



Food and Agriculture
Organization of
the United Nations



World Health
Organization

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Agenda Item 5 (b)

CX/FL 13/41/6

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD LABELLING

Forty-First Session

Charlottetown, Prince Edward Island, Canada, 14 - 17 May 2013

Revision of the Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods (CAC/GL 32-1999) to include Aquaculture and Seaweed

At step 3 of the Procedure

Final report of eWG

Governments and international organizations in Observer status with the Codex Alimentarius Commission wishing to submit comments on the proposal in Appendix 2 are invited to do so **no later than 15 April 2013** to:

Codex Contact Point for Canada E-mail: Codex_Canada@hc-sc.gc.ca with a copy to the Secretariat, Codex Alimentarius Commission, E-mail: codex@fao.org

Format for submitting comments:

In order to facilitate the compilation of comments and prepare a more useful comments document, Members and Observers are requested to provide their comments under the following headings:

- (i) General Comments
- (ii) Specific Comments

Specific comments should include a reference to the relevant section and/or paragraph of the document that the comments refer to.

When changes are proposed to specific paragraphs, Members and Observers are requested to provide their proposal for amendments accompanied by the related rationale. New texts should be presented in underlined/**bold** font and deletion in strikethrough font.

In order to facilitate the work of the Secretariats to compile comments, Members and Observers are requested to refrain from using colour font/shading as documents are printed in black and white and from using track change mode, which might be lost when comments are copied/pasted into a consolidated document.

Comments should be sent only in word to facilitate compilation of comments with limited use (where necessary) of tables and/or grids. Members and Observers are requested not to reproduce the completed document but only those parts of the texts for which any change and/or amendment is proposed.

Note by the Secretariat: This document contains

- Report of the eWG;
- Appendix 1: Participating countries of round two
- Appendix 2: Consolidated text of CAC/GL 32-1999
- Appendix 3: Responses paper for round two.

1. Introduction

The 40th Session of the Codex Committee on Food Labelling agreed to establish an electronic working group (eWG), chaired by the European Union, open to all Members and Observers and working in English only, with the following terms of reference:

- to revise the Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods (GL 32-1999) to include aquaculture animals and seaweed.

The outcome of the eWG on the inclusion of aquaculture animals and seaweed is circulated for comments at Step 3 to all Codex Member and Observers. The European Union Co-chairs wish to sincerely thank all those who contributed to this eWG for their efforts in advancing this proposed revision.

The Step 3 comment paper will be considered by a physical working group, working in English, French and Spanish. This will take place immediately before the next session of the Committee on Monday 13 May 2013 in Charlottetown, PEI, Canada, chaired by the EU. The conclusions of the physical working group will be considered at Step 4 at the 41st Session of the Committee which will commence on 14 May 2013.

2. Electronic working group consultation

Twenty-three countries, three international NGOs and the FAO requested to participate in the eWG. A list of participants was circulated to participants on 15 January 2013.

First consultation paper

The full GL32-1999 text on Organically Produced Foods (as last amended in 2010) was circulated on 9 November 2012 with the proposed new text regarding aquaculture and seaweed added in track changes.

In response to the consultation, comments were received from ten member governments. The comments in the first round were considered in a Discussion Paper where general comments were treated first followed by more specific comments. Sections of the text which were subject to a large amount of comment were presented in table form with the main comments by respondents listed in the right hand column. As separate Responses Paper compiling all the comments received was circulated for information at the same time.

Second consultation paper

In response to the Discussion Paper and Responses Paper circulated in the second round, responses were received from 18 members of the eWG, 17 countries and one international NGO. The list of respondents is given in Appendix 1. These comments allowed this final report of the electronic working group to be drawn up together with an updated version of the Guidelines text in Appendix 2. Text on which views are still diverging has been placed in square brackets in Appendix 2.

TIMELINES AND KEY ACTIVITIES

Dates	Key Activity	Duration
9 November 2012 – 7 December 2012	Circulate consultation document for comments from eWG members	Four weeks + one extra week
up to 11 January 2013	Preparation of Discussion Paper by EU based on input from WG members. Compilation of comments received in round one.	Four weeks
15 January 2013 – 12 February 2013	Circulate Discussion Paper for second round of comment from eWG	Four weeks
13- 28 February 2013	Final revision of the document by the EU, based on input	Two weeks +
1 March 2013	Circulation of the Outcome document to Codex Secretariat, Rome, CCFL Secretariat, Canada – host country Secretariat and the eWG members	

3. Discussion**A. General comments**

1. The eWG succeeded in further developing the guidance for incorporating organic aquaculture and seaweed into the Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods (GL 32-1999). The level of participation in the eWG by countries from all around the world shows strong support for going ahead with the draft revision of the Guidelines at this time. The comments received allow stock to be taken regarding areas where there is currently broad consensus and areas where opinions differ.
2. Paragraph 3 of the Foreword speaks of the Guidelines being a "first step into official international harmonization of the requirements for organic products in terms of production and marketing standards, inspection arrangements and labeling requirements." This paragraph also speaks of the "need (for) regular improvements and updating in order to take into account technical progress and the experience with their implementation." It also explains that "the guidelines do not prejudice the implementation of more restrictive arrangements and more detailed rules by member countries in order to maintain consumer credibility and prevent fraudulent practice, and to apply such rules to products from other countries on the basis of equivalency to such more restrictive provisions." The methodology for reviewing the guidelines is outlined in paragraph 12 of the Foreword and also in Section 8. Ongoing review of the Guidelines.
3. These provisions need to be recalled specifically in relation to the (additional) comments circulated by IFOAM to members of the eWG on 18 February. These comments, which call for a go-slow in the present work on the process of updating the Guidelines to incorporate provisions for aquaculture and seaweed, because of parallel work on public and private standards and for limiting the work to only high-level provisions, are not in keeping with paragraphs 3 and 12 of the Foreword or of Section 8. Ongoing review of the Guidelines. The regular improvements and updating of the guidelines, which have already occurred for organic agriculture (four revisions and three amendments between 2001 and 2010), will also be possible in the case of aquaculture and seaweed.
4. Meaning of organic aquaculture. Looking at the various sections of the Guidelines there was good consensus on the Foreword section. Japan suggested that the Guidelines need to be clear about what is meant by organic aquaculture and that wording, perhaps a definition, is needed to say what organic

aquaculture really is. Its position is that “organic” in aquaculture means that the products were grown not only in socially, ecologically and economically sustainable manner, but also in conditions as natural as possible. In this sense, even if a closed recirculating system has almost no impact on the environment, the products should not be deemed as organic. Japan also suggests that a definition of “organic aquaculture” would also be of benefit to consumers and help them to understand the difference between “wild” and “organic”.

5. Nearly all respondents in the second round felt that the principles are described adequately in the Foreword and did not support a specific definition of organic aquaculture. Panama, however proposes introducing the use of the term 'agroecology' in relation to organic aquaculture. This is described as "a production process which leverages local resources and synergy of the agro-ecosystem level processes, using practices that favour their complexity, adopting biological control and organic nutrition optimally in the management of the production system or farm."
6. Specific guidance. In relation to new text in Annex 1,B2,10, Norway expressed the view that if each competent authority decides on different standards for stocking densities for the same type of species, a large variation in organic production worldwide can result. Norway believes that this can result in great difference regarding quality for the same type of species, and could give rise to trading problems. Similarly Norway has concerns about each competent authority deciding on the more general production criteria covered by paragraph B2.14 (criteria for type of system, water flow, oxygen saturation, effluent elimination and fallowing).
7. Over half of the 15 responses to the question posed on this topic in the Discussion Document said that the Guidelines should contain maximum stocking densities for different species. (AR,IN,PA,FR,IT, GR, and IE agreed with Norway). Four respondents were against including maximum stocking densities in the Guidelines; Brazil felt that density should be lower than in conventional aquaculture; Canada noted that the agriculture sections of the Guidelines do not set maximum densities but do set outcome-based criteria; New Zealand supports the existing text of paragraph 10, but with a new ending, stating the stocking density should allow organisms exhibit natural behaviour and not compromise animal welfare. IFOAM expressed the view that stocking density was best left to competent authorities based on outcomes such as optimum health, welfare and water quality.
8. A further three respondents had intermediate views about maximum stocking densities; the USA felt it was premature to set maximum densities and that this could be addressed in future if trade difficulties were to arise. Thailand favoured densities being left to competent authorities (CAs), as full harmonisation might be difficult. Switzerland feels that indicative density figures should suffice provided that reference is made to optimising the outcomes in terms of animal health and welfare. France favours harmonized maximum densities but commented that it might be difficult to achieve this for all species. France suggests introducing the principle that maximum density should be lower in organic farming than in conventional farming, in addition to setting densities for the main species in international trade.
9. Regarding Norway's concern at a lack of harmonisation in relation to the more general production criteria of B2.14, there were only a few replies, with Sweden advocating that criteria be developed for oxygen saturation in the Guidelines. Argentina was in favour of CAs developing and publishing criteria, but not in favour of other recognised bodies doing so. Brazil would not object to some general provisions but was against detailed criteria. Panama stressed that different regional production techniques existed and Thailand expressed the view that full harmonisation may not be possible.
10. Nutrition. There were nine responses to the question based on Ireland's suggestion (in relation to Section B.2 para 15) that competent authorities should establish a positive list of feed additives, antioxidants, pigments and preservatives for use in preparation of feedstuffs for aquaculture animals. This would mirror the criteria used for feed additives for agriculture in Section B.1 para 18, which outlines general and specific criteria. Seven respondents agreed that competent authorities should do this, whereas two felt that such a list should be established by Codex.

B. Specific Issues

11. Foreword. Ten member countries responded to the two questions posed on text changes to paras 2 & 4 and to para 7 of the Foreword. All respondent favoured improving the wording of the early paragraphs to take better account of aquaculture. All were also in favour of changing and extending para 7, which describes organic production, with India suggesting new wording to ensure the aquatic environment is integrated into the text. The text in Annex 2 takes on board the balance of comments received.

12. Scope: Aquatic plants or seaweeds. Seven member countries commented on the para 1.1.a) of the scope and regarding this topic in the definitions and in the section on Seaweed in Annex 1. Argentina and India were in favour of using the term aquatic plants, with Argentina favouring its use before the term seaweed and India as an alternative inclusive term. Argentina would also like to include macroalgae from lakes. Brazil favoured the term aquatic organisms, to cover both aquaculture animals and seaweeds in the Scope section. New Zealand suggested that text be added to the end of the definition of seaweed to explain that for the purpose of the guidelines that "phytoplanktonic algae, microalgae, cyanobacteria, kelps and aquatic plants" are included. France felt that it should be possible to include phytoplankton and macroalgae for feed and food use in the scope. While it agreed that this issue needs to be discussed at the physical working group in May an alternative solution which involves the use of the term seaweeds and other algae is proposed below in Section 4. 7.
13. Closed Recirculation Systems. The issues of the proposed new definition and the relevant article in Annex I, (B2. Para 12) on principles, are taken together here. The University of Hull in the UK has categorised closed aquaculture systems as follows¹: *Sensu stricto*, a "Closed system" is *an aquaculture facility with a discharge(s) that does not connect in any way to open waters prior to being screened, filtered or percolated and treated to prevent cultured stock or associated organisms from escaping*. Closed containment systems involve a barrier technology that ensures no contact between wild and farmed aquatic organisms, thus eliminating the most important impacts of aquaculture on the surrounding environment. Closed facilities are usually based on recirculation systems. Such facilities tend to be enclosed and the effluent treated continuously; little exchange of water occurs and the system is usually only topped up with a small percentage of the volume of water in the system.
14. This has been used in the formulation of the revised definition in the Discussion Paper of 15.1.2013 which does not rule out a small exchange of water occurring. Respondents to the Discussion Paper were divided on the merits of the revised definition with about half in favour and half against or suggesting alternative wording. Half of the 12 respondents were against the outright prohibition of closed recirculation systems for organic production at the present time, while the other half were in favour of it. The physical working group meeting will provide an opportunity to deal with this in more depth and for now the definition and paragraph 12 have been placed in square brackets.
15. **Conversion.** In response to the request from Thailand a definition of "Conversion period" was proposed. A proposal was made by Argentina for a qualifying phrase "**fully and continuously** applied" to be at the end of text. IFOAM questioned whether proposing a new general definition was in the scope of this eWG and at the same time suggested a shorter definition of "Conversion": The time of transition from non-organic to organic farming. Both versions are placed in square brackets in Annex 2 for further consideration by the physical working group. If it is not possible to introduce a general definition via the aquaculture and seaweed revision, Thailand will have the opportunity of following the general revision procedure outlined in the Foreword and Section 8.
16. Proposal for a definition of 'Aquatic organisms'. Some member countries (AR & BR) have requested that a definition of aquatic organisms be included in Section 2. Argentina has proposed a definition which includes species which are not among the list of the main internationally traded aquaculture species. The Chair recommends that reptiles and amphibians not be included in the current revision of the guidelines (in its Annexes 1 and 3) and that rather than having a new definition as proposed, that the definition of Aquaculture be further elaborated by adding a list of the main species grouping which are traded internationally. This can be accomplished by adding the list as follows: "Aquaculture means the farming of aquatic organisms (fish, molluscs, crustaceans, seaweed and other algae) involving....." (see full amended definition in Annex 2).
17. Annex 1. Principle of Organic production – A.2 Seaweed and other algae and their products. New Zealand has requested additional definitions of "wild harvest" and "organic management plan". The first of these is requested in the context of seaweeds, aquatic organisms as well as plants and plant products. Para 9 of Annex 1, A.1 already describes the conditions for collection of edible plants in natural areas and sets out the relevant criteria. It is proposed that this paragraph be revised to include plants growing close to the seashore or bordering other aquatic environments. A reference has previously been proposed to have these criteria applicable for collection of seaweed and other algae (Annex 1, A.2, para 5). For this reason it is not proposed to develop an omnibus definition of wild harvest. Wild harvest of aquatic animals is in any case of scope of organic production. As the term organic management plan is not used for agriculture, it is not

¹ IMPASSE Project – http://www2.hull.ac.uk/science/pdf/IMPASSE_44142_D4-2.pdf

proposed to define this term. Para 4 of Annex 1, A.2 is developed in Annex 2 to further clarify the meaning of the organic management plan.

18. Annex 1. Principle of Organic production – B.2 Aquaculture animals and their products. A new introductory paragraph is introduced to make a link to the Codex Code of Practice for Fish and Fishery Products and the original first paragraph is deleted as unnecessary. A number of small changes to the wording of the section have been made in Annex 2 based on suggestions of respondents in the two rounds of consultation. Paragraph 7, Conversion has received a number of comments and is referred for further discussion at the physical working group, as have certain other paragraphs in square brackets; these are:
 - 8. Use of hormones on broodstock
 - 10. Maximum stocking density
 - 12. Closed recirculation systems
 - 15. Nutrition – alternative text (proposed by Argentina) and use of same species
 - 15' & 15". Nutrition (continued) – proposal to allow non-organic plant material to a level below 2% dry matter of feed (UK & France) and proposal for exemption as exists in guidelines for agriculture to allow a restricted percentage of feedstuffs not produced according to the guidelines in certain unforeseen or extreme conditions (proposed by Thailand, Brazil and UK), and
 - 16. Homeopathy – whether to delete or reword the second bullet of 16.
19. There were nine responses to the specific question posed on homeopathy, two respondents wanted to retain it with additional wording (NO & CH), two wanted the bullet point deleted altogether (UK & SE) and five had no information to provide. Switzerland reported that it had started research on this topic in aquaculture. The US pointed out that the original language is not consistent with that used for livestock in Annex 1, B.1, 22.b. Argentina suggested not including a reference to homeopathy for aquaculture until information is available about its effectiveness. The UK has raised concerns regarding the use of the word 'allopathic'. As this term is widely used in the guidelines concerning livestock and livestock products, it is beyond the scope of the present eWG and falls within the regular review process described in the Foreword and Section 8. It is proposed to use the term veterinary medicines without the qualifying word 'allopathic' in Annex 1, B2, however.
20. Annex 2. Permitted Substances for the production of organic foods. Thailand has made a proposal in the eWG to include a new table (inserted as Annex 2, Table 1' in Annex 2 to this paper) of agricultural inputs used for fertilizers and conditioners of aquaculture ponds. Having regards to Section 5 of the guidelines, this draft is placed in square brackets for comment and for discussion at the physical working group.
21. The Consultation Document (GL 32-1999 with track changes in text) circulated to members of the eWG in November 2012, together with the Discussion Document circulated in the second round in January 2013 contained two new tables. The first (Annex 2, Table 2', 1) is a proposed list of 16 substances for cleaning and disinfection of equipment and facilities, in the absence of aquaculture animals. The second (Annex 2, Table 2', 2) a limited list of two substances proposed for use in the presence of aquaculture animals. Participants were asked specifically to comment on these two tables in the second round.
22. Seven of the twelve replies were positively disposed to the tables (AR*, IT, JP* NO, IE*, TH & FR*: the * signifies additional comment), two respondents were negatively disposed (US* & GR) and three are still considering the tables (BR, CH & IFOAM). While agreeing with the tables Argentina agreed with the US that the general criteria outlined in Section 5 of the guidelines need to be adhered to. Both Ireland and France stated that it was important to have more substances available for use in the presence of animals. Thailand add its own additional proposals of five additional substances; two for use in the absence of animals and three in their presence in hatcheries (two of the latter overlap with Table 2', 1). Greece would prefer the focus to be on prevention rather than treatment and the US identified seven substances as needing additional discussion as to whether they meet the criteria established in Section 5.1 of the guidelines (iodophores, copper sulphate, potassium permanganate, sodium chloride, humic acid, peroxyacetic acids and peracetic acids).
23. The US stated its interest in having discussion at the physical working group on the best way to reach consensus on which materials that should be permitted for aquaculture cleaning. The US noted that CCFL has an established a structured process for review of materials, which may be appropriate to use for a subset of these materials, i.e. those that appear to be controversial or which do not have an allowance for

organic plant or livestock production in the current Guidelines (GL 32-1999). Japan, questioned the timing and suggests that it would be more appropriate to discuss permitted substances in Annex 2 after general consensus is reached on the main text and Annex 1.

24. Annex 3. Minimum Inspection Requirements etc..This Annex is also relevant for aquaculture, seaweed and other algae and had not been updated prior to the eWG getting started. In the second round, participants were asked specifically to comment on the proposed amendments circulated with the Discussion Document. All respondents agreed with the amendments proposed. These changes, with some small additional changes, are now incorporated in the text of Annex 2 to the final report.

4. Recommendations/Considerations

A. General issues

1. Meaning of organic aquaculture. Japan has suggested that the Guidelines need to be clear about what is meant by organic aquaculture so as to emphasize that it is as natural as possible. An opportunity should be given to further present this point at the physical working group, despite the majority view that the existing text is sufficiently clear as it is. The proposal from Panama to use 'agroecology' as a means of explaining organic aquaculture could also be discussed, although this term would also be relevant to organic production in general and hence may be beyond the scope of this revision.
2. Specific guidance on maximum stocking density. While there was a good level of support for establishing maximum stocking densities in the Guidelines it was not sufficient to change the current text of Annex 1, B2.10. This issue could benefit from further discussion at the physical working group, including the alternative suggestion by some respondents that the outcomes to be achieved need to be specified rather than maximum stocking densities.
3. Specific Guidance on general production criteria such as water flow, oxygen saturation, effluent elimination. There was less support for establishing criteria for these parameters in the guidelines so it is proposed not to go further into this, at this point in time.
4. Nutrition. As the Guidelines do not establish a list for agriculture use it is not proposed to have a list of feed additives for aquaculture drawn up in the guidelines but to leave this to competent authorities as was agreed by a large majority of respondents. This is best done by inserting a new paragraph in Annex I, Section B.2, paragraph 15 which makes a link to using criteria of B.1 paragraph 18 of the existing guidelines, as appropriate.

B. Specific Issues

5. **Foreword.** It is proposed that the Foreword be reworded following comments received in the second round as per text in track-changes in Annex 2.
6. Rather than include a new **definition of 'aquatic organisms'** it is recommended that the existing definition of aquaculture be amended by adding a list of the main species grouping which are traded internationally, following on from aquatic organisms in this definition.
7. **Scope: Aquatic plants or seaweeds.** The new term "seaweeds and other algae" now introduced to the scope has the benefit that it includes algae from lakes and all other algae which are, or may in future be covered by Annex I and 3 of the Guidelines. The Chair recommends that specific provisions for use of microalgae for food not be included in the current revision of the Guidelines (in its Annexes 1 and 3), but be left for a future revision.
8. It is proposed that the new text (bold) below be added to the Annex 1, A1, 9) to have wild plants found close to the shore or bordering lakes or rivers considered together with other edible wild plants in the section dealing with plants and plant products: "The collection of edible plants and parts thereof, growing naturally in natural areas, forests and agricultural areas, **close to the seashore or bordering other aquatic environments**, is considered an organic production method provided that: (four outlined criteria are met)."
9. This recommendation would assist those member countries who wish to include aquatic plants in the guidelines, while excluding hydroponic production. This proposal and the term 'seaweed and other algae' which are recommended for endorsement can be discussed further at the physical working group. It should be noted that brown seaweeds are not considered to be plants (Plantae). In the absence of criteria for

producing organic microalgae for food, it appears premature to include it in the current revision of the guidelines.

10. Annex 1. Principle of Organic production – B.2 Aquaculture animals and their products. Closed Recirculation Systems. Respondents in the eWG have been divided on the approach to take regarding closed recirculation systems. The definition and paragraph regarding the partial prohibition have been placed in square brackets. The discussion on this topic in the physical working group should take place in conjunction with the point from Japan on the meaning of organic aquaculture (general point above).
11. Homeopathy. A question was posed about retaining a reference to preferential use of homeopathic treatments in aquaculture, in the absence of information on their effectiveness. The majority of respondents were not in favour of retaining it and should any party outside the eWG wish to retain it, this view should be made known.
12. Annex 2. Permitted Substances for the production of organic food. Views of member countries and international NGOs are invited on the table of agricultural inputs proposed by Thailand as fertilizers and conditioners of aquaculture ponds (Annex 2, table 1'). This list should also be examined at the physical working group in May 2013.
13. While the majority of respondents agreed with the draft lists of substances which were proposed for cleaning and disinfection in aquaculture, both in the absence of and in the presence of aquaculture animals, two member countries did not agree. Thailand made additional proposals. The relevant text has been placed in square brackets for additional comment and for discussion at the physical working group in May 2013. The proposal from Japan to first concentrate on reaching consensus on the main text and Annex 1, rather than get bogged down in the issues of substances in Annex 2 at this stage, also needs to be considered.

List of Respondents in Round Two of electronic working group

Argentina

Brazil

Canada

France

Greece

IFOAM

India

Ireland

Italy

Japan

New Zealand

Norway

Panama

Sweden

Switzerland

Thailand

United Kingdom

United States

GUIDELINES FOR THE PRODUCTION, PROCESSING, LABELLING AND MARKETING OF ORGANICALLY PRODUCED FOODS

GL 32–1999

PREFACE

The **Codex Alimentarius Commission** is an intergovernmental body with over 180 members, within the framework of the Joint Food Standards Programme established by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO), with the purpose of protecting the health of consumers and ensuring fair practices in the food trade. The Commission also promotes coordination of all food standards work undertaken by international governmental and non governmental organizations.

The Codex Alimentarius (Latin, meaning Food Law or Code) is the result of the Commission's work: a collection of internationally adopted food standards, guidelines, codes of practice and other recommendations. The texts in this publication are part of the Codex Alimentarius.

Food labelling is the primary means of communication between the producer and seller of food on one hand, and the purchaser and consumer of the other. The Codex Alimentarius standards and guidelines on food labelling are published in a specific volume: *Food Labelling – Complete Texts*. In addition to the general recommendations, the Codex Committee on Food Labelling also provides guidance for certain claims commonly found in the market in order to provide clear information to the consumer.

The Codex Committee on Food Labelling developed the *Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods* in view of the growing production and international trade in organically produced foods with a view to facilitating trade and preventing misleading claims. The *Guidelines* are intended to facilitate the harmonization of requirements for organic products at the international level, and may also provide assistance to governments wishing to establish national regulations in this area.

The *Guidelines* include general sections describing the organic production concept and the scope of the text; description and definitions; labelling and claims (including products in transition/conversion); rules of production and preparation, including criteria for the substances allowed in organic production; inspection and certification systems; and import control.

Further information on labelling texts, or any other aspect of the Codex Alimentarius Commission, may be obtained from:

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GUIDELINES FOR THE PRODUCTION, PROCESSING, LABELLING AND MARKETING OF ORGANICALLY PRODUCED FOODS

GL 32–1999

FOREWORD

1. These guidelines have been prepared for the purpose of providing an agreed approach to the requirements which underpin production of, and the labelling and claims for, organically produced foods.
2. The aims of these guidelines are:
 - to protect consumers against deception and fraud in the market place and unsubstantiated product claims;
 - to protect producers of organic produce against misrepresentation of other agricultural [and aquaculture](#) produce as being organic;
 - to ensure that all stages of production, preparation, storage, transport and marketing are subject to inspection and comply with these guidelines;
 - to harmonize provisions for the production, certification, identification and labelling [have of](#) organically grown produce;
 - to provide international guidelines for organic food control systems in order to facilitate recognition of national systems as equivalent for the purposes of imports; and
 - to maintain and enhance organic [agricultural-food production](#) systems in each country so as to contribute to local and global preservation.
3. These guidelines are at this stage a first step into official international harmonization of the requirements for organic products in terms of production and marketing standards, inspection arrangements and labelling requirements. In this area the experience with the development of such requirements and their implementation is still very limited. Moreover, consumer perception on the organic production method may, in certain detailed but important provisions, differ from region to region in the world. Therefore, the following is recognized at this stage:
 - the guidelines are a useful instrument in assisting countries to develop national regimes regulating production, marketing and labelling of organic foods;
 - the guidelines need regular improvement and updating in order to take into account technical progress and the experience with their implementation;
 - the guidelines do not prejudice the implementation of more restrictive arrangements and more detailed rules by member countries in order to maintain consumer credibility and prevent fraudulent practices, and to apply such rules to products from other countries on the basis of equivalency to such more restrictive provisions.
4. These guidelines set out the principles of organic production at farm, preparation, storage, transport, labelling and marketing stages, and provides an indication of accepted permitted inputs for soil fertilizing and conditioning, plant pest and disease control, [substances for cleaning and disinfection](#) –and, food additives and processing aids. For labelling purposes, the use of terms inferring that organic production methods have been used are restricted to products derived from operators under the supervision of a certification body or authority.
5. Organic [agriculture-production](#) is one among the broad spectrum of methodologies which are supportive of the environment. Organic production systems are based on specific and precise standards of production which aim at achieving optimal agro-[and aquatic](#) ecosystems which are socially, ecologically and economically sustainable. Terms such as “biological” and “ecological” are also used in an effort to describe the organic system more clearly. Requirements for organically produced foods differ from those for other agricultural [or aquacultural](#) products in that production procedures are an intrinsic part of the identification and labelling of, and claim for, such products.
6. “Organic” is a labelling term that denotes products that have been produced in accordance with organic production standards and certified by a duly constituted certification body or authority. Organic [agriculture-food production](#) is based on minimizing the use of external inputs, avoiding the use of synthetic fertilizers and pesticides. Organic [agriculture-production](#) practices cannot ensure that products are completely free of residues, due to general environmental pollution. However, methods are used to minimize pollution of air, soil and water. Organic food handlers, processors and retailers adhere to standards to maintain the integrity of organic agriculture [and aquaculture](#) products. The primary goal of organic [agriculture-production](#) is to optimize the health and productivity of interdependent communities of soil [or aquatic life](#) life, plants, animals and people.

7. Organic ~~agriculture–food production~~ is a holistic production management system which promotes and enhances agro ~~and aquatic~~ ecosystem health, including biodiversity, biological cycles, and soil biological activity ~~in agriculture or water biological activity in aquaculture~~. It emphasizes the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible, cultural, biological and mechanical methods, as opposed to using synthetic ~~materials substances~~, to fulfil any specific function within the system. An organic production system is designed to:
- enhance biological diversity within the whole system;
 - increase soil biological activity ~~in agriculture or water biological activity in aquaculture~~;
 - maintain long-term soil fertility ~~in agriculture and quality of the aquatic environment in aquaculture~~;
 - recycle wastes of plant and animal origin in order to return nutrients to the land, thus minimizing the use of non-renewable resources;
 - rely on renewable resources in locally organized ~~agricultural-production~~ systems;
 - promote the healthy use of soil, water and air as well as minimize all forms of pollution thereto that may result from ~~agricultural-production~~ practices;
 - handle agricultural products with emphasis on careful processing methods in order to maintain the organic integrity and vital qualities of the product at all stages;
 - ~~preserve natural aquatic resources~~;
 - ~~maintain the marine or freshwater environment in the case of aquaculture by keeping impact on the environment low~~;
 - become established on any existing farm through a period of conversion, the appropriate length of which is determined by site-specific factors such as the history of the land ~~or aquatic medium~~, and type of crops, ~~and livestock~~, ~~or aquatic organism~~ to be produced.
8. The concept of close contact between the consumer and the producer is a long established practice. Greater market demand, the increasing economic interests in production, and the increasing distance between producer and consumer has stimulated the introduction of external control and certification procedures.
9. An integral component of certification is the inspection of the organic management system. Procedures for operator certification are based primarily on a yearly description of the agricultural ~~or aquacultural~~ enterprise as prepared by the operator in cooperation with the inspection body. Likewise, at the processing level, standards are also developed against which the processing operations and plant conditions can be inspected and verified. Where the inspection process is undertaken by the certification body or authority, there must be clear separation of the inspection and certification function. In order to maintain their integrity, certification bodies or authorities which certify the procedures of the operator should be independent of economic interests with regard to the certification of operators.
10. Apart from a small portion of ~~agricultural–food~~ commodities marketed directly from the farm to consumers, most products find their way to consumers via established trade channels. To minimize deceptive practices in the market place, specific measures are necessary to ensure that trade and processing enterprises can be audited effectively. Therefore, the regulation of a process, rather than a final product, demands responsible action by all involved parties.
11. Import requirements should be based on the principles of equivalency and transparency as set out in the *Principles for Food Import and Export Inspection and Certification*.¹ In accepting imports of organic products, countries would usually assess the inspection and certification procedures and the standards applied in the exporting country.
12. Recognizing that organic production systems continue to evolve and that organic principles and standards will continue to be developed under these guidelines, the Codex Committee on Food Labelling (CCFL) shall review these guidelines on a regular basis. The CCFL shall initiate this review process by inviting member governments and international organizations to make proposals to the CCFL regarding amendments to these guidelines prior to each CCFL meeting.

