

FISH INSPECTION AND CONTROL SYSTEMS IN THE ASIA PACIFIC REGION

by

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ABSTRACT

The Asia Pacific countries are both major suppliers and consumers of fish and fishery products. In the past decade, there has been a worldwide trend towards demanding safer food and thus a more stringent control of food safety and quality. Governments as key players in food safety control systems have tightened up regulations and introduced new control systems that are applied to imported and exported products. Other players in the system such as industry, buyers and consumers have an increasing role in the control system. Those roles can be identified as monitoring, inspection, verification, audit and education.

The purpose of the fish inspection and control system can be identified as providing safe food, increasing market access and protecting consumers. The system is usually based on end product analysis, certification of products and establishment registration. The approaches used are control of GMPs, sanitation, hygiene and HACCP. There are both voluntary and mandatory systems applied. Official bodies responsible for fish inspection and control in most cases involve more than one agency. In the Asia Pacific region, the official control body is normally the Ministry of Health or Fisheries rather than veterinary control systems as in case of European or South American countries. Responsibilities are, in some cases, divided to imports plus domestic control and exports control. The demand of major countries for a single competent authority has forced governments towards a one-agency control over the commodity. However, there are movements within countries for agreement among control agencies and modernization of inspection and control system toward a single agency.

Since 1990, the region has adapted to the worldwide trend of HACCP application with demands for control from raw material production to processing establishment and products. Many countries are able to provide the overall control, to meet the demands of importing countries. Training on HACCP in the region since 1991 has accelerated and concentrated in 1995 - 1996, on preparation for the EU own check system and USFDA Seafood HACCP regulation. The applications of HACCP in Asia Pacific countries are very progressive because of the export nature of the industry, though different levels of understanding and application exist. It is believed that the same HACCP principles as identified by the Codex Committee on Food Hygiene are applied but there are vast difference in the approach and procedures, causing confusion in practices and assessment of the efficiency of the system. In addition there are differences in standards for products and manufacturing practices, that make fish inspection and control systems very complex. It is recognized that harmonization and recognition of equivalency of fish inspection system are necessary for the development of trade. Countries need to be transparent in their inspection and control systems as well as standards applied to species, process and products. They should also be prepared to accept the equivalency of another system that may be different but produces acceptable levels of protection. The harmonization and recognition of equivalency requires trust and co-operation between the involved parties. This approach should be initiated among countries in the region.

INTRODUCTION

The Asia Pacific countries are both major suppliers and consumers of fish and fishery products. In the past decade, there has been a worldwide demand for safer food and thus a more stringent control of food safety and quality. Governments as key players in food safety have tightened up regulations and introduced new controls that apply to imported and exported products. Other players in the system such as industry, buyers and consumers have an increasing role in the control system. Those roles can be identified as monitoring, inspection, verification, audit and education.

The purpose of the fish inspection and control system is to provide safe food, increase market access and protect consumers. The system is usually based on end product analysis and certification of products

and establishment registration. The approaches used are control of GMP's, sanitation, hygiene and HACCP. There are both voluntary and mandatory systems. A number of ministries may share the responsibility of fish inspection. In the Asia Pacific region, official control bodies are normally Ministries of Health or Fisheries not veterinary control as in Europe or South America. Responsibilities are, in some cases, divided to imports plus domestic control and export control. The demand of the major importing countries for a single competent authority has encouraged the trend towards a one-agency control over the commodity. However, there are also movements within countries for agreements among control agencies and modernization of inspection and control system as well as towards a single agency.

Since 1990, the region has been adapting to the worldwide trend of HACCP application, covering control of raw material, processing establishment and products. Many countries are able to apply overall control, to meet the demands of importing countries after training on HACCP that has been available in the region since 1991. In 1995 – 1996, it has concentrated on preparation for the EU's own check system and USFDA Seafood HACCP regulations. The application of HACCP in Asia Pacific countries is very progressive because of the export nature of the industry, though different levels of understanding and application are apparent. Although the HACCP principles as identified by the Codex Committee on Food Hygiene are generally applied there are differences in the approach and procedures, which cause confusion in practice and in the assessment of the efficiency of the system. In addition there are differences in standards for products and manufacturing practices that make fish inspection and control systems very complex. It is recognized that harmonization and recognition of equivalency of fish inspection system is necessary for the development of trade. Countries need to be transparent in their inspection and control systems. They should also be prepared to accept the equivalency of another system, which may be different but produces an acceptable level of protection. The harmonization and recognition of equivalency requires trust and co-operation between the parties involved. This approach should be stimulated among countries in the region.

The need for fish inspection and control system in the Asia Pacific countries

World fish production increased to reach 112.4 million tones in 1994, this was entirely due to higher aquaculture production. Asian countries are major fish producing countries. China, Japan, India, Indonesia, Thailand the Republic of Korea and the Philippines are among the world top ten fish producing countries. (Table 1)

The roles of Asian countries as exporters of fishery products continues to grow, with Chinese exports growing particularly strongly. Thailand, China, Korea, Indonesia and Japan are among the world's big fish exporting nations, earning more than US \$ 700 million annually. (Table 2) While Asian nations are also importers of fishery products, among those are Japan, China, Hong Kong, Singapore, Thailand, Republic of Korea and Malaysia. (Table 3)

Consumption of fish in the Asian region is already high and growing. Intra regional trade is increasingly significantly. Food safety for intra regional trade is also very important and cannot be ignored neither can food safety for domestic consumption.

Products traded internationally are moving toward convenience food (ready to eat or ready to cook), that require more stringent control to ensure food safety. Moreover, preserved traditional products are now traded more widely, and need to be examined for manufacturing practices and product safety standards.

Table 1. World Fisheries Production.

World Production(in million tonnes)			
	1993	1994	1995
World total	102.2	109.6	112.4
China	17.6	20.7	24.4
Peru	8.5	11.6	8.9
Chile	6.0	7.8	7.6
Japan	8.1	7.4	6.8
United States	5.9	5.9	5.6
Area of Former USSR	5.5	4.6	5.3
India	4.3	4.5	4.6
Indonesia	3.7	4.0	4.1
Thailand	3.3	3.4	3.6
Norway	2.6	2.6	2.8
Korea, Rep.	2.6	2.7	2.7
Philippines	2.3	2.3	2.3
Denmark	1.7	1.9	2.0
Others	30.1	30.2	31.6

Many Asian countries, such as Bangladesh, Indonesia, India, and Thailand, derive considerable benefit from the fish/shrimp producing sector as an export earner and as a generator of income, especially for the small-scale rural industries. Major markets remain the USA, the European Union, Australia and Canada. The future for fish exports is being further seriously threatened by new regulations progressively imposed by these countries.

