from stocking to harvest without grading or reductions in density, the
- 5. The duration, stocking density and water quality management during transportation shall avoid unnecessary stress.

6. Starvation periods shall not be unduly long and slaughter techniques shall render fish immediately unconscious and insensible to pain, a condition that must persist until death. Differences in harvesting sizes, species, and production sites must be taken into account when considering optimal slaughtering methods. An opinion on slaughter of fish is due for the European Food Safety Authority in March 2009).

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7. No hormones shall be used for breeding or other purposes, either from hypophysis or synthetic sources.

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Article 16

General rules on feeds

1. For species or production systems for which the aquatic environment does not supply enough natural food to the farmed animals, organic aquaculture feeds shall be formulated and feeding regimes designed with the following priorities:

- a) animal health;
- b) high product quality, including the nutritional composition;
- c) low environmental impact.

Feed formulation must provide, within the limits of available knowledge, for the specific needs of the animals.

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2. All ingredients of agricultural origin shall be organic, apart from ingredients listed in R X/2008 NIROF, Annex VI. This criterion does not apply for fishmeal and fish-oil which shall originate from sustainable fisheries. The culture for organic feed of phytoplankton, microcrustacea, rotifers, worms or other feed organisms shall comply with all the relevant sections of this Regulation.

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Article 17

Specific rules on feeds

1. For the feeding of non-herbivorous aquatic animals fishmeal and oil and related ingredients listed in Annex V (2)(2) of Regulation X/2008 NIROF shall by preference be made from trimmings of fish already caught for human consumption in sustainable fisheries.

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Where this is not available, then fishmeal and oil from sustainable exploitation of fisheries as referred to in Article 5 (o) of Regulation 834/2007 and defined in Article 3 (e) of Regulation 2371/2002 may be used.

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By prior agreement with the competent authority, fish meal and fish oil from aquaculture trimmings may be used, providing they do not come from the same species. Where there is a shortage of the above ingredients, trimmings of fish caught for human consumption may be used for a transitional period until 2014 provided they shall not exceed 30% of the daily ration of omnivorous species. The use of fish hydrolysates and proteolysates shall not be limited to young animals (amend Annex V(2)(2) of R X/2008 NIROF).

The ration of non-herbivorous species should comprise at least 10% plant proteins from organic production. Complete substitution of fishmeal and fish-oil in carnivorous species is not advised on welfare grounds.

Deleted: The maximum phosphorous content shall not exceed 1.2% of the dry matter of the feed. The nitrogen content shall not exceed 9% of the dry matter of the feed. Should feeds from trimmings not meet these criteria then fishmeal and oil may be used from sustainable fisheries.

2. For industrial fisheries to be sustainable, they shall be subject to an effective management system that respects local, national and international laws and standards and incorporate institutional and operational frameworks that require fishing of the resource to be responsible and within limits set by scientific advice.

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[The Commission plans to come forward with a proposal for a new Public/Private Partnership in early 2009 to stimulate the creation of a sector-driven European standard for sustainable fisheries which shall be the future basis of determining sustainability of sources of fishmeal and fish oil for organic feed].

3. Herbivorous species shall be fed with natural aquatic food, including food grown within the farm itself and organic feed material of plant or seaweed origin. Where the conditions laid down in Article 22 (2)(b) of Regulation 834/2007 apply, non-organic plant material can be used under the conditions set out in Article 22 and Article 43 of Regulation X/2008 NIROF.

4. Natural sources of carotenoid pigments derived from shrimp, listed in Annex VI of Regulation X/2008 NIROF may be used, in feed. Phaffia yeast is also permitted.

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4. Only natural antioxidants, including those based on tocopherols and gallates, shall be permitted to preserve the feed. Permitted feed additives are listed in Annex VI of Regulation X/2008 NIROF.

Part C

Molluscs

Article 18

Bivalve shellfish

1. Production of filter feeding organisms shall require a study to ensure it is best adapted to the surrounding environment and to demonstrate that the local ecosystem will not be significantly affected by the farm. The results of this study shall be considered by the control authority or control body as part of the decision on certification of the operation. The findings shall be incorporated into the sustainable management plan to be established under Article 3. Inspection visits shall take place before and during maximum biomass production. Organic shellfish farming may be carried out in the same area of water as organic finfish and seaweed farming as part of an agreed system of organic polyculture.