¹ CAC/GL 20-1995.

SECTION 1. SCOPE

- 1.1 These guidelines apply to the following products which carry, or are intended to carry, descriptive labelling referring to organic production methods:
- unprocessed plants and plant products, [seaweed and other algae and their products](#), livestock and livestock products, [aquaculture animal and aquaculture animal products](#) to the extent that the principles of production and specific inspection rules for them are introduced in Annexes 1 and 3; and
 - processed agricultural crop ~~and~~, livestock [and aquatic](#) products² intended for human consumption derived from (a) above.
- 1.2 A product will be regarded as bearing indications referring to organic production methods where, in the labelling or claims, including advertising material or commercial documents, the product, or its ingredients, is described by the terms "organic", "biodynamic", "biological", "ecological", or words of similar intent including diminutives which, in the country where the product is placed on the market, suggests to the purchaser that the product or its ingredients were obtained according to organic production methods.
- 1.3 Paragraph 1.2 does not apply where these terms clearly have no connection with the method of production.
- 1.4 These guidelines apply without prejudice to other Codex Alimentarius Commission (CAC) provisions governing the production, preparation, marketing, labelling and inspection of the products specified in paragraph 1.1.
- 1.5 All materials and/or the products produced from genetically engineered/modified organisms (GEO/GMO) are not compatible with the principles of organic production (either the growing, manufacturing, or processing) and therefore are not accepted under these guidelines.

SECTION 2. DESCRIPTION AND DEFINITIONS

2.1 Description

Foods should only refer to organic production methods if they come from an organic ~~farm-production~~ system employing management practices which seek to nurture ecosystems which achieve sustainable productivity, and provide weed, pest and disease control through a diverse mix of mutually dependent life forms, recycling plant and animal residues, crop selection and rotation, water management, tillage and cultivation. Soil fertility is maintained and enhanced by a system which optimizes soil biological activity and the physical and mineral nature of the soil as the means to provide a balanced nutrient supply for plant and animal life as well as to conserve soil resources. Production should be sustainable with the recycling of plant nutrients as an essential part of the fertilizing strategy. Pest and disease management is attained by means of the encouragement of a balanced host/predator relationship, augmentation of beneficial insect populations, biological and cultural control and mechanical removal of pests and affected plant parts. The basis for organic ~~livestock~~ husbandry ~~of terrestrial or aquatic animals~~ is the development of a harmonious relationship between ~~land, plants and livestock~~ ~~their environment, flora and fauna~~, and respect for ~~the~~ ~~their~~ ~~characteristic~~ physiological and behavioural needs ~~of livestock~~. This is achieved by a combination of providing good quality organically grown feedstuffs, appropriate stocking rates, ~~livestock-animal~~ husbandry systems appropriate to behavioural needs, and animal management practices that minimize stress and seek to promote animal health and welfare, prevent disease and avoid the use of chemical allopathic veterinary drugs (including antibiotics).

2.2 Definitions

For the purpose of these guidelines:

Agricultural product/product of agricultural origin means any product or commodity, raw or processed, that is marketed for human consumption (excluding water, salt and additives) or animal feed. [For the purpose of these Guidelines reference to agricultural product/product of agricultural origin may be understood as also referring to aquatic product/product of aquatic origin, having regard to the specific characteristics of this sector.](#)

Aquaculture means [the farming of aquatic organisms \(fish, molluscs, crustaceans, seaweed and other algae\) involving intervention in the rearing process to enhance production and the individual or corporate ownership of the stock being cultivated](#)¹.

(Aquaculture) production cycle means [the lifespan of an aquaculture animal or seaweed from the earliest life stage to harvesting.](#)

Audit is a systematic and functionally independent examination to determine whether activities and related results comply with planned objectives.³

² Until lists of ingredients of non agricultural origin and processing aids permitted in the preparation of products of livestock origin are elaborated, competent authorities should develop their own lists.

³ CAC/GL 20-1995.

Certification is the procedure by which official certification bodies, or officially recognized certification bodies, provide written or equivalent assurance that foods or food control systems conform to requirements. Certification of food may be, as appropriate, based on a range of inspection activities which may include continuous on-line inspection, auditing of quality assurance systems and examination of finished products.⁴

Certification body means a body which is responsible for verifying that a product sold or labelled as "organic" is produced, processed, prepared handled, and imported according to these guidelines.

[Closed recirculation system means a type of enclosed unit (on land or a vessel), with very limited and managed barrier-connection to open waters, with recirculation depending on permanent external energy input to pump/circulate the water, and a system to treat the effluent water to enable its reuse.]

Competent authority means the official government agency having jurisdiction.

[Containment system means equipment for growing aquaculture animals or seaweed which prevents dispersal of the aquatic organism concerned - examples are, cages (net pens), ponds and tanks, long-line and rafts holding suspended ropes with the organisms attached and net bags on trestle tables.]

[Conversion period means the transition from conventional to organic farming within a given period of time, during which the guidelines concerning the organic production have been applied]

Or

[Conversion means the time of transition from non-organic to organic farming]

Genetically engineered/modified organisms. The following provisional definition is provided for genetically/modified organisms.⁵ Genetically engineered/modified organisms, and products thereof, are produced through techniques in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination.

Techniques of genetic engineering/modification include, but are not limited to: recombinant DNA, cell fusion, micro and macro injection, encapsulation, gene deletion and doubling. Genetically engineered organisms will not include organisms resulting from artificial polyploidy or from techniques such as conjugation, transduction and hybridization.

Ingredient means any substance, including a food additive, used in the manufacture or preparation of a food and present in the final product although possibly in a modified form.⁶

Inspection is the examination of food or systems for control of food, raw materials, processing, and distribution including in-process and finished product testing, in order to verify that they conform to requirements.⁷ For organic food, inspection includes the examination of the production and processing system.

Labelling means any written, printed or graphic matter that is present on the label, accompanies the food, or is displayed near the food, including that for the purpose of promoting its sale or disposal.⁸

Livestock means any domestic or domesticated terrestrial animal including bovine (including buffalo and bison), ovine, porcine, caprine, equine, poultry and bees raised for food or in the production of food.⁹ The products of hunting or fishing of wild animals or of aquaculture shall not be considered part of this definition.

[Locally grown aquatic species means both aquatic species which are grown within their natural range and those aquatic species which though outside their natural range, have been grown in commercial practice in an area and have adapted well to the local environment and management conditions without adverse effects on habitats or on native species.]

Marketing means holding for sale or displaying for sale, offering for sale, selling, delivering or placing on the market in any other form.

Official accreditation is the procedure by which a government agency having jurisdiction formally recognizes the competence of an inspection and/or certification body to provide inspection and certification services. For organic production the competent authority may delegate the accreditation function to a private body.

Officially recognized inspection systems/officially recognized certification systems are systems which have been formally approved or recognized by a government agency having jurisdiction.¹⁰

Operator means any person who produces, prepares or imports, with a view to the subsequent marketing thereof, products as referred to in Section 1.1, or who markets such products.

Plant protection product means any substance intended for preventing, destroying, attracting, repelling, or controlling any pest or disease including unwanted species of plants or animals during the production, storage, transport, distribution and processing of food, agricultural commodities, or animal feeds.

⁴ CAC/GL 20-1995.

⁵ In the absence of a definition of genetically engineered/modified organisms agreed by the Codex Alimentarius Commission, this definition has been developed in order to provide initial guidance for governments in the application of these guidelines. This definition is therefore to remain under review in the light of other considerations by the Commission and its Committees. In the interim, member countries may also apply national definitions.

⁶ *General Standard for the Labelling of Prepackaged Foods*, Section 4 – Labelling of Prepackaged Foods (CODEX STAN 1-1985).

⁷ CAC/GL 20-1995.

⁸ CODEX STAN 1-1985.

⁹ Provisions for aquaculture will be elaborated at a future date.

¹⁰ CAC/GL 20-1995.

Preparation means the operations of slaughtering, processing, preserving and packaging of agricultural [and aquacultural](#) products and also alterations made to the labelling concerning the presentation of the organic production method.

Production means the operations undertaken to supply [agricultural-food](#) products in the state in which they occur on the farm, including initial packaging and labelling of the product.

Seaweed means [large marine alga occurring both naturally and under cultivation, but specifically excluding phytoplanktonic algae and microalgae](#).ⁱⁱ

Veterinary drug means any substance applied or administered to any food-producing animal, such as meat or milk-producing animals, poultry, fish or bees, whether used for therapeutic, prophylactic or diagnostic purposes or for modification of physiological functions or behaviour.¹¹

SECTION 3. LABELLING AND CLAIMS

General provisions

- 3.1 Organic products should be labelled in accordance with the Codex *General Standard for the Labelling of Prepackaged Foods*.¹²
- 3.2 The labelling and claims of a product specified in Section 1.1(a) may refer to organic production methods only where:
- such indications show clearly that they relate to a method [of agricultural food](#) production;
 - the product was produced in accordance with the requirements of Section 4 or imported under the requirements laid down in Section 7;
 - the product was produced or imported by an operator who is subject to the inspection measures laid down in Section 6, and
 - the labelling refers to the name and/or code number of the officially recognized inspection or certification body to which the operator who has carried out the production or the most recent processing operation is subject.
- 3.3 The labelling and claims of a product specified in paragraph 1.1(b) may refer to organic production methods only where:
- such indication show clearly that they relate to a method of [agricultural-food](#) production and are linked with the name of the [agricultural-food](#) product in question, unless such indication is clearly given in the list of ingredients;
 - all the ingredients of agricultural [or aquacultural](#) origin of the product are, or are derived from, products obtained in accordance with the requirements of Section 4, or imported under the arrangements laid down in Section 7;
 - the product should not contain any ingredient of non-agricultural origin not listed in Annex 2, Table 3;
 - the same ingredients shall not be derived from an organic and non-organic origin;
 - the product or its ingredients have not been subjected during preparation to treatments involving the use of ionizing radiation or substances not listed in Annex 2, Table 4;
 - the product was prepared or imported by an operator subject to the regular inspection system as set out in Section 6 of these guidelines; and
 - the labelling refers to the name and/or the code number of the official or officially recognized certification body or authority to which the operator who has carried out the most recent preparation operation is subject.
- 3.4 By way of derogation from paragraph 3.3(b),
- certain ingredients of agricultural origin not satisfying the requirement in that paragraph may be used, within the limit of maximum level of 5% m/m of the total ingredients excluding salt and water in the final product, in the preparation of products as referred to in paragraph 1.1(b);
 - where such ingredients of agricultural origin are not available, or in sufficient quantity, in accordance with the requirements of Section 4 of these guidelines;
- 3.5 Pending further review of the guidelines, Member Countries can consider the following with regard to products referred to in paragraph 1.1(b) marketed in their territory:
- the development of specific labelling provisions for products containing less than 95% ingredients of agricultural ingredients;
 - the calculation of the percentages in 3.4 (5%) and in 3.5 (95%) on the basis of the ingredients of agricultural origin (instead of all ingredients excluding only salt and water);
 - the marketing of product with in transition/conversion labelling containing more than one ingredient of agricultural origin.

¹¹ Codex Alimentarius Commission Procedural Manual, Definitions.

¹² CODEX STAN 1-1985.

- 3.6 In developing labelling provisions from products containing less than 95% of organic ingredients in accordance with the paragraph above, member countries may consider the following elements in particular for products containing 95% and 70% of organic ingredients:
- a) the product satisfies the requirements of paragraphs 3.3(c), (d) (e), (f) and (g);
 - b) the indications referring to organic production methods should only appear on the front panel as a reference to the approximate percentage of the total ingredients including additives but excluding salt and water;
 - c) the ingredients, appear in descending order (mass/mass) in the list of ingredients;
 - d) indications in the list of ingredients appear in the same colour and with an identical style and size of lettering as other indications in the list of ingredient.

Labelling of products in transition/conversion to organic

- 3.7 Products of farms in transition to organic production methods may only be labelled as “transition to organic” after 12 months of production using organic methods providing that:
- a) the requirements referred to in paragraphs 3.2 and 3.3 are fully satisfied;
 - b) the indications referring to transition/conversion do not mislead the purchaser of the product regarding its difference from products obtained from farms and/or farm units which have fully completed the conversion period;
 - c) such indication take the form of words, such as “product under conversion to organic farming”, or similar words or phrase accepted by the competent authority of the country where the product is marketed, and must appear in a colour, size and style of lettering which is not more prominent than the sales description of the product;
 - d) foods composed of a single ingredient may be labelled as “transition to organic” on the principal display panel;
 - e) the labelling refers to the name and/or the code number of the official or officially approved certification body or authority to which the operator who has carried out the most recent preparation is subject.

Labelling of non-retail containers

- 3.8 The labelling of non-retail containers of product specified in paragraph 1.1 should meet the requirements set out in Annex 3, paragraph 10.

SECTION 4. RULES OF PRODUCTION AND PREPARATION

- 4.1 Organic production methods require that for the production of products referred to in paragraph 1.1(a):
- a) at least the production requirements of Annex 1 should be satisfied;
 - b) in the case where (a) (above) is not effective, substances listed in Annex 2, Tables 1 and 2 or substances approved by individual countries that meet the criteria established in Section 5.1, may be used as plant protection products, fertilizers, soil conditioners, insofar as the corresponding use is not prohibited in general agriculture [and aquaculture](#) in the country concerned in accordance with the relevant national provisions.
- 4.2 Organic processing methods require that for the preparation of products referred to in paragraph 1.1(b):
- a) at least the processing requirements of Annex 1 should be satisfied;
 - b) substances listed in Annex 2, Tables 3 and 4 or substances approved by individual countries that meet the criteria established in Section 5.1 may be used as ingredients of non-agricultural origin or processing aids insofar as the corresponding use is not prohibited in the relevant national requirements concerning the preparation of food products and according to good manufacturing practice.
- 4.3 Organic products should be stored and transported according to the requirements of Annex 1.
- 4.4 By derogation of the provisions of paragraphs 4.1 (a) and 4.2 (a), the competent authority may, with regard to the provisions on livestock [and aquaculture animal](#) production at Annex 1, provide for more detailed rules as well as for derogations for implementation periods in order to permit gradual development of organic farming practices.

SECTION 5. REQUIREMENTS FOR INCLUSION OF SUBSTANCES IN ANNEX 2 AND CRITERIA FOR THE DEVELOPMENT OF LISTS OF SUBSTANCES BY COUNTRIES

- 5.1 At least the following criteria should be used for the purposes of amending the permitted substance lists referred to in Section 4. In using these criteria to evaluate new substances for use in organic production, countries should take into account all applicable statutory and regulatory provisions and make them available to other countries upon request.

Any proposals for the inclusion in Annex 2 of new substances must meet the following general criteria:

- i) they are consistent with principles of organic production as outlined in these Guidelines;

- ii) use of the substance is necessary/essential for its intended use;
- iii) manufacture, use and disposal of the substance does not result in, or contribute to, harmful effects on the environment;
- iv) they have the lowest negative impact on human or animal health and quality of life; and
- v) approved alternatives are not available in sufficient quantity and/or quality.

The above criteria are intended to be evaluated as a whole in order to protect the integrity of organic production. In addition, the following criteria should be applied in the evaluation process:

- a) if they are used for fertilization, soil conditioning purposes:
 - they are essential for obtaining or maintaining the fertility of the soil or to fulfil specific nutrition requirements of crops, or specific soil-conditioning and rotation purposes which cannot be satisfied by the practices included in Annex 1, or other products included in Table 2 of Annex 2; and
 - the ingredients will be of plant, animal, microbial, or mineral origin and may undergo the following processes: physical (e.g., mechanical, thermal), enzymatic, microbial (e.g., composting, fermentation); only when the above processes have been exhausted, chemical processes may be considered and only for the extraction of carriers and binders;¹³ and
 - their use does not have a harmful impact on the balance of the soil ecosystem or the physical characteristics of the soil, or water and air quality; and
 - their use may be restricted to specific conditions, specific regions or specific commodities;
- b) if they are used for the purpose of plant disease or pest and weed control:
 - they should be essential for the control of a harmful organism or a particular disease for which other biological, physical, or plant breeding alternatives and/or effective management practices are not available; and
 - their use should take into account the potential harmful impact on the environment, the ecology (in particular non-target organisms) and the health of consumers, livestock and bees; and
 - substances should be of plant, animal, microbial, or mineral origin and may undergo the following processes: physical (e.g. mechanical, thermal), enzymatic, microbial (e.g. composting, digestion);
 - however, if they are products used, in exceptional circumstances, in traps and dispensers such as pheromones, which are chemically synthesized they will be considered for addition to lists if the products are not available in sufficient quantities in their natural form, provided that the conditions for their use do not directly or indirectly result in the presence of residues of the product in the edible parts;
 - their use may be restricted to specific conditions, specific regions or specific commodities;
- c) if they are used as additives or processing aids in the preparation or preservation of the food :
 - these substances are used only if it has been shown that, without having recourse to them, it is impossible to:
 - produce or preserve the food, in the case of additives, or
 - produce the food, in the case of processing aids
 in the absence of other available technology that satisfies these Guidelines;
 - these substances are found in nature and may have undergone mechanical/physical processes (e.g. extraction, precipitation), biological/enzymatic processes and microbial processes (e.g. fermentation),
 - or, if these substances mentioned above are not available from such methods and technologies in sufficient quantities, then those substances that have been chemically synthesized may be considered for inclusion in exceptional circumstances;
 - their use maintains the authenticity of the product;
 - the consumer will not be deceived concerning the nature, substance and quality of the food;
 - the additives and processing aids do not detract from the overall quality of the product.
- d) if they are used for the purpose of cleaning and disinfection of ponds ,cages, buildings and installations used for aquaculture animal production :
 - they should be essential for the control of a harmful organism or a particular disease for which other biological, physical, or breeding alternatives and/or effective management practices are not available;
 - and
 - their use should take into account the potential harmful impact on the environment, the ecology (in particular non-target organisms) and the health of consumers, aquaculture animals aquatic organisms;
 - and
 - substances should be of plant, animal, microbial, or mineral origin and may undergo the following processes: physical (e.g. mechanical, thermal), enzymatic, microbial (e.g. composting, digestion);
 - their use may be restricted to specific conditions, specific regions or specific commodities;

In the evaluation process of substances for inclusion on lists all stakeholders should have the opportunity to be involved.

5.2 Countries should develop or adopt a list of substances that meet the criteria outlined in Section 5.1.

¹³ The use of chemical processes in the context of these Criteria is an interim measure and should be reviewed.

[5.2](#)—[If these substances mentioned above are not available from such methods and technologies in sufficient quantities, then those substances that have been chemically synthesized may be considered for inclusion in exceptional circumstances.]

SECTION 6. INSPECTION AND CERTIFICATION SYSTEMS¹⁴

- 6.1 Inspection and certification systems are used to verify the labelling of, and claims for, organically produced foods. Development of these systems should take into account the *Principles for Food Import and Export Inspection and Certification*¹⁵, the *Guideline for the Design, Operation, Assessment and Accreditation of Food Import and Export Inspection and Certification Systems*.^{16,17}
- 6.2 Competent authorities should establish an inspection system operated by one or more designated authorities and/or officially recognized inspection/certification¹⁸ bodies to which the operators producing, preparing or importing products as referred to in paragraph 1.1 should be subject.
- 6.3 The officially recognized inspection and certification systems should comprise at least the application of the measures and other precautions set out in Annex 3.
- 6.4 For the application of the inspection system operated by the official or officially recognized certification body or authority, countries should identify a competent authority responsible for the approval and supervision of such bodies:
- the identified competent authority may delegate, while maintaining the responsibility for the decisions and actions taken, the assessment and supervision of private inspection and certification bodies to a private or public third party hereafter referred to as its “designate”. If delegated, the private or public third party should not be engaged in inspection and/or certification;
 - for this purpose an importing country may recognize a third party accrediting body when the exporting country lacks an identified competent authority and a national program.
- 6.5 In order to attain approval as an officially recognized certification body or authority, the competent authority, or its designate, when making its assessment should take into account the following:
- a) the standard inspection/certification procedures to be followed, including detailed description of the inspection measures and precautions which the body undertakes to impose on operators subject to inspection;
 - b) the penalties which the body intends to apply where irregularities and/or infringements are found;
 - c) the availability of appropriate resources in the form of qualified staff, administrative and technical facilities, inspection experience and reliability;
 - d) the objectivity of the body vis-à-vis the operators subject to inspection.
- 6.6 The competent authority or its designate should:
- a) ensure that the inspections carried out on behalf of the inspection or certification body are objective;
 - b) verify the effectiveness of inspections;
 - c) take cognizance of any irregularities and/or infringements found and penalties applied;
 - d) withdraw approval of the certification body or authority where it fails to satisfy the requirements referred to in (a) and (b) or, no longer fulfils the criteria indicated in paragraph 6.5 or, fails to satisfy the requirements laid down in paragraphs 6.7 to 6.9.
- 6.7 Official and/or officially recognized certification bodies or authority referred to in paragraph 6.2 should:
- a) ensure that at least the inspection measures and precautions specified in Annex 3 are applied to undertakings subject to inspection; and
 - b) not disclose confidential information and data obtained in their inspection or certification activities to persons other than the person responsible for the undertaking concerned and the competent authorities.
- [6.7'](#) [During \[registration\] of the aquaculture farm/ seaweed or other algae collection unit by the accredited certifying \[agency\], the producer has to present an annual organic management plan to the accredited certifying \[agency\], for verification during the inspection. The plan is required to be updated annually \(IN\).](#)

¹⁴ The systems conducted by certification bodies may in some countries be equivalent to those systems conducted by inspection bodies. Therefore, the term “inspection and certification” has been used wherever these systems may be synonymous.

¹⁵ CAC/GL 20-1995.

¹⁶ CAC/GL 26-1997.

¹⁷ See also other agreed international standards, e.g. ISO65.

¹⁸ In organic approval processes reference is frequently made to certification performed by either a ‘certification body’ or an ‘inspection body’. Where these functions are conducted by the same body there must be clear separation of the inspection and certification roles.

- 6.8 Official or officially recognized inspection and/or certification bodies or authority should:
- a) give the competent authority or its designate, for audit purposes, access to their offices and facilities and, for random audit of its operators, access to the facilities of the operators, together with any information and assistance deemed necessary by the competent authority or its designate for the fulfilment of its obligations pursuant to these guidelines;
 - b) send to the competent authority or its designate each year a list of operators subject to inspection for the previous year and present to the said authority a concise annual report.
- 6.9 The designated authority and the official or officially recognized certification body or authority referred to in paragraph 6.2 should:
- a) ensure that, where an irregularity is found in the implementation of Sections 3 and 4, or of the measures referred to in Annex 3, the indications provided for in paragraph 1.2 referring to the organic production method are removed from the entire lot or production run affected by the irregularity concerned;
 - b) where a manifest infringement, or an infringement with prolonged effects is found, prohibit the operator concerned from marketing products with indications referring to the organic production method for a period to be agreed with the competent authority or its designate.
- 6.10 The requirements of the *Guidelines for the Exchange of Information between Countries on Rejections of Imported Food*¹⁹ should apply where the competent authority finds irregularities and/or infringements in the application of these guidelines.

SECTION 7. IMPORTS

- 7.1 Products as specified in paragraph 1.1 which are imported may be marketed only where the competent authority or designated body in the exporting country has issued a certificate of inspection stating that the lot designated in the certificate was obtained within a system of production, preparation, marketing and inspection applying at least the rules provided for in all sections and annexes of these guidelines and satisfy the decision on equivalency referred to under 7.4.
- 7.2 The certificate referred to in paragraph 7.1 above should accompany the goods, in the original copy, to the premises of the first consignee; thereafter the importer should keep the transactional certificate for not less than two years for inspection/audit purposes.
- 7.3 The authenticity of the product should be maintained after import through to the consumer. If imports of organic products are not in conformity with the requirements of these guidelines due to treatment required by national regulations for quarantine purposes that is not in conformity with these guidelines they lose their organic status.
- 7.4 An importing country may:
- a) require detailed information, including reports established by independent experts mutually agreed between competent authorities of the exporting and importing countries, on the measures applied in the exporting country to enable it to make judgements and decisions on equivalency with its own rules provided that these rules of the importing country meet the requirements of these guidelines, and/or
 - b) arrange together with the exporting country for site visits to examine the rules of production and preparation, and the inspection/certification measures including production and preparation itself as applied in the exporting country.
 - c) require, in order to avoid any confusion to the consumer, that the product is labelled in accordance with the labelling requirements applied, in accordance with the provisions of section 3, in the importing country for the products concerned.

¹⁹ CAC/GL 25-1997.

ANNEX 1 PRINCIPLES OF ORGANIC PRODUCTION

A.1 PLANTS AND PLANT PRODUCTS

1. The principles set out in this Annex should have been applied on the parcels, farm or farm units during a conversion period of at least two years before sowing, or in the case of perennial crops other than grassland, at least three (3) years before the first harvest of products as referred to in paragraph 1.1(a) of these guidelines. The competent authority, or where delegated, the official or officially recognized certification body or authority may decide in certain cases (such as idle use for two years or more) to extend or reduce that period in the light of previous parcel use but the period must equal or exceed 12 months.
2. Whatever the length of the conversion period it may only begin once a production unit has been placed under an inspection system as required by 6.2 and once the unit has started the implementation of the production rules referred to in Section 4 of these Guidelines.
3. In cases where a whole farm is not converted at one time, it may be done progressively whereby these guidelines are applied from the start of conversion on the relevant fields. Conversion from conventional to organic production should be effected using permitted techniques as defined in these guidelines. In cases where a whole farm is not converted at the same time, the holding must be split into units as referred to in Annex 3, part A, paragraphs 3 and 11.
4. Areas in conversion as well as areas converted to organic production must not be alternated (switched back and forth) between organic and conventional production methods.
5. The fertility and biological activity of the soil should be maintained or increased, where appropriate, by:
 - a) cultivation of legumes, green manures or deep-rooting plants in an appropriate multi-annual rotation programme;
 - b) incorporation in the soil of organic material, composted or not, from holdings producing in accordance with these guidelines. By-products from livestock farming, such as farmyard manure, may be used if they come from livestock holdings producing in accordance with these guidelines;

Substances, as specified in Annex 2, Table 1 may be applied only to the extent that adequate nutrition of the crop or soil conditioning are not possible by the methods set out in 5(a) and (b) above or, in the case of manures, they are not available from organic farming.

 - c) for compost activation, appropriate micro-organisms or plant-based preparations may be used;
 - d) biodynamic preparations from stone meal, farmyard manure or plants may also be used for the purpose covered by paragraph 5.
6. Pests, diseases and weeds should be controlled by any one, or a combination, of the following measures:
 - choice of appropriate species and varieties;
 - appropriate rotation programs;
 - mechanical cultivation;
 - protection of natural enemies of pests through provision of favourable habitat, such as hedges and nesting sites, ecological buffer zones which maintain the original vegetation to house pest predators;
 - diversified ecosystems. These will vary between geographical locations. For example, buffer zones to counteract erosion, agro-forestry, rotating crops, etc.
 - flame weeding;
 - natural enemies including release of predators and parasites;
 - biodynamic preparations from stone meal, farmyard manure or plants;
 - mulching and mowing;
 - grazing of animals;
 - mechanical controls such as traps, barriers, light and sound;
 - steam sterilization when proper rotation of soil renewal cannot take place.
7. Only in cases of imminent or serious threat to the crop and where the measures identified in 6. (above) are, or would not be effective, recourse may be had to products referred to in Annex 2.
8. Seeds and vegetative reproductive material should be from plants grown in accordance with the provisions of Section 4.1 of these guidelines for at least one generation or, in the case of perennial crops, two growing seasons. Where an operator can demonstrate to the official or officially recognized certification body or

authority that material satisfying the above requirements is not available, the certification body or authority may support:

- a) in the first instance, use of untreated seeds or vegetative reproductive material, or
- b) if (a) is not available, use of seeds and vegetative reproductive material treated with substances other than those included in Annex 2.

The competent authority may establish criteria to limit the application of the derogation in 8 above.

9. The collection of edible plants and parts thereof, growing naturally in natural areas, forests and agricultural areas, close to the seashore or bordering other aquatic environments, is considered an organic production method provided that:
 - the products are from a clearly defined collection area that is subject to the inspection/certification measures set out in Section 6 of these guidelines;
 - those areas have received no treatments with products other than those referred to in Annex 2 for a period of three years before the collection;
 - the collection does not disturb the stability of the natural habitat or the maintenance of the species in the collection area;
 - the products are from an operator managing the harvesting or gathering of the products, who is clearly identified and familiar with the collection area.

