International Federation of
Organic Agriculture Movements –
EU Regional Group

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Working for organic farming in Europe

POSITION PAPER

IFOAM EU Group position on the implementing rules for Aquaculture (revision 2) October 3rd 2008

The IFOAM EU Group is encouraged to see the improvements made to the aquaculture implementing rules in Revision 2 of the Commission's working document.

We still consider that there are sections of the working document which should be improved in order to secure the differentiation of organic aquaculture from non-organic production, and to protect consumer confidence in organic food.

The below list highlights the points the IFOAM EU Group finds highly important to consider. In addition, various comments are inserted into the working document text in the annex.

1 – Feeds (Article 17)
While the 'most organic' systems grow food naturally in ponds/lakes supplemented with organic vegetable ingredients where necessary, many feeds for organic aquaculture are harvested from natural aquatic resources (typically in the form of fishmeal and fish oil). The sustainable collection/harvest of these raw materials is critical.

Defining the acceptable use of these different sources in organic feeds is complex, but we consider the current text (Article 17) is confused and unclear. It also has a very weak definition of 'sustainable fisheries'.

The IFOAM EU Group considers the use of whole-fish fishmeal and oil from fisheries that are not sustainable to be completely unacceptable, and urges a strong definition of sustainability to be included in the rules.

We recommend that the relevant text be changed so that the following criteria for the use of fishmeal and oil in organic aquaculture feeds are required:

i. from organic aquaculture is the first preference (if available),
ii. trimmings wastes from independently certified sustainable fisheries for human consumption fisheries is second,
iii. trimmings wastes from other fisheries for human consumption is third
iv. limited amounts (for example 30%) of fishmeal made from whole fish from independently certified sustainable fisheries is fourth
v. limited amounts (for example 30%) of fishmeal made from whole fish from other sustainable fisheries is last option

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We also recommend that strict timescales are used (subject to revision where necessary) to eliminate the less-preferred options in the list above. We recommend that exceeding 30% use of option (v) above should be prohibited after two years.

2 – Veterinary treatments (Article 22)
Although the number of parasite treatments for terrestrial livestock is not limited in the agriculture implementing rules, the IFOAM EU group recommends that the Commission includes such a restriction for aquaculture.

In addition to the limit of two allopathic treatments per year, we recommend that parasite treatments be restricted to three per year. In addition to the restrictions on shrimp and prawns, we recommend this is extended to other animals whose life span is less than one year.

3 – Stocking densities (Annexes)
In general, we consider the stocking densities are high, and have little (if any) differentiation from non-organic aquaculture. While acknowledging that knowledge of fish welfare is limited, and that welfare is affected by other critical parameters such as water quality, we urge the Commission to review the stocking densities based on a precautionary principle, and based on existing organic aquaculture production.

4 – Pigments/colouring (Article 17(4))
Organic principles aim to minimise the use of additives in organic production and food processing. IFOAM Basic Standards do not permit colourings to be used to visually enhance organic food. The IFOAM EU Group therefore recommends that the use of pigments in organic aquaculture feeds be limited to the level required physiologically by the fish.

We consider these changes to be vital in order to ensure the quality and credibility of European organic aquaculture standards, and to protect consumer confidence in organic products produced according to the regulation.

We urge the Commission to consider these aspects in the further work on the implementing rules for aquaculture.

Annex: Working document with comments

Annex

Working Document

Rev. 2 – Organic Aquaculture and Seaweed

Commission Regulation

Amending Commission Regulation 889/2008[1] on detailed rules for organic production labelling and control with regard to organic aquaculture and seaweed

Chapter I

Introductory provisions

Article I

Subject matter and scope

This Regulation lays down specific rules for products originating from aquaculture and seaweed. The rules also covers the production of plankton for further use in aquaculture.

Article 2

Definitions

For the purpose of this Regulation the following definitions shall apply:

'carrying capacity' The amount of a given aquaculture production or seaweed harvesting that can be accommodated within the environmental capacity of a defined area

'closed aquaculture faciltiy' means the type of facility defined in Article 3, paragraph (3) of Council Regulation (EC) No 708/2007 of 11 June 2007 concerning use of alien and locally absent species in aquaculture[2];

' direct flame' means a flame which comes in direct contact with a foodstuff;

"energy from renewable sources" means renewable non-fossil energy sources: wind, solar, geothermal, wave, tidal, hydropower, landfill gas, sewage treatment plant gas and biogases;

'hatchery' means a place of breeding, hatching and rearing through the early life stages of animals, finfish and shellfish in particular;

'nursery' means a place where an intermediate farming system, between the hatchery and grow-out stages is applied. Nurseries use lower technology as compared with hatcheries. In

[1] OJ L 250, 18.9.2008, p 1

the case of molluscs the nursery grows from 2mm juveniles to 20 mm, suitable for their transfer to marine rearing facilities;

' 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

'production cycle' the lifespan of an animal or seaweed from the earliest life stage to harvesting;

'locally grown species' means species which in accordance with Council Regulation 708/2007 are neither alien species nor locally absent species.