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2. The shellfish business operator shall keep records of the results of periodic checks carried out under Annex II.B of Regulation (EC) 854/2004² and shall comply fully with competent authority decisions under Annex II.C of the same Regulation following monitoring

² OJ L 226, 25.6.2004, p 83

concerning microbiological quality, contaminants and possible closures due to toxin-producing plankton in production and relaying areas.

3. Organic shellfish production shall take place within protected areas delimited by post, floats or other clear markers and shall, as appropriate, be restrained by net bags, cages or other man made means and shall be clearly separated from conventional cultivation operations and wild shellfish stocks by a distance decided by the competent authority. Floats and other structures above the surface, except for navigational markers, shall be of uniform, subdued and neutral colour. All equipment at sea or onshore is to be stored in a tidy and unobtrusive manner.

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- Deleted: but thereafter seed material must be sourced from organic hatcheries.
- Deleted: of mussels and scallops

Seed from non-organic bivalve-shellfish hatcheries can be used until 2013 by which date consideration will be given to the need to continue the use of non-organic seed.

Providing there is no lasting damage to the environment and if permitted by local legislation, wild seed from outside the boundaries of the farm can be used in the case bivalve shellfish. Records must be kept of how, where and when wild seed was collected to allow traceability back to the collection area. Partially grown seed, which has been grown organically, can also be used under the same conditions.

Production must focus on size and density of shellfish so as to provide optimum conditions for the species with regard to water current and feed supply. Sorting, thinning and density adjustments shall be made according to the biomass. Biofouling organisms shall be removed by physical means or by hand and returned to the sea away from shellfish farms. Shellfish may be treated once during the production cycle with a lime solution to control competing fouling organisms.

Organic shellfish farms shall not be located at sites know to have a high level of predators or in known moulting areas for eider ducks. If predator nets are used their design should not permit diving birds to be harmed.

Article 19

Mussels

Cultivation on ropes supported by long-lines or rafts in areas with sufficient flow of water shall be eligible for organic certification. Traditional bouchot poles may also be used for mussel collection and on-growing.

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In certain situations, providing environmental impact is minimised at the collection and growing sites, cultivation of mussels on licensed plots of sub-tidal ground shall also be eligible for organic certification. The evidence of minimal environmental impact must be supported by a survey and report on the dredged areas by an independent monitoring body.

Article 20

Oysters

Organic oyster farms shall be organised in an efficient manner, which for cultivation in net bags shall involve the use of particular areas of the farm for specific sizes and densities of oysters with an emphasis on growing stock at low stocking densities. Having regard to the impact on the shoreline, these areas shall be set out in blocks or rows avoiding the formation of a total barrier along the shoreline. Spacing shall allow for the movement of tractors, trailers and amphibious equipment or boats. The areas should be marked and colour-coordinated on a site plan which should be available for inspection by the control authority or control body.

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Stock shall be positioned carefully on the beds in relation to tidal flow to optimise meat condition, shape, taste and appearance of the oysters.

Unused or derelict equipment shall not be stored on the shore and debris and litter shall be gathered up on an ongoing basis. Equipment leaking oil or diesel should not be taken on the shore. Vehicles shall not be driven at high speed to reduce noise, prevent churning up of sediment and disturbance to wildlife and human recreational activity. Vehicles should keep to the same routes to avoid tyre marks on the shore.

Open cultivation on licensed plots shall also be eligible for organic certification. Evidence of minimal environmental activity shall be supported in such cases by a survey and report from independent body.

Preference should be given to juvenile oysters produced by organic hatcheries, which in the case of Pacific oyster should be selectively bred to reduce spawning in the wild. Natural settlement of juvenile oyster shall take place on tiles, strings of shells, or tree branches which have been sustainably sourced. The continuing use of wild Pacific oyster seed for organic aquaculture shall be reviewed in light of the evolution of the sector by 2016, as set out in Article 11.