A.2 SEaweEDS AND SEaweED OTHER ALGAE AND THEIR PRODUCTS

(Numbering of A2 to be integrated into Guideline's sequence eventually)

1. [This section applies to seaweed and kelps and other algae in addition to phytoplankton and microalgae for use as direct or indirect feed for aquaculture animals. Member countries are free to develop criteria outside the scope of these Guidelines for organic production of phytoplankton and microalgae for food use. The Guidelines may be revised in future to include criteria for phytoplankton and microalgae for use as food.]
2. The operation and management of the production of organic seaweed and other algae production, whether in containment systems or not, should respect be consistent with the principles of organic farming. The biodiversity of the aquatic environment and the quality of the surrounding water should be maintained
3. Harvested seaweed and other algae can be sold as organically produced when these Guidelines have been complied with. The criteria for siting of aquaculture animal units in Section B2 of these guidelines should be applied as appropriate to production units for seaweed and other algae production units. The criteria for conversion of plant and plant products in these guidelines (Annex I.A, 1-4) should be applied as appropriate to seaweed/other algae production units. If a competent authority agrees to a conversion period shorter than 12 months, it should be at least the length of a production cycle.
4. Both farming and collection of seaweed and other algae should be carried out in areas which meet the criteria of paragraph 4 and 6 of Section B2. An organic management plan should be developed and implemented by means of annual revision by all producers of all organic seaweed and other algae producers to guide the operation of the production unit in keeping the impact on the environment low and setting out monitoring to be done to ensure that this aim is achieved each year.
5. The collection of edible seaweeds and other algae and parts thereof, growing naturally in the sea aquatic environment is considered an organic production method provided that the four conditions of Annex 1.A, paragraph 9 are met.
6. To maintain good quality planting material, the collection in the wild should be done in a sustainable manner.
7. Farming should be carried out in a sustainable manner at all stages from collection of seedlings in the wild to harvesting. The application of supplementary fertiliser using natural organic compounds to the growing area should be restricted to pond cultivation [and to substances listed in Annex 2, (Brazilian request), Table x]. Ropes and other equipment used for growing seaweed should be re-used or re-cycled where possible. Removal of bio-fouling organisms should be by physical means only.
8. The operator should maintain detailed and up-to-date records as set out in Annex 3, paragraphs 7 – 15, where the terms livestock should be taken to read seaweed stock or other algae stock.

B.1 LIVESTOCK AND LIVESTOCK PRODUCTS

General principles

1. Where livestock for organic production are maintained, they should be an integral part of the organic farm unit and should be raised and held according to these guidelines.
2. Livestock can make an important contribution to an organic farming system by:
 - a) improving and maintaining the fertility of the soil;
 - b) managing the flora through grazing;
 - c) enhancing biodiversity and facilitating complementary interactions on the farm; and
 - d) increasing the diversity of the farming system.
3. Livestock production is a land related activity. Herbivores must have access to pasture and all other animals must have access to open-air runs; the competent authority may allow exceptions when the animals' physiological state, inclement weather conditions, and state of the land so permit, or the structure of certain 'traditional' farming systems restrict access to pasture, providing the welfare of the animals can be guaranteed.
4. Stocking rates for livestock should be appropriate for the region in question taking into consideration feed production capacity, stock health, nutrient balance, and environmental impact.
5. Organic livestock management should aim to utilize natural breeding methods, minimize stress, prevent disease, progressively eliminate the use of chemical allopathic veterinary drugs (including antibiotics), reduce the feeding of animals with products of animal origin (e.g. meat meal), and maintain animal health and welfare.

Livestock sources/origin

6. The choice of breeds, strains and breeding methods shall be consistent with the principles of organic farming, taking into account in particular:
 - a) their adaptation to the local conditions;
 - b) their vitality and resistance to disease;
 - c) the absence of specific diseases or health problems associated with some breeds and strains (porcine stress syndrome, spontaneous abortion etc).
7. Livestock used for products satisfying Section 1.1 (a) of these guidelines must come, from birth or hatching, from production units complying with these guidelines, or have been the offspring of parents raised under the conditions set down in these guidelines. They must be raised under this system throughout their life.
 - Livestock may not be transferred between organic and non-organic units. The competent authority can establish detailed rules for the purchase of livestock from other units complying with these Guidelines.
 - Livestock existing on the livestock production unit, but not complying with these Guidelines, may be converted.
8. When an operator can demonstrate to the satisfaction of the official or officially recognized inspection/certification body that livestock satisfying the requirements indicated in the previous paragraph are not available, the official or officially recognized inspection/ certification body may allow livestock not raised according these guidelines under circumstances such as:
 - a) for considerable expansion of the farm, when a breed is changed or when new livestock specialization is developed;
 - b) for the renewal of a herd, e.g., high mortality of animals caused by catastrophic circumstances;
 - c) males for breeding.

The competent authority may set the specific conditions under which livestock from non-organic sources may be allowed or not allowed, taking into account that animals be brought in as young as possible as soon as they are weaned.

1. These livestock qualified by the derogations indicated in the previous paragraph must comply with the conditions set out in paragraph 12. These conversion periods must be observed if the products are to be sold as organic according to Section 3 of these guidelines.

Conversion

10. The conversion of the land intended for feeding crops or pasture must comply with the rules set out in Part A paragraphs 1, 2, and 3 of this Annex.
11. The competent authority may reduce the conversion periods or conditions established in paragraph 10 (for the land) and/or paragraph 12 (for livestock and livestock products) in the following cases:
 - a) pasture, open-air runs and exercise areas used by non-herbivore species;

- b) for bovine, equine, ovine and caprine coming from extensive husbandry during an implementation period established by the competent authority or dairy herds converted for the first time;
- c) if there is simultaneous conversion of livestock and land used only for feeding within the same unit, the conversion period for both livestock, pasture and/or land used for animal feed, may be reduced to two years only in the case where the existing livestock and their offspring are fed mainly with products from the unit.
12. Once the land has reached organic status and livestock from a non-organic source is introduced, and if the products are to be sold as organic, such livestock must be reared according to these Guidelines for at least the following compliance periods:

Bovine and equine

Meat products: 12 months and at least $\frac{3}{4}$ of their life span in the organic management system;

Calves for meat production: 6 months when brought in as soon as they are weaned and less than 6 months old;

Milk products: 90 days during the implementation period established by the competent authority, after that, six months.

Ovine and caprine

Meat products: six months;

Milk products: 90 days during the implementation period established by the competent authority, after that, six months.

Porcine

Meat products: Six months.

Poultry/laying hens

Meat products: whole of life span as determined by the competent authority;

Eggs: six weeks.

Nutrition

13. All livestock systems should provide the optimum level of 100% of the diet from feedstuffs (including 'in conversion' feedstuffs) produced to the requirements of these guidelines.
14. For an implementation period to be set by the competent authority, livestock products will maintain their organic status providing feed, consisting of at least 85% for ruminants and 80% for non-ruminants and calculated on a dry matter basis, is from organic sources produced in compliance with these Guidelines.
15. Notwithstanding the above, where an operator can demonstrate to the satisfaction of the official or officially recognized inspection/certification body that feedstuffs satisfying the requirement outlined in paragraph 13 above are not available, as a result of, for example, unforeseen severe natural or manmade events or extreme climatic weather conditions, the inspection/certification body may allow a restricted percentage of feedstuffs not produced according to these guidelines to be fed for a limited time, providing it does not contain genetically engineered/modified organisms or products thereof. The competent authority shall set both the maximum percentage of non-organic feed allowed and any conditions relating to this derogation.
16. Specific livestock rations should take into account:
- the need of young mammals for natural, preferably maternal, milk;
 - that a substantial proportion of dry matter in the daily rations of herbivores needs to consist of roughage, fresh or dried fodder, or silage;
 - that polygastric animals should be not fed silage exclusively;
 - the need for cereals in the fattening phase of poultry;
 - the need for roughage, fresh or dried fodder or silage in the daily ration for pigs and poultry.
17. All livestock must have ample access to fresh water to maintain the full health and vigour of the livestock.
18. If substances are used as feedstuffs, nutritional elements, feed additives or processing aids in the preparation of feedstuffs, the competent authority shall establish a positive list/s of substances in compliance with the following criteria:
- General criteria**
- a) substances are permitted according to national legislation on animal feeding;
 - b) substances are necessary/essential to maintain animal health, animal welfare and vitality; and
 - c) such substances:
 - contribute to an appropriate diet fulfilling the physiological and behavioural needs of the species concerned; and
 - do not contain genetically engineered/modified organisms and products thereof; and
 - are primarily of plant, mineral or animal origin.

Specific criteria for feedstuffs and nutritional elements

- a) feedstuffs of plant origin from non-organic sources can only be used, under the conditions of paragraphs 14 and 15, if they are produced or prepared without the use of chemical solvents or chemical treatment;
- b) feedstuffs of mineral origin, trace elements, vitamins, or provitamins can only be used if they are of natural origin. In case of shortage of these substances, or in exceptional circumstances, chemically well-defined analogic substances may be used;
- c) feedstuffs of animal origin, with the exception of milk and milk products, fish, other marine animals and products derived therefrom should generally not be used or, as provided by national legislation. In any case, the feeding of mammalian material to ruminants is not permitted with the exception of milk and milk products;
- d) synthetic nitrogen or non-protein nitrogen compounds shall not be used.

Specific criteria for additives and processing aids

- a) binders, anti-caking agents, emulsifiers, stabilizers, thickeners, surfactants, coagulants: only natural sources are allowed;
- b) antioxidants: only natural sources are allowed;
- c) preservatives: only natural acids are allowed;
- d) colouring agents (including pigments), flavours and appetite stimulants: only natural sources are allowed;
- e) probiotics, enzymes and micro-organisms are allowed;
- f) antibiotics, coccidiostats, medicinal substances, growth promoters or any other substance intended to stimulate growth or production shall not be used in animal feeding.

19. Silage additives and processing aids may not be derived from genetically engineered/modified organisms or products thereof, and may be comprised of only:
- sea salt;
 - coarse rock salt;
 - yeasts;
 - enzymes;
 - whey;
 - sugar; or sugar products such as molasses;
 - honey;
 - lactic, acetic, formic and propionic bacteria, or their natural acid product when the weather conditions do not allow for adequate fermentation, and with approval of the competent authority.

Health care

20. Disease prevention in organic livestock production shall be based on the following principles:
- a) the choice of appropriate breeds or strains of animals as detailed in paragraph 6 above;
 - b) the application of animal husbandry practices appropriate to the requirements of each species, encouraging strong resistance to disease and the prevention of infections;
 - c) the use of good quality organic feed, together with regular exercise and access to pasture and/or open-air runs, having the effect of encouraging the natural immunological defence of the animal;
 - d) ensuring an appropriate density of livestock, thus avoiding overstocking and any resulting animal health problems.
21. If, despite the above preventative measures, an animal becomes sick or injured it must be treated immediately, if necessary in isolation and in suitable housing. Producers should not withhold medication where it will result in unnecessary suffering of the livestock, even if the use of such medication will cause the animal to lose its organic status.
22. The use of veterinary medicinal products in organic farming shall comply with the following principles:
- a) where specific disease or health problems occur, or may occur, and no alternative permitted treatment or management practice exists, or, in cases required by law, vaccination of livestock, the use of parasiticides, or therapeutic use of veterinary drugs are permitted;
 - b) phytotherapeutic (excluding antibiotics), homeopathic or ayurvedic products and trace elements shall be used in preference to chemical allopathic veterinary drugs or antibiotics, provided that their therapeutic effect is effective for the species of animal and the condition for which the treatment is intended;
 - c) if the use of the above products is unlikely to be effective in combating illness or injury, chemical allopathic veterinary drugs or antibiotics may be used under the responsibility of a veterinarian; withholding periods should be the double of that required by legislation with, in any case, a minimum of 48 hours;
 - d) the use of chemical allopathic veterinary drugs or antibiotics for preventative treatments is prohibited.
23. Hormonal treatment may only be used for therapeutic reasons and under veterinary supervision.

24. Growth stimulants or substances used for the purpose of stimulating growth or production are not permitted.

Livestock husbandry, transport and slaughter

25. Maintenance of livestock should be guided by an attitude of care, responsibility and respect for living creatures.
26. Breeding methods should be in compliance with the principles of organic farming taking into account:
- the breeds and strains suitable for raising under local conditions and under an organic system;
 - the preference for reproduction through natural methods, although artificial insemination may be used;
 - that embryo transfer techniques and the use of hormonal reproductive treatment shall not be used;
 - that breeding techniques employing genetic engineering must not be used.
27. Operations such as attaching elastic bands to the tails of sheep, tail-docking, cutting of teeth, trimming of beaks and dehorning are generally not allowed in the organic management system. Some of these operations may, however, be authorized in exceptional circumstances by the competent authority or its delegate, for reasons of safety (e.g. dehorning in young animals) or if they are intended to improve the health and welfare of the livestock. Such operations must be carried out at the most appropriate age and any suffering to the animals must be reduced to a minimum. Anaesthetic should be used where appropriate. Physical castration is allowed in order to maintain the quality of products and traditional production practices (meat-type pigs, bullocks, capons, etc) but only under these conditions.
28. The living conditions and the management of the environment should take into account the specific behavioural needs of the livestock and provide for:
- sufficient free movement and opportunity to express normal patterns of behaviour;
 - company of other animals, particularly of like kind;
 - the prevention of abnormal behaviour, injury and disease;
 - arrangements to cover emergencies such as the outbreaks of fire, the breakdown of essential mechanical services and the disruption of supplies.
29. The transport of living stock should be managed in a calm and gentle way and in a manner which avoids stress, injury and suffering: the competent authority should establish specific conditions in order to meet these objectives and may establish maximum transport periods. In transporting livestock, the use of electric stimulation or allopathic tranquilizers is not permitted.
30. The slaughter of livestock should be undertaken in a manner which minimizes stress and suffering, and in accordance with national rules.

Housing and free-range conditions

31. Housing for livestock will not be mandatory in areas with appropriate climatic conditions to enable animals to live outdoors.
32. Housing conditions should meet the biological and behavioural needs of the livestock by providing:
- easy access to feeding and watering;
 - insulation, heating, cooling and ventilation of the building to ensure that air circulation, dust level, temperature, relative air humidity and gas concentration are kept within limits which are not harmful to the livestock;
 - plentiful natural ventilation and light to enter.
33. Livestock may be temporarily confined during periods of inclement weather, when their health, safety or well being could be jeopardized, or to protect plant, soil and water quality.
34. The stocking density in buildings should:
- provide for the comfort and well being of the livestock having regard for the species, the breed and the age of the livestock;
 - take into account the behavioural needs of the livestock with respect to the size of the group and the sex of the livestock;
 - provide them with sufficient space to stand naturally, lie down easily, turn round, groom themselves, and assume all natural postures and movements such as stretching and wing flapping.
35. Housing, pens, equipment and utensils should be properly cleaned and disinfected to prevent cross infection and the build-up of disease carrying organisms.
36. Free-range, open-air exercise areas, or open-air runs should, if necessary, provide sufficient protection against rain, wind, sun and extreme temperatures, depending on the local weather conditions and the breed concerned.

37. The outdoor stocking density of livestock kept on pasture, grassland, or other natural or semi-natural habitats, must be low enough to prevent degradation of the soil and over-grazing of vegetation.

Mammals

38. All mammals must have access to pasture or an open-air exercise area or run which may be partially covered, and they must be able to use those areas whenever the physiological condition of the animal, the weather conditions and the state of the ground permit.
39. The competent authority may grant exceptions for :
- the access of bulls to pasture or, in case of cows to an open-air exercise area or run during the winter period;
 - the final fattening phase.

40. Livestock housing must have smooth, but not slippery floors. The floor must not be entirely of slatted or grid construction.

41. The housing must be provided with a comfortable, clean and dry laying/rest area of sufficient size, consisting of a solid construction. Ample dry bedding strewn with litter material must be provided in the rest area.

42. The housing of calves in individual boxes and the tethering of livestock are not permitted without the approval of the competent authority.

43. Sows must be kept in groups, except in the last stages of pregnancy and during the suckling period. Piglets may not be kept on flat decks or in piglet cages. Exercise areas must permit dunging and rooting by the animals.

44. The keeping of rabbits in cages is not permitted.

Poultry

45. Poultry must be reared in open-range conditions and have free access to open-air run whenever the weather conditions permit. The keeping of poultry in cages is not permitted.

46. Water fowl must have access to a stream, pond or lake whenever the weather conditions permit.

47. Housing for all poultry should provide an area of solid construction covered with litter material such as straw, wood shavings, sand or turf. A sufficiently large part of the floor area must be available to laying hens for the collection of droppings, Perches/higher sleeping areas of a size and number commensurate with the species and size of the group and of the birds and exit/entry holes of an adequate size must be provided.

48. In the case of laying hens, when natural day length is prolonged by artificial light, the competent authority shall prescribe maximum hours respective to species, geographical considerations and general health of the animals.

49. For health reasons, between each batch of poultry reared buildings should be emptied, and runs left empty to allow the vegetation to grow back.

Manure management

50. Manure management practices used to maintain any area in which livestock are housed, penned or pastured should be implemented in a manner that:
- a) minimizes soil and water degradation;
 - b) does not significantly contribute to contamination of water by nitrates and pathogenic bacteria;
 - c) optimizes recycling of nutrients; and
 - d) does not include burning or any practice inconsistent with organic practices.

51. All manure storage and handling facilities, including composting facilities should be designed, constructed and operated to prevent contamination of ground and/or surface water.

52. Manure application rates should be at levels that do not contribute to ground and/or surface water contamination. The competent authority may establish maximum application rates for manure or stocking densities. The timing of application and application methods should not increase the potential for run-off into ponds, rivers and streams.

Record keeping and identification

53. The operator should maintain detailed and up-to-date records as set out in Annex 3, paras 7–15.

Species specific requirements

Beekeeping and bee products

General principles

54. Bee keeping is an important activity that contributes to the enhancement of the environment, agriculture and forestry production through the pollination action of bees.
55. The treatment and management of hives should respect the principles of organic farming.
56. Collection areas must be large enough to provide adequate and sufficient nutrition and access to water.
57. The sources of natural nectar, honeydew and pollen shall consist essentially of organically produced plants and/or spontaneous (wild) vegetation.
58. The health of bees should be based on prevention such as adequate selection of breeds, favourable environment, balanced diet and appropriate husbandry practices.
59. The hives shall consist basically of natural materials presenting no risk of contamination to the environment or the bee products.
60. When bees are placed in wild areas, consideration should be given to the indigenous insect population.

Siting of hives

61. Hives for beekeeping shall be placed in areas where cultivated and/or spontaneous vegetation comply with the rules of production as set out in Section 4 of these Guidelines.
62. The official certification body or authority shall approve the areas which ensure appropriate sources of honeydew, nectar and pollen based on information provided by the operators and/or through the process of inspection.
63. The official certification body or authority may designate a specific radius from the hive within which the bees have access to adequate and sufficient nutrition that meets the requirements of these Guidelines.
64. The certification body or authority must identify zones where hives, that meet these requirements, should not be placed due to potential sources of contamination with prohibited substances, genetically modified organisms or environmental contaminants.

Feed

65. At the end of the production season hives must be left with reserves of honey and pollen sufficiently abundant for the colony to survive the dormancy period.
66. The feeding of colonies can be undertaken to overcome temporary feed shortages due to climatic or other exceptional circumstances. In such cases, organically produced honey or sugars should be used if available. However the certification body or authority may permit the use of non-organically produced honey or sugars. Time-limits should be set for such derogations. Feeding should be carried out only between the last honey harvest and the start of the next nectar or honeydew flow period.

Conversion period

67. Bee products can be sold as organically produced when these Guidelines have been complied with for at least one year. During the conversion period the wax must be replaced by organically produced wax. In cases where all the wax cannot be replaced during a one-year period, the certification body or authority may extend the conversion period. By way of derogation when organically produced beeswax is not available, wax from sources not complying with these Guidelines may be authorized by the certification body or authority, provided it comes from the cap or from areas where no prohibited materials have been used.
68. Where no prohibited products have been previously used in the hive, replacement of wax is not necessary.

Origin of bees

69. Bee colonies can be converted to organic production. Introduced bees should come from organic production units when available.
70. In the choice of breeds, account must be taken of the capacity of bees to adapt to local conditions, their vitality and their resistance to disease.

Health of the bees

71. The health of bee colonies should be maintained by good agricultural practice, with emphasis on disease prevention through breed selection and hive management. This includes:
 - a) the use of hardy breeds that adapt well to the local conditions;
 - b) renewal of queen bees if necessary;
 - c) regular cleaning and disinfecting of equipment;
 - d) regular renewal of beeswax;
 - e) availability in hives of sufficient pollen and honey;
 - f) systematic inspection of hives to detect any anomalies;

- g) systematic control of male broods in the hive;
 - h) moving diseased hives to isolated areas, if necessary; or
 - i) destruction of contaminated hives and materials.
72. For pest and disease control the following are allowed:
- lactic, oxalic, acetic acid
 - formic acid
 - sulphur
 - natural etheric oils (e.g. menthol, eucalyptol, camphor)
 - *Bacillus thuringiensis*
 - steam and direct flame.
73. Where preventative measures fail, veterinary medicinal products may be used provided that:
- a) preference is given to phytotherapeutic and homeopathic treatment, and
 - b) if allopathic chemically synthesized medicinal products are used, the bee products must not be sold as organic. Treated hives must be placed in isolation and undergo a conversion period of one year. All the wax must be replaced with wax which is in accordance with these Guidelines, and
 - c) every veterinary treatment must be clearly documented.
74. The practice of destroying the male brood is permitted only to contain infestation with *Varroa jacobsoni*.
- Management**
75. The foundation comb shall be made from organically produced wax.
76. The destruction of bees in the combs as a method of harvesting of bee products is prohibited.
77. Mutilations, such as clipping of the wings of queen bees, are prohibited.
78. The use of chemical synthetic repellents is prohibited during honey extraction operations.
79. Smoking should be kept to a minimum. Acceptable smoking materials should be natural or from materials that meet the requirements of these Guidelines.
80. It is recommended that temperatures are maintained as low as possible during the extraction and processing of products derived from beekeeping.
- Record keeping**
81. The operator should maintain detailed and up-to-date records as set out in Annex 3, paragraph 7. Maps should be maintained depicting the location of all hives.

B.2 AQUACULTURE ANIMALS AND THEIR PRODUCTS

(Numbering of B2 to be integrated into Guideline's sequence eventually)

General principles

1. The operation and management of aquaculture production, whether in containment systems or not, should be consistent with the principles of organic production and the Codex Code of Practice for Fish and Fishery Products, Section 6 (CAC/RCP 52-2003) as appropriate. (IR)

~~2. Aquaculture is an important activity that contributes to the global supply of fish and other seafood species. Fishery products are important in terms of world trade and the aquaculture component is becoming increasingly important as time goes on.~~

~~3. The operation and management of aquaculture production, whether in containment systems or not, should respect be consistent with (US) the principles of organic production. The biodiversity of the aquatic environment and the quality of the surrounding water should be maintained.~~

4. Aquaculture operators must maintain on an ongoing basis an organic management plan, to guide the operation of the production unit, particularly regarding environmental issues, so as to maintain or improve the natural resources of the operation. This should be developed and implemented by means of annual revision by all producers to guide the operation of the production unit in keeping and keep the impact on the environment low and set out a monitoring programme to ensure that this aim is achieved each year. The plan should cover nutrient discharge, if applicable, and the repair and surveillance of technical equipment. The Organic Management Plan should document how monitoring is done to ensure there is minimal impact to the surrounding environment. The plan should cover nutrient discharge, if applicable, and the repair and surveillance of equipment. The organic management plan could (may – IFOAM) also include a water quality monitoring scheme for early detection of potential contaminants from unlikely events such as an oil spill or other potential contamination of the harvest area. (AU)

Siting

4. The conditions listed for the growing water quality in Section 6.1.2 of the Codex Code of practice for fish and fishery products should apply. The production area should have characteristics which allow the production of safe products of high quality without unacceptable **while minimizing** (US) negative environmental impacts on surrounding natural ecosystems. Production facilities should be located in areas where the risk of contamination is minimized and where sources of pollution are unlikely and can be controlled or mitigated. The boundaries of the production unit should be clearly defined and marked appropriately.

5. Water used for aquaculture should **meet the physiological requirements of the species (AR)** and be of a quality suitable for the production of food which is safe for human consumption ~~and therefore~~ **Waste water** from domestic or industrial sources should not be used in accordance with the FAO Technical Guidelines for Aquaculture Certification, 2011.

6. The certification body or authority must ensure at the outset that the location of the production unit is suitable by conducting ~~a risk analysis~~ **an assessment** (TH & AR) of potential sources of contamination ~~with contaminants or~~ **by** (UK) substances unacceptable to organic production systems. Buffer zones within or between farms should be established by competent authorities, where necessary, to separate organic and non-organic production units.

Conversion period [for operations] (for discussion at physical WG, 5/2013)

7. The conversion period should in general be at least one year. [In cases where the water has been drained and the facility cleaned and disinfected, a shorter period of six months may apply. In the case of non-enclosed ~~marine~~ **aquatic** locations a shorter period of three months may apply] provided that cages (net pens) have not been treated with prohibited antifoulants and there are no other sources of exposure to prohibited substances. During the conversion period the stock should not be subject to treatments or exposed to products which are not permitted for the production of organic foods. Production areas that have contact with the soil must not have had any prohibited substances applied for at least three years prior to first harvest.

Origin of stock

8. It is preferable that locally grown aquatic species be used for organic **farming production** (AR) where possible. The species should be able to adapt to local conditions and selection criteria should include their vitality and resistance to pests and diseases. Following the conversion period if organic aquaculture animals are not available, young non-organic aquaculture stock may be introduced for on-growing, provided that the latter two thirds of their production cycle or 90% of their final biomass is under organic management and providing the stock is healthy. ~~[alternative suggestion for consideration by oWG: When organic juveniles are not available, the certifying body would prescribe a time limit and percentage of non-organic juveniles for use according to the production of the species]~~ Breeding stock should come from organic production units, where the parent stock have been under organic management for at least three months prior to breeding. For bivalve shellfish, seed may be wild-harvested from outside of the production area, provided such harvesting is permitted by ~~legislation~~ **the competent authority** (BR), and records are kept to allow it be tracked back to the collection area. Genetically modified organisms (GMOs) [and stock produced using hormones must not be used].

Production rules for husbandry and breeding

9. The production unit should provide sufficient space for the animals' needs in terms of stocking density, in numbers per cubic metre, or per square metre of surface area, as most appropriate for the species concerned. They aquatic animals should be provided with ~~good quality~~ **clean** water with a flow rate and temperature which ~~is suitable~~ **meets** to the **physiological** requirements of the species with sufficient oxygen and, in the case of filter feeding animals, other nutritional factors for their needs. The temperature and light conditions should be suitable for the species concerned in the particular geographic location of the production unit. When netting is used it should be kept clean by physical means or by hand.

10. **Maximum stocking density should be lower than that used in conventional farming** (IT). [Competent authorities, or ~~other recognised bodies~~ (AR), shall (may (JP)) develop and publicise guide values for maximum densities for the species grown under their authority, which are reflective of the natural behaviour of the species involved and in keeping with good welfare.]

11. Containment systems, when used, including cages (net pens) should be designed, constructed, located and operated to suit the requirements of the species cultivated, ~~and~~ minimize the risk of escapes and other negative environmental impacts and **to** (UK) prevent the entry of predatory species.

12. [Closed recirculation systems are prohibited except when used as hatcheries or nurseries or for production of species used as organic feed on account of the fact that such systems depend on external energy inputs and are high in energy consumption. As they have some positive features, such as reduction of waste discharges and prevention of escapes, this prohibition may be reviewed at a future date [alternative: in five years], as greater knowledge becomes available on their environmental viability and compatibility with organic production.]

13. Breeding should reflect the natural situation as closely as possible, in terms of ambient conditions, using appropriate strains for the type of farming. Manual sorting or selection, manual stripping of gametes and artificial incubation of eggs is allowed.

Artificial polyploidy, cloning, [artificial hybridization and use of single sex strains are prohibited].

14. [Competent authorities or other recognised bodies (AR) shall also develop and publicise criteria for aquaculture production systems, with particular reference to type of system, water flow, oxygen saturation and effluent elimination and if necessary, following.]

Nutrition

15.

Where feed is used, aquaculture operations should include procedures for avoiding feed contamination in compliance with national regulations or as determined by internationally agreed standards. The feed should meet the animal's nutritional requirements at the various stages of its development. Plant material used in aquaculture feed must be organically grown and should always meet the requirements of these guidelines, [except under conditions of para 15' below]. [Carnivorous fish should not be fed material from the same species/family,] nor a totally plant-based diet to ensure their physiological needs are met and to ensure good welfare. The aquatic animal based portion of the feed should be made from fish meal and fish oil, or ingredients of fish origin, or from organic feed material of non-aquatic origin, derived from the following sources in priority order:

- organically grown aquatic animals and their trimmings, or
 - trimmings of fish caught for human consumption in sustainable fisheries, or
 - fish and invertebrates caught in sustainable fisheries, or
 - organic feed material of non-aquatic origin as allowed by national legislation
- [Alternative text suggested by Argentina:
 - When designing the diet plan the operator must consider:
 - a) foods that contribute to good health and animal welfare
 - b) that the animals are fed in sufficient quantity and with organic feed and / or natural quality, according to production systems that meet their nutritional needs for different stages of development.
 - c) that the quality of food and their nutritional composition contribute to high end product quality and edibility;
 - d) to minimize the environmental impact
 - The animals are fed with natural feed in the production environment. If this is not available in sufficient quantity and quality, feed may be used, provided they are organic, which may include ingredients of plant, animal and / or mineral origin.
 - No use of growth factors or synthetic amino acids is permitted.
 - No use of any dead animals from aquaculture production system feed, when his death was due to disease or unknown causes.]

