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SUB-COMMITTEE ON FISH TRADE

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BEST PRACTICE GUIDELINES FOR INTEGRATED TRACEABILITY

SUMMARY

This paper reviews the use of traceability in the fisheries sector and explores options for integration of traceability requirements.

The Sub-Committee on Fish Trade is invited to provide comments on the options that have been identified to integrate traceability requirements. The Sub-Committee is also invited to comment on how FAO's work should proceed in relation to traceability.

INTRODUCTION

1. The purpose of this paper is to review the use of traceability in the fisheries sector and to explore options for integration of traceability requirements.
2. The eleventh session of the Sub-Committee remarked that traceability in a number of areas was increasingly becoming a requirement in international trade. The Sub-Committee also noted that efforts should be made to integrate traceability requirements in order to avoid unnecessary barriers to trade. The twenty-eight session of the Committee on Fisheries agreed that the Secretariat should develop best practice guidelines for traceability.

BACKGROUND

3. Traceability systems are a well established tool for verifying the integrity of a supply chain and for remedying failure when a supply chain's integrity is broken. One example is regulated requirements for traceability for food safety related purposes. The same disciplines are also applied to assure that traded food products do not provide a conduit that could endanger national security and public safety.
4. Over the last decade, a number of Regional Fisheries Management Organizations (RFMOs) have independently implemented documentation systems that enable contracting parties and cooperating states to verify that certain sensitive fish products have been caught in compliance with the requirements of those inter-governmental agreements, and therefore should be granted access to international markets.
5. From the start of 2010, the European Union will require catch certificates (and re-export certificates where appropriate) that can verify that all wild caught fish and shellfish traded to the EU can be traced back to the vessel that caught it and that all vessels used to supply wild captured fish to the EU were legally authorized at the time of fishing.
6. Private sector eco-labelling schemes have emerged over the last decade and, *inter alia*, have required assurance that an eco-labelled product has only been sourced from certified or otherwise approved fisheries.

DEFINITION

7. Traceability is “*the ability to trace the history, application or location of that which is under consideration*” (International Organization for Standardization, 9000:2000). When considering a product, traceability relates to the origin of materials and parts, the processing history and the distribution and location of the product after delivery.
8. In the case of food safety, the *Codex Alimentarius* (Codex Alimentarius Commission, 2005) defines “*traceability/product tracing as the ability to follow the movement of a food through specified stages of production, processing and distribution*”.
9. This definition has been further refined into a regulation by the European Union (EU) to signify “*the ability to trace and follow a food, feed, food producing animal or substance intended to be, or expected to be incorporated in a food or feed, through all stages of production, processing and distribution*” (EU, 2002).

FOOD SAFETY TRACEABILITY REQUIREMENTS IN MAIN MARKETS

10. This section discusses traceability requirements in the three key global markets for fish and fish products. Japan, the USA and the EU are the major import markets, with a total share of 72 percent of the total import value in 2006.¹ The public traceability requirements implemented by these importing countries must be complied with by the countries supplying them with fish and fish products.

EUROPEAN UNION

11. The European Union has established mandatory traceability requirements for all food and feed, including fish and fish products.² Food business operators must be able to identify the persons that have supplied to them and to whom the operators themselves have supplied (one step forward – one step behind) and be able to make this information available to the competent authorities on demand. Article 18 (4) states, “Food or feed which is placed on the market or is likely to be placed on the market in the Community shall be adequately labelled or identified to facilitate its traceability, through relevant documentation or information in accordance with the relevant requirements of more specific provisions.”

UNITED STATES OF AMERICA

12. Importers of seafood into the USA are required to notify the Food and Drug Administration (FDA) prior to receiving a shipment. Among other things the notice must identify the submitter; the food article including FDA product code; common, usual or market name, estimated quantity of the smallest pack size to the largest container; lot or code numbers or other identifiers; identification of the shipper; the country from where the food was shipped; identification of the importer, owner or ultimate consignee in the US; identification of the carrier and mode of transport and planned shipping information.