As a result of consumer pressure for a safer food supply, the EU, introduced regulations that fish imports will only be permitted from countries or companies which have convinced the EU Commission that the fishery products have been produced in establishments which comply with EU Directive 91/493. The EU has issued a Commission Decision drawing up a list of third countries from which import of fishery products is authorized (97/564/EC). Only 8 countries in Asia appear on the list for permanent authorization status. Those are Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan Province of China and Thailand. While another 4 Asian countries are given an interim status, they are Bangladesh, China, India, Maldives and Vietnam. However, this list is updated frequently. Countries that have not been approved are not allowed to export fishery products to the EU after 1 July 1998. The USA introduced Seafood HACCP regulations, effective December 18, 1997, requiring that fishery products, processed domestically or imported, be processed by processors that operate quality assurance systems, based on the principles of Hazard Analysis Critical Control Point (HACCP). Canada recently amended the Fish Inspection Regulation to incorporate HACCP Principles to the existing Quality Management Program. The new arrangements for quality assurance place the responsibility for consumer safety on the producer, that is they transfer the inspection function from the point of export/import to the producer.

Table 2. World Fishery Products Exports (*in million \$*).

	1993	1994	1995
World total	41 494	46 798	49 249
Thailand	3 404	4 190	4 449
Norway	2 302	2 178	3 123
United States	3 179	3 230	3 582
China	1 542	2 320	2 854
Denmark	2 151	2 359	2 460
Canada	2 055	2 182	2 314
Korea, Rep.	1 335	1 411	1 565
Chile	1 125	1 304	1 704
Indonesia	1 149	1 583	1 667
Netherlands	1 129	1 436	1 447
Iceland	1 138	1 265	1 343
Russian Federation	1 471	1 191	1 628
Spain	814	1 021	1 191
India	836	1 125	1 125
United Kingdom	1 037	1 180	1 019
France	858	910	993
Germany	653	790	899
New Zealand	648	692	814
Morocco	539	620	786
Ecuador	574	724	724
Japan	767	743	713
Mexico	431	481	691
Others	11 919	13 322	12 157

Table 3. World Fishery Products Imports (*in million \$*).

	1993	1994	1995
World total	44 549	51 009	54 088
Japan	14 187	16 140	17 853
USA	6 290	7 043	7 145
France	2 556	2 797	3 221
Spain	2 630	2 639	3 106
Germany	1 884	2 136	2 479
Italy	2 131	2 257	2 281
United Kingdom	1 629	1 880	1 910
Hong Kong	1 377	1 642	1 828
Denmark	1 094	1 415	1 574
Netherlands	792	1 192	1 139
Canada	821	913	1 034
Belgium	730	921	1 035
China	576	856	941
Thailand	830	816	826
Korea, Rep.	537	718	825
Portugal	628	670	763
Singapore	567	620	660
Australia	360	428	494
Switzerland	354	390	418
Norway	310	322	490
Malaysia	265	304	325
Other	3 999	4 728	3 740

The need for market access pressured Asian countries to step up and strengthen their fish inspection systems to guarantee their market position. In these countries strengthening of systems was undertaken through bilateral and multilateral assistance. The quality assurance systems must be at least equivalent to those used in the importing countries in order to facilitate import/export controls.

However, as a result of perceived poor quality of processed fishery products, and also lack of recent information on production hygiene, inspection and quality control efforts of exporting countries, rejection, automatic detention, bans on products or processors and bans on countries still occur.

Therefore, it is necessary for countries in the Asia Pacific region to build up the fish inspection and control system to guarantee control of food safety, quality and fair trade for both local and export markets. In addition, good control will give confidence to consumers, buyers and control authorities of trading partners, thus market access and confidence will be gained.

Present Structure of Fish Inspection and Control System

Existence of a National Fish and Fishery Products Inspection and Control System

The author conducted survey on Who is Who in Fish Inspection in selected ASIA – Pacific Countries in 1995. (APEC, 1995) The study revealed that Asian countries are active in fish inspection and quality control in all 17 countries surveyed. Though some indicated that there are no fish inspection system such as Brunei Darussalam and Hong Kong but fish inspection is part of food inspection in those countries. Profiles of the fish inspection systems of selected countries are attached. Countries in South Asia and the Arab countries, were not included in the survey, however, fish inspection in those countries is active. In most Asian countries, quality assurance systems have developed as a result of market requirements.

Legislative Framework

Laws and regulations that empower fish inspection agencies to conduct fish inspection and control system are crucial for the control of food safety, quality and fair trade.

The inspection agencies in Asian countries are supported by Food Acts, Public Health Services Acts, Food Standard Acts, Commodities Act, Fisheries Acts, The Sale of Food Act, Import and Export Control Act. While no specific fish inspection act is applied in the region the authority for conducting inspection and quality control is in various sections of those Acts.

Ideally, the fish inspection agency should have the authority, based on adequate legislation, to establish and enforce regulatory requirements.

Legislation should provide the necessary authority to carry out controls at all stages of raw material holding, handling, transporting, processing, packaging, and trade (domestic, import and export) in fish and fishery products. It is also crucial that the law authorizes the fish inspection agency to control food safety, and prevent unsafe food from entering markets or export. It appears that there are very few countries in Asia that have clear legislation to support activities at all stages of fish production, resulting in a rather complex government structure for fish inspection.

Governmental Structures

The inspection authorities in Asia define the purposes of fish inspection and control as to provide safe food, increase market access and protect consumers as well as to enhance development of the fishery industry.

Official control bodies include Ministries of Health, Fisheries, Industry or Commerce. Controls are of public health and standards rather than a veterinary control system as in European or South American countries.

Responsibilities are, in some cases, divided to imports plus domestic control and exports control. In many countries, such as India, Indonesia, China, Malaysia, the Philippines, Thailand, Vietnam and Taiwan Province of China different authorities in the same country have jurisdiction over different parts of the fish inspection and control system. The official body responsible for fish inspection in most cases involves more than one agency. This leads to problems of duplication of roles and results in improper control on production, manufacturing process and product safety.