15' If substances are used as feedstuffs or in the preparation of feedstuffs for aquaculture animals, the competent authority shall establish a positive list of substances in compliance with the criteria of Section B1, para. 18. (IR, GR). [Where feed additives or, only where there is an absence of organic feed materials an amount of non-organic feed ingredients below 2% of the dry matter of the feed, are needed in order to meet aquaculture animal's nutritional requirements and in order to ensure good animal welfare these should by preference originate from natural ingredients. Only in the absence of suitable natural additives may chemically synthesized additives be permitted. All additives or non-organic feed ingredients may only be used with the permission of the certification body or authority and evidence of their need should be provided.] (UK & FR).

15'' [Notwithstanding the above, where an operator can demonstrate to the satisfaction of the official or officially recognized inspection/certification body that feedstuffs satisfying the requirement outlined in paragraph 15 above are not available, as a result of, for example, unforeseen severe natural or manmade events or extreme climatic weather conditions, the inspection/certification body may allow a restricted percentage of feedstuffs not produced according to these guidelines to be fed for a limited time, providing it does not contain genetically engineered/modified organisms or products thereof. The competent authority shall set both the maximum percentage of non-organic feed allowed and any conditions relating to this derogation] (TH, BR & UK).

Health and welfare

16. Disease prevention in organic aquaculture shall may (US) be based on guidelines and standards set by the OIE and the principles and practices for health care of livestock (terrestrial animals) in these guidelines, specifically Annex I, B.1, paragraphs, 20, 21, 22 and 24 and on the following additional points:

- ensuring that the siting and design of the production unit is optimal and that there is regular cleaning and disinfection of premises with ~~organic disinfectant~~ **permitted substances** (US) where appropriate.
- [Homeopathic ~~medicines~~ **treatments** ~~should be used by preference~~ shall be used in preference to chemical ~~allopathic~~ veterinary drugs or antibiotics] [provided that their therapeutic effect is effective for the species of animal and the condition for which the treatment is intended] (NO)
- to control ectoparasites such as sea lice, **appropriate production methods (and cleaner fish if available)** (CA) ~~natural processes, such as the use of predatory species of ectoparasites (e.g. cleaner fish)~~ [alternative more general wording: ~~appropriate production methods~~] should be used where possible, rather than parasiticides. Parasite treatments should be limited to twice [query this limit (JP)] per year, with the exception of compulsory control schemes.
- the use of ~~allopathic treatments~~ **veterinary medicines** (Chair) should be limited to two [query this limit (JP too low; BR should be one)] courses of treatment per year, with the exception of vaccines and compulsory eradication schemes. If the specified limits are exceeded the aquaculture animals concerned should not be sold as organic.

17. ~~Hormonal treatment should not be used.~~ See final sentence of 8 above.

Transport

17. Guidelines and standards set by the OIE ~~should~~ **may** (US) be the specific normative basis. The provisions on holding and transport in aquaculture production of the Codex Code of Practice for Fish and Fishery Products (Section 6.3.5 of CAC/RCP 52-2003) should also apply.

~~Live fish~~ **aquatic animals** (TH) should be transported in suitable containers with clean water, which meets their physiological needs in terms of temperature and dissolved oxygen. Before use, tanks should be thoroughly cleaned, disinfected and rinsed. Precautions should be taken to reduce stress during transport, in particular regarding the density.

Slaughter

18. Guidelines and standards set by the OIE should ~~[(may (US)]~~ be the specific normative base. **Live** (TH & AR) aquaculture animals should be handled in such a way as to avoid unnecessary stress. Slaughter techniques should render fish immediately unconscious and insensible to pain.

Inspection

19. **The operator should maintain detailed and up-to-date records and meet the relevant requirements of Annex 3 for inspection purposes.**

C. HANDLING, STORAGE, TRANSPORTATION, PROCESSING AND PACKAGING

82. The integrity of the organic product must be maintained throughout the processing phase. This is achieved by the use of techniques appropriate to the specifics of the ingredients with careful processing methods limiting refining and the use of additives and processing aids. Ionizing radiation should not be used on organic products for the purpose of pest control, food preservation, elimination of pathogens or sanitation. Ethylene may be used for ripening of kiwifruit and bananas.

Pest management

83. For pest management and control the following measures, in order of preference, should be used:
- a) Preventative methods, such as disruption and elimination of habitat and access to facilities by pest organisms, should be the primary methodology of pest management;
 - b) If preventative methods are inadequate, the first choice for pest control should be mechanical/physical and biological methods;
 - c) If mechanical/physical and biological methods are inadequate for pest control, pesticidal substances appearing in Annex 2 table 2 (or other substances allowed for use by a competent authority in accordance with Section 5.2) may be used provided that they are accepted for use in handling, storage, transportation or processing facilities by the competent authority and so that contact with organic products is prevented.
84. Pests should be avoided by good manufacturing practice. Pest control measures within storage areas or transport containers may include physical barriers or other treatments such as sound, ultra-sound, light, ultra-violet light, traps (pheromone traps and static bait traps) controlled temperature, controlled atmosphere (carbon dioxide, oxygen, nitrogen), and diatomaceous earth.

85. Use of pesticides not listed in Annex 2 for post harvest or quarantine purposes should not be permitted on products prepared in accordance with these guidelines and would cause organically produced foods to lose their organic status.

Processing and manufacturing

86. Processing methods should be mechanical, physical or biological (such as fermentation and smoking) and minimize the use of non-agricultural ingredients and additives as listed in Annex 2, Tables 3 and 4.

Packaging

87. Packaging materials should preferably be chosen from bio-degradable, recycled or recyclable sources.

Storage and transport

88. Product integrity should be maintained during any storage and transportation and handling by use of the following precautions:
- a) Organic products must be protected at all times from co-mingling with non-organic products; and
 - b) Organic products must be protected at all times from contact with materials and substances not permitted for use in organic farming and handling.
89. Where only part of the unit is certified, other product not covered by these guidelines should be stored and handled separately and both types of products should be clearly identified.
90. Bulk stores for organic product should be separate from conventional product stores and clearly labelled to that effect.
91. Storage areas and transport containers for organic product should be cleaned using methods and materials permitted in organic production. Measures should be taken to prevent possible contamination from any pesticide or other treatment not listed in Annex 2 before using a storage area or container that is not dedicated solely to organic products.

ANNEX 2

PERMITTED SUBSTANCES FOR THE PRODUCTION OF ORGANIC FOODS

PRECAUTIONS

1. Any substances used in an organic system for soil fertilization and conditioning, pest and disease control, for the health of livestock [and aquaculture animals](#) and quality of the animal products, or for preparation, preservation and storage of the food product should comply with the relevant national regulations.
2. Conditions for use of certain substances contained in the following lists may be specified by the certification body or authority, e.g. volume, frequency of application, specific purpose, etc.
3. Where substances are required for primary production they should be used with care and with the knowledge that even permitted substances may be subject to misuse and may alter the ecosystem of the soil or farm.
4. The following lists do not attempt to be all inclusive or exclusive, or a finite regulatory tool but rather provide advice to governments on internationally agreed inputs. A system of review criteria as detailed in Section 5 of these Guidelines for products to be considered by national governments should be the primary determinant for acceptability or rejection of substances.

TABLE 1
SUBSTANCES FOR USE IN SOIL FERTILIZING AND CONDITIONING

Substances	Description; compositional requirements; conditions of use
Farmyard and poultry manure	Need recognized by certification body or authority if not sourced from organic production systems. "Factory" farming ²⁰ sources not permitted.
Slurry or urine	If not from organic sources, need recognized by inspection body. Preferably after controlled fermentation and/or appropriate dilution. "Factory" farming sources not permitted.
Composted animal excrements, including poultry	Need recognized by the certification body or authority
Manure and composted farmyard manure	"Factory" farming sources not permitted.
Dried farmyard manure and dehydrated poultry manure	Need recognized by the certification body or authority. "Factory" farming sources not permitted.
Guano	Need recognized by the certification body or authority.
Straw	Need recognized by the certification body or authority.
Compost and spent mushroom and Vermiculite substrate	Need recognized by the certification body or authority. The initial composition of the substrate must be limited to the products on this list
Sorted, composted or fermented home refuse	Need recognized by the certification body or authority.
Compost from plant residues	
Processed animal products from slaughterhouses & fish industries	Need recognized by the certification body or authority.
By-products of food & textile industries not treated with synthetic additives.	Need recognized by the certification body or authority.
Seaweeds and seaweed products	Need recognized by the certification body or authority.
Sawdust, bark and wood waste	Need recognized by the certification body or authority, wood not chemically treated after felling.

Substances	Description; compositional requirements; conditions of use
Wood ash and wood charcoal	Need recognized by the certification body or authority, from wood not chemically treated after felling.
Natural phosphate rock.	Need recognized by the certification body or authority. Cadmium should not exceed 90mg/kg P ₂ O ₅
Basic slag	Need recognized by the certification body or authority.
Rock potash, mined potassium salts (e.g. kainite, sylvinite)	Less than 60% chlorine
Sulphate of potash (e.g. patenkali)	Obtained by physical procedures but not enriched by chemical processes to increase its solubility. Need recognized by the certification body or authority.
Calcium carbonate of natural origin (e.g. chalk, marl, maerl, limestone, phosphate chalk)	
Magnesium rock	
Calcareous magnesium rock	
Epsom salt (magnesium-sulphate)	
Gypsum (calcium sulphate)	Only from natural sources/origin.
Stillage and stillage extract	Ammonium stillage excluded
Sodium chloride	Only mined salt
Aluminium calcium phosphate	Cadmium should not exceed 90mg/kg P ₂ O ₅
Trace elements (e.g. boron, copper, iron, manganese, molybdenum, zinc)	Need recognized by the certification body or authority.
Sulphur	Need recognized by the certification body or authority.
Stone meal	
Clay (e.g. bentonite, perlite, zeolite)	
Naturally occurring biological organisms (e.g. worms)	
Vermiculite	
Peat	Excluding synthetic additives; permitted for seed, potting module composts. Other use as recognized by certification body or authority. Not permitted as a soil conditioner.
Humus from earthworms and insects	
Chloride of lime	Need recognized by the certification body or authority.
Human excrements	Need recognized by the certification body or authority. The source is separated from household and industrial wastes that pose a risk of chemical contamination. It is treated sufficiently to eliminate risks from pests, parasites, pathogenic micro-organisms, and is not applied to crops intended for human consumption or to the edible parts of plants.
By-products of the sugar industry (e.g. Vinasse)	Need recognized by the certification body or authority.
By-products from oil palm, coconut and cocoa (including empty fruit bunch, palm oil mill effluent (pome), cocoa peat and empty cocoa pods)	Need recognized by the certification body or authority.
By-products of industries processing	Need recognized by the certification body or authority.

Substances	Description; compositional requirements; conditions of use
ingredients from organic agriculture	
Calcium chloride solution	Leaf treatment in case of proven calcium deficiency.

[Annex 2, Table 1'. Agricultural inputs used for fertilizers and conditioners of aquaculture pond (suggested by

Thailand)

<u>Substances</u>	<u>Details/specific conditions</u>
<u>1. Lists of permitted organic substances</u>	
<u>1.1 Organic fertilizer made from organic materials; compost of crop residues, straw, sawdust, bark, wood waste, and other agricultural by-products</u>	- If substances are not from organic sources, they need to be recognized by certification body or competent authority. Inorganic substances added to provide plant nutrients such as phosphate rock shall be permitted substances.
<u>1.2 Manure</u>	- If substances are not from organic sources, they need to be recognized by certification body or competent authority
<u>1.3 Green manure, fresh crop residues and residual material of organic nature used in the farm</u>	- If substances are not from organic sources, they need to be recognized by certification body or competent authority
<u>1.4 Leftover products from slaughterhouses and industries such as sugar factories, tapioca factories, and fish sauce factories</u>	- Synthetic substances shall not be added and they need to be recognized by certification body or competent authority
<u>1.5 Growth control substances for aquatic organisms, those free from synthetic substances</u>	- If substances are not from organic sources, they need to be recognized by certification body or competent authority
<u>1.6 Bacteria, molds, and enzymes</u>	- If substances are not from organic sources, they need to be recognized by certification body or competent authority
<u>2. Lists of permitted inorganic substances</u>	
<u>2.1 Phosphate rock</u>	-
<u>2.2 Ground limestone (In calcite or dolomite form, it is prohibited to use baked dolomite)</u>	-
<u>2.3 Calcium silicate</u>	-
<u>2.4 Sodium silicate</u>	-
<u>2.5 Magnesium sulfate</u>	-
<u>2.6 Clay minerals such as smectite, kaolinite, Chlorite, etc</u>	-
<u>2.7 Perlite, zeolite, and bentonite</u>	-
<u>2.8 Rock potash, mined, potassium salt with less than 60% chloride</u>	-
<u>2.9 Calcium from seaweed</u>	-
<u>2.10 Seashells</u>	-
<u>2.11 Potassium sulphate produced by physical processes</u>	-
<u>2.12 Rock salt</u>	-
<u>2.13 Oxygen</u>	-

TABLE 2
SUBSTANCES FOR PLANT PEST AND DISEASE CONTROL

Substance	Description; compositional requirements; conditions for use
I. PLANT AND ANIMAL	
Preparations on basis of pyrethrins extracted from <i>Chrysanthemum cinerariaefolium</i> , containing possibly a synergist	Need recognized by the certification body or authority. Exclusion of Piperonyl butoxide after 2005 as a synergist.
Preparations of Rotenone from <i>Derris elliptica</i> , <i>Lonchocarpus</i> , <i>Thephrosia</i> spp.	Need recognized by the certification body or authority. <u>The substance should be used in such a way as to prevent its flowing into waterways.</u>
Preparations from <i>Quassia amara</i>	Need recognized by the certification body or authority.
Preparations from <i>Ryania speciosa</i>	Need recognized by the certification body or authority.
Commercial preparations/ products of Neem (Azadirachtin) from <i>Azadirachta indica</i>	Need recognized by the certification body or authority.
Propolis	Need recognized by the certification body or authority.
Plant and animal oils	
Seaweed, seaweed meal, seaweed extracts, sea salts and salty water	Need recognized by the certification body or authority. Not chemically treated.
Gelatine	
Lecithin	Need recognized by the certification body or authority.
Casein	
Natural acids (e.g. vinegar)	Need recognized by the certification body or authority.
Fermented product from Aspergillus	
Extract from mushroom (Shiitake fungus)	Need recognized by certification body or authority
Extract from Chlorella	
Chitin nematicides	Natural origin
Natural plant preparations, excluding tobacco	Need recognized by certification body or authority.
Tobacco tea (except pure nicotine)	Need recognized by certification body or authority.
Sabadilla	
Beeswax	
II. MINERAL	
Copper in the form of copper hydroxide, copper oxychloride, (tribasic) copper sulphate, cuprous oxide, Bordeaux mixture and Burgundy mixture	Need, prescription and application rates recognized by certification body or authority. As a fungicide on condition that the substance be used in such a way as to minimize copper accumulation in the soil.
Sulphur	Need recognized by certification body or authority.
Mineral powders (stone meal, silicates)	
Diatomaceous earth	Need recognized by certification body or authority.
Silicates, clay (bentonite)	
Sodium silicate	

Substance	Description; compositional requirements; conditions for use
Sodium bicarbonate	
Potassium permanganate	Need recognized by certification body or authority.
Iron phosphates	As molluscicide.
Paraffin oil	Need recognized by certification body or authority.
III. MICRO-ORGANISMS USED FOR BIOLOGICAL PEST CONTROLS	
Micro-organisms (bacteria, viruses, fungi) e.g. <i>Bacillus thuringiensis</i> , Granulosis virus, etc.	Need recognized by certification body or authority.
IV. OTHER	
Carbon dioxide and nitrogen gas	Need recognized by certification body or authority.
Potassium soap (soft soap)	
Ethyl alcohol	Need recognized by certification body or authority.
Homeopathic and Ayurvedic preparations	
Herbal and biodynamic preparations	
Sterilized insect males	Need recognized by certification body or authority.
Rodenticides	Products for pest control in livestock buildings and installations. Need recognized by certification body or authority.
V. TRAPS	
Pheromone preparations	
Preparations on the basis of metaldehyde containing a repellent to higher animal species and as far as applied in traps.	Need recognized by certification body or authority.
Mineral oils	Need recognized by the certification body or authority.
Mechanical control devices such as e.g., crop protection nets, spiral barriers, glue-coated plastic traps, sticky bands.	

[TABLE 2'](#)

[CLEANING AND DISINFECTANT TREATMENTS APPROVED FOR ORGANIC AQUACULTURE](#)

[2'.1 Substances for cleaning and disinfection of equipment and facilities, in the absence of aquaculture animals: —](#)

[Ozone](#)

[Sodium chloride](#)

[Sodium hypochlorite](#)

[Calcium hypochlorite](#)

Lime (CaO, calcium oxide)
Caustic soda
Alcohol
Hydrogen peroxide
Organic acids (acetic acid, lactic acid, citric acid)
Humic acid
Peroxyacetic acids
Iodophores
Copper sulphate: [only until 31 December 2015 or alternative agreed date]—
Potassium permanganate
Peracetic and peroctanoic acids
Tea seed cake made of natural camelia seed (use restricted to shrimp production)

2'.2. Limited list of substances for use in the presence of aquaculture animals: —

Limestone (Calcium carbonate) for pH control
dolomite for pH correction (use restricted to shrimp production).

Additional proposal from Thailand:

2' . Substances for pest and disease control for aquaculture in the absence of animals (AA) or in the presence of animals (PA)

<u>Substances</u>	<u>Details/specific conditions</u>
1. Tea meal (AA)	-
2. Rotenone (AA)	-
3. Potassium permanganate (PA) – listed above	- only allowed in the hatching stage with an advice from fishery biologist or veterinarian
4. Hydrogen peroxide (PA) - listed above	
5. Povidone iodine (PA)	

TABLE 3
**INGREDIENTS OF NON-AGRICULTURAL ORIGIN REFERRED TO IN SECTION 3
 OF THESE GUIDELINES**

3.1 Additives permitted for use under specified conditions in certain organic food categories or individual food items

The following table provides a list of those food additives including carriers which are allowed for use in organic food production. The functional uses and food categories and individual food items for each food additive in the following table are governed by the provisions in Tables 1–3 of the *General Standard for Food Additives* and other standards which have been adopted by the Codex Alimentarius Commission.

The table is an indicative list for the purpose of processing organic food only. Countries may develop a list of substances for national purposes that satisfy the requirements as recommended in Section 5.2 of these Guidelines.

Food additives in this Table can be used to perform the function indicated in the specified food products.

INS no.	Additive name	Functional use allowed in organic production	Permitted for use in food categories	
			Food of plant origin	Food of animal origin
170i	Calcium Carbonate	All	Permitted, although exclusions of the GSFA still apply.	01.0 Dairy products and analogues, excluding products of food category 02.0
220	Sulphur Dioxide	All	14.2.2 Cider and perry 14.2.3 Grape wines 14.2.4 Wines (other than grapes)	14.2.5 Mead
270	Lactic Acid (L- D- and DL-)	All	04.2.2.7 Fermented vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes and aloe vera), and seaweed products, excluding fermented soybean products of food category 12.10	01.0 Dairy products and analogues, excluding products of food category 02.008.4 Edible casings (e.g. sausage casings)
290	Carbon Dioxide	All	Permitted, although exclusions of the GSFA still apply.	Permitted, although exclusions of the GSFA still apply.
296	Malic Acid (DL-)	All	Permitted, although exclusions of the GSFA still apply.	Not permitted.
300	Ascorbic Acid	All	Provided insufficient natural sources are available. Permitted, although exclusions of the GSFA still apply.	Provided insufficient natural sources are available. 08.2 Processed meat, poultry, and game products in whole pieces or cuts 08.3 Processed comminuted meat, poultry, and game products 08.4 Edible casings (e.g., sausage casings)
307	Tocopherols (mixed natural concentrates)	All	Permitted, although exclusions of the GSFA still apply.	All mixed products allowed under the General Standard for Food Additives and Standards adopted by the Codex Alimentarius Commission
322	Lecithins (obtained without bleaches and organic solvents.)	All	Permitted, although exclusions of the GSFA still apply.	01.0 Dairy products and analogues, excluding products of food category 02.002.0 Fats and oils, and fat emulsions 12.6.1 Emulsified sauces (e.g. mayonnaise, salad dressing) 13.1 Infant formulae and follow-on formulae 13.2 Complementary foods for infants and young children
327	Calcium Lactate	All	Not permitted.	01.0 Dairy products and analogues, excluding products of food category 02.0
330	Citric Acid	All	04.0 Fruits and vegetables	As a coagulation agent for specific cheese

INS no.	Additive name	Functional use allowed in organic production	Permitted for use in food categories	
			Food of plant origin	Food of animal origin
			(including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	products and for cooked eggs01.6 Cheese and analogues02.1 Fats and oils essentially free from water 10.0 Egg and egg products
331i	Sodium Dihydrogen Citrate	All	Not permitted.	01.1.1.2 Butter milk (plain) (Stabilizer only)01.1.2 Dairy-based drinks, flavoured and/or fermented (e.g., chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks)01.2.1.2 Fermented milks (plain), heat-treated after fermentation (Stabilizer only)01.2.2 Renneted milk (Stabilizer only)01.3 Condensed milk and analogues (plain) (Stabilizer only)01.4 Cream (plain) and the like (Stabilizer only)01.5.1 Milk powder and cream powder (plain) (Stabilizer only)01.6.1 Unripened cheese (Stabilizer only)01.6.4 Processed cheese (Emulsifier only)01.8.2 Dried whey and whey products, excluding whey cheeses08.3 Processed comminuted meat, poultry, and game products, restricted to sausagesTo be used in pasteurization of egg whites only in the following:10.2 Egg Products
332i	Potassium Dihydrogen Citrate	All	Not permitted.	Permitted, although exclusions of the GSFA still apply.
333	Calcium Citrates	All	Permitted, although exclusions of the GSFA still apply.	01.0 Dairy products and analogues, excluding products of food category 02.0
334	Tartaric Acid	All	Permitted, although exclusions of the GSFA still apply.	Not permitted.
335i 335ii	Monosodium Tartrate Disodium Tartrate	All	05.0 Confectionery07.2.1 Cakes	Not permitted.
336i 336ii	Monopotassium Tartrate Dipotassium Tartrate	All	05.0 Confectionery06.2 Flours and starches 07.2.1 Cakes	Not permitted.
341i	Monocalcium Orthophosphate	All	06.2.1 Flours	Not permitted.
400	Alginic Acid	All	Permitted, although exclusions of the GSFA still apply.	01.0 Dairy products and analogues, excluding products of food category 02.0
401	Sodium Alginate	All	Permitted, although exclusions of the GSFA still apply.	01.0 Dairy products and analogues, excluding products of food category 02.0 All mixed products allowed under the <i>General Standard for Food Additives</i> and Standards adopted by the Codex Alimentarius Commission
402	Potassium Alginate	All	Permitted, although exclusions of the GSFA still apply.	01.0 Dairy products and analogues, excluding products of food category 02.0 All mixed products allowed under the <i>General Standard for Food Additives</i> and Standards adopted by the Codex Alimentarius Commission
406	Agar	All	Permitted, although exclusions of the GSFA still apply.	Permitted, although exclusions of the GSFA still apply.

INS no.	Additive name	Functional use allowed in organic production	Permitted for use in food categories	
			Food of plant origin	Food of animal origin
407	Carrageenan	All	Permitted, although exclusions of the GSFA still apply.	01.0 Dairy products and analogues, excluding products of food category 02.0
410	Carob Bean Gum	All	Permitted, although exclusions of the GSFA still apply	01.1 Milk and dairy-based drinks 01.2 Fermented and renneted milk products (plain), excluding food category 01.1.2 (dairy-based drinks) 01.3 Condensed milk and analogues (plain) 01.4 Cream (plain) and the like 01.5 Milk powder and cream powder and powder analogues (plain)
410	Carob Bean Gum (<i>cont'd</i>)	All	Permitted, although exclusions of the GSFA still apply.	01.6 Cheese and analogues 01.7 Dairy-based desserts (e.g. pudding, fruit or flavoured yoghurt) 01.8.1 Liquid whey and whey products, excluding whey cheeses 08.1.2 Fresh meat, poultry and game, comminuted 08.2 Processed meat, poultry, game products in whole pieces or cuts 08.3 Processed comminuted meat, poultry, and game products 08.4 Edible casings (e.g. sausage casings)
412	Guar Gum	All	Permitted, although exclusions of the GSFA still apply.	01.0 Dairy products and analogues, excluding products of food category 02.0 08.2.2 Heat-treated processed meat, poultry, and game products in whole pieces or cuts 8.3.2 Heat-treated processed comminuted meat, poultry, and game products 10.2 Egg products
413	Tragacanth Gum	All	Permitted, although exclusions of the GSFA still apply.	Permitted, although exclusions of the GSFA still apply.
414	Gum Arabic	All	02.0 Fats and oils, and fat emulsions 05.0 Confectionery	01.0 Dairy products and analogues, excluding products of food category 02.0 02.0 Fats and oils, and fat emulsions 05.0 Confectionery
415	Xanthan Gum	All	02.0 Fats and oils, and fat emulsions 04.0 Fruits and vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds 07.0 Bakery wares 12.7 Salads (e.g. macaroni salad, potato salad)	Not permitted.
416	Karaya Gum	All	Permitted, although exclusions of the GSFA still apply.	Not permitted.
422	Glycerol	All	Obtained from plant origin; used as a carrier for plant extracts 04.1.1.1 Untreated fresh fruit 04.1.1.2 Surface-treated fresh fruit 04.1.2 Processed fruit 04.2.1.2 Surface-treated fresh vegetables, (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds and nuts and seeds 04.2.2.2 Dried vegetables, (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds 04.2.2.3 Vegetables	Not permitted.

INS no.	Additive name	Functional use allowed in organic production	Permitted for use in food categories	
			Food of plant origin	Food of animal origin
			(including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds in vinegar, oil, brine, or soy sauce 04.2.2.4 Canned or bottled (pasteurized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds 04.2.2.5 Vegetable, (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g., peanut butter) 04.2.2.6 Vegetable, (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps and preparations (e.g., vegetable desserts and sauces, candied vegetables) other than food category 04.2.2.5 04.2.2.7 Fermented vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweed products, excluding fermented soybean products of food category 12.10 12.2 Herbs, spices, seasonings, and condiments (e.g., seasoning for instant noodles)	
440	Pectins (non-amidated)	All	Permitted, although exclusions of the GSFA still apply.	01.0 Dairy products and analogues, excluding products of food category 02.0
500ii 500ii i	Sodium hydrogen carbonate Sodium Sesquicarbonate	All	05.0 Confectionery 07.0 Bakery Wares	01.0 Dairy products and analogues, excluding products of food category 02.0
501i	Potassium Carbonate	All	05.0 Confectionery 06.0 Cereals and cereal products, derived from cereal grains, from roots and tubers, pulses and legumes, excluding bakery wares of food category 07.0 07.2 Fine Bakery wares (sweet, salty, savoury) and mixes	Not permitted.
503i 503ii	Ammonium carbonate Ammonium Hydrogen Carbonate	Acidity Regulator Raisin Agent	Permitted, although exclusions of the GSFA still apply.	Not permitted.
504i 504ii	Magnesium Carbonate Magnesium Hydrogen Carbonate	All	Permitted, although exclusions of the GSFA still apply.	Not permitted.
508	Potassium Chloride	All	04.0 Fruits and vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds 12.4 Mustards 12.6.2 Non-emulsified sauces (e.g. ketchup, cheese sauces, cream sauces, brown gravy)	Not permitted.

INS no.	Additive name	Functional use allowed in organic production	Permitted for use in food categories	
			Food of plant origin	Food of animal origin
509	Calcium chloride	All	04.0 Fruits and vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds 06.8 Soybean products (excluding soybean products of food category 12.9 and fermented soybean products of food category 12.10) 12.9.1 Soybean protein products 12.10 Fermented soybean products	01.0 Dairy products and analogues, excluding products of food category 02.008.2 08.2 Processed meat, poultry, and game products in whole pieces or cuts 08.3 Processed comminuted meat, poultry and game products 08.4 Edible casings (e.g. sausage casings)
511	Magnesium chloride	All	06.8 Soybean products (excluding soybean products of food category 12.9 and fermented soybean products of food category 12.10) 12.9.1 Soybean protein products 12.10 Fermented soybean products	Not permitted.
516	Calcium sulphate	All	06.8 Soybean products (excluding soybean products of food category 12.9 and fermented soybean products of food category 12.10) 07.2.1 Cakes, cookies and pies (e.g. fruit-filled or custard type) 12.8 Yeast and like products 12.9.1 Soybean protein products 12.10 Fermented soybean products	Not permitted.
524	Sodium Hydroxide	All	06.0 Cereals and cereal products, derived from cereal grains, from roots and tubers, pulses and legumes, excluding bakery wares of food category 07.007.1.1.1 yeast-leavened breads and specialty breads	Not permitted.
551	Silicon Dioxide (Amorphous)	All	12.2 Herbs, spices, seasonings, and condiments (e.g. seasonings for instant noodles)	Not permitted.
941	Nitrogen	All	Permitted, although exclusions of the GSFA still apply	Permitted, although exclusions of the GSFA still apply

3.2 Flavourings

Substances and products labelled as natural flavouring substances or natural flavouring preparations are defined in the *General Requirements for Natural Flavourings* (CAC/GL 29-1987).

3.3 Water and salts

Drinking water.

Salts (with sodium chloride or potassium chloride as basic components generally used in food processing).

3.4 Preparations of micro-organisms and enzymes

Any preparation of micro-organisms and enzymes normally used in food processing, with the exception of micro-organisms genetically engineered/modified or enzymes derived from genetic engineering.

3.5 Minerals (including trace elements), vitamins, essential fatty and amino acids, and other nitrogen compounds

Only approved in so far as their use is legally required in the food products in which they are incorporated.