Part D

Disease prevention and transport

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Article 21

General rules on disease prevention

1. Production techniques must be designed to keep the aquatic animals in good health via preventative action. Prevention involves maintaining a good balance between the stock and their environment.

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2. Organic farms shall have a veterinary management plan detailing biosecurity and disease prevention practices including a written agreement for health counseling with a veterinarian who shall visit the farm at a frequency of not less than once every nine months in the case of fish, crustaceans and echinoderms, and once per year in the case of molluscs.

5. Where appropriate, holding systems, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the buildup of disease carrying organisms in line with Article 9 of Council Directive 2006/88/EC.

6. A period of fallowing during which the facility used for animal production is emptied, disinfected and left empty before being used again is required after each production cycle in open water containment systems and is recommended in other branches of aquaculture but shall not be mandatory for bivalve mollusc cultivation.

7. Uneaten fishfeed (where appropriate), faeces and mortalities should be removed promptly to maximize water quality, minimize disease risks, and to avoid attracting insects or rodents.

8. Vaccination shall be permitted where a known disease risk occurs in accordance with Article 48 of of Council Directive 2006/88/EC.

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Article 22

Veterinary treatments

1 Preference shall be given to veterinary treatments based on:

- substances of the plant, animal or mineral kingdom in a homoeopathic dilution (availability issue)
- plants and their extracts not having anaesthetic effects, and
- substances such as: [trace elements, metals or natural immunostimulants, authorised probiotics.]

2. Limitations to the use of allopathic treatments are detailed in the Annexes for each of the main species by production system. For other species two treatments with veterinary medicines, other than anti-parasitic treatments, shall apply. The withdrawal period shall be double the period of conventional aquaculture.

Article 23

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Transport of fish and Crustaceans

1. Live fish and crustaceans must be carried in suitable tanks with water which meets their physiological needs, in terms of temperature and dissolved oxygen.

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2. These tanks must be sealed in such a way as to prevent the substitution of their contents, and provided with a suitable label.

3. However, the tanks may be used beforehand or subsequently for the collection and transport of fish not originating from organic farming. Comprehensive precautions shall then be taken concerning cleaning, disinfection and rinsing of these tanks.

4. Action shall be taken to reduce the conditions of stress. During transport, the density must not exceed 150 kg/m³.

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Article 24

Exceptional production rules

With the exception of hatcheries, the post-harvest flushing of seaweed or where a known disease risk occurs, water shall not be treated with ultraviolet light or ozone for microbial control.

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Introduction of exogenous oxygen for aeration of aquaculture units (except hatchery systems) is allowed by exception to Article 15.4 under the following conditions.

Deleted: By exception to Article 15.2.b), to enable the development of organic cod farming the limit of 16 hours of light daily shall not apply to on-growing of this species until 2015

Temporary use of mechanical systems (aerators,) preferably powered by renewable energy sources, due to temperature rise, drop in atmospheric pressure, accidental pollution, or for occasional stock management procedures such as sampling and sorting, fasting periods, or in order to assure the survival of the farm stock. Such temporary use shall also be permitted where a minimum oxygen threshold is to be met, adapted to species, in order to maintain animal welfare. All such use is to be recorded in the farm log.

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The ice slurry method of slaughter shall be permitted for seabass and seabream and closely related species in the Mediterranean Sea and areas of similar temperature and also for tropical invertebrates. For fish this shall be reviewed by 2014 with reference to scientific advice and evaluation of optimal stunning and slaughter conditions for this type of aquaculture. Stunning by carbon dioxide shall also be permitted for tropical invertebrates.

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(Unless specifically mentioned the minimum duration of the life cycle in organic production is two thirds of total)¶

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Article 25

Transitional Production Rules

When these rules are issued, the remaining batches still under production according to national/government organic rules will be allowed to be marketed and sold using the national/government labels. Producers will have to declare the ponds/cages which are concerned to the certifying bodies in charge of their operation.