'stocking density' the live weight of animals per cubic metre of water at any time during the production cycle and in the case of flatfish the weight per square metre of surface;

'stock' a quantity of aquatic animals, seaweed or plankton considered in a given situation.

Article 3

Suitability of aquatic medium and environmental sustainability

1. 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.

2. Operations shall be situated in locations that are not subject to undue levels of contamination by products or substances not authorised for organic production, 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. The operator shall fund the environmental assessment.

3. 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, including annual reporting should it be required 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.

4. The plan shall include the surveillance of technical equipment and provisions for its repair and for defensive and preventive measures as regards predators as permitted under Council Directive 92/42/EEC and national rules. Where more than one operation is based in an area, verifiable coordination should take place between operators in drawing up their management plans. The sustainable management plan shall be available to the competent authority for scrutiny

5. For aquaculture in ponds, tanks or raceways, effluent monitoring shall be carried out at regular intervals and farms shall be equipped with eithernatural-filter beds, settlement ponds, or biological filters to collect waste nutrients or use plants and/or animals (bivalves and algae) which contribute improving the quality of the effluent, unless dispensation is granted by the competent authority.

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

7. 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 shall be limited to energy from renewable sources.

Chapter II

Seaweeds

Article 4

Conversion

1. 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 889/2008 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.

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

Article 5

Sustainable harvesting

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

Comment: 'unduly damaging' does not have a clear meaning

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

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

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

5. Coexistence of organic and non-organic seaweed beds shall not be permitted except by permission from the competent authority. If seaweed is harvested from a shared or common harvest area, documentary evidence must be available that the total harvest complies with these rules.

6. 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.

Article 6

Seaweed Cultivation

1.

2. . Where external nutrient sources are used in r facilities on land, nutrient levels in the effluent water shall be verifiably the same, or lower, than the inflowing water. Only nutrients listed for this use in Regulation 889/2008, Annex I , shall be sued.

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

Comment: Section 3 contradicts section 2

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

5. Bio-fouling organisms shall be removed by physical means or by hand and returned to the sea at a distance from the farm; chemical antifoulants are not permitted unless listed in Regulation 889/2008, Annex VII for this use.

Comment: 'at a distance' needs clarification, and will result in the waste being dumped at another site. Propose to delete this requirement.

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

7. Ropesand 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.

Comment: This section is not needed

The use of direct flames shall be prohibited for seaweed drying. If ropes or other equipment are used in the drying process they must be free of anti-fouling treatments which are not listed in Regulation 889/2008, Annex VII.

Article 8

Controls for seaweed

The control requirements mentioned in Articles 63 – 67 of Regulation 889/2008 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 and one harvester per year.

Article 9

Controls for collection of wild seaweeds

Collection of wild 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

Scope

These specifications in this chapter apply to all cultivated species of fish, crustaceans, echinoderms and molluscs as listed in Annex XX. .[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].

Article 11

Origin of organic animals

1. Preference shall be given to locally grown species and juvenile stock shall originate from organic broodstock and organic hatcheries.

Comment: Propose 'native'

2. 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.

In the case of non-organic juveniles the percentage introduced to the farm shall decrease by a minimum of ten percent per year from 2009. uch introductions shall take place in the first one-third of the production cycle only. These provisions will be reviewed by 2013with a view to phasing out, 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.

Comment: What does this mean, and where is it defined? Propose to delete ' According to species'.

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

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

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

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

b) European glass eel, so long as an eel management plan is in place for the and artificial reproduction of eel is not an option;

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

Comment: What does 'surplus to requirements mean? Propose to change to 'shellfish seed from ephemeral settlement beds'

d) natural settlement of shellfish juveniles on collectors.

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, under inspection by the control body or the control authority shall apply:

(a) for facilities that cannot be drained, cleaned and disinfected, a conversion period of 24 months shall apply;

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

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

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

2. 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

1. For all facilties other than sea cages there shall be a separate water distribution system for organic and non-organic production to reduce the risk of contamination to the latter by products and substances not authorised for organic production. 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.