Table 4

PROCESSING AIDS WHICH MAY BE USED FOR THE PREPARATION OF PRODUCTS OF AGRICULTURAL ORIGIN REFERRED TO IN SECTION 3 OF THESE GUIDELINES

Substance	Specific conditions
FOR PLANT PRODUCTS	
Water	
Calcium chloride	coagulation agent
Calcium carbonate	
Calcium hydroxide	
Calcium sulphate	coagulation agent
Magnesium chloride (or nigari)	coagulation agent
Potassium carbonate	drying of grape raisins
Carbon dioxide	
Nitrogen	
Ethanol	solvent
Tannic acid	filtration aid
Egg white albumin	
Casein	
Gelatine	
Isinglass	
Vegetable oils	greasing or releasing agent
Silicon dioxide	as gel or colloidal solution
Activated carbon	
Talc	
Bentonite	
Kaolin	
Diatomaceous earth	
Perlite	
Hazelnut shells	
Beeswax	releasing agent
Carnauba wax	releasing agent
Sulphuric acid	pH adjustment of extraction water in sugar production
Sodium hydroxide	pH adjustment in sugar production
Tartaric acid and salts	

Substance	Specific conditions
Sodium carbonate	sugar production
Preparations of bark components	
Potassium hydroxide	pH adjustment for sugar processing
Citric acid	pH adjustment

Preparations of micro-organisms and enzymes

Any preparations of micro-organisms and enzymes normally used as processing aids in food processing, with the exception of genetically engineered/modified organisms and enzymes derived from genetically engineered/modified organisms.

For livestock and bee products

The following is a provisional list for the purposes of processing livestock and bee products only. Countries may develop a list of substances for national purposes that satisfy the requirements of these Guidelines as recommended in Section 5.2.

INS	Name	Specific conditions
	Calcium carbonates	
	Calcium chloride	Firming, coagulation agent in cheese making.
	Kaolin	Extraction of propolis.
	Lactic acid	Milk products: coagulation agent, pH regulation of salt bath for cheese.
	Sodium carbonate	Milk products: neutralizing substance.
	Water	

ANNEX 3

MINIMUM INSPECTION REQUIREMENTS AND PRECAUTIONARY MEASURES UNDER THE INSPECTION OR CERTIFICATION SYSTEM

1. Inspection measures are necessary across the whole of the food chain to verify product labelled according to Section 3 of these guidelines conforms to internationally agreed practices. The official or officially recognized certification body or authority and the competent authority should establish policies and procedures in accordance with these guidelines.
2. Access by the inspection body to all written and/or documentary records and to the establishment under the inspection scheme is essential. The operator under an inspection should also give access to the competent or designated authority and provide any necessary information for third party audit purposes.

A. PRODUCTION UNITS

Production according to these guidelines should take place in a unit where the land parcels, production areas, farm buildings and storage facilities for crop, **and** livestock **and** aquaculture and seaweed/other algae sites are clearly separate from those of any other unit which does not produce according to these guidelines; preparation and/or packaging workshops may form part of the unit, where its activity is limited to preparation and packaging of its own agricultural produce.

4. When the inspection arrangements are first implemented, the operator and the official or officially recognized certification body or authority should draw up and sign a document which includes:
 - a) a full description of the unit and/or collection areas, showing the storage and production premises, **and** land parcels, **aquaculture and seaweed/other algae sites** and, where applicable, premises where certain preparation and/or packaging operations take place;
 - b) and, in the case of collection of wild plants **and** wild seaweeds or other algae, the guarantees given by third parties, if appropriate, which the producer can provide to ensure that the provisions of Annex 1, A.1 para ~~40~~ 9 are satisfied;
 - c) all the practical measures to be taken at the level of the unit to ensure compliance with these guidelines;
 - d) the date of the last application on the land parcels, **aquatic sites** and/or collection areas concerned of products the use of which is not compatible with Section 4 of these guidelines;
 - e) an undertaking by the operator to carry out operations in accordance with Sections 3 and 4 and to accept, in event of infringements, implementation of the measures as referred to in Section 6, paragraph 9 of these guidelines.
5. Each year, before the date indicated by the certification body or authority, the operator should notify the official or officially recognized certification body or authority of its schedule of production of crop products and livestock, giving a breakdown by land parcel/herd, flock or hive.
6. Written and/or documentary accounts should be kept which enable the official or officially recognized certification body or authority to trace the origin, nature and quantities of all raw materials bought, and the use of such materials; in addition, written and/or documentary accounts should be kept of the nature, quantities and consignees of all agricultural products sold. Quantities sold directly to the final consumer should preferably be accounted for on a daily basis. When the unit itself processes agricultural products, its accounts must contain the information required in B2, third dash point of this Annex.
7. All livestock should be identified individually or, in the case of small mammals or poultry, by herd or flock ~~or~~ in the case of bees by hive **and in the case of aquaculture animals by lot**. Written and/or documentary accounts should be kept to enable tracking of livestock and bee colonies within the system at all times and to provide adequate traceback for audit purpose. The operator should maintain detailed and up-to-date records of:
 - a) breeding and/or origins of livestock or aquaculture animals;
 - b) registration of any purchases;
 - c) the health plan to be used in the prevention and management of disease, injury and reproductive problems;
 - d) all treatments and medicines administered for any purpose, including quarantine periods and identification of treated animals or hives;
 - e) feed provided and the source of the feedstuffs;
 - f) stock movements within the unit and hive movements within designated forage areas as identified on maps;

- g) transportation, slaughter and/or sales.
h) extraction, processing and storing of all bee products.
8. Storage, on the unit, of input substances, other than those whose use is with paragraph 4.1(b) of these guidelines is prohibited.
9. The official or officially recognized certification body or authority should ensure that a full physical inspection is undertaken, at least once a year, of the unit. Samples for testing of products not listed in these guidelines may be taken where their use is suspected. An inspection report should be drawn up after each visit. Additional occasional unannounced visits should also be undertaken according to need or at random.
10. The operator should give the certification body or authority, for inspection purposes, access to the storage and production premises and to the parcels of land or aquatic sites, as well as to the accounts and relevant supporting documents. The operator should also provide the inspection body with any information deemed necessary for the purposes of the inspection.
11. Products referred to in Section 1 of these guidelines which are not in their packaging for the end consumer should be transported in a manner which should prevent contamination or substitution of the content with substances or product not compatible with these guidelines and the following information, without prejudice to any other indications required by law:
- the name and address of the person responsible for the production or preparation of the product;
 - the name of the product; and
 - that the product is of organic status.
12. Where an operator runs several production units in the same area (parallel cropping), units in the area producing crop, crop products or seaweed/other algae or their products not covered by Section 1 should also be subject to the inspection arrangements as regards the dash points of paragraph 4 and paragraphs 6 and 8 above. Plants of indistinguishable varieties as those produced at the unit referred to in paragraph 3 above should not be produced at these units:
- If derogations are allowed by the competent authority, the authority must specify the types of production and circumstances for which derogations are granted and the supplementary inspection requirements, such as unannounced site visits; extra inspections during harvest; additional documentary requirements; assessment of an operation's ability to prevent co-mingling, etc., which are to be implemented.
 - Pending further review of these guidelines, member countries can accept parallel cropping of the same variety, even if it is not distinguishable, subject to adequate inspection measures being applied.
13. In organic livestock and aquaculture animal production, all livestock on one and the same production unit must be reared in accordance with the rules laid down in these Guidelines. However, livestock not reared in accordance with these Guidelines may be present on the organic holding provided that they are separated clearly from livestock produced in accordance with these Guidelines. The competent authority can prescribe more restrictive measures, such as different species.
14. The competent authority may accept that animals reared in accordance with the provisions of these Guidelines may be grazed on common land, or reared in aquatic zones held in common, provided that:
- a) this land has not been treated with products other than those allowed in accordance with Section 4.1 (a) and (b) of these Guidelines, for at least three years;
 - b) a clear segregation between the animals reared in accordance with the provisions of these Guidelines, and the other animals can be organized.
15. For livestock or aquatic animal production, the competent authority should ensure, without prejudice to the other provisions in this Annex, that the inspections related to all stages of production and preparation up to the sale to the consumer ensure, as far as technically possible, the traceability of livestock and livestock products from the livestock production unit through processing and any other preparation until final packaging and/or labelling.

B. PREPARATION AND PACKAGING UNITS

1. The producer and/or operator and should provide:
- a full description of the unit, showing the facilities used for the preparation, packaging and storage of agricultural products before and after the operations concerning them;
 - all the practical measures to be taken at the level of the unit to ensure compliance these guidelines.

This description and the measures concerned should be signed by the responsible person of the unit and the certification body.

- The report should include an undertaking by the operator to perform the operations in such a way as to comply with Section 4 of these guidelines and to accept, in the event of infringements, the implementation of measures as referred to in paragraph 6.9 of these guidelines and be countersigned by both parties.
2. Written accounts should be kept enabling the certification body or authority to trace:
 - the origin, nature and quantities of agricultural products as referred to in Section 1 of these guidelines which have been delivered to the unit;
 - the nature, quantities and consignees of products as referred to in Section 1 of these guidelines which have left the unit;
 - any other information such as the origin, nature and quantities of ingredients, additives and manufacturing aids delivered to the unit and the composition of processed products, that is required by the certification body or authority for the purposes of proper inspection of the operations.
 3. Where products not referred to in Section 1 of these guidelines are also processed, packaged or stored in the unit concerned:
 - the unit should have separate areas within the premises for the storage of products as referred to in Section 1 of these guidelines, before and after the operations;
 - operations should be carried out continuously until the complete run has been dealt with, separated by place or time from similar operations performed on products not covered by Section 1 of these guidelines;
 - if such operations are not carried out frequently, they should be announced in advance, with a deadline agreed on with the certification body or authority;
 - every measure should be taken to ensure identification of lots and to avoid mixtures with products not obtained in accordance with the requirements of these guidelines.
 4. The official or officially recognized certification body or authority should ensure that a full physical inspection, at least once a year, of the unit. Samples for testing of products not listed in these guidelines may be taken where their use is suspected. An inspection report must be drawn up after each visit countersigned by the person responsible for the unit inspected. Additional occasional unannounced visits should also be undertaken according to need or at random.
 5. The operator should give the official or officially recognized certification body or authority or authority, for inspection purposes, access to the unit and to written accounts and relevant supporting documents. The operator should also provide the inspection body with any information necessary for the purposes of inspection.
 6. The requirements in respect to the transport as laid down in paragraph A.10 of this Annex are applicable.
 7. On receipt of a product referred to in Section 1 of these Guidelines, the operator shall check:
 - the closing of the packaging or contained where it is required;
 - the presence of the indications referred to in A.10 of this Annex. The result of this verification shall be explicitly mentioned in the accounts referred to in point B.2. When there is any doubt that the product cannot be verified according to the production system provided for in Section 6 of this Guidelines, it must be placed on the market without indication referring to the organic production method.

C. IMPORTS

Importing countries should establish appropriate inspection requirements for the inspection of importers and of imported organic products.

ⁱ Definition of Aquaculture from the FAO Technical Guidelines on Aquaculture Certification, document agreed by the Sub-Committee on Aquaculture in 2010 and approved by FAO Committee on Fisheries February 2011;

ⁱⁱ Definition from FAO Glossary of Aquaculture

eWG Organic Aquaculture and Seaweed**Responses Paper for Round Two****8 March 2013**

Compilation of eWG Responses to the Discussion Document and Responses Paper for Round One, circulated on 15 January 2013, regarding the proposed revision of the Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods (GL 32-1999) to include Aquaculture and Seaweed.

There were 18 respondents in the second and final round of consultation in the eWG. On the basis of the responses the final report was drawn up and circulated to all member of the electronic working group on 5 March, together with the proposed revision of the Guidelines. This responses paper is an addendum to the main documents. The following responses were received and are either copied in full or summarized (extracted from the Discussion Document to make this paper shorter) in this document:

- 1) Argentina
- 2) Brazil
- 3) Canada
- 4) France
- 5) Greece
- 6) India
- 7) Ireland
- 8) Italy
- 9) Japan
- 10) New Zealand
- 11) Norway
- 12) Panama
- 13) Sweden
- 14) Switzerland
- 15) Thailand
- 16) United Kingdom (comments by email of 8 February, already copied to all members and not duplicated here)
- 17) United States
- 18) IFOAM – page 40 (Comments of 8 February included here; supplementary comments of 18 February were addressed and copied by email to all members and not duplicated here).

1) ARGENTINA

Argentina believes the following:

In the Preamble:

In paragraph 2, point two

We accept the proposal submitted by Norway, which reads as follows:

“to protect producers of organic produce against misrepresentation of other agricultural and aquaculture produce as being organic;”

In paragraph 4

We accept Australia's suggestion, the text now reading as follows:

“substances for clearing and disinfection ~~in aquaculture~~”, covering all types of production, not only aquaculture.

In paragraph 5

We accept the proposal by the Coordinator of the eWG.

In paragraph 6

We accept the text in red added to the document, except the last sentence proposed, which reads as follows:

“The primary goal of organic production is to optimize the health and productivity of interdependent communities of soil or aquatic life ~~life~~, plants, animals and people”.

In paragraph 7

We accept the text in red added in the first two lines.

We accept the text proposed by Norway and included in subsection f), reading as follows:

“f) promote the healthy use of soil, water and air as well as minimize all forms of pollution thereto that may result from agricultural and aquacultural practices”

We accept the addition of subsection g') as proposed by Australia

“g) preserve ~~the preservation of~~ natural aquatic resources”.

We accept the addition of g"), reading as follows:

“g”) maintain ~~or improve~~ the aquatic environment in the case of aquaculture”

The following amendment is proposed:

“h) become established on any existing farm through a period of conversion, the appropriate length of which is determined by site-specific factors such as the history of the land or aquatic medium, and type of crops. livestock, aquatic animal or plant ~~seaweed~~ to be produced”, given that seaweeds are vegetables.

Argentina believes that the definition of "Organic aquaculture" should not be included in Section 2. Description and definitions, in paragraph 2.2. Definitions. In the same way, the Guidelines do not include the definitions of the terms "organic" and "organic farming", since these concepts are set forth in paragraph 2.1. Description.

In paragraph 9

We accept the text in red added to the document

In paragraph 10

We accept the text in red added to the document.

In Section 1: Scope**In paragraph 1.1. a)**

We accept the text in red added to the document.

In paragraph 1.1. b)

We accept the text in red added to the document.

In Section 2: Descriptions and Definitions**In paragraph 2.1. Description:**

We accept the text in red added to the document.

In paragraph 2.2. Definitions:

Argentina proposes to include "Aquatic organisms", defined as follows: **"Aquatic organisms' includes fish, reptiles, amphibians, crustaceans, molluscs, echinoderms, tunicates, sponges, algae and aquatic plants that have a partial or complete cycle in direct relation to the water, originated in wild or produced by culture. It also applies to zooplankton, micro, rotifers, annelids and other animals to feed."**

With regard to the definition of "**Agricultural product/product of agricultural origin**", Argentina believes that aquaculture products should not be included in the definition, since the environment of agricultural and aquaculture products is different (soil and water).

With regard to the definition of **Agricultural product/product of agricultural origin** Argentina proposes the following text:

"Agricultural product/product of agricultural origin: means any product or commodity, raw or processed, that is marketed for human consumption (excluding water, salt and additives) or animal feed, developed in terrestrial sites".

With regard to the definition of "**Aquaculture**", Argentina proposes the following:

"Aquaculture: productive management of aquatic organisms in an enclosed environment".

With regard to the definition of "Production cycle (Aquaculture)", Argentina proposes the following:

"Production cycle: life of aquatic organisms ranging from the earliest life stage to harvest".

With regard to the definition of **Closed recirculation system**, Argentina accepts the proposal of the Coordinator.

With regard to the definition of **Containment system**, Argentina does not agree with the definition set out in the document and proposes the following:

"Containment systems: facilities for the production or harvesting of aquatic organisms in an enclosed environment."

With regard to the definition of "**Techniques of genetic engineering/modification**", Argentina accepts the text in red added to the document.

With regard to the definition of "**Livestock**", Argentina accepts the text in red added to the document

With regard to the definition of "**Locally grown aquatic species**", Argentina agrees with the text suggested in the document.

With regard to the definition of "**Production**", Argentina proposes the following wording:

"Production means the operations undertaken to supply feed agricultural or aquatic products in the state in which they occur on the farm, including initial packaging and labelling of the product".

Regarding the definition of **Seaweed**, Argentina does not agree with the definition in the document and proposes the following:

"Seaweed: algae that grow in freshwater and saltwater environments, including microalgae and phytoplankton".

With regard to the incorporation of the definition of the "**Conversion period**", Argentina accepts the proposal by the Coordinator, with the following addition:

*"Conversion period means the transition from conventional to organic farming within a given period of time, during which the guidelines concerning the organic production have been ~~applied~~, **fully and continuously applied**".*

Section 3: Labelling and Claims

Paragraph 3.2. a)

Argentina agrees with the text in red added to the document

Paragraph 3.3. a)

Argentina agrees with the text in red added to the document

Paragraph 3.3. b)

Argentina agrees with the text in red added to the document.

Section 4: Rules of Production and Preparation

Paragraph 4.1. b)

Argentina agrees with the text proposed

Paragraph 4.4.

Argentina agrees with the text proposed

Section 5. Requirements for the inclusion of substances in Annex II and criteria for the development of lists by countries

Argentina accepts the addition of subsection d) in paragraph 5.1., with the following amendment in the first item:

"if they are used for the purpose of cleaning and disinfection of ponds, cages, buildings and installations used for aquaculture ~~animal~~-production"

Regarding the third item, Argentina proposes:

*"- their use should take into account the potential harmful impact on the environment, the ecology (in particular non-target organisms) and the health of consumers, **aquatic organisms** ~~aquaculture animals~~; and....."*

Annex I Principles of Organic Production

Section A2 Seaweed and seaweed products

Argentina maintains the proposal to entitle this section **"Aquatic plants, seaweed and seaweed products"**, since the current title does not cover aquatic plants. As regards seaweeds, Argentina also believes that macro and micro seaweeds and freshwater seaweeds should be included, both for human and animal consumption.

Regarding the question whether terrestrial plants which are artificially grown in water can be considered aquatic plants, Argentina believes that, since this would imply hydroponics which is prohibited in organic production, these plants could not be considered aquatic.

Paragraph 1

Argentina proposes to delete it since it is mentioned in Section 1. Scope.

Paragraph 2

Argentina proposes the following text:

*"The operation and management of organic **aquatic plants and** seaweed production, whether in containment systems or not, should be consistent with respect the principles of organic farming. The biodiversity of the aquatic environment and the quality of the surrounding water should be maintained"*

Paragraph 3

Argentina proposes the following amendment:

“The criteria for siting of aquaculture animal units in Section B' these guidelines should be applied as appropriate to **aquatic plant** and seaweed production units.....”

Paragraph 4

Argentina proposes the following amendment, thus broadening the scope to cover aquatic plants and also deletes the last two sentences, since Section A2 does not cover animals:

*“Both farming and collection of **aquatic plant and** seaweed should be carried out in areas which meet the criteria of paragraph 4 and 6 of Section B2. An Organic Management Plan should be developed and implemented by all organic **aquatic plant and** seaweed producers to guide the operation of the production unit, in keeping the impact on the environment low and setting out monitoring to be done to ensure that this aim is achieved each year. ~~The operation and management of aquaculture animals, whether in containment systems or not, should respect the principles of organic farming. The biodiversity of the aquatic environment and the quality of the surrounding water should be maintained”~~*

Paragraph 5

Argentina proposes the following amendment, thus broadening the scope to cover aquatic plants:

*“The collection of edible **aquatic plant and** seaweeds and parts thereof, growing naturally in ~~the sea~~ **aquatic environment** is considered an organic production method provided that the four conditions of Annex 1.A.9 are met.”*

Paragraph 7

Argentina accepts the text proposed

Paragraph 8

Argentina proposes the following amendment, thus broadening the scope to aquatic plants

*“The operator should maintain detailed and up-to-date records as set out in Annex 3, paragraphs 7 – 15, where the terms livestock should be taken to read **aquatic plant and** seaweed stock”.*

Section B2 Aquaculture animals and their products

Paragraph 1

Argentina agrees to replace the paragraph with the one proposed by Ireland, including the motion of the USA as follows:

*“The operation and management of aquaculture production, whether in containment systems or not, should **be consistent with** ~~respect the~~ principles of organic production and the Codex Code of Practice for Fish and Fishery Products, Section 6 (CAC/RCP 52-2003) as appropriate ”.*

Paragraph 3

In line 3

Argentina proposes the following wording:

*“..... issues, so as **to keep impact on the enviroment low** ~~maintain or improve the natural resources of the operation and and~~ set out a monitoring programme*”

Moreover, it is agreed to delete the last sentence (which is duplicated), accept Australia's proposal and the modification of the Coordinator, as follows:

“The Management Plan could also include a water quality monitoring scheme for early detection of potential contaminants from unlikely events such as an oil spill or other potential contamination of the harvest area.”

Paragraph 4

In the second sentence

Argentina agrees with the proposals by the USA and by the Coordinator, the new text reading as follows:

“The production area should have characteristics which allow the production of ~~safe~~ ORGANIC products of high quality without unacceptable negative while minimizing negative environmental impacts on surrounding natural ecosystems.

Paragraph 5

Argentina does not agree with the new wording proposed since, like Ireland, it believes that seawater is not fit for human consumption. The resulting text would therefore read as follows:

*“Water used for aquaculture should be of a quality suitable for the production of food ~~which is safe for human consumption~~ **which meets the physiological requirements of the species** and therefore. ~~Waste water from domestic or industrial sources should not be used in accordance with the FAO Technical Guidelines for Aquaculture Certification, 2011”.~~*

Paragraph 6

Argentina proposes the following text:

*"The certification body or authority must ensure at the outset that the location of the production unit is suitable by conducting a risk analysis **an assessment** of potential sources of contamination with contaminants or substances unacceptable to organic production systems. Buffer zones within or between farms should be established by competent authorities, ~~where necessary~~, to separate organic and non-organic production units".*

Paragraph 7

Argentina agrees with the proposal by the Coordinator.

Paragraph 8

Argentina agrees on the following:

Accept the amendment of the title as follows: **"Origin of Stock and conversion of non-organic aquatic animals to organic"**

Partially accept the proposal by Italy to include the species in Section 2, paragraph 2.2. and to accept the proposal by Canada to use the term "production" instead of "farming" in the first sentence, in accordance with the following text:

*"It is preferable that locally-grown aquatic species, **as defined in these Guidelines (Section 2, para 2.2)** **should** be used for organic **production** ~~farming~~ where possible"*

Maintain the original text regarding the conversion period that conventional animals admitted to the production unit should meet when no organic animals are available, with the caveat that the competent authority will be empowered to set a time limit for acceptance of conventional animals. This motion arises in case the alternative provided between square brackets by the coordinator is accepted.

Accept Italy's proposal for the cases of unavailability of organic parents, as follows:

"When organic parent stock is not available or for improving genetic stock, wild caught animal or non-organic aquaculture animals may be brought into a holding, providing that the parent stock have been under organic management for at least three months prior to breeding".

Propose the deletion of the text reading:... "and stock produced using hormones must not be used" in the last sentence, since this is already covered by the Subsection 1.5 in Scope.

In summary, Argentina proposes the following text:

Origin of stock Origin of Stock and conversion of non-organic aquatic animals to organic.

8. *"It is preferable that locally grown aquatic species , **as defined in these Guidelines (Section 2, para 2.2)**) **should** be used for organic ~~farming~~ production where possible. The species should be able to adapt to local conditions and selection. ~~Following the conversion period~~ if organic aquaculture animals are not available, young non-organic aquaculture stock may be introduced for on-growing provided that the latter two thirds of their production cycle or 90% of their final biomass is under organic management and providing the stock is healthy. **When organic parent stock is not available or for improving genetic stock, wild caught animal or non-organic aquaculture animals may be brought into a holding, providing that the parent stock have been under organic management for at least three months prior to breeding.** [alternative suggestion for consideration by eWG: When organic juveniles are not available, the **competent authority** ~~certifying body~~ would prescribe a time limit and percentage of non-organic juveniles for use according to the production of the species], ~~.Seed may be wild-harvested from outside of the production area, provided such harvesting is permitted by legislation, and records are kept to allow it be tracked back to the collection area."~~*

Paragraph 9.- Production rules for husbandry and breeding:

Argentina does not agree with the term "clear" (proposed by the Coordinator and the USA), since some freshwater species develop in a turbid aquatic environment.

Argentina proposes to change the first part of the second sentence as follows:

*" They aquatic animals should be provided with ~~good quality~~ water with a flow rate and temperature which is suitable to the **meet the physiological** requirements of the species."*

Argentina proposes to delete the following from paragraph 9:

~~“When netting is used it should be kept clean by physical means or by hand.”~~, since this is addressed in paragraph 16 on Cleaning and disinfection of equipment.

Paragraph 10

Argentina proposes that the competent authority should be the only one to define the maximum values of density by species and that this should be established by Codex, so that there is no deference between the countries. Argentina agrees with the proposal by Italy, in that the guide value should be inferior than the one accepted in conventional production, according to the conditions of animal welfare of the species. The following text is proposed:

~~“10 Competent authorities, or other recognised bodies, shall develop and publicise guide values for maximum densities for the species grown under their authority, which are reflective of the natural behaviour of the species involved and in keeping with good welfare.”~~

Paragraph 12

Argentina supports the US proposal, which takes into account that the quality of the final product is related to the production system and not to the recipient (human or animal consumption). The principles of organic production should be extended to the entire production cycle. This generates savings in water use in the productive system and, with the new equipment, low energy consumption could be achieved. This in turn would increase the number of enterprises for organic aquacultural production, not limited to environments with high water availability. In these cases, the quality and maintenance of the filtering process should be ensured. The following text is proposed:

~~“Closed recirculation systems are permitted when use is consistent with the general principles for organic aquaculture, including requirements for feed and stocking densities. The Organic Management Plan should cover nutrient discharge and the repair and surveillance of technical equipment and document how monitoring is done to ensure there is minimal impact to the surrounding environment. are prohibited except when used as hatcheries or nurseries or for production of species used as organic feed on account of the fact that such systems depend on external energy inputs and are high in energy consumption. As they have some positive features, such as reduction of waste discharges and prevention of escapes, this prohibition may be reviewed at a future date [alternative: in five years], as greater knowledge becomes available on their environmental viability and compatibility with organic production.”~~

Paragraph 13

Argentina agrees with the wording of the paragraph in the document.

Paragraph 14

Argentina believes that the establishment of these criteria by certification bodies should be performed only when there are no competent authorities and so proposes the following wording:

~~“14. Competent authorities or other recognised bodies **(when those don't exist)** shall also develop and publicise criteria for aquaculture production systems, with particular reference to type of system, water flow, oxygen saturation and effluent elimination and if necessary, following.”~~

Paragraph 15 Nutrition

Argentina generally agrees with the Coordinator in that the wording of the document should be kept.

We reiterate the inclusion of the two last sentences of the proposal made, namely:

“No use of growth factors or synthetic amino acids”

“No use of any dead animals from aquaculture production system feed, when his death was due to disease or unknown causes.”

In relation to the possibility of including conventional raw materials of plant origin for food (up to 15% as proposed by Thailand), Argentina believes that, if established, it should be an exception and should be allowed only at the start of the venture and for a limited time period. This measure should be approved by certification bodies previously evaluating the use, origin and composition of food and ensuring that it does not come from GMOs or contain residues of products not permitted.

In the case of use of synthetic inputs (up to 5% as proposed by Thailand), Argentina believes that there is a need to define which products are concerned and to provide a list.

Paragraph 16 Health and Welfare

Argentina agrees with the proposal by the Coordinator with respect to “cleaner fish” and with the change in the wording of subsection 3.

Argentina maintains the term "shall" in the first line as it conforms to the principles of organic animal production.

Argentina agrees with the proposal of USA, Canada, and the Coordinator to amend the wording of the first paragraph regarding "permitted substances"

Argentina does not have information on the use of homeopathic treatments in aquaculture and therefore proposes not to include it until information is available.

Argentina supports the maintenance of the limitation of allopathic medical treatments to no more than two per year. If there are more than two treatments, animals would pass a greater part of the year under non-organic management, considering periods of quarantine (double than that for conventional production) and they would also be subject to an alternation of organic and conventional management repeatedly, which is not expected to obtain a quality product by consumers.

Also, the fact that more than two treatments are provided would be showing that the system is not even consistent with the principles of organic production in a sustainable manner, demonstrating imbalances in the health system, where prevention has not been ensured, which leads to more routine treatments. Therefore, the suggestion of USA could be accepted.

The following text is proposed:

"16. Disease prevention in organic aquaculture shall be based on guidelines and standards set by the OIE and the principles and practices for health care of livestock (terrestrial animals) in these guidelines, specifically Annex B I, paragraphs, 20, 21, 22 and 24 and on the following additional points:

- ensuring that the siting and design of the production unit is optimal and that there is regular cleaning and disinfection of premises with ~~organic disinfectant~~ **permitted substances** where appropriate.
- ~~Homeopathic medicines should be used by preference,~~
- to control ectoparasites such as sealice, ~~natural processes, such as the use of predatory species of ectoparasites (e.g. cleaner fish)~~ **appropriate production methods should be used where possible, rather than parasiticides.** Parasite treatments should be limited to twice per year, with the exception of compulsory control schemes.
- the use of allopathic treatments should be limited to two courses of treatment per year, with the exception of vaccines and compulsory eradication schemes. If the specified limits are exceeded the aquaculture animals concerned should not be sold as organic."

Paragraph 18 Transport

Argentina agrees that the wording of the first paragraph of the document should be kept, keeping the term "should".

With regard to the second paragraph, we agree with Thailand and the Coordinator to replace "live fish" with "live aquatic animals".