JAPAN

13. Japan has no mandatory traceability requirements for seafood products, but Japan has a number of other legal obligations that have the effect of requiring that businesses have effective traceability capacity. The Food Sanitation Law (Law No.55 of 2003) has requirements for food suppliers to be able to implement effective recalls. Importers are required to maintain records for each lot imported that identifies the product, processor, date of import and import record supplied at the time of import. Japan has implemented country of origin labelling to be shown on all unprocessed seafood products³ and certain processed seafood products.⁴

¹ “The State of the World Fisheries and Aquaculture 2008”, page 49; FAO, Rome 2009.

² Article 18 in Regulation EC No 178/2002 of the European Parliament and of the Council of 28 January, 2002; Official Journal of the European Communities L31/1, 1.2.2002.

³ Quality Labeling Standard for Perishable Foods; Notification 514; Ministry of Agriculture, Forestry and Fisheries; 31 March 2000.

⁴ Quality Labeling Standard for Processed Foods ; Notification 513; Ministry of Agriculture, Forestry and Fisheries; 31 March 2000.

TRACEABILITY REQUIREMENTS FOR SUSTAINABILITY

REGIONAL FISHERIES MANAGEMENT ORGANISATIONS

14. Several Regional Fisheries Management Organisations (RFMOs) require that certain fish caught under the authority of member flag States be accompanied by catch or trade documentation when exported.⁵ These do not generally amount to full traceability systems, but rather are government to government documentation systems that provide verification to border control authorities that the particular fish in trade was sourced from authorized fishing operations. Not all RFMOs have such requirements and for those that do, there are significant differences between them in the nature of the documentation required and the species that schemes apply to.

ILLEGAL, UNREPORTED AND UNREGULATED FISHING

15. The Council of the European Union passed Council Regulation (EC) No 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing (IUU).⁶ Upon entry into force on 1 January 2010, the regulation will require, *inter alia*, that imports of wild caught fish and fishery products caught as from that date supplied to EU member states from third countries, are accompanied by a Catch Certificate (article 12) validated by the competent fisheries management authority of the flag state of the vessel that caught the fish. The model Catch Certificate set out in Annex II of 1005/2008, is similar to a number of the existing statistical documents of RFMOs.

16. Failure to provide a validated catch certificate or certificates will mean that the consignment would be refused entry into EU Member States (article 18) and the Member State may confiscate and destroy, dispose of or sell the product.

PRIVATE SECTOR ECO-LABELLING SCHEMES

17. Eco-labelling schemes may also include chain of custody and associated traceability requirements. For example, the Marine Stewardship Council (MSC) requires any business involved in the value chain for fish or fishery products from fisheries certified to the Marine Stewardship Council's standard to have a separate Chain of Custody certification from an accredited, independent Certifier. Users of the Friend of the Sea logo are required to implement the organisation's Chain of Custody and Traceability Procedure.⁷ This will be audited at the time that Friend of the Sea eco-labelling is sought.

FAO GUIDELINES

18. The FAO's Technical Guidelines for Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries⁸ provide guidance on maintaining the chain of custody for ecolabelled fish products – in essence a traceability system. Paragraph 135 states; "Chain of custody procedures are implemented at the key points of transfer. At each point of transfer, which may

⁵ RFMOs that have adopted catch and trade documentation schemes include the International Commission for the Conservation of Atlantic Tunas (ICCAT), the Indian Ocean Tuna Commission (iotc), the Inter-American Tropical Tuna Commission (IATTC), the Convention for the Conservation of Southern Bluefin Tuna, the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR).

⁶ Council Regulation (EC) No 1005/2008 of 29 September 2008; Official Journal of the EU L286/1 of 29.10.2008.

⁷ Friend of the Sea; http://www.fos.bondwaresite.com/photos/Traceability_and_Chain_of_Custody_Procedure.doc.

⁸ FAO; Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries; FAO, Rome 2005.

vary according to the type of fish or fishery product traded, all certified fish or fishery products must be identified and/or segregated from non-certified fish or fishery products.”

TECHNOLOGICAL DEVELOPMENTS

19. Over recent decades businesses have adopted standardized product numbering using bar coding to identify goods for a variety of purposes as they move through supply chains from producer to consumer. Primarily used for inventory control purposes, bar coding provides a proprietary, technical solution for delivering traceability.