The demand of major importing countries, such as the EU, for a single competent authority has encouraged the movement towards one-agency control over the commodity. There are also trends within countries for agreement among control agencies such as in the Philippines and Indonesia and modernization of inspection and control systems toward a single agency.

Resources/Tools

The fish inspection authority should have in place: the necessary controls, procedures, standard setting mechanisms, enforcement options, facilities, equipment, laboratories, transportation, communications, personnel and training to support the objectives of the fish and fishery products inspection and control.

In Asia Pacific countries, the above vary from country to country depending on financial support, priorities, competency and government policies. However, again, because of the export oriented natures of many countries, the resources and tools are in place. Moreover, in the past decade countries in the region have received assistance from World Bank, Asian Development Bank, Canadian International Development Agency, USAID, JICA, FAO and UNDP to improve their programmes.

Controls:

Inspection in the region involves the control of production (sanitation, environment and produce), handling, processing, and products. These controls include registration, approval and certification.

However, only in a few countries does the fish inspection authority have overall control. Examples are India, Indonesia, Philippines, and Thailand. Most inspection agencies in the region concentrate on inspection of facilities and end product certification such as Sri Lanka, Oman, Vietnam, Singapore, Korea, Hong Kong, China and Taiwan Province of China.

It is important that the control system covers pre harvest control in terms of food safety, in order to ensure safety and quality of raw material, sources and traceability.

Procedures

Asian countries appear to lack specific procedures for fish inspection. The inspection procedures need to be formulated and documented both in general for sanitation and hygiene and also specifically for products. Working methods and techniques should be formally documented. In addition procedures should be in place to ensure that inspections are carried out using priorities based on risk, in order to address known or suspected non-compliance situations; and in a coordinated manner between different regulatory authorities, if several exist.

Standard setting mechanism

In Asian countries, standards are usually drafted (under food act, product commodities act, industrial standard acts etc.), by a group of experts from government and industry using international standards as a model. Standard setting still concentrates on product standards rather than manufacturing practices.

Personnel

The strength of countries in this region is the qualification and training of personnel. Most countries identify the minimum qualification for an inspector as Bachelor in Science. Training on various aspects of inspection has been designed for the inspectors. Inspectors have opportunities for training on inspection, quality control and HACCP. Many international organizations and importing countries have worked closely with countries in the region on training on inspection and quality control. However, practical experience and specific training on process and product or even HACCP are still needed.

Enforcement options

Enforcement options depend very much on the legislative power of the authority, the enforcement options of countries in this region include:

- for processing facilities, formal warnings, implementation of voluntary closures, and suspension of registration, withdrawal from approved list and legal action as appropriate.
- for product, detention of product, culling, suspension of inspection, re-inspection, seizure of product, disposal of violative product; legal action

In Asian countries, where, different authorities in the same country have jurisdiction over different parts of the fish inspection system, or more than one body has jurisdiction, conflicting requirements and enforcement options could occur. This could create legal and commercial obstacles to trade.

Laboratory capacity

The laboratory is an important support to fish inspection. Exporting countries in the region have fairly well equipped laboratories. However, it is difficult for the laboratories to cope with all the demands of importing countries, as the list of analyses keeps expanding. For example, the Ministry of Health, New Zealand requires that frozen crustaceans, both cooked or uncooked, be examined for the presence of pathogens (*Salmonella* and *Listeria*) and heavy metal contamination (cadmium, copper and selenium). For shipment of molluscan bivalves, it requires that PSP, DSP, ASP and NSP be tested. This means that the laboratory must have the capacity for mouse bioassay and other complicated equipment such as HPLC.

It is also necessary that inspection laboratories operate under good laboratory practices and participate in inter-laboratory collaboration programmes. (Report of CODEX Committee in Method of Analysis and Sampling. 1997) Often the laboratory is heavily loaded with product inspection for certification, rather than verification testing to support implementation of HACCP. Good Laboratory Practice is therefore neglected. Personnel at different levels still lack training and experience, especially on analysis procedures, operation and maintenance of complicated equipment and laboratory quality management.

Inter-laboratory testing is also neglected. Check programmes are not available for all tests and a limited testing scheme is available to date. The region should co operate on this issue.

Certification system

Fish inspection services in the region concentrate on certification of export products as this is still required by most importing countries.

The certificate requirements vary greatly. Certificates commonly used for export shipment include sanitary certificate, plant hygiene certificate, health certificate or certificate of analysis, stating the test results of the product inspected. Most countries have their own format. Countries trading with the EU have to use certificates in the format and language of EU member states.

When required, certification of the conformity of a product or batch of products may be based on:

- regular checks by the inspection service;
- analytical results;
- evaluation of quality assurance procedures;
- any inspections specifically required for the issuance of a certificate.

Responsible authorities should take all necessary steps to ensure the integrity, impartiality and independence of certification systems. Personnel empowered to validate certificates must be appropriately trained and fully aware of the significance of the contents of each certificate which they complete.

Private sector involvement

Other players in the system such as industry, buyers and consumers have an increasing role in the control system. Those roles can be identified as monitoring, inspection, verification, audit and education.

Processors are involved directly in fish inspection and control, they have responsibility to produce safe products. The minimum requirement is a quality control program based on the CODEX General Principle of Food Hygiene. Once HACCP is required, their responsibility for control is more obvious. In the US requirements, processors may use a written guarantee together with HACCP plan as objective evidence of their application of HACCP. In addition to the use of a HACCP certificate and inspection report from a third party has paved the way for private third party audit.

Since the announcement of the US Seafood HACCP regulations, private consulting firms offering auditing and training from the USA and the EU have been working rather actively in the region.

HACCP Based Fish Inspection System

Countries in the region such as Thailand, Indonesia and India have been among the early starters in implementing HACCP. To date HACCP systems are being implemented at both government and industry level, mainly for export. Countries reporting active HACCP implementation by government and private sector include Bangladesh, Indonesia, India, Philippines, Malaysia, Singapore, Thailand, Korea. In some countries, the private sector is leading the way in HACCP implementation *e.g.*, Japan, China, Hong Kong and Taiwan Province of China. The application of HACCP in Asia Pacific countries is very progressive because of the export nature of the industry, though there are different levels of understanding and application.

Although training is ongoing there are still training needs to increase understanding on hazard analysis, formulating control measures and corrective actions, critical limit verification, internal audit, documentation of plans, and a prerequisite program for industry.