Technical Annexes for main species

Annex 1: Organic production of salmonids in fresh water

Species concerned: Brown trout (*Salmo trutta*) – Rainbow trout (*Oncorhynchus mykiss*) – American brook trout – Salmon (*Salmo salar*) – Charr (*Salvelinus alpinus*) – Grayling (*Thymallus thymallus*) – American lake trout (or grey trout) (*Salvelinus namaycush*) – Huchen (*Hucho hucho*).

Minimum separation distance organic from conventional production unit/s	In a river 2,000 metres and the organic production unit must be upstream of conventional units. In a lake 1,000 metres. <u>As an exception to this rule a farm may be granted organic status where it can prove to the control authority or control body that there is minimal contamination from a non-organic farm within these limits, but not closer than 500 metres</u>	<p>Deleted: 3,000</p> <p>Formatted: Left</p> <p>Deleted:</p>
Production system	Ongrowing farm systems must be fed from open systems. The flow rate must <u>ensure a minimum of 65% oxygen saturation for stock</u> and must ensure their comfort and the elimination of farming effluent.	<p>Formatted: Left</p> <p>Deleted: be at least 7 litres/second/tonne of fish stock</p> <p>Deleted: of the animals</p> <p>Formatted: Left</p>
Maximum stocking density (kg fish per cubic metre of water)	<u>Rainbow trout 30 kg/m³</u> <u>Arctic charr 80 kg/m³</u> <u>Brown trout 15 kg/m³</u>	<p>Formatted: Left</p>
Allopathic treatments during on-growing	With the exception of vaccinations, where fish receive more than two courses of treatments per year with chemically-synthesized allopathic veterinary medicinal products or antibiotics and <u>where fish receive</u> more than two treatments per year with antiparasitics (<u>bath or oral</u>), the livestock concerned or produce derived from them, may not be sold as organic products. <u>(See Article 19)</u>	<p>Formatted: Left</p> <p>Deleted: [</p> <p>Deleted: and] compulsory eradication schemes</p>
		<p>Deleted: None permitted within three-months of harvest</p> <p>Deleted: ¶</p>

Annex 2: Organic production of salmonids in sea water

Species concerned: Salmon (*Salmo salar*), Brown trout (*Salmo trutta*) – Rainbow trout (*Oncorhynchus mykiss*)

Minimum separation distance organic from conventional production unit/s	2 nautical miles <u>As an exception to this rule a farm may be granted organic status where it can prove to the control authority or control body that there is minimal contamination from a non-organic farm within these limits, but not closer than 1 nautical mile</u>	<p>Formatted: Font: Bold</p> <p>Deleted: Technical annex for the organic</p> <p>Formatted: Font: Bold</p> <p>Formatted: Font: Bold</p> <p>Formatted: Font: Bold, Italic</p> <p>Formatted: Font: Bold</p> <p>Formatted: Font: Bold</p> <p>Deleted: r</p> <p>Formatted: Font: Bold</p>
Maximum stocking density (kg fish per cubic metre of water)	<u>18 kg/m³ in net pens</u>	<p>Formatted: Left</p> <p>Formatted: Left</p> <p>Deleted: 15</p>
Allopathic treatments during on-growing	With the exception of vaccinations, where fish receive more than two courses of treatments per year with chemically-synthesized allopathic veterinary medicinal products or antibiotics and more than two treatments per year with antiparasitics, the livestock concerned or produce derived from them, may not be sold as organic products.	<p>Formatted: Left</p> <p>Deleted: [</p> <p>Deleted: and] compulsory eradication schemes</p>
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Annex 3: Organic production of cod (*Gadus morhua*) and other *Gadidae*, sea bass (*Dicentrarchus labrax*), sea bream (*Dentex dentex*), meagre (*Argyrosomus regius*), turbot (*Psetta maxima*), red porgy (*Pagrus pagrus*) and other *Sparidae*, and spinefeet (*Siganus spp.*)