20. More portable and secure technologies are available through the development of an international standard for electronic product coding (EPC) and its application through radio frequency product identification (RFID) with unique traceability data encoded using an internationally standardised and secure system on products to enable their identification as they pass along the supply chain. Such proprietary systems require significant investment by companies in systems development and internal documentation. While the unit cost of applying a barcode or RFID tag is very small, the investment costs for infrastructure development, system development and internal controls and training required can be high.

21. Producing official certificates electronically can also provide a greater level of assurance of document integrity – especially if the documents exist solely in cyber-space accessed only through secure access arrangements. The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) has released a standard for electronic certification (eCert) that allows Governments to exchange electronic export certificates for agriculture and food commodities, including fish and fisheries products.

COMMONALITIES

22. Efficient and effective supply chain management, inventory control, food safety and economic fraud risk management and mitigation are among the imperatives for businesses to develop and apply effective traceability systems. Whether these are private or developed in compliance with public standards depends on the nature of the traceability requirements. Transparent, international standards are more likely to be adopted where synergies in supply chain relationships between businesses can be obtained.

23. Commonalities (and differences) in traceability demands in the public and private sectors are summarized in the Annex.

OPTIONS FOR INTEGRATION

24. Traceability is now a common risk management system for many food products in international trade, including fish and fish products, whether or not it is a regulatory requirement. Traceability provides a systematic capacity for regulators and businesses to manage and mitigate risks to public health and to food businesses from food safety and other product integrity failures. Mandated, official systems are generally based on one down/one up control where the business is required to know the origin(s) of the goods and components it is sourcing and the businesses that it has supplied its products to.

25. Traceability requirements related to the legal provenance of the fish (i.e., that it was caught in compliance with national or regional management requirements) are generally not adapted to the traceability requirements that are applied to fish and fish products for food safety related purposes. In the case of national systems, many fisheries authorities have concerned themselves only with verification of legitimacy at the point of first landing or first sale.

26. RFMOs have developed mainly paper-based, statistical documents that in some instances combine landing data and verification of legality through to importing country authorities. Currently, the schemes are limited in the number of species that they address. They are likely to be inadequate if they had to be expanded to more comprehensive coverage of fish in trade managed by the RFMOs. There may be efficiencies and synergies to be gained by exploring linking RFMO statistical documentation systems to the traceability systems required for food safety verification.

27. The EU's IUU regulation 1005/2008 requiring Catch Certificates for all wild fish and fish products caught using vessels caught as from the start of 2010 and entering the EU from third countries is modelled on RFMO statistical documentation systems with similar disadvantages. However the regulation's scope is fully comprehensive of all wild caught marine fish and shellfish traded to the EU. The EU requires the Catch Certificate to be separate and distinct from Health Certification. Nonetheless, it is likely that some third countries will adapt their existing systems for food safety certification required for fish traded to the EU, to also meet the catch certification requirements of the EU.

28. Official Government to Government Food Safety Certification as, for example, required by the EU, is widely regarded as having a high level of integrity. With the development of eCert, the integrity of this certification will be enhanced as only the electronic version of a certificate available between competent authorities in password protected cyberspace would be accepted. Certificates would become significantly more difficult to duplicate or alter fraudulently.

29. The audited systems that food producers must put in place in order to be able to obtain food safety certification, are being adopted by private sector chain of custody standards for ecolabelling. However these will remain separate from official assurance systems.

CONCLUSIONS

30. Traceability is a common feature in the fisheries sector, especially in the case of fish and fish products that are traded internationally. Traceability is commonly used for food safety purposes, to verify legal provenance of fish or to meet national security and public safety objectives.

31. Traceability requirements can be mandatory or voluntary in nature. Traceability requirements may also be the result of public or private obligations.