In order to promote the application of HACCP, the strategic activities of the government may include:

- facilitating training programs for industry and government personnel
- implementing the necessary infrastructure in terms of guidance, expertise and where appropriate, legislation
- developing the necessary support and training materials for industry, government and interest parties
- formulating an overall program to assess HACCP system in place.

These activities may be carried out by different bodies of government or by the private sector. Conflict of interest should be avoided such as when activities are conducted by the inspection authority's assessors who provide advice on how to implement HACCP and are then responsible for assessment. This is true for most Asian countries where in one agency carries out all activities.

The inspection authorities in the region need to look into the inspection and verification of HACCP system of the industry to assess the effectiveness of the program. The role of government will have to shift from traditional inspection methods towards the assessment of HACCP systems. The assessment of HACCP systems by government may include:

- assessment of: HACCP management,
- the basis for HACCP plan development,
- Hazard Analysis,
- effectiveness of control measures,
- verification procedures,
- documentation and
- Implementation.

Harmonization

There are differences in standards for products and manufacturing practices, that make fish inspection very complex. These differences can become major barriers to trade.

Harmonization is necessary for the development of trade. To this end countries need to be transparent in their inspection and control systems as well as in the standards applied to species, process and products.

Differences in standards and acceptable practices could be dealt with through regional or international harmonization. The best forum is the CODEX Alimentarius. Yet involvement of Asian countries in CODEX is minimal, when seen in comparison to the importance of fish trade to the region. As a result codes of practice and standards do not appropriately cover Asian tropical conditions such as temperature and species of fish e.g. tuna and sardine standards do not cover species found in the region. There are few participants from Asian countries in the CODEX Committee on Fish and Fishery Products. At the 23rd CCFFP meeting where Codes of Practice for Fresh, Frozen, Minced and Canned Fish, Frozen Shrimp and Prawns, Molluscan Shellfish, Salted Fish, Smoked Fish and the Products of Aquaculture; as well as a Standard for Salted Anchovies and a Standard for Fish Crackers were under review, there were very few countries from Asia present at the Meeting.

As CODEX standards will be used as reference standards in international trade, countries should participate and give more input to international standard development.

Equivalency

The WTO – SPS Agreement encourages Governments to accept the SPS measures of other countries, where they meet the importing countries level of protection. Negotiation of equivalence agreements is encouraged.

They should also be prepared to accept the equivalency of another system that may be different but produces an acceptable level of protection. The harmonization and recognition of equivalency requires trust and co-operation between the involved parties. This approach should be initiated among countries in the region.

According to the WTO SPS Agreement, a country is obliged to consider a request for an equivalency agreement once asked.

Guidelines for equivalency

There is a need for common language to measure equivalency. As a result, the Codex Committee on Food Import and Export Inspection and Certification Systems has established draft guidelines for establishing equivalency. The guidelines outline steps for equivalency determination that include a side by

side comparison of regulations, inspection procedures, resources in inspection etc; following by on-site visits to verify equivalency of the systems.

The USFDA contemplates a process that will involve a paper review, an on-site verification review, and public notice and comment in making a determination that a foreign country's system is equivalent.

The EU Commission specified steps for determining equivalency of trading partners to include document review and on-site visits and approval from Commission members to be published in Council Directives.

APEC has laid down guidelines for determining equivalency on food control systems as well.

The above guidelines are identical in that there shall be at least document review of inspection and control systems and on-site visits to audit the agency having jurisdiction of control and audit. There should be focus on government control not the individual industry's performance.

Entering into equivalency agreements is possible but rather time consuming.

Assessment of Equivalency

The determination of equivalency between fish and fishery products inspection and control systems is usually based on an assessment of the following criteria:

1. Existence of a National Fish and Fishery Products Inspection and Control System:
 - a) Legislative Framework
 - b) Governmental Structures
 - c) Adequate Resources/Tools
 - d) Appropriate Implementation of Mandate
 - e) Training for Inspectors and Laboratory Personnel
 - f) Inspection procedures and Sampling Plans
 - g) Certification Systems
 - h) Enforcement History.

2. Ability to identify Fish Processing Establishments

Enforcement should that seafood processors who are included under the Agreement have adopted a system of controls that prevent the occurrence of food safety hazards or other regulatory infractions in fish and fishery products exported to the other Party. This system of preventive controls should be based on internationally recognized principles of HACCP.

3. Ability to Perform Audit Procedures on the Inspection Control System
4. Verification of Equivalence.

System Audit

Audit of a fish inspection system will be based on procedures of the CCFICS. Assessment and verification should concentrate primarily on effectiveness of the inspection and certification system in operation in the exporting country rather than on specific commodities or establishments.

The equivalency approach is not appropriate for countries that lack legislative support, clearly defined inspection and control and qualified personnel in both government and the private sector

Possibility of Equivalency agreement among Asia Pacific Countries

Countries in the Asia Pacific region may consider establishing equivalency agreements with trading partners in the region such as Japan and their major trading partners such as EU, USA, Australia, New Zealand and Canada. So far, there is no initiative to establish equivalency agreements among Asia Pacific exporting nations. This is mainly because the similarities of the products traded makes countries compete for the market and the agreement is needed to gain market access.

Since CODEX and many importing countries such as EU, USA and Canada have developed procedures for determining equivalency, the process is becoming clearer but it is also complex and time consuming. In any case, the exporting countries have to prove that their systems are equivalent and have to document this. From the experience of Thailand, this is the most time consuming part: preparation of all necessary documents and making the system clear to the partner. The scope of document review is very extensive while the review is very intensive.

If countries in the region would like to establish agreements with one another, there is no choice but to follow the CODEX guidelines and make the agreement international.

It may not be necessary to establish equivalency agreements if the value of trade does not justify it. It is of utmost important for countries in the region to have fish inspection systems in place. These should be effective and sufficient to provide the necessary assurance that products have been produced under good hygienic practices and HACCP control and in addition that the products are safe, wholesome and meet the requirements of importing countries.

RECOMMENDATIONS

Asian countries should keep themselves up to date with the new requirements of the market and make an active contribution to CODEX

Priority should be given to improving or establishing an effective fish inspection and regulatory system, development of personnel, GMP's and HACCP for the industry.

Cooperate to strengthen laboratory services and laboratory quality management.

Countries or agencies who wish to establish equivalency agreements should recognize the steps and procedures for equivalency determination. The country or agency should have a well established and effective fish inspection and control system. Capabilities and competency is vital to the development of trust and gaining of recognition. The support of industry is very important for the development of equivalency, as industry will have to take responsibility for their quality program.