Paragraph 19 Slaughter

Argentina agrees that the word "should" be kept as it conforms to a principle of organic production and accepts the proposal of Thailand in terms of incorporating "Live". The following text is proposed:

"19. Guidelines and standards set by the OIE should be the specific normative base. **Live Aquaculture animals should be handled in such a way as to avoid unnecessary stress. Slaughter techniques should render fish immediately unconscious and insensible to pain.**"

Paragraph 20

Argentina supports the inclusion of the new paragraph 20

"The operator should maintain detailed and up-to-date records and meet the relevant requirements of Annex 3 for inspection purposes."

6. Annex 2 Substances permitted for the production of organic food Precautionary Measures

Argentina agrees with the inclusion of terms "and aquaculture animals" in item 1.

Annex 2 Table 2

"Cleaning And Disinfectant Treatments Approved For Organic Aquaculture"

With respect to paragraphs 2.1 and 2.2, Argentina accepts the new list with restriction of use according to the (non) presence of animals, as proposed by the Coordinator.

With respect to inputs to be included in the lists, Argentina agrees with the comments of USA in that they should be evaluated according to the criteria established in section 5 of the guide prior to inclusion.

ANNEX 3

A - Production Units

In **3** Argentina believes that the phrase should be "an aquaculture ~~and seaweeds~~" since it refers to aquaculture sites in general.

In **4 a**, same as above.

In **4 b** we agree with the proposal.

In **4 d** we agree with the proposal.

7:

In the first paragraph we agree with the proposal.

(In subsection a) we agree with the inclusion of "**and** /or aquaculture animals"

In **10** we agree with the proposal.

In **12** we agree with the proposal.

In **13** we agree with the proposal.

In **14** we agree with the proposal.

In **15** we agree with the addition of the first line and propose to simplify the wording at the end of the paragraph so that it includes both aquatic and terrestrial animals as follows:

*"For livestock **or aquatic animal** production, the competent authority should ensure, without prejudice to the other provisions in this Annex, that the inspections related to all stages of production and preparation up to the sale to the consumer ensure, as far as technically possible, the traceability of ~~livestock livestock products~~ from the ~~livestock~~ production unit through processing and any other preparation until final packaging and/or labelling".*

2) BRAZIL

Comments from Brazil on the first round papers can be found in Annex 1

Comments in Round Two:

(i) General Comments:

We would like to congratulate the European Union on the work as a coordinator of the electronic working group on organic aquaculture.

(ii) Specific Comments:

Questions for eWG members to address relating to Japan's General Comments on the meaning of organic aquaculture.

The members of the eWorking Group are requested to give their views on this topic and to say if they consider the existing text to be adequate? If not, how should the principles be described more adequately?

Brazilian comments: We understand that the existing text on organic production is adequate and covers appropriately organic agriculture and aquaculture.

Question to eWG regarding need for harmonisation of production criteria such as maximum density in the Guidelines.

(1) Should the Guidelines include maximum stocking densities?

Brazilian comments: Brazil does not support the proposal to include predefined maximum stocking densities into the Guidelines. However, Brazil supports the comments of Italy that the maximum stocking density should be lower than that used in conventional farming. Thus, we would agree with general provisions that could help national authorities in establishing maximum stocking densities.

Establishing maximum stocking densities would be a very complicate task due to the large number of species that should be taken into consideration. Besides, maximum stocking densities will be influenced by the characteristics of the production area, local environmental conditions and management practices. Thus, establishing maximum stocking densities in the Guidelines would not be appropriated for the different needs worldwide.

(2) Is there a need for more harmonisation for the general production criteria covered by paragraph B.2.14?

Brazilian comments: Brazil could support general provisions related to production criteria. However, the Guidelines should not define specific criteria for production for the reasons stated above.

Question for eWG on positive list of substances.

Members of the eWG are requested to state if they do not agree with this proposed amendment and the reason for disagreeing. Views on the amendments proposed for Nutrition in B, General Comments, below, are also requested here.

Brazilian comments: Brazil agrees with the proposed amendment. For the purpose of clarity, it should be placed as a new paragraph instead of at the end of paragraph 15. Additionally, the words 'in compliances' are repeated and should be deleted.

16. If substances are used as feedstuffs or in the preparation of feedstuffs for aquaculture animals the competent authority shall establish a positive list of substances ~~in compliances~~ in compliance with the criteria of Section B1, para. 18.

Additionally, Brazil supports the comments of Thailand about the need to insert some flexibility on the obligation to use 100% organic feed in aquaculture for the reasons that are already state in paragraphs 14 and 15 of section B.1 (Livestock and livestock products). We agree with the chair proposal to discuss the threshold at the physical working group.

Question for eWG on edits to Foreword paragraphs 2 & 4.

Members of the eWG are requested to state if they do not agree with this proposed edits and the reason for disagreeing.

Brazilian comments: Brazil supports the amendments.

Question for eWG on edits to Foreword paragraph 7.

Members of the eWG are requested to state if they do not agree with the proposed edits and the reason for disagreeing.

Brazilian comments: Brazil supports the proposed amendments. However, we understand that subsections (g') and (g'') should be renamed to (h) and (i).

Question for eWG on amended definition of closed recirculation system.

Members of the eWG are requested to state if they agree with the proposed amended definition.

Brazilian comments: Brazil suggests deleting this definition. We understand that the use of recirculation systems in organic production should not be generally prohibited and paragraph 12 would not be necessary.

~~Closed recirculation system means a type of enclosed unit (on land or a vessel), with very limited and managed barrier connection to open waters, with recirculation depending on permanent external energy input to pump/circulate the water, and a system to treat the effluent water to enable its reuse.~~

Action Item: Members of the eWG are asked to provide information and views they may have on this issue of homeopathy in aquaculture.

Brazilian comments: Brazil has no information to share on the issue of homeopathy in aquaculture in this moment.

Action for eWG on revised Annex 2, Table 2'.

Members of the eWG are requested to reflect on this table, having regard to the comments on this from Thailand, Ireland and the US in particular. There will be an opportunity to discuss the content at the physical working group meeting in May 2013.

Brazilian comments: Brazil is reflecting on this table and has no comments in this moment.

Question for eWG on revised Annex 3.

Members of the eWG are requested to state if they agree with the proposed amendments above.

Brazilian comments: Brazil supports most of the amendments. However, we suggest replacing the words 'aquaculture and seaweed' by 'aquatic organism' in paragraph 3 and 4(a). The term 'aquatic organism' is broader and aligned with the proposed definition of aquaculture.

3. Production according to these guidelines should take place in a unit where the land parcels, production areas, farm buildings and storage facilities for crop, livestock and ~~aquaculture and seaweed~~ **aquatic organism** sites are clearly separate from those of any other unit which does not produce according to these guidelines; preparation and/or packaging workshops may form part of the unit, where its activity is limited to preparation and packaging of its own agricultural produce.

4...

a) a full description of the unit and/or collection areas, showing the storage and production premises, land parcels, ~~aquaculture and seaweed~~ **aquatic organism** sites and, where applicable, premises where certain preparation and/or packaging operations take place.

3) CANADA

Canada's comments on the Discussion Paper on the proposed revision of the Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods (GL 32-1999) to include Aquaculture and Seaweed, 15 January 2013. Specifically, Canada is responding to questions raised by the Chair in the discussion paper.

There are a number of questions where members are asked to indicate if they disagree and why. For these questions, if there is no comment from Canada, the chair can assume that Canada agrees.

Questions for eWG members to address relating to Japan's General Comments on the meaning of organic aquaculture -The members of the eWorking Group are requested to give their views on this topic and to say if they consider the existing text to be adequate? If not, how should the principles be described more adequately?

Canada considers the existing text to be adequate.

Question to eWG regarding need for harmonisation of production criteria such as maximum density in the Guidelines The eWG should reflect on this issue and come forward with views on what is the correct balance between not being over prescriptive in the Guidelines on production density and other relevant production criteria and ensuring that problems do not occur on the international-trade front in the future? (1) Should the Guidelines include maximum stocking densities? (2) Is there a need for more harmonisation for the general production criteria covered by paragraph B.2.14?

Canada notes that the agricultural standard does not prescribe maximum stocking densities but sets out outcome based criteria for stocking densities.

Question for eWG on amended definition of closed recirculation system - Members of the eWG are requested to state if they agree with the proposed amended definition.

Canada requests that the definition of closed recirculation system be discussed in conjunction with Paragraph 12, prohibition of Closed Recirculation Systems.

Paragraph 8

Canada suggests the following change to the proposed paragraph.

Hormonal treatment is not allowed for enhancing growth, and can only be used as reproductive aids in those cases where captive breeding would not occur otherwise.

Paragraph 13

Canada agrees with the proposed wording from the USA and also suggests replacing “use of single sex strains are prohibited” “the use of single sex populations are permitted”

Paragraph 15 – Carnivorous fish should not be fed material from the same species, nor a totally plant-based diet to ensure their physiological needs are met and to ensure good welfare.

Chair comment: Taking into consideration comments on this sentence by Canada and Japan (want it relaxed) and by the US (want it strengthened) it is proposed to retain the original wording (middle ground).

Canada suggests that further discussion on this paragraph takes place at the physical working group meeting in May. Canada notes that cannibalism is natural in fish and that very few disease agents are limited to single families.

4) FRANCE

Question to eWG regarding need for harmonisation of production criteria such as maximum density in the Guidelines *The eWG should reflect on this issue and come forward with views on what is the correct balance between not being over prescriptive in the Guidelines on production density and other relevant production criteria and ensuring that problems do not occur on the international-trade front in the future?*

(1) Should the Guidelines include maximum stocking densities?

(2) (2) Is there a need for more harmonisation for the general production criteria covered by paragraph B.2.14?

Regarding the question of density, it would be interesting to have harmonized maximum density in the Codex guidelines. It may however be a difficult work to achieve for all species. A first step could be to introduce the principle that there normally should be lower density in organic farming than in conventional farming and to set densities for the main species who are submitted to international trade.

Question for eWG on positive list of substances

Members of the eWG are requested to state if they do not agree with this proposed amendment and the reason for disagreeing. Views on the amendments proposed for Nutrition in B, General Comments, below, are also requested here

Regarding nutrition, a positive list of feedstuff should be set in the guidelines as suggested by Ireland. Leaving this list to local authorities would not allow for appropriate harmonization.

As regard phytoplankton and zoo-plankton, they should be allowed for organic aquaculture. The possibility to use a small percentage of conventional product (outside product from sustainable fisheries) in feed could be introduced to allow products not yet available in the organic form to be used (or tested) in organic farming. This percentage should not be higher than 2%.

Action for eWG on revised Annex 3, Table 2'

Members of the eWG are requested to reflect on this table, having regard to the comments on this from Thailand, Ireland and the US in particular. There will be an opportunity to discuss the content at the physical working group meeting in May 2013

The proposed list for substances for use in the presence of aquaculture animals is too short and should be enlarged. This is absolutely necessary for organic aquaculture.

Question for eWG on revised Annex 3

Members of the eWG are requested to state if they agree with the proposed amendments above

No opposition to this proposal.

5) GREECE

Greece has a great interest in the preparation of these Guidelines as we are among the leading countries in Marine fish farming and the largest producer of farmed seabass and sea bream in EU. Organic farms already exist and they run according to the EU Regulation 710/2009, with very promising results.

Following a thorough study on the documents you kindly forwarded and after discussions between us in Greece we came up with the following comments especially concerning the issues pointed in the Discussion paper as suggested.

Disc. Paper (now on **DP**) page (p) 3. We suggest that the **description** of organic production may stay as in the original text

DP p.3. Points 7g' and point 7g" stay as they are. We also suggest that in point 7f we could include the term "**and aquaculture**" after the word agricultural (line 2).

DP p.3. In Table 1. we suggest that maximum **stocking densities** should be defined and that in the case of **seabass/ seabream saltwater cages** the maximum density should be set as in EU regulation 710/2009, which is **15kg/m³**.

DP. P.4. General guidelines in the areas defined in B.2.14. Can be an issue for more thorough discussions in the future, in order to succeed better harmonisation

DP. P.4. Nutrition. We agree on the need for a positive list of substances. We suggest that **the B.1. para.18 General and specific criteria** be copied and added at the end of B.2. para. 15. keeping the wording (**except** for references for **milk** etc.).

DP P.4. Specific Comments- Foreword

Para. 2. agree with Norwegian comment

Para.4. agree with Australian comment

Comments on para 7. *n g"* agree to replace "marine or freshwater" with **aquatic!**

We prefer to see the word "preservation" instead of conservation as we think that Preservation supposes a more proactive behaviour than conservation.

DP. P. 6. Section 1.1.a. This is a very interesting discussion and we tend to agree with the Chair to further discuss it in May 2013. As the all inclusive term "aquatic organisms" may not allow for differentiations and specific regulations we seem to agree with the Argentine proposal for changing the **heading of A.2. to "Aquatic plants, seaweed and seaweed products"**.

We also suggest to take into account the fact that phytoplankton and microalgae, reared under laboratory conditions, are fed to the larval stages of marine farmed species either directly (for a period of few weeks) or indirectly (as food for zooplankton) for some days.

D.P. Section 2.2. Definitions.

We agree with the Chair proposal about the definition of "Aquaculture"

The term "aquatic plants" is suggested to be added in the definition of {Aquaculture} production cycle.

We agree with proposed amended definition from the Chair on Closed recirculation system, **keeping however a question as to whether a closed land based system can be an organic farm.** (to what extent it resembles the natural growing conditions). The proposed wording from Italy concerning the partial

connection must be taken into account and be clarified if it is of the same meaning as with the proposed by the Chair.

The added Definition of the "Conversion Period" as proposed by the Chair is agreed.

The other proposed changes in the Definition section are also agreed. (macro - algae is a widely adopted term...)

D.P. Section 5.

The need of harmonisation suggests that **a common basic list of substances** is required.

The use of waste products must be allowed only after specific, authorised and supervised treatment.

Agree with the Chair on the inclusion of seaweed in 5.1.d.

D.P. Section A.2. Seaweed and Seaweed products

We have already suggested to include in heading the term "Aquatic plants" .

The proposed by USchange is accepted.

D.P. B.2. Aquaculture Animals and their products.

General principles.

Agree with Chair about the added text for a general reference to Codex Code.

As for the Management Plan it is advisable to include a water quality monitoring scheme and it is of vital importance but it is not always feasible as it may overcome the capabilities of a single farm. So, we agree with the wisely used word "could".

Agree with alternate text (proposed by US) in 2nd sentence para 4, with the addition of ORGANIC!

We insist on the initial wording of para 6. concerning both "**a risk assessment**" and the provisions on the establishment of Buffer zones. We state our concern about the provisions about buffer zones "within farms". This can be further clarified as to the type of farm... For example this cannot apply for single net cage farms in one site.

Paragraphs 7 & 8.

Conversion Period

The Conversion period must take into account the life cycle of the aquaculture organism as well as the type of production. In plants it can probably shorter than with fish with a production cycle of 18 months or longer. This can be an issue that will be further discussed in May.

Origin of stock

The definition of local species is vital. For example Mediterranean species are local to the whole basin? Can the national borders be the definitive factor? What about breeders obtained, as second generation fish, from a local farm but originating from imported juvenile stocks? What about fish caught from wild fisheries and transported to mainland based farms? Because fish raised in captivity did not have any opportunity (unless escapes) to show any measurable adverse effect on local populations.

We agree with the Chair to retain the original phrasing for the use of hormones.

Having said these, we agree with the Chair to further the discussion and bring these issues in May 2013.

Paragraph 9. Production Rules for husbandry and breeding.

Agree with Chair

Paragraph 10.

Agree with Chair

Paragraph 12.

We Agree to bring this issue in May 2013. We suggest the original text to remain.

Paragraph 13.

We suggest to retain original phrasing. The word "artificial" clarifies the issue.

Paragraph 15.

We agree on the original phrasing.

Cannibalism should not be allowed for both ethical reasons and disease prevention. Carnivory is a different issue as it is natural.

Generally we agree to bring the issues of 15% inclusion of conventional feeds.

Health and Welfare.

We agree with the proposed by the Chair wording concerning the control of ectoparasites.

We do not have a comment on the use of Homeopathy to fish as we don so far know of any such treatment in aquaculture.

Generally we believe that emphasis should be given on the enforcement of preventive measures and not treatment. We can suggest that "populations of organisms treated with medicines and chemicals cannot be labelled as organic". The farm will be considered organic after a having been audited by a competent authority.

"Disinfection of premises, can be performed with the use of approved and certified disinfectants".

Preventive use of chemicals and parasiticides is not allowed.

Transport

Agree with original phrasing

Slaughter

Agree with original phrasing

The word should is proposed to remain

We agree with the added paragraph concerning Inspection.

We agree with **Proposed Amendments** but wish we have some additional time to further our search as these issues may have a more demanding scientific background.

6) INDIA**Specific Comments of India****Foreword**

At Para 2, second bullet, it is proposed to add '**and aquatic**' after agricultural.

At Para 4, line three, may include '**feed for aquatic organisms, aquatic pest and disease control**' after plant pest and disease control.

It is also suggested to replace substances for cleaning and disinfection in aquaculture with '**disinfection and cleaning of aquatic units**'

At Para 7: 2nd line, may add **water/aquatic** after soil.

Point (b) may add '**and aquatic**' after soil

Point (c) may add '**and quality of aquatic environment**' after soil fertility.

Point (d) may add '**aquatic waste treatment and utilization**' after resources;

Point (e) may add '**and aquatic**' after agricultural

Point (f) may replace agricultural with '**cultivation**' to signify both agriculture and aquaculture.

Points (g') may replace preservation with '**conservation**'.

Section 1. Scope

It is suggested to include specifically the conditions for aquatic organisms in the scope such as '**fresh and brackish water ponds and open water bodies in estuaries and sea**'.

Section 2.2 Definitions

The definition of Organic Aquaculture could also '**include bivalves**' as many bivalves (clams, mussels, oysters, scallops, cockles) are important for human consumption as well as in the food chain, being consumed by fish, birds, marine mammals and other vertebrates and various invertebrates.

Secondly, it is suggested that in the definition, sea weed may be replaced by '**Aquatic Plants**' as sea weeds defines only large marine algae while aquatic plants will include all the plants and phytoplankton etc.

Section 5. Requirement for inclusion of substances in Annex 2 and criteria for the development of lists of substances by countries'

There is need for harmonization of the list of substances as basic standards are required in the food safety management system.

The list may include' **Piscicides of Herbal origin such as Mahua Oil cake (*Bassia latifolia*), Tea Seed cake (*Camellia sinensis*), Neervalam (*Crotalaria tigrillum*), Derris root powder (*Linchocarpus* sp. etc.)**

Section 6: Inspection and certification system

Under section 6, it is proposed to add the following text.

'During registration of the aquaculture farm/unit by the accredited certification agency, the producer has to present an annual organic management plan to the accredited certification agency, for verification during the inspection. This plan is required to be updated annually'.

B. 2 Aquaculture Animals and their products

At Paragraph 7: Conversion Period (for operations)

May add the condition of conversion period of **'non drainable system'** as suggested below

'In case of non drainable systems which cannot be disinfected, the conversion period shall be 24 months (fresh water prawns, carps).

In 3rd line of Paragraph 7, non –enclosed marine locations may be replaced by **'open water farming'**.

Paragraph 8: Origin of stock

May add after first line **"if locally grown aquatic species are not available, exotic species may be selected ,after ascertaining their impact on endemic species and environment'**.

May also add **'Collection of wild seed for selective stocking is prohibited (except for bivalves)'**.

Stocking Density

Taking into consideration not to compromise with the animal well-being, ecological capacity of the site and species specific physiological need and animal behavior ,there is need to standardize the stocking density limit specific to the different aquatic animal for production

A separate heading is suggested for 'harvest' before Transportation covering

'harvesting methods related to minimum stress, sufficient care for avoiding accidental killing of non targeted organisms such as birds, reptiles and mammals and for preserving the natural system'.

7) IRELAND

Answers (A - in italic text) to Questions (Q) in Discussion Document

1) Q. Relating to Japan's General Comments on the meaning of organic aquaculture

A. Ireland considers that the existing text is adequate and that it places emphasis on organic production having a positive effect on the environment rather than minimising negative impacts.

2) Q. Regarding need for harmonisation of production criteria such as maximum density in the **Guidelines** - what is the correct balance between not being over prescriptive in the Guidelines on production density and other relevant production criteria and ensuring that problems do not occur on the international-trade front in the future?

Q. (1) Should the Guidelines include maximum stocking densities?

A. Ireland agrees with the comments from Norway.

(2) Is there a need for more harmonisation for the general production criteria covered by paragraph B.2.14.

A. Ireland recognises that it is very difficult to set limits in light of the number of systems that exist which have different water flows, oxygen and temperature profiles. In addition, the requirements will vary depending on the particular species. Ireland considers therefore that stocking densities offer the easiest solution to limit production whilst maintaining animal welfare.

3) Q. regarding edits to Foreword paragraphs 2 & 4.

Members of the eWG are requested to state if they do not agree with this proposed edits and the reason for disagreeing?

A. Ireland agrees with the proposed edits.

4) Q. Regarding edits to Foreword paragraph 7 - Members of the eWG are requested to state if they do not agree with the proposed edits and the reason for disagreeing?

A. Ireland agrees with the proposed edits.

5) Q. on amended definition of closed recirculation system - Members of the eWG are requested to state if they agree with the proposed amended definition?

A. Ireland agrees.

Additional comments:

1) In relation to Health and welfare (paragraph 16)

With regard to the Para 16 Health and Welfare section, Ireland's lice management system is considered to be a "compulsory control scheme" as farms are obliged to treat their fish at the request of the national authority. We understood that parasite treatments can be applied more than twice a year in organic aquaculture on the basis of animal welfare and level of lice infestation and can still be considered 'organically' produced.

2) Substances for use in the presence of aquaculture animals

Ireland's suggestion from the previous round of comments was inserted into the document, as Substances for use in the absence of aquaculture animals. Rather than our proposal that it be in the following section: "Substances for use in the presence of aquaculture animals. (*Chair apologies for this error!*) The proposed list of substances for use in the presence of aquaculture animals is too short and should be extended.

8) ITALY

Answers (A - in italic text) to Questions (Q) in Discussion Document

1) Q. Relating to Japan's General Comments on the meaning of organic aquaculture
A. Italy considers the text to be adequate.

2) Q. Regarding the need for harmonisation of production criteria such as maximum density in the **Guidelines** - what is the correct balance between not being over prescriptive in the Guidelines on production density and other relevant production criteria and ensuring that problems do not occur on the international-trade front in the future?

Q. (1) Should the Guidelines include maximum stocking densities?

A. As a minimum, it should be required that maximum stocking density should be lower than that used in conventional farming.

3) Q. regarding edits to Foreword paragraphs 2 & 4.

Members of the eWG are requested to state if they do not agree with this proposed edits and the reason for disagreeing?

A. Italy agrees with the proposed amendments.

4) Q. Regarding edits to Foreword paragraph 7 - Members of the eWG are requested to state if they do not agree with the proposed edits and the reason for disagreeing?

A. *Italy agrees with the edits.*

5) Q.on amended definition of closed recirculation system - Members of the eWG are requested to state if they agree with the proposed amended definition?

A. *Italy agrees.*

8) Q. Regarding revised Annex 3, Table 2' - Members of the eWG are requested to reflect on this table, having regard to the comments on this from Thailand, Ireland and the US in particular. There will be an opportunity to discuss the content at the physical working group meeting in May 2013.

A. *Italy agrees with tables.*

9) Question for eWG on revised Annex 3 - Members of the eWG are requested to state if they agree with the proposed amendments above?

A. *Italy agrees with the edits.*

Additional Comments

Two comments on text at bottom of page 8 of Discussion Document:

1) Thailand suggests the addition of a definition of "**Conversion period**". The Chair suggests the following text: "**Conversion period means the transition from conventional to organic farming within a given period of time, during which the guidelines concerning the organic production have been applied.**"

Italy agrees to this proposal.

2) Australia suggests the deletion of the qualifying word "terrestrial" from the definition of Livestock. The Chair proposes that it be retained on account of the same argumentation under Scope above. The US suggests deleting the final phrase "without adverse effects on habitats or on native species" from the definition of "Locally grown aquatic species". *The Chair proposes to accept this and to add the word "well" after "adapted" in the third line; the phrase would read:*

".. and have ~~have~~ adapted well to the local environment...."

Italy does not agree as a species could "have adapted well to the local environment..." having totally replaced the native species.

3) An additional comment on text in on page 9:

Section A.2. Seaweeds and Seaweed products

The comments on the first paragraph are covered under Scope, above. For the second paragraph at line two, the US proposes the wording "**be consistent with** the principles of organic farming," rather than "respect the principles of organic farming". As this improves the sense, the Chair proposes to accept the change as proposed.

The reference to Section B in para 3 should be Section B2. As pointed out by Argentina, Thailand and Japan the last sentence of paragraph 4 should be deleted.

Italy disagrees.

(Chair : This deletion avoids repeating the same sentence which occurs in paragraph 2).

4) Comment on second paragraph of page 12 of Discussion Document.

"Bivalve shellfish seed and juveniles of yellow tail".

Comment: *Why yellow tail juveniles? Why not other species aswell?*

9) JAPAN

First of all, Japan thanks the EU, the e-WG chair, for preparing the discussion paper.

SUPPLEMENTARY COMMENTS TO “GENERAL COMMENTS”

We thank the EU for introducing our comments on definition of “Organic Aquaculture” in page 2 to 3 of the discussion paper. As this is fundamental and critical points that need to be thoroughly discussed before going into deep discussion, Japan would like to provide following supplementary comments.

We reiterate our position that “organic” in aquaculture means that the products were grown not only in socially, ecologically and economically sustainable manner, but also in condition as natural as possible. In this sense, even if a closed recirculating system does create almost no impact on environment, the products should not be deemed as organic.

In addition, considering that “wild-caught fish” is widely distributed in the fishery market, which we believe is one of the major differences between agriculture/livestock production and fishery, definition of “Organic Aquaculture” need to be clearly stated so that consumers can understand the relevance between “wild” and “organic”.

COMMENTS TO THE STATEMENT IN THE “SPECIFIC COMMENTS”

B.2 Aquaculture animals and their products

Para. 8

Wild harvested seed and Hormonal treatment

Japan supports chair’s proposal. We welcome the opportunity to have further discussion at the physical working group.

Para. 15

Carnivorous fish

Japan supports Canada’s proposal, though, cannot support the US’s proposal. As Canada and Japan stated, cannibalism often occurs in natural condition. Species belong a same family are often prey and predator. For example, tunas eat mackerels (both are under Scombridae), and mackerels are often use as feed for tuna farming.

Regarding chair’s comment, not only feeding same species but also feeding other species may pose such risk.

ADDITIONAL SPECIFIC COMMENTS TO THE PROPOSED DRAFT

Annex 2 “Permitted substances for the production of organic foods”
(Suggestion)

In accordance with addition of new commodities (i.e. aquatic animals and seaweed), we believe some Tables in Annex 2 “Permitted substances for the production of organic foods” and relevant provisions in Section A.2 and B.2 need to be revised too.

Since we are at very beginning of revision process, we question whether this is appropriate timing for us to discuss detailed substances. Therefore, we suggest discussing permitted substances in Annex 2 after we reach general consensus on the main text and Annex 1.

10) NEW ZEALAND

New Zealand welcomes the opportunity to offer the following comments on this version of the proposed draft revision of the Guidelines.

This response includes:

- Responses to “Questions for eWG members”
- Other Specific Comments

QUESTIONS FOR EWG

1 Relating to Japan’s General Comments on the meaning of organic aquaculture

The members of the eWorking Group are requested to give their views on this topic and to say if they consider the existing text to be adequate? If not, how should the principles be described more adequately?

New Zealand response: New Zealand does not strongly support amending paragraph 5 of the Foreword. We consider the existing text to be adequate.

New Zealand has, however, proposed an amended text to that submitted by Japan, which incorporates the concept of 'minimizing negative impacts to the environment', but does not restrict this to only aquaculture. (See below under "Other Specific Comments".)

2 Regarding need for harmonisation of production criteria such as maximum density in the Guidelines

The eWG should reflect on this issue and come forward with views on what is the correct balance between not being over prescriptive in the Guidelines on production density and other relevant production criteria and ensuring that problems do not occur on the international-trade front in the future?

- (1) Should the Guidelines include maximum stocking densities?
- (2) Is there a need for more harmonisation for the general production criteria covered by paragraph B.2.14?

New Zealand response: New Zealand does not support fixing maximum stocking densities in the Guidelines. We support the existing text, or a variation thereon. The following wording could be considered:

"Competent authorities, or other recognised bodies, shall develop and publicise guide values for maximum densities for the species grown under their authority. Stocking density shall allow the organisms to exhibit natural behaviour and shall not compromise animal welfare."

3 On positive list of substances

Members of the eWG are requested to state if they do not agree with this proposed amendment and the reason for disagreeing. Views on the amendments proposed for Nutrition in B, General Comments, below, are also requested here

New Zealand response: Agree

4 On edits to Foreword paragraphs 2 & 4

Members of the eWG are requested to state if they do not agree with this proposed edits and the reason for disagreeing

New Zealand response: Agree

5 On edits to Foreword paragraph 7

Members of the eWG are requested to state if they do not agree with the proposed edits and the reason for disagreeing

New Zealand response:

- 7.f – agree
- 7.g – agree
- 7.g' – **conserve** natural aquatic resources (grammatical amendment)
- 7.g" – maintain or improve marine or freshwater **environments** in the case of aquaculture (grammatical amendment)

6. On amended definition of closed recirculation system

Members of the eWG are requested to state if they agree with the proposed amended definition

New Zealand response: New Zealand has proposed a rewording. (See below under "Other Specific Comments".)