Comment: This should relate to freshwater cage sites too.

2 By 31 December 2015 where not all production units of an aquaculture holdingare organic, the non-organic production must involve different species from the organic production except in situations where there is adequate separation between the productions units. The minimum separation distance shall be no less than outlined in the relevant annexes. For species not covered by an Annex the distance shall be one kilometer on land and one nautical mile at sea. For the same species to be used, authorization shall be received in advance from the competent authority and such authorization shall stipulate differentiation criteria such as different phases of different handling systems.

Article 13

General husbandry rules

1. The environment of the animals must be designed in such a way that, in accordance with their species specific needs, the animals shall:
a) have sufficient space for their wellbeing;
b) be kept in water of good quality with sufficient oxygen levels, and
c) be kept in temperature and light conditions in accordance with the requirements of the species and having regard to the geographic location;
d) in the case of freshwater fish the bottom type shall be as close as possible to natural conditions (sand and gravel)
e) in the case of carp the bottom shall be natural earth.

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 behavioural needs.

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

5. If fish or crustaceans escape, appropriate action must be taken to reduce the impact on the local ecosystem, including recapture, where appropriate. Documentary evidence shall be maintained..

Part B

Fish, Crustaceans and Echinoderms

Article 14

Containment systems - specific rules

1. Closed aquaculture facilities on land, in which animals are within a building and spend their entire lives indoors, are prohibited.
2. Closed aquaculture facilities may be used for the hatchery and nursery stages.

3. 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;

b) at least five percent of the farm area shall be an undisturbed natural area.

3. Containment systems at sea 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;

b) demonstrate the suitability of cage design, construction and maintenance to the exposure of the operating environment.

4. Antifoulants are not permitted unless listed in Annex VII of Regulation 889/2008.

6. Artificial heating or cooling of water shall be permitted in hatcheries and nurseries. Only residual heat energy from renewable sources is permitted for grow-out stages. Natural borehole water may be used to heat or cool water at all stages of production. .

Comment: Insert 'only'

Article 15

Management of animals

1. Handling of fish shall be minimized, undertaken with the greatest care and proper equipment and protocols used to avoid stress and physical damage associated with handling procedures. Broodstock should be handled [under anaesthesia where appropriate to the species] to minimize physical damage and stress. Grading shall be reduced to a minimum level except in hatcheries.

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 ethological needs, geographical conditions and general health of farmed animals, this maximum should not, except for duly justified circumstances exceed 16 hours per day;

b) Abrupt changes in light intensity shall be avoided by the use of dimmable lights or background lighting.

3. The maximum stocking densities specified in the relevant Annexes shall apply to the actual density at any time between stocking and harvest.

4. Aeration shall not be used to raise the stocking density above the permitted level but its non-routine use shall be permitted on the following conditions.. Temporary use of mechanical 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.

5. The use of liquid oxygen is prohibited except for animal health requirements and transport.

6. The duration, stocking density and water quality management during transportation shall avoid unnecessary stress.

7. Starvation periods shall not be unduly long and slaughter techniques shall render fish immediately unconscious and insensible to pain. Differences in harvesting sizes, species, and production sites must be taken into account when considering optimal slaughtering methods.
8. The use of hormones is prohibited.
9. 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 2013 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.

Comment: This is unacceptable on welfare grounds. The scientific evidence is available now.

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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, only 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.

2. All ingredients of agricultural origin shall be organic, apart from ingredients listed in Regulation 889/2008, Annex VI. This criterion does not apply for fishmeal and fish-oil which shall originate from sustainable fisheries. The culture for organic feed such as plankton, micro-crustacea, rotifers, worms or other feed organisms shall comply with all the relevant sections of this Regulation.

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 889/2008 shall by preference be made from trimmings of fish already caught for human consumption in sustainable fisheries. 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.

Comment: This definition is very weak

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 31 December 2014, by which time this shall be reviewed. Such feed material shall not exceed 30% of the daily ration of omnivorous species. The use of fish hydrolysates and proteolysates shall not be limited to young aquaculture animals.

Comment: This paragraph is confusing, and does not agree with the paragraph above

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.

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.
[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 889/2008.

4. [Natural sources of carotenoid pigments, including derived from shrimp listed in Annex VI of Regulation 889/2008 may be used in feed.].

Comment: Insert 'to satisfy the animal's physiological requirement'

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 889/2008.

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 harmed 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.

Comment: This is potentially a huge environmental study.