REFERENCES

- APEC. 1995. Who is Who in Fish Inspection of APEC Economies. Asia Pacific Economic Cooperation. Singapore
- CCFICS. 1997. Proposed draft guidelines for the development of equivalence agreements regarding food import export inspection and certification system. CX/FICS 98/3. (October/97) Codex Alimentarius. Food Agriculture Organization of the United Nations. Rome.
- CCFICS. 1997. Discussion paper on issues relating to the judgement of equivalence. CX/FICS 98/7. (October/97) Codex Alimentarius. Food Agriculture Organization of the United Nations. Rome.
- CFIA. 1998. Regulation Amending the Fish Inspection Regulation. Canada Gazette Part I. August1, 1998. Ottawa

EU Commission. 1996. Council Decision of 17 December 1996 on the Conclusion of an Agreement between the European Community and New Zealand on sanitary measures applicable to trade in live animals and animal products.

FAO. 1997. Fishery Products in Commodities Market Review, 1996 – 1997. FAO, Rome.

FDA. 1997. Draft Guidance on Equivalence Criteria for Food. Code of Federal Register 62 FR 30593 June 4, 97. US. Food and Drug Administration.

Agreement on Equivalence of Fish and Fishery Products Inspection and Control Systems between the Government of the Kingdom of Thailand and the Government of Canada. April 9, 1997.

FAO/WHO. 1998. The Role of Government Agencies in Assessing HACCP. Report of a Joint FAO/WHO .Consultation. 2 – 6 June 1998. Geneva. Switzerland.

Sophonphong, K. and Lima dos Santos, C.A. Fish Inspection Equivalence Agreements: Overview and current development- Developing countries perspective in Market Access for Seafood Proceedings of the Workshop. Toronto, Canada.

Suwanrangsi, S. Equivalency Agreement on Fish Inspection and Control System between Thailand and Canada. In Market Access for Seafood Proceedings of the Workshop. Toronto, Canada

CHINA

According to Standardisation Law, State Bureau of Technical Super-vision (SBTS) unitedly manages quality inspection standardisation work of whole country. The Ministry of Agriculture (MA) is in charge of quality inspection and standardisation work of fishery industry. Under the leading of MA and SBTS, the work is carried out concertedly by National Fishery Standards Technical Committee, Sub-committee on Fish and Fishery Pro-ducts (NFSTC SFFP) and National Center for Quality Supervision and Test of Aquatic Products (NCQSTAP).

Name of Organisation :

National Center for Quality Supervision and Test of Aquatic Products, P.R. China

Full Address :

106 Nanjing Road
Qingdao 266071
Shan Dong Province,
P.R.China
Tel. 86 532 582-6579
Fax. 86 532 581-1514

Products of Discipline :

- Fishery products for export/
import/domestic use
- Fresh and frozen fishery products
only
- Chilled fishery products
- Dried fishery products only
- Others

Mandatory or Voluntary:

The supervision, selective examination for the quality of products which are pointed by the government are mandatory. Intrusted by Department concerned, examination of products quality for implant production licence and quality certification is mandatory. Examination of arbitration about quality dispute is mandatory. Examination and appreciation of high quality products are voluntary.

Description of Organisation:

NCQSTAP is one of the national agencies for quality supervision and test of products in fishery aspect. It is set up in Yellow Sea Fishery Research Institute (YSFRI). It processes perfect physical, chemical and microbial laboratory. It is equipped with many advanced analysis instruments such as ICP-AES (made in USA), GC and HPLC (made in Japan), etc. Twenty specialists are in the centre. Certified by the State Bureau of Technical Supervision 1988, the NCQSTAP set on working in April, 1989.

Policies and Regulations that Support the Inspection System:

The competent policies and regulations are two basic government laws "The Standardisation Law of the People's Republic of China" in article 19. It is ordered that the competent standards of the country level and above may in the light of needs. According to article 11, "Products Quality Law of People's Republic of China", the centre is supported by the following description. The quality test agencies must have test conditions and ability responding to its work area. They cannot take quality test only until they are past the examination made by Quality Supervision Department of SBTS.

Description of Inspection and Certification Systems:

Practised and Accreditation System Quality Certification System of Fishery Products are being established.

HONG KONG, CHINA

Name of Organisation:

Agriculture & Fisheries Department
Hong Kong Special Administrative Region
of China

Full Address:

Canton Road Government Offices
12/F, 393 Canton Road
Kowloon, Hong Kong SAR
Tel. (852) 2733-2208, 2873-8326
Fax. (852) 2311-3731, 2814-0018

Products of Discipline:

All fish and food products

Mandatory or Voluntary:

Hong Kong does not have a specific fish inspection and quality control programme. Currently, there are no standards for the quality of any of the export/import/domestic use fish products. There is however a code of practice for export frozen prawns. The processing plant can apply for an export health certificate of their frozen prawns products from the Urban Services Department or the Regional Services Department on a voluntary basis.

Description of Organisation:

Inspection of fish processing plants and of fish products comes under the general food laws. This is part of Hong Kong's comprehensive food inspection service jointly run by the Urban Services Department, the Regional Services Department and the Department of Health. The food laws are oriented towards the control of food for domestic consumption and they do not have a section specialising in quality control of fish products. In addition to the food laws, the Urban Services Department issued the Code of Practice for processing of frozen prawns. This code is very specific and applies to food factories which process frozen shrimps for which an export health certificate is required.

Policies and Regulations that Support the Inspection System:

The existing legislation to control the wholesomeness and quality of food derives from two sets of basic regulations: the Public Health and Municipal Services Ordinance and the Food Business By-laws. These laws control the handling, processing, storage, distribution and sale of all food commodities, including fish but would not include live fish and along with the Preservatives in Food Regulations, regulate their safety and composition. The food laws require that all food processing factories which include fish processing plants must operate with a licence renewable on an annual basis. There are some 740 qualified public health inspectors working in the above three departments and they are responsible for the day-to-day enforcement work. Food processing establishments such as fish processing plants are inspected, fish products are sampled and tested if required.

Description of Inspection and Certification Systems:

Export health certificates will only be granted for frozen prawns which are processed in the licensed premises and the quality of the products must comply with the Code of Practice for processing of frozen prawns. The products must also be sampled, inspected and where applicable subject to chemical and/or bacteriological analysis. Visual and sensory testing are carried out in the processing plant, chemical analysis in the Government Laboratory and bacteriological analysis in the Institute of Pathology. The health certificate is signed by the Chief Health Inspector of the Health Certificate Section of the Department of Health. Fees are charged for the testing.