Minimum separation distance organic from conventional production unit/s	<p><u>1 nautical mile</u></p> <p><u>As an exception to this rule a farm may be granted organic status where it can prove to the control authority or control body that there is minimal contamination from a non-organic farm within these limits, but not closer that 300 metres</u></p>
Production system	<p>In open water containment systems (net pens/cages) with minimum sea current speed <u>2 centimetres/second</u>. The depth must not be less than 20 metres <u>at mean low water of spring tides</u> giving a minimum <u>clearance</u> between the bottom of the net and the sea floor of 10 metres. <u>In shallow enclosed seas with low tidal amplitude the latter may be reduced to 5 metres. Low clearance shall require the total biomass on sited to be kept low.</u></p>

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Maximum stocking density (kg fish per cubic metre of water)	offshore: 25 kg/m³ onshore: 35 kg/m³ Turbot: 45 kg/m³	Deleted: 10 Deleted: [Deleted: 20 Deleted:] Deleted: one Formatted: Left Deleted: [Deleted: and] compulsory eradication schemes, Deleted: one Deleted: None permitted within three-months of harvest¶
Allopathic treatments during on-growing	With the exception of vaccinations where fish receive more than two courses of treatments per year with chemically-synthesized allopathic veterinary medicinal products or antibiotics (possibly supplemented by two treatment per year with antiparasitics) the livestock concerned or produce derived from them, may not be sold as organic products.	

Annex 4: Organic production of penaeid shrimps and freshwater prawns
(Macrobrachium sp.)

Establishment of production unit/s	Location to be in sterile clay areas to minimise environmental impact of pond construction. Ponds to be built with the natural pre-existing clay. Maximum 2% mangrove destruction permitted. This ratio can be extended to 10 % if an existing conventional farm is converted.	Formatted: Font: Bold Deleted: Technical annex for the Deleted: organic Formatted: Font: Bold Formatted: Font: Bold Formatted: Left
Conversion time	Six months per pond, corresponding to the normal lifespan of a farmed shrimp.	Formatted: Left
broodstock origin	A minimum of half the broodstock shall be domesticated after three years operating and proportion of domesticated stock shall be increased subsequently to avoid excessive collection of wild stock. The genetic diversity of domesticated stocks should be properly managed to avoid inbreeding] The remainder is to be pathogen free wild broodstock originating from sustainable fisheries. A compulsory screening to be implemented on the first and second generation prior to introducing to the farm.	Formatted: Left Deleted: [Deleted: Minimum Deleted: [50%] Deleted: of Deleted: should Deleted: The goal is to counteract genetic depletion.]
Eyestalk ablation	Single eyestalk ablation ('epedoncluation') of female <i>Penaeid</i> shrimp is permitted on a maximum of 90% of breeding stock until 2015, so long as no alternative is proven suitable to enable production. A minimum of 10% are to be spawned without ablation as part of breeding programme.	Formatted: Left Deleted: [Deleted: to be Deleted: The remaining Deleted:]
Allopathic treatment	Maximum one allopathic treatment shall be allowed in the hatchery for each larval cycle and for curative purposes only. Hatchery operator to justify each treatment by supplying relevant data. No treatment is to be allowed at the farm during grow-out.	Formatted: Left
Minimum duration of the organic life-cycle	Whole life cycle.	Formatted: Left Formatted: Left
Maximum on farm stocking densities and production limits	Seeding: maximum 22 post larvae/m² Maximum instantaneous biomass (to be defined): 240 g/ m ² Maximum annual production : 5 tonnes/ha	Deleted: [Deleted:] Deleted: ¶ Formatted: Left
Shell treatment	By exemption Metabisulphite treatment shall be allowed until 2010 given the current absence of a treatment to prevent blackening of shells. The effectiveness of alternative	Formatted: Left Deleted: [

	<p><u>treatments will be examined by the end of the 2010.</u></p> <p>One single treatment to be permitted at the farm on a specific platform with a residual water treatment and monitoring system.</p> <p>Maximum <u>residue</u> permitted in the edible parts <u>is</u> 75ppm for raw products and 50ppm for cooked products.</p>
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Annex 5: Organic production of Sturgeon in fresh water.