2. The shellfish business operator shall keep records of the results of periodic checks carried out under Annex II.B of Regulation (EC) 854/2004[3] and shall comply fully with competent authority decisions under Annex II.C of the same Regulation following monitoring 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 posts, 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.

4. 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.

5. 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 of 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.

6. Production must focus on size and stocking density of shellfish so as to provide optimum conditions for the species with regard to water current and feed supply. Sorting, thinning and stocking density adjustments shall be made according to the biomass. Biofouling organisms shall be removed by physical means or by hand and where appropriate 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.
7. 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

1. 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.

[3] OJ L 226, 25.6.2004, p 83

2. 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 permitted. 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

1. 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. The use of other customary methods shall also be organised on these lines. 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.

Comment: Propose to delete 'for cultivation in net bags'

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

3. 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.

4. 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.

5. 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 sustainable sourced. The continuing use of wild Pacific oyster seed for organic aquaculture shall be reviewed in light of the evolution of the sector by 2013, as set out in Article 11.

Comment: Propose to delete 'wild'

Part D

Disease prevention and transport

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 to ensure healthy animals and reduce pathogen loading.

2. Organic farms shall have a veterinary management plan detailing biosecurity and disease prevention practices including a written agreement for health counselling with a veterinarian who shall visit the farm at a frequency of not less than once per year.

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

6. A period of fallowing during which the cage, 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 at sea and is recommended for tanks, ponds, and cages in other branches of aquaculture but shall not be mandatory for bivalve mollusc cultivation.

Comment: Propose to delete 'disinfected'. It is not practical to disinfect cage systems.

7. Uneaten fish-feed (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 Council Directive 2006/88/EC.

9. The use of ultraviolet light and ozone is permitted for microbial control in hatcheries where a known disease risk occurs.

Article 22

Veterinary treatments

1. Where despite preventive measures to ensure animal health, according to Article 15 (1) (f) (i), of Regulation 834/2007, a health problem arises, veterinary treatments is permitted based on the use of:

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

2. The use of allopathic treatments is limited to two courses of treatment per year, with the exception of vaccinations, treatment for parasites and compulsory eradication schemes. However in the case of shrimps and prawns a limit of one allopathic treatmentshall apply. The withdrawal period shall be double the period of non-organic aquaculture.

Article 23

Transport of fish and Crustaceans

1. Packaging and transport shall meet the requirements of Article 31 of Regulation 834/2007.
2. Live fish must be transported in suitable tanks with water which meets their physiological needs in terms of temperature and dissolved oxygen.

3. 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 a level which is detrimental to the species.

Article 23b

Processing

Article 24

Exceptional production rules

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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:

The use of non-organic feed of agricultural origin is permitted for non-herbivorous species in accordance with the provisions of Article 43 of Regulation 889/2008.

Article 25

Transitional Production Rules

When these rules are issued, the remaining batches still under production according to Member State, Member State recognised or national organic rules will be allowed to be marketed and solusing the relevant label. Producers will have to declare the ponds/cages which are concerned to the control body or the control authority in charge of their operation.

For existing organic sites a period of three years shall be permitted to comply with the requirement of Article 14.(2)(b).

For farming of carp and associated species in inland water units (lakes, ponds, etc.), units which though already 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.

Technical Annexes

[Annex 0 : Technical annex determining products authorized for cleaning, disinfection and treatments

Cleaning and disinfection (when livestock is not present, except for the hatchery phase)	**Cleaning and disinfection** (when livestock is present)
Mechanical cleaning : brush, water under pressure	Mechanical cleaning
Physical disinfection: dry heat, wet heat, hot water,	Chemical disinfection: Hydrogen peroxide and yyy
Chemical disinfection: lime, liquid bleach, iodophors, biocidal products approved by directive 98/8/CE	

Comment: 'except for the hatchery phase' is not clear

Materials specific to shrimp ponds (environment cleaning and balancing), that may be used in the presence of livestock:
Xxx

Norwegian list also to be reviewed]

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 non-organic production unit/s	In a river 2,000metres and the organic production unit must be upstream of non-organic units. In a lake 1,000 metres. 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 500 metres
Production system	Ongrowing farm systems must be fed from open systems. The flow rate must ensure a minimum of 65% oxygen saturation for stock and must ensure their comfort and the elimination of farming effluent.
Maximum stocking density (kg fish per cubic metre of water)	Rainbow trout 30 kg/m^3 Arctic charr 80 kg/m^3 Brown trout 15 kg/m^3

Comment: Propose 20 for salmon

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 non-organic production unit/s	2 nautical miles A farm may be granted organic status where it can prove that there is minimal contamination from a non-organic farm within these limits, but not closer that 1 nautical mile. Documentary evidence shall be provided to the control authority or control body.
Maximum stocking density (kg fish per cubic metre of water)	18 kg/m^3 in net pens

Comment: This is high, and similar to non-organic production. All organic salmon is currently produced at 10.