The Department of Agriculture and Fisheries has a Veterinary Health Certification Section which can provide veterinary public health certification for live fish or for manufactured foods containing fishery products when this is required on animal and public health grounds by importing countries. The health certificate is signed by an Official Veterinary Surgeon.

INDONESIA

Name of Organisation:

Sub Directorate of Fish
Inspection and Quality Control,
Directorate General of Fisheries,
Ministry of Agriculture

Full Address:

Jl. Harsono R.M. no. 3,
Pasar Minggu,
Jakarta 12550, Indonesia
Tel. (6221) 789-1479
Fax. (6221) 789-1479
Telex: 47318 djikan ia

Products of Discipline:

- Fishery products for export/
import/domestic use
- Fresh and frozen fishery products
only
- Chilled fishery products
- Dried fishery products only
- Others :Curing, Fish/shrimp crackers,
Traditional processed products

Mandatory or Voluntary:

Mandatory inspection for export and
import used products and voluntary inspection for
domestic used products.

Description of Organisation:

The Directorate General of Fisheries is designated
as a *Competent Authority* in which the Directorate
of Fisheries Enterprise and Processing
Development, viz. Sub Directorate of Fish
Inspection and Quality Control is responsible for
conducting periodically mandatory sanitary and
hygienic assessment as well as the operational
aspects of handling and processing techniques.
Certificate of GMP and *Certificate of Competence*
(as Fish Technology Supervisor or as Quality
Controller) are issued by the Directorate General
of Fisheries.

Day-to-day plant inspection and supervision is
carried out by local inspectors employed by the
Provincial Fisheries Services and the Laboratories

of Fish Inspection and Quality Control at the
provincial and district level.

The Provincial Laboratories of Fish Inspection
and Quality Control conduct inspection and issue
Certificate of Quality/Health for final fish and
fishery products prior to export. The Laboratories
are also designated, under the European
Commission Decision no. 94/324/EC, to issue the
EC-version *Health Certificates*.

The National Centre for Fish Quality Control and
Processing Development designated as *reference
laboratory* to provide supervision to the
provincial laboratories, in terms of analytical
methods, processing technology development and
training packages.

The Directorate General of Fisheries has also
developed a HACCP-based Integrated Quality
Management Programme (IQMP), for the past
three years, to the industry.

The Directorate General of Fisheries also set up
standards of fish and fishery products which shall
then be promulgated by the National Council of
Standardisation through the Centre of
Standardisation and Accreditation at the Ministry
of Agriculture.

**Policies and Regulations that Support the
Inspection System:**

A number of legislative decrees concerned with
re-regulation of Fish Inspection and Quality
Control have been issued, namely:

- 1) European Commission Decision no.
94/324/EC of 19 May 1994, laying down
specific conditions for importing fishery and
aquaculture products from Indonesia
- 2) Government Regulation no.5/1991 of 1 March
1991, laying down the Indonesian National
Standardisation
- 3) Presidential Decree no. 12/1991 of 1 March
1991, setting forth the implementation,
application and control of the Indonesia
National Standard

- 4) Presidential Decree no. 2/1990 of 28 May 1990, setting forth the Inspection and Quality Control of Fresh and Frozen Fish and Fishery Products
- 5) Government Regulation no. 15/1990 of 28 May 1990, laying down Fisheries Enterprise
- 6) An implementation decree issued by the Minister of Agriculture no. 815-Kpts/IK. 120/11/90 of 1 November 1990, setting forth regulation on Fisheries Enterprise
- 7) A decree issued by the Minister of Agriculture no. 303 Kpts/OT. 210/ 94 of 27 April 1994, setting forth Standardisation, Certification and Accreditation of Agriculture Products
- 8) A Memorandum of Understanding between Minister of Agriculture, of Health and of Trade on May 1990, setting forth the implementation of inspection and quality control of fresh and frozen fish and fishery products according to respective Ministry's jurisdiction
- 9) An implementation decree issued by the Minister of Health no. 397/Menkes/SK/VIII/1990 of 24 August 1990, setting forth regulations on additives permitted in handling and processing of fish and fishery products
- 10) Presidential Decree no. 47/1986 of 17 September 1986, setting forth the improvement of post-harvest technology of agriculture products

Description of Inspection and Certification Systems:

- 1) Certificate of Quality for final fish and fishery products intended for export can only be issued by the Laboratories of Fish Inspection and Quality Control that have been accredited according to criteria drawn-up by the National Council of Standardisation.
- 2) EC-version Health Certificate for fish and fishery products intended for export to EC is under designation of Laboratories of Fish Inspection and Quality Control and is issued if the result of inspection meets the requirement as stipulated in the Commission Decision no. 94/324/EC of 19 May 1994 which refers to the Council Directive no. 91/493/EEC of 22 July 1991.
- 3) Certification of GMP is conducted by the Directorate General of Fisheries based on the result of inspection carried out by fish inspectors engaged at the Sub Directorate of Fish Inspection and Quality Control and monitoring report submitted by the local inspectors employed by the Provincial Fisheries Services and the Laboratories of Fish Inspection and Quality Control.
- 4) Certificate of Competence (for fish processing supervisors and/or quality control personnel at processing plants) is issued by the Directorate General of Fisheries.
- 5) Verification for the implementation of Integrated Quality Management Programme which applied by fish industries, is provided by the Directorate General of Fisheries, Provincial Fisheries Services and the Laboratory of Fish Inspection and Quality Control.

JAPAN

Name of Organisation:

Veterinary Sanitation Division
Environmental Health Bureau
Ministry of Health and Welfare

Full Address:

2-2, Kasumigaseki 1-Chome
Chiyoda-ku, Tokyo 100-45
Japan
Tel. (813) 3503-1711 (ext.2436)
Fax. (813) 3503-7964

Products of Discipline:

- Fishery products for export/
import/domestic use
- Fresh and frozen fishery products only
- Chilled fishery products
- Dried fishery products only
- Others

Mandatory or Voluntary:

In principle, fish inspection is applied mandatorily for export/import/ domestic use products.

Description of Organisation :**(1) Inspection system for export**

For example, the fish products for EU are inspected under the guidance of each prefecture. Sanitary Research

Institute in each prefecture performs its role as the reference laboratory.