Species concerned: Acipenser family

Minimum separation distance organic from conventional production unit/s	In a river <u>2,000 metres</u> and the organic production unit must be upstream of conventional units. <u>As an exception from the upstream rule a farm may be granted organic status where it can prove to the control authority or control body that there is minimal contamination from a non-organic farm located which is more than 1,000 m upstream.</u> In a lake 1,000 metres.
production system	Water flow in each rearing unit shall be sufficient to ensure animal welfare, with a minimum turn over rate of 2 hours. Effluent water to be of equivalent quality to incoming water
maximum farming density	<u>40 kg/m³</u>
minimum duration of the organic life-cycle	From juvenile to harvest

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Annex 6: Organic production of sea bass, sea bream, meagre, mullets (*Liza, Mugil*) and eel (*Anguilla spp*) in earth ponds of tidal areas

Containment system	Traditional salt pans transformed into aquaculture production units and similar earth ponds in tidal areas
Production system	The average time for renewal of the water is set at 5 renewals per hour at most. At least 50% of the dikes must have plant cover Wetland based depuration ponds <u>required</u>
maximum farming density	4 kg/m ³

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Annex 7: Organic production of fish in inland waters

Species concerned: Carp (*Cyprinus carpio*) and other associated species in the context of polyculture, tench, crucian carp, perch, pike, catfish, coregonids, etc.

<u>Minimum separation distance organic from conventional production unit/s</u>	<u>1,000 metres and the</u> organic production <u>unit</u> is to be located upstream of any non organic aquaculture <u>unit</u> . <u>As an exception from the upstream rule a unit may be granted organic status where it can prove to the control authority or control body that there is minimal contamination from a non-organic farm which is located more than 1,000 metres upstream, but not closer that 500 metres.</u>
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Production system	<p>Lakes and land-based ponds, in which any drained and dry periods, must <u>ideally</u> be total (total dry-out, with the exception of fishery trenches).</p> <p>The fishery capture area must be equipped with a clean water inlet and of a size to provide optimal comfort for the fish. The fish must be stored in clean water after harvest.</p> <p>Organic and mineral fertilisation of the ponds and lakes must be carried out in compliance with <u>R.X/2008 NIROF</u>.</p> <p>Treatments involving synthetic chemicals for the control of hydrophytes and plant coverage present <u>in production waters</u> are prohibited.</p> <p>Areas of natural vegetation must be maintained around <u>inland water units</u> as a buffer zone for external land areas not involved in the farming operation in accordance with the rules of organic aquaculture.</p> <p><u>As an exception, inland water units (lakes, ponds, etc.) which though already certified as organic, prior to the implementation of this Regulation, do not meet its requirements fully, may nevertheless retain their organic status for a period of five years provided there is no undue pollution of the waters with substances not allowed in organic production. All of the requirements shall be met by the end of the transitional period if the organic status is to be maintained.</u></p> <p><u>"Polyculture"</u> is permitted on condition that the criteria laid down in the present specifications for the other species of lakes fish are duly adhered to.</p> <p>Lakes must be devoted exclusively to organic production, including the growing of crops on dry areas.</p>	<p>Deleted: with an average minimum depth of 0.7 m of water</p> <p>Formatted: Left</p> <p>Deleted: Regulation No 834/2007 (list?)</p> <p>Deleted: on the water system on the production site</p> <p>Deleted: 50m wide</p> <p>Deleted: lakes and ponds</p> <p>Deleted: [</p> <p>Deleted: (the simultaneous farming of different species of fish)</p> <p>Deleted:]</p> <p>Deleted: Use of borehole water is prohibited.¶</p>
Feed	<p>Additional feed <u>may</u> be added <u>in</u> limited <u>quantities</u> to supplement natural production <u>to the extent necessary</u>. <u>Operators shall keep documentary evidence of the need to use additional feed.</u></p>	<p>Formatted: Left</p> <p>Deleted: can</p>
Farming yield	<p>The total production of species is limited to <u>1,000</u> kg of fish per hectare <u>per year</u>.</p>	<p>Deleted: only on an exceptional basis and over</p> <p>Deleted: periods</p> <p>Deleted: 500</p> <p>Deleted: produced per year and</p> <p>Formatted: Left</p> <p>Deleted: of pond (average area of water).</p> <p>Deleted: End of square brackets]¶</p>