32. Efforts to integrate official certification for different objectives require a balance between meeting demands for high levels of integrity and security, while at the same time not being an unnecessary barrier to trade through requiring unreasonable costs of compliance or time demands either for competent authorities or for businesses that must meet the resulting standards. Integrating certification for different objectives with different information needs on the "platform" that offers the greatest security or integrity may appear to be a logical solution, but it runs the risk of adding costs and barriers for some users to a greater extent than may be strictly necessary.

33. Private traceability standards should, to the extent possible, be adapted to official standards. This can offer cost savings to the businesses concerned, as compared to having to develop and implement duplicate proprietary systems.

34. Technologies based on the application of unique product numbering, whether proprietary or compliant with transparent public standards, can enable businesses (and regulators) to track and trace products through the value chain. These technologies may be adopted to assist food suppliers to meet enhanced regulatory requirements, as for example proposed in the USA, requiring food suppliers to demonstrate the full provenance of their products at any point as they pass through the supply chain.

35. The World Trade Organization (WTO) obligation of measures being least trade impacting, needs to be kept in mind when considering the costs and benefits of integrating traceability requirements. The costs arising from integrated certification should, in total, be less than the costs of providing the services separately. Additionally, an assessment needs to be made that an integrated certification system which safeguards against the highest risk – for example public health and welfare – is not unduly burdening the other users(s) of the service.

SUGGESTED ACTION BY THE SUB-COMMITTEE

36. The Sub-Committee on Fish Trade is invited to provide comments on the traceability schemes described in this document and on the options that have been identified to integrate traceability requirements.

37. The Sub-Committee is also invited to comment on how FAO should proceed in its work in relation to traceability.

ANNEX

Table 1. Traceability, purpose, objectives attributes to trace, type or requirement for traceability and examples (regulations and standards)

| Purpose | Objective | Attributes | Standard | Example |
|---|---|---|--|---|
| Safety | Consumer protection (through recall and withdrawal) | Specified in food & fish safety regulations | Mandatory | EU Regulation |
| | | | Voluntary (1) | USA Regulation |
| Security | Prevention of criminal actions (through verifiable identification and deterrence) | Specified in security regulations | Regulatory (2) | USA Prevention of Bio-terrorism, regulation |
| | | Verification of selected attributes on package and/or food | Voluntary (no common standard) | Brand and product protection |
| Regulatory Provenance | Removal of economic reward from IUU fishing by denying market access | Specified in fisheries regulations & RFMO management measures | Mandatory (on contracting Parties) (3) | EC Regulation, RFMO management and documentation measures |
| Regulatory Quality | Consumer assurance (through recall and withdrawal) | Specific attributes included in regulations | Regulatory(4) | EC Labelling, mandatory consumer information |
| Non-regulatory quality, provenance & marketing | Creation and maintenance of credence attributes | Specific attributes included in public standards | Voluntary (common standard) (5) | Public Quality seals (e.g. Label Rouge, France) Organic, Eco-labelling |
| Food chain trade & logistics management | Food chain uniformity & improved logistics | Specific attributes required to food and services suppliers by contract | Private standards (5) | Own proprietary traceability systems (e.g. Wal-Mart) |
| | | | Public standards for encoding information | EAN.UCC 128 (6) (e.g. with TRACEFISH (7) standard) SSCC (8) |
| Plant management | Productivity improvement and cost reduction | Internal logistics and link to specific attributes | Voluntary (internal traceability; own or public standards) | From simple to complex IT systems |

(1) Recall and withdrawal can become compulsory if a responsible company does not take action.

(2) Includes the possibility of mandatory disposal, recall and withdrawal, legal and police actions, but primary purpose is prevention.

(3) Council Regulation (EC) No 1005/2008; RFMO measures binding on contracting and cooperating non-contracting Parties.

(4) Includes the possibility of mandatory disposal, recall and withdrawal and administrative actions, but primary purpose is consumer assurance.

(5) Could include voluntary (contractual) recall and withdrawal and agreed (contractual) sanctions.

(6) EAN.UCC (European Article Numbering Uniform Code Council) System standardises bar codes (www.ean-ucc.org).

(7) TRACEFISH, "Traceability of Fish Products" (EC funded project) <http://tracefish.org>.

(8) SSCC: Serial Shipping Container Code (UCC).