(2) Inspection system for import

Inspection is conducted by the quarantine office at each port or the Centre of Quarantine and Inspection (only at Kobe City and Yokohama City).

(3) Inspection system for domestic use products

Inspection is conducted by the Sanitary Research Centre or the public health centre in each prefecture.

Policies and Regulations that Support the Inspection System:

"Food Sanitation Law"

The purpose of this law is to protect the people from health hazards which may be caused by eating or drinking, and to help improve and promote public health.

Description of Inspection and Certification Systems:

The inspection and certification system varies with items. However, in case of import, the results of inspection by authorities of exporting countries are accepted in principle.

In some case, inspection and certification system is based on bilateral arrangements, for example ;

- (1) The certification system for the processing facilities of the scallops for EU.
- (2) Arrangement on sanitary controls of fresh or frozen oysters, clams and mussels intended for shipment between US and Japan.

KOREA

Name of Organisation:

National Fishery Products Inspection Service (NFPIS)

Full Address:

National Fishery Products
Inspection Service
Wonnam Dong 103, Chongrogu,
Seoul, 110-450 Korea
Tel. (02) 762-9214
Fax. (02) 765-1755

Products of Discipline:

- Fishery products for export/
import/domestic use
- Fresh and frozen fishery products
only
- Chilled fishery products
- Dried fishery products only
- Others

Mandatory or Voluntary:

The NFPIS has received a mandate from the Ministry of Health and Welfare to inspect the raw fisheries materials and simply processed products. Among the products for export and domestic consumption (including government saving for emergency), 13 items are subject to compulsory inspection.

Description of Organisation:

The NFPIS consists of the main office in Seoul and 11 branch offices throughout the country.

Inspection I Division in the main office controls the overall inspection system and Inspection II Division runs a laboratory for scientific analysis of the fishery products.

Policies and Regulations that Support the Inspection System:

Inspection for fishery products is implemented under the Fishery Products Inspection Law and Food Sanitation Law.

13 fisheries product items for export are subject to inspection in accordance with Fishery Products Inspection Law and some simply processed fishery products such as frozen, dried and salted fishery products are subject to inspection under Food Sanitation Law.

Description of Inspection and Certification Systems:

The NFPIS issues Inspection Certificates for exported products and Import Notification Certificates for imported products for the customs clearance.

Establishment of fishery processing plants for frozen and chilled products, agar-agar, fish liver oil and fish oil products and fishery processing industry on factory vessel are subject to licensing from the mayors or governors of the province, and the establishment of processing plants for dried, salted products and other fishery products is subject to report to the competitive authority.

MALAYSIA - 1

Name of Organisation:

Malaysian Fisheries Development
Authority (MFDA)

Full Address:

8th Floor Wisma PKNS,
Jalan Raja Laut,
P.O. Box 12630
50784 Kuala Lumpur, Malaysia
Tel. (03) 292-4044
Fax. (03) 291-1931

Description of Inspection and Certification Systems:

Presently, MFDA only enforces on the importers/exporters to make declaration on certain items/information relating to importation of fish and fish products required by MFDA by using pre-printed forms.

Products of Discipline:

- Fishery products for export/
import/domestic use
- Fresh and frozen fishery products only
- Chilled fishery products
- Dried fishery products only
- Others

Mandatory or Voluntary:

Mandatory for export/import of fish and fishery products whereas voluntary for domestic use.

Description of Organisation:

Mainly physical inspection and observation of fish and fish products brought into the country. The inspection is conducted at the entry points and is done manually. The use of equipment for inspecting the quality of fish is presently being tested by MFDA and will be incorporated into the inspection system.

Policies and Regulations that Support the Inspection System:

The Fish Marketing Regulation 1988 empowered MFDA to enforce programmes that support inspection for fish and fish products.

MALAYSIA - 2

Name of Organisation:

Fisheries Research Institute
Department of Fisheries Malaysia

Full Address:

Fisheries Research Institute
Department of Fisheries Malaysia
11960 Batu Maung,
Penang, Malaysia
Tel. (04) 626-3925/6
Fax. (04) 626-2210

Description of Inspection and Certification Systems:

Inspection is normally carried out on seafood processors by inspectors of local authorities, Ministry of Health and the Department of Veterinary Services. Samples are sent to accredited laboratories for analyses. Accredited private laboratories are also providing analytical services with health certificates being issued by the Ministry of Health.

Products of Discipline:

- Fishery products for export/
import/domestic use
- Fresh and frozen fishery products
only
- Chilled fishery products
- Dried fishery products only
- Others

Mandatory or Voluntary:

Voluntary

Description of Organisation:

Based on importing country requirements. Analyses are conducted by accredited private laboratories upon request. The Veterinary Services and Health Ministry Food Quality Control unit conduct inspection of premises. The *Competent Authority* for Malaysia is the Ministry of Health. Whilst the reference laboratory is based at the Fisheries Research Institute, Penang.

Policies and Regulations that Support the Inspection System:

- Food Regulations 1985
- Fisheries Act 1985

REPUBLIC OF THE PHILIPPINES

Name of Organisation:

Bureau of Fisheries and Aquatic Resources

Full Address:

860 Quezon Avenue, Arcadia Bldg.
Quezon City, Metro Manila,
3008 Philippines
Tel. (632) 973-617
Fax. (632) 987-871, 973-617

Products of Discipline:

- Fishery products for export/import/domestic use
- Fresh and frozen fishery products only
- Chilled fishery products
- Dried fishery products only
- Others: Wildlife species (Sea snakes, frogs and by-products)

Mandatory or Voluntary:

Fish inspection for export has become voluntary with the implementation of Executive Order No. 1016 "Withdrawing the Inspection, Commodity, and Export Clearance Requirements for Philippine Exports". However, inspection, commodity clearances/health certificates are mandatory for those covered by international trade agreement; commodities which are restricted, regulates and when required by the importing country.

Description of Organisation:

The Fish Inspection Section of the Fisheries Post Harvest Technology Division, Bureau of Fisheries and Aquatic Resources is responsible for the inspection, issuance of commodity clearance and/or health certificates and the quality control programme for fish and fishery/aquatic products.

Fish processing establishments are inspected every quarter to verify compliance with the provisions of existing rules and regulations on plant structures and equipment, production

requirements, transport facilities and hygiene and sanitation of plants and workers. For plants with serious and critical deficiencies regular follow-up is undertaken on a monthly basis.