Annex 3: Organic production of cod (Gadus morhua) and other *Gadidae*, sea bass (*Dicentrarchus labrax*), sea bream (*Sparus aurata*), meagre (*Argyrosomus regius*), turbot (*Psetta maxima [= Scopthalmus maximux]*), red porgy (*Pagrus pagrus[=Sparus pagrus]*) and other *Sparidae*, and spinefeet (*Siganus spp*)

Minimum separation distance organic from non-organic production unit/s	1 nautical mile A farm may be granted organic status where it can prove that there is minimal contamination from a non-organic farm within these limits, but not closer that 300 metres.
Production system	In open water containment systems (net pens/cages) with minimum sea current speed to provide optimum fish welfare.

Maximum stocking density (kg fish per cubic metre of water)	offshore: 25 kg/m^3 onshore: 35 kg/m^3 [Turbot: Xkg/ m^2]

Comment: These are high, and are typical commercial non-organic densities. Propose 20 maximum.

Comment: This should be very low, because at even moderate stocking densities, these flatfish have to lie on top of each other.

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 provided compsatory action is taken.
Conversion time	Six months per pond, corresponding to the normal lifespan of a farmed shrimp.
broodstock origin	A minimum of half the broodstock shall be domesticated after three years operating 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.
[Eyestalk ablation	Single eyestalk ablation ('epedonculation') of female *Penaeid* shrimp is permitted on a maximum of 75% of breeding stock until 2013, so long as no alternative is proven suitable to enable production. A minimum of 25% are to be spawned without ablation as part of breeding programme.]
Minimum duration of the organic life-cycle	Whole life cycle.
Maximum on farm stocking densities and production limits	Seeding: maximum 22 post larvae/m^2 Maximum instantaneous biomass (to be defined): 240 g/ m^2 Maximum annual production : 5 tonnes/ha
[Shell treatment Subject to expert group	

Annex 5: Organic production of Sturgeon in fresh water

Species concerned: *Acipenser family*

Minimum separation distance organic from non-organic production unit/s	In a river 2,000 metres and the organic production unit must be upstream of non-organic units. A farm may be granted organic status where it can prove that there is minimal contamination from a non-organic farm located more than 1,000 m away. Documentary evidence shall be provided to the control authority or control body.
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	40 kg/m³
minimum duration of the organic life-cycle	From juvenile to harvest

Comment: This is a high turnover of water, and indicates intensive production

Comment: This is high. Not much is known about the welfare of this species.

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 required
maximum farming density	4 kg/m³

Comment: This is a very high turnover rate, requiring huge amounts of pumping energy.

Comment: Confusingly, this is a very low stocking density. It is nearly ten times less than recommended for the same species in Annex 3 above.

Annex 7: Organic production of fish in inland waters

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

Minimum separation distance organic from non-organic production unit/s	1,000 metres and the organic production unit is to be located upstream of any non organic aquaculture unit. A unit may be granted organic status where it can prove 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. Documentary evidence shall be provided to the control authority or control body.
Production system	Lakes and land-based ponds, in which any drained and dry periods, must ideally be total (total dry-out, with the exception of fishery trenches). The fishery capture area must be equipped with a clean water inlet and of a size to provide optimal comfort for the fish. The

Comment: This doesn't make sense – more than 1000m, but closer than 500m

	fish must be stored in clean water after harvest. Organic and mineral fertilisation of the ponds and lakes must be carried out in compliance with Annex I of Regulation 889/2008 within the limits (xx kg/ha). Treatments involving synthetic chemicals for the control of hydrophytes and plant coverage present in production waters are prohibited. Areas of natural vegetation must be maintained around inland water units as a buffer zone for external land areas not involved in the farming operation in accordance with the rules of organic aquaculture. "Polyculture" is recommended on condition that the criteria laid down in the present specifications for the other species of lakes fish are duly adhered to. Lakes must be devoted exclusively to organic production, including the growing of crops on dry areas.
Feed	Additional feed may by added in limited quantities (yy kg)to supplement natural production to the extent necessary. Operators shall keep documentary evidence of the need to use additional feed.
Farming yield	The total production of species is limited to [500] kg of fish per hectare per year.