7. Action Item:

Members of the eWG are asked to provide information and views they may have on this issue of homeopathy in aquaculture.

New Zealand response: New Zealand is not aware of any homeopathic remedies for aquaculture systems.

8. Action for eWG on revised Annex 3, Table 2'

Members of the eWG are requested to reflect on this table, having regard to the comments on this from Thailand, Ireland and the US in particular. There will be an opportunity to discuss the content at the physical working group meeting in May 2013

New Zealand response: New Zealand is satisfied with the lists as they are proposed in the document eWG Aqua_Discussion_Paper_15_1_13.doc.

9. On revised Annex 3

Members of the eWG are requested to state if they agree with the proposed amendments above

New Zealand response: New Zealand agrees with the proposed amendments, and proposes additional amendments to two clauses, that may have been missed in the previous round. (See below under “Other Specific Comments”.)

OTHER SPECIFIC COMMENTS

FOREWORD

Current Proposal:

5. Organic **production** is one among the broad spectrum of methodologies which are supportive of the environment. Organic production systems are based on specific and precise standards of production which aim at achieving optimal agro **and aquatic** ecosystems which are socially, ecologically and economically sustainable. Terms such as “biological” and “ecological” are also used in an effort to describe the organic system more clearly. Requirements for organically produced foods differ from those for other agricultural or **aquacultural** products in that production procedures are an intrinsic part of the identification and labelling of, and claim for, such products. (JAPAN: Organic aquaculture is that minimizing negative impacts to environment, and harvesting seaweed and aquatic animals under conditions as natural as possible.)

New Zealand comments: In response to Japan’s suggestion to amend para 5 of the Foreword regarding ‘minimising negative impacts on the environment’, New Zealand proposes the addition of a sentence to this paragraph, (underlined):

Organic production is one among the broad spectrum of methodologies which are supportive of the environment. Organic production systems are based on specific and precise standards of production which aim at achieving optimal agro and aquatic ecosystems which are socially, ecologically and economically sustainable. Organic production systems are developed with the goal of minimising negative impacts on the environment. Terms such as “biological” and “ecological” are also used in an effort to describe the organic system more clearly. Requirements for organically produced foods differ from those for other agricultural or aquacultural products in that production procedures are an intrinsic part of the identification and labelling of, and claim for, such products. (JAPAN: ~~Organic aquaculture is that minimizing negative impacts to environment, and harvesting seaweed and aquatic animals under conditions as natural as possible.~~)

The aim of minimising negative impacts on the environment is not limited to only aquatic environments.

SECTION 1. SCOPE

Current Proposal:

- 1.1 These guidelines apply to the following products which carry, or are intended to carry, descriptive labelling referring to organic production methods:
- a) unprocessed plants and plant products, seaweed and seaweed products, livestock and livestock products, aquaculture animal and aquaculture animal products to the extent that the principles of production and specific inspection rules for them are introduced in Annexes 1 and 3; and

New Zealand comments: New Zealand proposes that the wording in the Scope section remains as it is, but that the definition for “seaweed” (for the purposes of these Guidelines) is expanded to include the products excluded by the FAO definition. See proposed text below.

SECTION 2. DESCRIPTION AND DEFINITIONS

Definitions

Current Proposal:

Closed recirculation system means a type of enclosed unit from which the effluent water does not connect to open waters, which depends on permanent external energy input to pump, heat or cool and recirculate water and to treat the effluent water to enable its reuse.

New Zealand comments: New Zealand supports the proposed wording of Canada, or a variation there on. We also support the concern that Norway appears to have raised about managing the contamination of the external environment with untreated effluent water. We propose the following slight rewording, for consideration:

“**Closed recirculation system** means a type of enclosed environment on land or on a vessel having a system for recirculation of water, including treatment of effluent water, to enable its reuse. Closed recirculation system’s should have a limited and managed barrier preventing discharge of untreated effluent from the unit to the external environment.”

Current Proposal:

Seaweed means large marine alga occurring both naturally and under cultivation, but specifically excluding phytoplanktonic algae and microalgae¹.

New Zealand comments: New Zealand proposes that the definition for “seaweed” (for the purposes of these Guidelines) is expanded to include the products excluded by the FAO definition. This could simplify the wording in the Scope and subsequent references to ‘seaweed, aquatic plants, phytoplanktonic algae, (etc.)).

“Seaweed: Large marine alga, occurring both naturally and under cultivation, but specifically excluding phytoplanktonic algae and microalgae (Synonym: macro algae, Source: FAO (online) Glossary of Aquaculture). For the purposes of these Guidelines, Seaweed may also include phytoplanktonic algae, microalgae, cyanobacteria, kelp and aquatic plants.

Note: the January 2013 discussion paper scope/definitions would exclude products such as Spirulina.

New Zealand comments: New Zealand recommends developing an additional two definitions for “Wild harvest” and “Organic Management Plan”:

Wild harvest

New Zealand recommends adding a definition for ‘wild harvest’. This should include wild harvest of seaweeds, aquatic organisms as well as plants and plant products. The principles set out in Annex 1.A.9 could be utilised and edited to provide this definition.

We are concerned that without a definition for wild harvest, inferences to wild harvest (e.g. forest fruits) could become confused by any seeming precedent set by the text of passages on aquaculture and seaweed.

Organic Management Plan

New Zealand notes that the term “Organic Management Plan” has been introduced to the Guidelines (in A2, para 4, and B2, para 3). This term is not specifically defined, but alluded to in a number of other places, (Foreword, paragraph 9 and Annex 3 section A).

New Zealand recommends developing and including a concise definition for this term. “Organic Management Plans” are one the primary documentary tools against which we verify that an operation can and has met the principles of organic production systems, irrespective of the products being produced.

SECTION 5. REQUIREMENTS FOR INCLUSION OF SUBSTANCES IN ANNEX 2 AND CRITERIA FOR THE DEVELOPMENT OF LISTS OF SUBSTANCES BY COUNTRIES

Current Proposal:

5.1.d) if they are used for the purpose of cleaning and disinfection of ponds ,cages, buildings and installations used for aquaculture animal production. :

- they should be essential for the control of a harmful organism or a particular disease for which other biological, physical, or breeding alternatives and/or effective management practices are not available; and
- their use should take into account the potential harmful impact on the environment, the ecology (in particular non-target organisms) and the health of consumers, aquaculture animals; and
- substances should be of plant, animal, microbial, or mineral origin and may undergo the following processes: physical (e.g. mechanical, thermal), enzymatic, microbial (e.g. composting, digestion);
- their use may be restricted to specific conditions, specific regions or specific commodities;

New Zealand comments: New Zealand does not support repeating the third indent of Section 5.1.c (additives or processing aids used in the preparation or preservation of food) to include it also in Section 5.1.d. There is no parallel to this indent in sections 5.1.a (substances used for fertilization / soil conditioning purposes) or 5.1.b (substances used for plant disease or pest and weed control).

ANNEX 1 - PRINCIPLES OF ORGANIC PRODUCTION B.2 AQUACULTURE ANIMALS AND THEIR PRODUCTS

General principles

Current Proposal:

2. Aquaculture operators must maintain on an ongoing basis an Organic Management Plan, to guide the operation of the production unit, particularly regarding environmental issues, so as to ~~maintain~~ or keep impact on the environment low and set out a monitoring programme to ensure that this aim is achieved each year. The plan should cover nutrient discharge, if applicable, and the repair and surveillance of technical equipment. The Organic Management Plan should document how monitoring is done to ensure there is minimal impact to the surrounding environment.

New Zealand comments: New Zealand proposes the following rewrite:

Aquaculture operators must maintain on an ongoing basis an Organic Management Plan (OMP), to guide the operation of the production unit. The OMP should include plans for addressing environmental issues to ensure there is minimal impact on the surrounding environment, such as:

- procedures for nutrient discharge, if applicable,
- the repair and surveillance of technical equipment,
- any other mechanisms for keeping impact on the environment low, and
- a description of the monitoring programme for ensuring that these goals are achieved each year.

Alternatively, this text could be used as the basis for developing a Definition for “Organic Management Plan”, applicable to all organic production operations.

Origin of stock and conversion of non-organic aquatic animals to organic

Current Proposal:

8. ~~It is preferable that~~ Locally grown aquatic species, as defined in these Guidelines (Section 2, para 2.2) should be used for organic farming ~~where possible~~. The species should be able to adapt to local conditions and selection criteria should include their vitality and resistance to pests and diseases. Following the conversion period if organic aquaculture animals are not available, young non-organic aquaculture stock may be introduced for on-growing provided that the latter two thirds of their production cycle or 90% of their final biomass is under organic management and providing the stock is healthy. [alternative suggestion for consideration by eWG: When organic juveniles are not available, the certifying body would prescribe a time limit and percentage of non-organic juveniles for use according to the production of the species] .Breeding stock should come from organic production units, where the parent stock have been under organic management for at least three months prior to breeding. For bivalve shellfish seed and juveniles of yellow tail may be wild-harvested from outside of the production area, provided such harvesting is permitted by legislation, and records are kept to allow it be tracked back to the collection area. Genetically modified organisms (GMOs) and stock produced using hormones must not be used.

New Zealand comments: New Zealand does not support permitting “juveniles of yellow tail” to be wild-harvested. We may consider supporting the Latin name of this aquatic species.

New Zealand proposes spitting paragraph 8 into two paragraphs, one to address ‘origin of stock’, and the second to address ‘conversion of non-organic aquatic animals’:

8A. Locally grown aquatic species, as defined in these Guidelines (Section 2, para 2.2) should be used for organic farming. The species should be able to adapt to local conditions and selection criteria should include their vitality and resistance to pests and diseases. Breeding stock should come from organic production units, where the parent stock have been under organic management for at least three months prior to breeding. For bivalve shellfish, seed may be wild-harvested from outside of the production area, provided such harvesting is permitted by legislation, and records are kept to allow it be tracked back to the collection area. Genetically modified organisms (GMOs) and stock produced using hormones and/or antibiotics must not be used.

8B. Following the conversion period if organic juvenile aquaculture animals are not available, the certifying body would prescribe a time limit and percentage of non-organic juveniles for use according to the production of the species, provided that the latter two thirds of their production cycle or 90% of their final biomass is under organic management and providing the stock is healthy.

Production rules for husbandry and breeding

Current Proposal:

10 Competent authorities, or other recognised bodies, shall develop and publicise guide values for maximum densities for the species grown under their authority, which are reflective of the natural behaviour of the species involved and in keeping with good welfare.

New Zealand comments: New Zealand supports the existing text, or a variation thereon. New Zealand does not support fixing maximum stocking densities in the Guidelines. The following wording could be considered:

“Competent authorities, or other recognised bodies, shall develop and publicise guide values for maximum densities for the species grown under their authority. Stocking density shall allow the organisms to exhibit natural behaviour and shall not compromise animal welfare.”

Current Proposal:

12. Closed recirculation systems are prohibited except when used as hatcheries or nurseries or for production of species used as organic feed on account of the fact that such systems depend on external energy inputs and are high in energy consumption. As they have some positive features, such as reduction of waste discharges and prevention of escapes, this prohibition may be reviewed at a future date [alternative: in five years], as greater knowledge becomes available on their environmental viability and compatibility with organic production.

New Zealand comments: New Zealand supports the (restricted) use of closed recirculation systems, and supports the proposal that this clause be reviewed in the future.

Nutrition

Current Proposal:

15. Where feed is used, aquaculture operations should include procedures for avoiding feed contamination in compliance with national regulations or as determined by internationally agreed standards. The feed should meet the animal's nutritional requirements at the various stages of its development. Plant material used in aquaculture feed must be organically grown and should always meet the requirements of these guidelines. Carnivorous fish should not be fed material from the same species, nor a totally plant-based diet to ensure their physiological needs are met and to ensure good welfare. The aquatic animal based portion of the feed should be made from fish meal and fish oil, or ingredients of fish origin, or from organic feed material of non-aquatic origin, derived from the following sources in priority order:

- organically grown aquatic animals and their trimmings, or
- trimmings of fish caught for human consumption in sustainable fisheries, or
- fish and invertebrates caught in sustainable fisheries, or
- organic feed material of non-aquatic origin as allowed by national legislation

New Zealand comments: New Zealand commends Argentina on the suggestion to reformat and rephrase paragraph 15, and agrees with the Chair that a shorter version of Argentina's proposed amendment might be more appropriate.

New Zealand supports leaving the restrictions on feed for carnivorous fish as they are: Carnivorous fish should not be fed material from the same species.

New Zealand supports Thailand's suggestion to provide for circumstances where 100% organic feed is unavailable. Such provisions should be limited in time and scope, subject to periodic review, and managed by the official body. Genetically engineered/modified organisms or product thereof are prohibited. Feed stuffs should not have residues. This provision parallels Annex 1, paragraph B15 for livestock and livestock products.

Health and welfare**Current Proposal:**

16. Disease prevention in organic aquaculture shall may be based on guidelines and standards set by the OIE and the principles and practices for health care of livestock (terrestrial animals) in these guidelines, specifically Annex B.I, paragraphs, 20, 21, 22 and 24 and on the following additional points:

- ensuring that the siting and design of the production unit is optimal and that there is regular cleaning and disinfection of premises with organic disinfectant where appropriate.
- ~~Homeopathic medicines should be used by preference,~~
- to control ectoparasites such as sealice, natural processes, such as the use of predatory species of ectoparasites (and cleaner-fish if available) [alternative more general wording: appropriate production methods] should be used where possible, rather than parasiticides. Parasite treatments should be limited to twice per year, with the exception of compulsory control schemes.
- the use of allopathic treatments should be limited to two courses of treatment per year, with the exception of vaccines and compulsory eradication schemes. If the specified limits are exceeded the aquaculture animals concerned should not be sold as organic.

New Zealand comments: New Zealand is not aware of any homeopathic remedies for aquaculture systems. New Zealand proposes a rewording of the third bullet point on parasiticides:

Parasiticide treatments should not be used as a preventative control or in the place of good management practices, but may be used in the case of an infestation or where a compulsory control scheme is in place.

ANNEX 3: MINIMUM INSPECTION REQUIREMENTS AND PRECAUTIONARY MEASURES UNDER THE INSPECTION OR CERTIFICATION SYSTEM**A. PRODUCTION UNITS****Current Proposal:**

A4. When the inspection arrangements are first implemented, the operator and the official or officially recognized certification body or authority should draw up and sign a document which includes:...

New Zealand comments: New Zealand notes that while the concept of an "Organic Management Plan" has been implied, it has not been included in the Definitions section of the Guidelines.

Also, the term "Organic Management Plan" has been used in in A2, para 4, and B2, para 3.

New Zealand recommends compiling a definition for Organic Management Plan and including it in the Definitions section of the Guidelines.

Current Proposal:

5. Each year, before the date indicated by the certification body or authority, the operator should notify the official or officially recognized certification body or authority of its schedule of production of crop products and livestock, giving a breakdown by land parcel/herd, flock or hive.

New Zealand comments: New Zealand proposes an additional amendment:

Each year, before the date indicated by the certification body or authority, the operator should notify the official or officially recognized certification body or authority of its schedule of production of crop and seaweed products, ~~and~~ livestock and aquaculture animals, giving a breakdown by land parcel/herd, flock, ~~or~~ hive or aquatic sites.

Current Proposal:

14. The competent authority may accept that animals reared in accordance with the provisions of these Guidelines may be grazed on common land, or reared in aquatic zones held in common, provided that:

- a) this land has not been treated with products other than those allowed in accordance with Section 4.1 (a) and (b) of these Guidelines, for at least three years;
- b) a clear segregation between the animals reared in accordance with the provisions of these Guidelines, and the other animals can be organized.

New Zealand comments: New Zealand proposes an additional amendment:

- 14 (a) ~~this land~~ the production site has not been treated with products other than those allowed in accordance with Section 4.1 (a) and (b) of these Guidelines, for at least three years;

11) NORWAY

Section A. General Comments

Questions for eWG members to address relating to Japan's General Comments on the meaning of organic aquaculture

The members of the eWorking Group are requested to give their views on this topic and to say if they consider the existing text to be adequate?

If not, how should the principles be described more adequately?

As we read the proposed Guidelines, the text seems to be adequate and covers minimalizing negative impact on the environment, reference foreword point 7 g' and g''.

Question to eWG regarding need for harmonisation of production criteria such as maximum density in the Guidelines The eWG should reflect on this issue and come forward with views on what is the correct balance between not being over prescriptive in the Guidelines on production density and other relevant production criteria and ensuring that problems do not occur on the international-trade front in the future?

(1) Should the Guidelines include maximum stocking densities?

(2) Is there a need for more harmonisation for the general production criteria covered by paragraph B.2.14?

1. We are of the opinion that the guidelines should include maximum stocking densities. This will reduce large variation of organic production worldwide, which can cause great difference regarding quality for the same type of species, and can give trading problems.
2. Yes, we are of the opinion that there is a need for more harmonization for the general production criteria covered by paragraph B.2.14.

Question for eWG on positive list of substances

Members of the eWG are requested to state if they do not agree with this proposed amendment and the reason for disagreeing. Views on the amendments proposed for Nutrition in B, General Comments, below, are also requested here

We agree that there should be a positive list for feed additives, antioxidants, pigments and preservatives. However, we would prefer that such a list is established by the Codex Committee and not by the competent authority as this can cause great difference regarding quality for the same type of species, and can give trading problems.

This list could be according to the list for livestock, B1, para 18. However, we would like this to be discussed at the WG in May.

B. Specific Comments

It is proposed that both of these small amendments are agreed.

Question for eWG on above edits to Foreword paragraphs 2 & 4

Members of the eWG are requested to state if they do not agree with this proposed edits and the reason for disagreeing

We agree that these small amendments are made to foreword para 2 and 4.

Question for eWG on above edits to Foreword paragraph 7

Members of the eWG are requested to state if they do not agree with the proposed edits and the reason for disagreeing

- f. We agree with Chairs proposal.
- g. We support the proposal
- g' We support Chairs proposal.
- g'' We support Chairs proposals.

Section 1.1.a) of Section I. Scope

We agree with the chair that this point can be discussed at the WG in May. However, we find the unclear if the proposal want to exclude seaweed and kelps for human consumption.

Our opinion is that it should also be able to produce organic seaweed and kelps for food.

Question for eWG on amended definition of closed recirculation system

Members of the eWG are requested to state if they agree with the proposed amended definition;

Closed recirculation system means a type of enclosed unit (on land or a vessel), with very limited and managed barrier-connection to open waters, with recirculation depending on permanent external energy input to pump/circulate the water, and a system to treat the effluent water to enable its reuse.

We do not fully agree with the proposal. We do question the need to include the middle part of the sentence, **with recirculation depending on permanent external energy input to pump/circulate the water**, as we do not see what it adds to the first part. Our proposal would then be: **Closed recirculation system means a type of enclosed unit (on land or a vessel), with very limited and managed barrier-connection to open waters and a system to treat the effluent water to enable its reuse.**

We also would like to discuss the wording **(on land or a vessel)** and would prefer that the phrase **(on land or in water)** is used.

Health and Welfare

Action Item: Members of the eWG are asked to provide information and views they may have on this issue of homeopathy in aquaculture.

Actually homeopathic medicine does not have any meaning for cages in sea. However, there may be places as ponds and smaller lakes where it may be used. Homeopathic treatment is a traditionally and originally part of the organic principles, so we would prefer that homeopathic treatment should be included. We do

agree with UKs question if it is correct term to use “medicine” in connection with homeopathy. We also would like to support Canadians proposal saying that *Homeopathic medicines should be used by preference to chemical veterinary drugs, provided that their therapeutic effect is effective for the species of animal and the condition for which the treatment is intended.*

Annex 3

Action for eWG on revised Annex 3, Table 2'

Members of the eWG are requested to reflect on this table, having regard to the comments on this from Thailand, Ireland and the US in particular. There will be an opportunity to discuss the content at the physical working group meeting in May 2013

We agree that there should be a positive list. We appreciate that it will be possible to discuss this at the physical working group in May.

Question for eWG on revised Annex 3

Members of the eWG are requested to state if they agree with the proposed amendments above

Yes, we can agree with the proposed amendments above.

12) PANAMA

Panama thanks the EU the opportunity to comment on the guidelines for organically produced food include Aquaculture and seaweed.

Our comments so generally to the guidelines, appropriate considering the comments made by the countries. Considering as the basic method for maintaining organic production philosophy, clearly excluding the presence of chemicals not allowed, such as hormones and other unauthorized additives for fish and other organic bodies, in addition to clearly establish that the production areas should not be near the breeding of genetically modified organisms

Panama considers it appropriate to make changes to the guide Codex organic guidelines, and that organic production has increased and countries require guidelines for organic products, thus allowing greater increase in the existing group of foods.

. General Comments

Meaning of Organic Aquaculture

Panama also proposes using the term agroecology is a production process which leverages local resources and synergy of the agroecosystem level processes, using practices that favor their complexity, adopting biological control and organic nutrition optimally in the management of the production system or farm.

Questions for eWG members to address relating to Japan's General Comments on the meaning of organic aquaculture

The members of the eWorking Group are requested to give their views on this topic and to say if they consider the existing text to be adequate?

A. Yes, adequate text

Question to eWG regarding need for harmonisation of production criteria such as maximum density in the Guidelines The eWG should reflect on this issue and come forward with views on what is the correct balance between not being over prescriptive in the Guidelines on production density and other relevant production criteria and ensuring that problems do not occur on the international-trade front in the future?

(1) Should the Guidelines include maximum stocking densities?

A. Yes, if densities should include

(2) Is there a need for more harmonisation for the general production criteria covered by paragraph B.2.14?

A. Whether further harmonization is needed, since there are different regional production techniques

Question for eWG on positive list of substances

Members of the eWG are requested to state if they do not agree with this proposed amendment and the reason for disagreeing. Views on the amendments proposed for Nutrition in B, General Comments, below, are also requested here.

A. Panama agree with this amendment

Question for eWG on above edits to Foreword paragraphs 2 & 4

Members of the eWG are requested to state if they do not agree with this proposed edits and the reason for disagreeing

A. Wording should be improved.

Several comments have been made regarding the second half of para. 7 as follows:

FOREWORD paragraph 7.	
f) promote the healthy use of soil, water and air as well as minimize all forms of pollution thereto that may result from agricultural practices;	<p>Norway – add ‘and aquaculture’ in front of final word</p> <p>Chair comment: Agree and suggest that when the adjective form “agricultural” is used that the adjective form ‘aquacultural’ is used to match. The definition of Agricultural Products/product of agricultural origin has been amended in the</p>

	Consultation Document so as to avoid the need to insert 'and aquaculture' almost every time the work "agriculture" is used in the Guidelines
g) handle agricultural products with emphasis on careful processing methods in order to maintain the organic integrity and vital qualities of the product at all stages;	Norway – add 'and aquacultural' as words three and four Chair comment: Agree.
g') <u>the preservation of natural aquatic resources</u>	Australia – “ preserve natural aquatic resources Japan – delete g') (see General Comments above for reason) Thailand – use “conservation” rather than preservation and move upwards to become new 7.d Chair comment: agree to “conservation” but prefer to maintain location as this develops 7f) Comment: Panama agree to maintain the conservation of natural resources

Question for eWG on above edits to Foreword paragraph 7

Members of the eWG are requested to state if they do not agree with the proposed edits and the reason for disagreeing

A. *We agree*

13) SWEDEN

Sweden would like to thank the chair for the opportunity to comment the questions in the discussion paper .

Questions for eWG members to address relating to Japan’s General Comments on the meaning of organic aquaculture

The members of the eWorking Group are requested to give their views on this topic and to say if they consider the existing text to be adequate?

If not, how should the principles be described more adequately?

A. Although non-organic aquaculture should also contribute to “the preservation of natural aquatic resources” does not relieve organic aquaculture of their duties. Thereby 7g in the guidelines for organically produced food should stay

Question to eWG regarding need for harmonisation of production criteria such as maximum density in the Guidelines The eWG should reflect on this issue and come forward with views on what is the correct balance between not being over prescriptive in the Guidelines on production density and other relevant production criteria and ensuring that problems do not occur on the international-trade front in the future?

(1) Should the Guidelines include maximum stocking densities?

(2) Is there a need for more harmonisation for the general production criteria covered by paragraph B.2.14?

A. *Other aspects that should also be unified are oxygen saturation. Due to the fact that the nets used in organic aquaculture are not impregnated will result in the growth of epiphytes on the net, which decreases the water flow i.e. oxygen saturation. Thereby affecting the life quality of the aquaculture animals.*

Question for eWG on above edits to Foreword paragraph 7

Members of the eWG are requested to state if they do not agree with the proposed edits and the reason for disagreeing

A. *Regarding to g) and g’), changing to “conservation” instead of “preservation” and “aquatic instead of marine and freshwater” is good but g) and g’) derives more from f) which in about minimizing pollution not g) which in about the quality of the product. Therefor g) and g’) should be changed to f) and f’). Furthermore, in f) and g) it only says agriculture. Aquaculture should be included.*

Section 2.2 Definitions

Japan suggested an amended definition of "**Aquaculture**":

"means farming **during part or the whole of their life cycle of all aquatic animals, except mammalian species, aquatic reptiles and amphibians, intended for human consumption**—of aquatic organisms involving intervention in the rearing process to enhance production and the individual or corporate ownership of the stock being cultivated."

The Chair would prefer to retain the original proposal, as it the definition used by the FAO in the Technical Guidelines on Aquaculture Certification finalised in 2011. The Chair agrees with Japan on excluding mammals, reptiles and amphibians but feels that this is best dealt with in other sections as described in the following paragraph. The definition of aquaculture in the Codex Code of practice for fish and fishery products does not include bivalve shellfish.

The suggestions from Japan under General Comments regarding a suggested definition of "**organic aquaculture**" are recalled here but are not repeated. Argentina suggests adding a four line definition of "**Aquatic organisms**" which would include reptiles, amphibians and aquatic plants.....that have a partial or complete cycle in direct relation to water....." As mentioned under the section on Scope above the original proposal is specific to species used in conventional aquaculture which include fish, various species or aquatic invertebrates and seaweed, as outlined in the scope and in sections A.2 and B.2 of Annex I. As such as definition could see the Guidelines going into new fields (e.g. crocodile farming) unintentionally, the Chair would prefer to retain the original proposal, but there will be an opportunity to discuss this at the physical working group in May 2013. Japan

Comment: In Council Directive 2006/88/EC of 24 October 2006 on animal health requirements for aquaculture animals and products thereof, and on the prevention and control of certain diseases in aquatic animals, aquaculture animal has already been defined as :“means any aquatic animal at all its life stages, including eggs and sperm/gametes, reared in a farm or mollusc farming area, including any aquatic animal from the wild intended for a farm or mollusc farming area” This includes fish, mollusc and crustaceans. From an EU-perspective, it would be very unfortunate to have different definitions and not include bivalve shellfish. The same applies to the definition of aquaculture: “means the rearing or cultivation of aquatic organisms using techniques designed to increase the production of those organisms beyond the natural capacity of the environment and where the organisms remain the property of one or more natural or legal persons throughout the rearing or culture stages, up to and including harvesting”

Action Item: Members of the eWG are asked to provide information and views they may have on this issue of homeopathy in aquaculture.

A. Homeopathy is not used in aquaculture. Sweden agrees with UK that it is not medicine, it has no proven effect. It should be deleted from the text.

14) SWITZERLAND

Questions for eWG members to address relating to Japan's General Comments on the meaning of organic aquaculture

The members of the eWorking Group are requested to give their views on this topic and to say if they consider the existing text to be adequate?

If not, how should the principles be described more adequately?

A. Switzerland agrees with the proposed amendment by the EU Chair.

Question to eWG regarding need for harmonisation of production criteria such as maximum density in the Guidelines The eWG should reflect on this issue and come forward with views on what is the correct balance between not being over prescriptive in the Guidelines on production density and other relevant production criteria and ensuring that problems do not occur on the international-trade front in the future?

(1) Should the Guidelines include maximum stocking densities?

A. Switzerland would for the time being not include specific stocking densities or use the figures only indicative way. However it would be important to include some criteria for national regulators, which must be considered when setting specific stocking densities. These criteria should take animal health and welfare outcomes into account.

(2) Is there a need for more harmonisation for the general production criteria covered by paragraph B.2.14?

A. Switzerland prefers more harmonisation regarding general production criteria, in particular with regard to nutrition and health management.

Question for eWG on positive list of substances

Members of the eWG are requested to state if they do not agree with this proposed amendment and the reason for disagreeing. Views on the amendments proposed for Nutrition in B, General Comments, below, are also request

A. Switzerland agrees with the proposed amendment.

Question for eWG on above edits to Foreword paragraph 7

Members of the eWG are requested to state if they do not agree with the proposed edits and the reason for disagreeing

A. Switzerland does agree with the edits.

Question for eWG on amended definition of closed recirculation system

Members of the eWG are requested to state if they agree with the proposed amended definition

A. Switzerland is not satisfied with the definition. At the end it should be added ...to enable its reuse, in general associated by high production intensity.

Discussion Document – pages 9 & 10:

B.2 Aquaculture Animals and their products

General principles

There are requests to alter or delete the introductory para 1 and the Chair proposed to delete it. Ireland suggests that a general reference to the Codex Code of Practice for Fish and Fishery Products, Section 6, at the beginning of this Section and has suggested the following text:

“The operation and management of aquaculture production, whether in containment systems or not, should respect the principles of organic production and the Codex Code of Practice for Fish and Fishery Products, Section 6 (CAC/RCP 52-2003) AS APPROPRIATE ”.

The Chair agrees to the text with the words “as appropriate’ added at the end to take account of the fact that Code of Practice was drawn up with safety and quality in mind for conventional production and has a

different approaches in some areas (it does not cover extensive fish farming systems; excludes bivalve shellfish from aquaculture etc.)

In para 2 the US wording "be consistent with" is better than respect, as above (A.2 para 2). In para 3, line 3 it is proposed to replace the wording "*improve the natural resources of the operation*" by the alternative wording proposed by the US:

"keep impact on the environment low"

The final sentence of para 3 should be deleted as it repeats. The Chair proposes to add the Australian additional text concerning the Organic Management Plan, at the end of this para:

"The Management Plan could also include a water quality monitoring scheme for early detection of potential contaminants from unlikely events such as an oil spill or other potential contamination of the harvest area."

Comment of Switzerland: on the last sentence this is only relevant for ponds : shrimps, carps, etc.

Discussion Document – page 12:

Paragraph 12. Closed Recirculation Systems. The definition attracted several comments and a number of comments were made on the text of this paragraph also. Both Japan and Italy agreed with the prohibition and neither favours a review. At an earlier stage IFOAM stated that it does not favour CLS use in in organic aquaculture. On the other hand Canada (subject to conditions), Norway, Thailand and the USA favoured permitting closed recirculation systems in the Guidelines. The Chair proposes to refer this issue for the physical working group in May 2013 for further discussion.

Comment: Switzerland does not favour Closed Recirculation Systems as most of these closed systems have very high stocking densities, which are 5-10 times higher and which do not fulfil animal welfare principles sufficiently.

Switzerland has the following comments regarding the text of point 12

Closed recirculation systems are prohibited **except when used as hatcheries or nurseries or for production of species used as organic feed*** on account of the fact that such systems depend on external energy *inputs and are high in energy consumption***

** this exception is not necessary as in reality this happens mostly in open systems. Questioned if this should be mentioned.*

*** it should be added "and strictly follows given stocking density rules"*

Paragraph 13. Further to the request from the US, as polyploidy and hybridisation are known to occur naturally, the word "artificial" is used in the para to indicate situations when it is not a natural occurrence.

Comment:

1. Artificiala hybridisaiton critical, we need to forbid also other techniques associated with use of hormones,

2. There should be an amendment made: Eye stalk ablation in shrimp farming/hatcheries is prohibite with the exception for research facilities being part of selection programmes, which aims to overcome problems of shrimp reproduction (especially P. monodon).

Discussion Document – pages 13 &14, Table on Section B.2 paragraph 15 – suggestion of Thailand to allow "synthetic substances" - not more than 5% of formula:

Comment:

- *comment to the proposal of Thailand regarding synthetically produced substances – these have to be forbidden.*
- *Furthermore sustainable fisheries should be defined.*

Action Item: Members of the eWG are asked to provide information and views they may have on this issue of homeopathy in aquaculture.

A. Homeopathic treatments should be allowed as it is the case in the animal husbandry (where for some substances positive effects could be documented scientifically. Research has started in Switzerland to test homeopathic substances in aquaculture.

Discussion Document – page 15:

The US suggests the following text:

Treatment with parasiticides should only be done in the case of an infestation; not as a preventative control.

Given that one responding member country believes the text regarding treatments is over strict and another believes it not strict enough, the Chair proposes to maintain the text as it is. As some countries require

mandatory treatments in the case of compulsory control schemes, the requirement to treat with parasiticides only in the case of an infection, may not be in compliance with local legislation in such countries.

Comment: it should be added: organic farms are recommended to participate to research programmes, suitable for organic aquaculture, regarding parasite control.

Action for eWG on revised Annex 3, Table 2'

Members of the eWG are requested to reflect on this table, having regard to the comments on this from Thailand, Ireland and the US in particular. There will be an opportunity to discuss the content at the physical working group meeting in May 2013

A. Switzerland is still consulting more on these substances and might give comments at the physical working group meeting. For the time being the list is a good starting point for the discussion.

Question for eWG on revised Annex 3

Members of the eWG are requested to state if they agree with the proposed amendments above

A. Switzerland agrees with the proposed amendments.

15) THAILAND

Thailand would like to provide the following comments on the discussion paper. We have noted our comments base on discussion paper.

Questions for eWG members to address relating to Japan's General Comments on the meaning of organic aquaculture

Answer: We are of the view that the text in paragraph 5&6 of Forward is sufficient for describing the principles of organic aquaculture. Therefore, there is not necessary to additionally define the organic aquaculture.

Question to eWG regarding need for harmonisation of production criteria such as maximum density in the Guidelines

Answer: Since the maximum stock densities and production criteria depend on various elements, such as type of systems, farming management and region, these should be set by competent authorities. As above reason, we are point of view that it may not be possible to harmonize the maximum stock densities and production criteria in this guideline.

Question for eWG on positive list of substances

Answer: we agree with the proposed amendment suggested by the Chair. Besides, we would like to correct our previous comment on the nutrition as follow;

"(1) if necessary, raw material from conventional agriculture may be used in an amount of not more than 15% of the raw materials from cultivated plants;

(2) if the synthetic substances are necessarily used in feed, only substances in **Annex A 2, Table A-5 3** are allowed to use in an amount of not more than 5% of the formula."

Question for eWG on above edits to Foreword paragraph 7

Answer: We agree with the text edition. However, we still would like to suggest the re-sequence of bullets . This is because bullet b (& c (stated about the resources. For well understanding, the text about water resource should be next to b (& c(. We, then, realized that the bullet g' and g'' should be placed next to bullet c.

Question for eWG on amended definition of closed recirculation system

Answer: We have no objection on the revision of this definition. However, we would like to seek for clarification about "closed recirculation system". Could you please give us some examples of closed recirculation systems which are in line with the closed recirculation systems in this guideline? There are several types of closed recirculation systems. Some systems use less energy and minimize the impact on environment more than the conventional systems. Consequently, we still considered that closed recirculation systems should be allowed to be used in the production of organic aquaculture as far as they are consistent with the principles of organic.

Action for eWG on revised Annex 3, Table 2'

Answer: We would like to propose an addition of substances in Table 1.1 and 1.2 as same as previous comments as follows;

- Rotenone (in Table 1.1: Substances for cleaning and disinfection of equipment and facilities, in the absence of aquaculture animals)

Justification: This substance is complied with the criteria in section 5.1. Additionally, it will be used in the absence of aquaculture animal, it is not harmful.

- Hydrogen peroxide and Potassium permanganate (1.2. Limited list of substances for use in the presence of aquaculture animals)

Justification: Hydrogen peroxide can enhance the oxygen level in the water.

Potassium permanganate is used for the purpose of reducing pathogen and it is fast degraded.

Other matter

Beside the questions in discussion paper, we would like to share some comments on conversion period as below.

Since different aquaculture animals have different production cycle, we still would like to propose an amendment as follows;

~~“The conversion period should in general be at least one year or one organic production cycle. In cases where the water has been drained and the facility cleaned and disinfected, a shorter period of six months may apply. In the case of non-enclosed aquatic locations a shorter period”~~

Additionally, the period of “three years” of production area (last sentence of paragraph 7) contrast with the conversion period of one year. We are of the view that one organic production cycle is sufficient for the conversion period of the organically aquaculture production. We, then, suggest the deletion of this sentence. However, the prohibited substances should be specified if this sentence still retain. This is because residues of some prohibited substances can be detected for the long period (such as antibiotic as Chair mentioned in the discussion paper) or, on the other hand, residues of some prohibited substances can only be detected for the short period (such as chemical fertilizer).

16) UNITED KINGDOM

See e mail circulated to all members on 8 February (from Robin Fransella - received 16:00 CET) – comments relate to Round One document.

17) UNITED STATES

The United States is pleased to provide the following comments on the Discussion Paper of January 15, 2013 on the proposed revision of the Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods (GL 32-1999) to include Aquaculture and Seaweed for organic aquaculture.

Questions for eWG members to address relating to Japan’s General Comments on the meaning of organic aquaculture

The members of the eWorking Group are requested to give their views on this topic and to say if they consider the existing text to be adequate?

If not, how should the principles be described more adequately?

US Response:

The US believes the proposed text is adequate at this time.

Question to eWG regarding need for harmonisation of production criteria such as maximum density in the Guidelines The eWG should reflect on this issue and come forward with views on what is the correct balance between not being over prescriptive in the Guidelines on production density and other relevant production criteria and ensuring that problems do not occur on the international-trade front in the future?

(1) Should the Guidelines include maximum stocking densities?

US Response:

The US believes that the addition of maximum stocking densities to the guidelines for organic aquaculture may be premature at this time. We understand the concerns expressed by some eWG members; however, we feel that it may be better to address stocking densities in the future only if discrepancies in stocking densities become a barrier to trade. At this time, we do not have adequate data to comment on whether the maximum stocking densities proposed in the table for various species are appropriate for organic aquaculture production.

Question for eWG on amended definition of closed recirculation system

Members of the eWG are requested to state if they agree with the proposed amended definition.

US Response:

We look forward on additional discussion on this issue. We considered whether “permanent external energy input” could be phrased more simply, but we do not have suggested language at this time.

Action Item: Members of the eWG are asked to provide information and views they may have on this issue of homeopathy in aquaculture.

US Response:

We do not have sufficient data to comment on the use of homeopathy use in organic aquaculture; however, we noted that the proposed language is consistent with the preference for homeopathic products for terrestrial livestock elsewhere in the Guidelines.

Action for eWG on revised Annex 3, Table 2

Members of the eWG are requested to reflect on this table, having regard to the comments on this from Thailand, Ireland and the US in particular. There will be an opportunity to discuss the content at the physical working group meeting in May 2013.

US Response:

Thank you for consideration of our comments. We have identified the following substances that were included in Annex 3, Table 2 as needing additional discussion as to whether they meet the criteria established in Section 5.1 of the Guidelines:

- **Iodophores** – We are unclear whether this substance is needed and would need additional data to fully evaluate this substance against the criteria in Section 5.1 of the Guidelines.
- **Copper sulphate** – We are unclear whether this substance is needed and would need additional data to fully evaluate this substance against the criteria in Section 5.1 of the Guidelines. In addition, we are interested in additional information on why an expiration date is necessary and how the 31 December 2015 date was chosen.
- **Potassium permanganate** – We are unclear whether this substance is needed and would need additional data to fully evaluate this substance against the criteria in Section 5.1 of the Guidelines.
- **Sodium chloride** – we noted that this was listed for cleaning and disinfection of the absence of animals. We do not object to the allowance of sodium chloride (salt), but we are not familiar with its use for this purpose.
- **Humic Acid** – we noted that this was listed for cleaning and disinfection of the absence of animals. We do not object to the use of humic acids as a soil amending for crop production; however, we are not familiar with its use for cleaning and disinfection.
- We noted the inclusion of both “**Peroxyacetic acids**” and “**Peracetic and peroctanoic acids**” in the table. This may be duplicative as “peroxyacetic acid” is alternately known as “peracetic acid.”

We are also interested in the discussion that will occur at the physical working group on the best way to reach consensus on which materials that should be permitted for aquaculture cleaning. The CCFL has an established a structured process for review of materials, which may be appropriate to use for a subset of these materials. We would encourage further discussion on this issue and would suggest that the structured review process be used for any materials that appear to be controversial or which do not have an allowance for organic plant or livestock production in the current Guidelines (GL 32-1999).

Question for eWG on revised Annex 3

Members of the eWG are requested to state if they agree with the proposed amendments above.

US Response:

We noted an error at para 7 where “animas” should be “animals”.

18) IFOAM

Comments received on 8 February (subsequent comments of 18 February were sent by email to all members and are not duplicated here).

Questions for eWG members to address relating to Japan’s General Comments on the meaning of organic aquaculture

The members of the eWorking Group are requested to give their views on this topic and to say if they consider the existing text to be adequate?

If not, how should the principles be described more adequately?

A.IFOAM: IFOAM agrees with the revision language in the draft. The definition suggested by Japan is narrower in scope and does not address the organic principles in aquaculture comprehensively.

Question to eWG regarding need for harmonisation of production criteria such as maximum density in the Guidelines The eWG should reflect on this issue and come forward with views on what is the correct balance between not being over prescriptive in the Guidelines on production density and other relevant production criteria and ensuring that problems do not occur on the international-trade front in the future?

(1) Should the Guidelines include maximum stocking densities?

A. IFOAM: *No, these International Guidelines should not include specific stocking densities. FAO list of species produced in aquaculture demonstrates that this task is neither appropriate nor really feasible at the worldwide level, considering that aquaculture covers a large number of species of fish, crustaceans and molluscs, and the relevant species will differ from region to region, and maybe even country to country. Prescriptive details like this should be left to the competent authorities while the international guidelines should present what outcomes should be achieved when considering stocking densities. Some of the existing national standards specify outcomes to be achieved and do not themselves prescribe stocking density on a species by species basis (Thailand, Australia). However, the guidelines should specify that stocking density should reflect due consideration of the optimal health and welfare of the animal, and the quality of the surrounding environment. The Working Group should also discuss if there should be language referencing density and the sustainable yield of the ecosystem, such as in the Canadian aquaculture standards.*

Question for eWG on amended definition of closed recirculation system

Members of the eWG are requested to state if they agree with the proposed amended definition

A. IFOAM: *The proposed definition should be reconsidered. Scientific literature refers to systems with limited connection to open waters as "semi-closed recirculation systems". Furthermore, the proposed new definition does not refer to systems with no connection to open water and therefore misses the main point.*

Discussion Document page 8:

Thailand suggests the addition of a definition of "Conversion period". The Chair suggests the following text: **"Conversion period means the transition from conventional to organic farming within a given period of time, during which the guidelines concerning the organic production have been applied."**

Comment: IFOAM questions if it is within the scope of this EWG to propose a new general definition, but is also of the view that this term should be defined in the Guideline. IFOAM suggests the following, simpler definition:

Conversion: The time of transition from non-organic to organic farming.

Discussion Document pages 9 and 10:

In para 2 the US wording "be consistent with" is better than respect, as above (A.2 para 2). In para 3, line 3 it is proposed to replace the wording "improve the natural resources of the operation" by the alternative wording proposed by the US:

"keep impact on the environment low"

Comment: IFOAM prefers to retain the current language in para 3 line 3. The phrase "maintain or improve the natural resources of the operation" have a specific meaning that is not covered in the additional phrase regarding "keeping impact on the environment low."

The final sentence of para 3 should be deleted as it repeats. The Chair proposes to add the Australian additional text concerning the Organic Management Plan, at the end of this para:

"The Management Plan could also include a water quality monitoring scheme for early detection of potential contaminants from unlikely events such as an oil spill or other potential contamination of the harvest area."

Comment IFOAM: It should be considered and discussed if this additional language is too specific. Use of the word "could" is problematic in this document. It is not normative language.

Siting

The US suggests an alternative text for second sentence of para 4:

The production area should have characteristics which allow the production of safe-ORGANIC products of high quality without unacceptable negative while minimizing negative environmental impacts on surrounding natural ecosystems.

The Chair proposes to accept this with the addition of the word organic (in capital letters).

Comment IFOAM: What is the reason for writing organic in capital letters?

Action for eWG on revised Annex 3, Table 2'

Members of the eWG are requested to reflect on this table, having regard to the comments on this from Thailand, Ireland and the US in particular. There will be an opportunity to discuss the content at the physical working group meeting in May 2013.

A. *IFOAM: Something for IFOAM to consult internally and comment in May*

Annex 1

Brazilian comment in Round One

(i) General Comments:

Unfortunately, Brazil was left out of the first round of the eWG Consultation. Nevertheless, we appreciate the opportunity to present our comments in relation to the first consultation document.

Brazil supports the proposal to integrate aquaculture into the Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods (GL 32-1999).

(ii) Specific Comments:

Foreword:

2. The aims of these guidelines are:

- to protect consumers against deception and fraud in the market place and unsubstantiated product claims;
- to protect producers of organic produce against misrepresentation of other agricultural and aquaculture produce as being organic;

...

Rationale: Brazil suggests including the words 'and aquaculture' in the second bullet of section 2 in order to properly include aquaculture in this section.

4. These guidelines set out the principles of organic production at farm, preparation, storage, transport, labelling and marketing stages, and provides an indication of accepted permitted inputs for soil fertilizing and conditioning, plant pest and disease control, substances for cleaning and disinfection ~~in aquaculture~~ and, food additives and processing aids. For labelling purposes, the use of terms inferring that organic production methods have been used are restricted to products derived from operators under the supervision of a certification body or authority.

Rationale: Brazil suggests deleting the words 'in aquaculture'. There is no need to restrict the list of substances for cleaning and disinfection only for aquaculture purposes.

6. ...The primary goal of organic production is to optimize the health and productivity of interdependent communities of soil or aquatic life ~~life~~, plants, animals and people

Rationale: The word 'life' is repeated and should be deleted.

7. ...

e) rely on renewable resources in locally organized ~~agricultural~~ production systems;

f) promote the healthy use of soil, water and air as well as minimize all forms of pollution thereto that may result from ~~agricultural~~ production practices;

~~g~~h) the preservation of natural aquatic resources;

~~g~~i) maintain or improve the ~~marine or freshwater~~ aquatic environment in the case of aquaculture;

~~h~~j) become established on any existing farm through a period of conversion, the appropriate length of which is determined by site-specific factors such as the history of the land or aquatic medium, and type of crops, ~~livestock, aquatic animal or seaweed~~ organism to be produced.

Rationale: Brazil understands that the principles stated in subsections (e) and (f) are also applied to aquaculture systems. Thus, we suggest the replacement of the word 'agricultural' by 'production'. The term 'aquatic organism' should be used instead of 'aquatic animals and seaweed' as this term is broader and aligned with the proposed definition of aquaculture.

Section 1. Scope:

1.1 These guidelines apply to the following products which carry, or are intended to carry, descriptive labelling referring to organic production methods:

a) unprocessed plants ~~and plant products, seaweed and seaweed products,~~ livestock, aquatic organism and ~~livestock products, aquaculture animal and aquaculture animal~~ their products to the extent that the principles of production and specific inspection rules for them are introduced in Annexes 1 and 3; and...

Rationale: Brazil understands that the term 'aquatic organism' should be used instead of 'aquaculture animal' and 'seaweed' as this term is broader and aligned with the proposed definition of aquaculture.

Section 2. Description and Definitions:

2.1 Description

... This is achieved by a combination of providing good quality organically grown feedstuffs, appropriate stocking rates, animal husbandry systems appropriate to behavioural needs, and animal management practices that minimize stress and seek to promote animal health and welfare, prevent disease and avoid the use of ~~chemical~~ **synthetic** allopathic veterinary drugs (including antibiotics).

Rationale: Natural medicines produced from plant extracts and other natural resources could be classified as chemical allopathic veterinary drugs, but should not have its use restricted. Thus, we suggest replacing the word 'chemical' by 'synthetic'.

(Aquaculture) production cycle means the lifespan of an ~~aquaculture animal or seaweed~~ **aquatic organism** from the earliest life stage to harvesting.

Rationale: Brazil understands that the term 'aquatic organism' should be used instead of 'aquaculture animals and seaweed' as this term is broader and aligned with the proposed definition of aquaculture.

~~Closed recirculation system means a type of enclosed unit from which the effluent water does not connect to open waters, which depends on permanent external energy input to pump, heat or cool and recirculate water and to treat the effluent water to enable its reuse~~

Rationale: Brazil suggests deleting this definition. As explained latter, we understand that the use of recirculation systems in organic production should not be prohibited. Thus, paragraph 12 and this definition would not be necessary.

Containment system means equipment for growing ~~aquaculture animals or seaweed~~ **aquatic organisms** which ~~prevents~~ **minimizes the risk of their** dispersal of the ~~aquatic organism concerned~~ - examples are, cages (net pens), ponds and tanks, long-line and rafts holding suspended ropes with the organisms attached and net bags on trestle tables;

Rationale: Brazil understands that the term 'aquatic organism' should be used instead of 'aquaculture animals and seaweed' as this term is broader and aligned with the proposed definition of aquaculture. Additionally, we suggest to replace the term 'prevents' by 'minimize the risk', because some of the containment systems (long-line and suspended ropes) do not contain the aquatic organisms in a manner which prevents their dispersal.

~~Locally grown aquatic species means both aquatic species which are grown within their natural range and those aquatic species which though outside their natural range, have been grown in commercial practice in an area and have adapted to the local environment and management conditions without adverse effects on habitats or on native species.~~

Rationale: Brazil understands that this definition is unnecessary and should be deleted. Trying to define locally grown aquatic species can be very difficult, especially for countries that have a mega biodiversity. Additionally, we have suggested further amendments that eliminate the need for the use of the term 'locally grown aquatic species'.

Section 5. Requirements for inclusion of substances in annex 2 and criteria for the development of lists of substances by countries

d) if they are used for the purpose of cleaning and disinfection of ponds, cages, buildings and installations used for aquaculture ~~animal~~ production :

- they should be essential for the control of a harmful organism or a particular disease for which other biological, physical, or breeding alternatives and/or effective management practices are not available; and
- their use should take into account the potential harmful impact on the environment, the ecology (in particular non-target organisms) and the health of consumers, **producers**, aquaculture animals; and

- substances should be of plant, animal, microbial, or mineral origin and may undergo the following processes: physical (e.g. mechanical, thermal), enzymatic, microbial (e.g. composting, digestion);
- their use may be restricted to specific conditions, specific regions or specific commodities;

Rationale: Brazil suggests the following amendments: deleting the word 'animal' from subsection (d) as these substances could be used in other aquaculture production systems (ex. seaweed), and inserting the word 'producers' in the second dash.

A.2 Seaweeds and seaweed products

~~1. This section applies to seaweed and kelps and in addition to phytoplankton and microalgae for use as feed for aquaculture animals. (Member countries are free to develop criteria outside the scope of these Guidelines for organic production of phytoplankton and microalgae for food use).~~

Rationale: Brazil suggests the deletion of this paragraph. The inclusion of phytoplankton and microalgae in this section is not appropriate because these organisms are not considered seaweeds according to the proposed definition. If CCFL understands that phytoplankton and microalgae for feed and/or food uses should be explicit included into the Guidelines, principles for the organic production of these aquatic organisms should be incorporated in a specific annex. This situation illustrates why the use of the term 'aquatic organism' instead of 'aquaculture animals and seaweeds' is better. It avoids being too restrictive in relation to aquaculture production.

~~4. Both farming and collection of seaweed should be carried out in areas which meet the criteria of paragraph 4 and 6 of Section B2. An Organic Management Plan should be developed and implemented by all organic seaweed producers to guide the operation of the production unit, in keeping the impact on the environment low and setting out monitoring to be done to ensure that this aim is achieved each year. The operation and management of aquaculture animals, whether in containment systems or not, should respect the principles of organic farming. The biodiversity of the aquatic environment and the quality of the surrounding water should be maintained.~~

Rationale: Brazil suggests the deletion of the last two sentences as they are already covered by paragraph 2.

7. Farming should be carried out in a sustainable manner at all stages from collection of seedlings in the wild to harvesting. The application of supplementary fertiliser using natural organic compounds to the growing area should be restricted to pond cultivation **and to the substances listed in Annex 2**. Ropes and other equipment used for growing seaweed should be re-used or re-cycled where possible. Removal of bio-fouling organisms should be by physical means.

Question: Brazil asks for clarification in the rationale to restrict the use of natural organic compounds to ponds. Additionally, for the purpose of clarification and consistency the supplementary fertilizers used should be restricted to the substances approved in the Annex 2.

B.2 Aquaculture animals and their products

2. Aquaculture operators must maintain on an ongoing basis an Organic Management Plan, to guide the operation of the production unit, particularly regarding environmental issues, so as to maintain or improve the natural resources of the operation and keep the impact on the environment low and set out a monitoring programme to ensure that this aim is achieved each year. The plan should cover nutrient discharge, if applicable, and the repair and surveillance of technical equipment. The Organic Management Plan should document how monitoring is done to ensure there is minimal impact to the surrounding environment. ~~The plan should cover nutrient discharge, if applicable, and the repair and surveillance of equipment.~~

Rationale: Brazil suggests deleting the last sentence as it is repeated.

~~4. The conditions listed for the growing water quality in Section 6.1.2 of the Codex Code of practice for fish and fishery products should apply. **The siting, design and construction of aquaculture farms should follow principles of best aquaculture practice, appropriate to species. The physical environment with regard to temperature, current, salinity and depth should also be considered as different species have different environmental requirements.**~~ The production area should have characteristics which allow the production of safe products of high quality without unacceptable negative environmental impacts on surrounding natural ecosystems. Production facilities should be located in areas where the risk of

contamination is minimized and where sources of pollution are unlikely and can be controlled or mitigated. **Ponds should have separated inlets and discharge canals so that water supplies and effluent are not mixed. Adequate facilities for the treatment of effluent should be provided to allow sufficient time for sediments and organic load settlement before used water is discharged into the public water body. Water inlets and outlets to ponds should be screened to prevent the entrance of unwanted species.** The boundaries of the production unit should be clearly defined and marked appropriately.

Rationale: Brazil understands that part of the text from section 6.1.1 from the Code of Practice for Fish and Fishery Products could be used as a reference for this paragraph. The first sentence about the growing water quality should be moved to paragraph 5.

5. The conditions listed for the growing water quality in Section 6.1.2 of the Codex Code of practice for fish and fishery products should apply. Water used for aquaculture should be of a quality suitable for the production of food which is safe for human consumption and therefore waste water from domestic or industrial sources should not be used. ~~in accordance with the FAO Technical Guidelines for Aquaculture Certification, 2011.~~

Rationale: Brazil suggests deleting the reference to the FAO Guidelines 'in accordance with the FAO Technical Guidelines for Aquaculture Certification, 2011'. This modification is necessary because the FAO guidelines allow the use of waste water from domestic or industrial sources in certain conditions.

8. ~~It is preferable that locally grown aquatic species be used for organic farming where possible.~~ The species should be able to adapt to local conditions and selection criteria should include their vitality and resistance to pests and diseases. Following the conversion period if organic aquaculture animals are not available, young non-organic aquaculture stock may be introduced for on-growing provided that the latter two thirds of their production cycle or 90% of their final biomass is under organic management and providing the stock is healthy. [alternative suggestion for consideration by eWG: When organic juveniles are not available, the certifying body would prescribe a time limit and percentage of non-organic juveniles for use according to the production of the species] .Breeding stock should come from organic production units, where the parent stock have been under organic management for at least three months prior to breeding. For bivalve shellfish, seed may be wild-harvested from outside of the production area, provided such harvesting is permitted by ~~legislation~~ **competent authorities**, and records are kept to allow it be tracked back to the collection area. Genetically modified organisms (GMOs) and stock produced using hormones, **artificial polyploidy, cloning, artificial hybridization, artificial sterilized and single sex strains** must not be used.

Rationale: Brazil understands that the first sentence is not necessary. Organic aquatic organisms must be able to adapt to local conditions and this is already reflected in the paragraph. Besides, we believe that defining locally grown aquatic species can be very difficult, especially for countries that have a mega biodiversity. Additionally, we suggest replacing the word 'legislation' by 'competent authorities'. Finally, we propose an amendment in the last sentence to clarify that stocks produced by artificial polyploidy, cloning, artificial hybridization, artificial sterilized and single sex strains must not be used in organic aquaculture.

9. The production unit should provide sufficient space for the animals' needs in terms of stocking density, ~~in numbers per cubic metre, or per square metre of surface area, as most appropriate for the species concerned.~~ They aquatic animals should be provided with good quality water with a flow rate and temperature which is suitable to the requirements of the species with sufficient oxygen and, in the case of filter feeding animals, other nutritional factors for their needs. The temperature and light conditions should be suitable for the species concerned in the particular geographic location of the production unit. When netting is used it should be kept clean by physical means or by hand.

Rationale: Brazil understands that it is not necessary to specify how stocking density should be regulated.

~~12. Closed recirculation systems are prohibited except when used as hatcheries or nurseries or for production of species used as organic feed on account of the fact that such systems depend on external energy inputs and are high in energy consumption. As they have some positive features, such as reduction of waste discharges and prevention of escapes, this prohibition may be reviewed at a future date [alternative: in five years], as greater knowledge becomes available on their environmental viability and compatibility with organic production.~~

Rationale: Brazil understands that the use of recirculation systems in organic production should not be prohibited. As mentioned in the paragraph this type of systems has positive features that could be

compatible with the principles of organic production in certain conditions. Thus, Brazil suggests deleting this paragraph.

15. Where feed is used, aquaculture operations should include procedures for avoiding feed contamination in compliance with national regulations or as determined by internationally agreed standards. The feed should meet the animal's nutritional requirements at the various stages of its development. Plant material used in aquaculture feed must be organically grown and should always meet the requirements of these guidelines. **In cases of scarceness or other special conditions, non-organic plant materials might be used in aquaculture feed.** Carnivorous fish should not be fed material from the same species, nor a totally plant-based diet to ensure their physiological needs are met and to ensure good welfare. The aquatic animal based portion of the feed should be made from fish meal and fish oil, or ingredients of fish origin, or from organic feed material of non-aquatic origin, derived from the following sources in priority order:

- organically grown aquatic animals and their trimmings, or
- trimmings of fish caught for human consumption in sustainable fisheries, or
- fish and invertebrates caught in sustainable fisheries, or
- organic feed material of non-aquatic origin as allowed by national legislation

Rationale: Brazil suggests the inclusion of an exception about the use of non-organic plant materials in aquaculture feed during implementation periods and in cases of scarceness or other special conditions. We note that a similar exception was already adopted in paragraph 15 of Annex B on livestock and livestock products.

Health and welfare

16. ...

- the use of allopathic treatments should be limited to ~~two~~ **one** courses of treatment per year **production cycle**, with the exception of vaccines and compulsory eradication schemes. If the specified limits are exceeded the aquaculture animals concerned should not be sold as organic.

Rationale: Brazil suggests modifying the criteria for allopathic treatment to one course of treatment per production cycle as it would be more compatible with the different production cycle periods of aquatic organisms worldwide.

ⁱ Definition from FAO Glossary of Aquaculture