For plants located in the regions, there are at least two (2) deputised inspectors responsible for the follow-up inspection of plants located in each respective region. This is an ongoing activity to upgrade the condition of fishery establishments.

Fish inspectors draw and collect samples based on AQL 6.5 sampling plan for sensory, chemical and microbiological analysis. Health certificates are issued based on the result of the product analysis conducted either by BFAR and/or government and private laboratories recognized by BFAR.

Imported fresh, chilled and frozen fishery products are inspected upon arrival at the port for quality control measures. Samples are randomly taken/drawn for sensory evaluation, chemical and microbiological tests. Results are used as a basis for the sale and distribution of the products.

For products locally produced and intended for domestic consumption, regulations on the sale and distribution are under the jurisdiction of the local government units. The Bureau of Food and Drug is the agency mandated to implement the rules and regulations on the production, distribution and sale of locally manufactured fishery products.

The One Stop Export Documentation Centre, Fisheries Unit is responsible for the inspection, processing and issuance of documentation requirements for fishery products for export in coordination with Fish Inspection Section. CITES Permit for Wildlife Species and those included in the Convention and International Trade in Endangered Species of Wildlife Flora and Fauna (CITES) regulations are issued in this Unit. Commodity clearance requirements for other fishery products are issued after inspection is conducted.

Policies and Regulations that Support the Inspection System:

Policies, rules and regulations that support the inspection system for export/import/domestic trade of fishery products include:

- a. Presidential Decree (PD) 930 and its implementing Guidelines. "Simplifying Export Procedures and Documentation by Realigning Functions of certain Government Offices/Agencies involved in processing export documents, by authorizing the issuance of periodic clearances, by adoption of standardized export documents and for other purposes".

The decree prescribes inspection and issuance of commodity clearances by government agencies to safeguard the quality of Philippine exportable products but stipulate simplified export procedures by reassigning and/or realigning overlapping functions of certain specialized agencies of the government.

- b. Presidential Decree 704 known as the "Fisheries Decree of 1975". Revising and Consolidating all Laws and Decrees Affecting Fishing and Fisheries.

The decree declares the policy of the state for optimum utilization of the country's fishery resources, conservation and protection, acceleration and promotion of the integrated development of the fishery industry and the promotion of exportation of fish and fishery/aquatic products.

- c. Fisheries Administrative Order No. 117 series of 1975 (FAO 117). Rules and Regulations Governing the Operation of Processing Plants for Fish and Fishery/Aquatic Products and Prescribing/Requiring Standards, Quality Control and Inspection of Processed Fish and Fishery Aquatic Products.

- d. FAO No. 117-1 series of 1994. Amendment of Sections 3, 4, and 5 of FAO 117s. 1975. Certain provisions on the minimum requirements for processing plants and the standards for shrimps and tuna were amended to conform with the present international standard of specifications.

- e. Republic Act (R. A.) 7394 known as the "Consumers Act of the Philippines" declares the policy of the state to protect the interest

of consumers, promote the general welfare and establish standards for business and industry.

Department of Agriculture Administrative Order No. 9 series of 1993 Rules and Regulation to achieve the objectives of protecting the consumers against hazards to health and safety and deceptive, unfair and unconscionable sales acts and practices and providing information and education to facilitate sound choice and proper exercise of rights by the consumer.

- f. Executive Order No. 1016. "With-drawing the Inspection, Commodity & Export Clearance Requirements on Philippine Exports" - The order simplifies the export documentation requirements of commodity agencies.

Description of Inspection and Certification Systems:

The inspection and certification system practised is based on the approved rules and regulation of FAO 117 and 117-1; patterned after the Quality Management Programme (QMP) of Canada and the principles of Hazard Analysis and Critical Control Point (HACCP). The accreditation system implemented especially for the European Union will be in coordination with the Department of Health approved legislation in the operation of food plants.

SINGAPORE

Name of Organisation:

Veterinary Public Health &
Food Supply Division Primary Production
Department
Ministry of National Development

Full Address:

5 Maxwell Road, #02-00/#03-00
Tower Block, MND Complex
Singapore 069110
Republic of Singapore
Tel. (65) 265-0622
Fax. (65) 265-0784
Telex RS 28851 PPD

Products of Discipline:

- Fishery products for export/import/
domestic use
- Fresh and frozen fishery products
only
- Chilled fishery products
- Dried fishery products only
- Others

Mandatory or Voluntary:

All fish, including finfish, crustaceans, molluscs, and fishery products which are wholesome and fit for human consumption may be imported or exported with a licence. Additional requirements on product quality and live fish quarantine may be imposed on selected fish/fish products as and when necessary.

Fish inspection is mandatory for import consignments of high-risk seafood such as frozen oyster, frozen raw blood cockle meat, frozen cooked prawns / shrimps and frozen crabmeat. End product testings are also carried out to ensure fitness for human consumption. These high-risk seafood also require health certificates from competent authority in the country of origin. Prior approval from the Primary Production

Department (PPD) is required before importation of these products.

Import of chilled forms of the above products are prohibited.

Description of Organisation:

The Veterinary Public Health & Food Supply Division (VPHFS) of the Primary Production Department (PPD) is charged with the responsibility of providing an efficient and effective inspection and testing services to ensure primary produce are safe and whole-some in Singapore and to assure the foreign buyers that Singapore's export of primary produce conforms to their health requirements. VPHFS is also responsible for ensuring a stable and adequate supply of fresh produce in Singapore.

These responsibilities are discharged through VPHFS's four branches, viz.; Food Inspection Services Branch (FISB), Veterinary Public Health Laboratory Branch (VPHL), Food Supply Branch (FSB) and Development & Compliance Branch (D&C).

The VPHL is an internationally recognized laboratory able to detect food-borne diseases as well as major chemical contaminants and drug residues in food. The VPHL is also the National Reference Laboratory for pesticide residues.

Policies and Regulations that Support the Inspection System:

- The Slaughterhouses and Meat Processing Factories Act (Chap 307)
- The Animals and Birds Act (Chap 7)
- Fisheries Act (Chap 294)
- Control of Plants Act 1993
- The Sale of Food Act (Cap 283)
- The Environment Public Health Act (Cap)

* Relevant Rules/Orders under above Acts.

Description of Inspection and Certification Systems:

Traders have to submit the declarations for all imports and exports of fish and fishery products (including finfish, crustaceans and molluscs) through TradeNet for processing by the PPD.

They also need to submit (fax acceptable) the invoices, bill of loading/ airway bill and other relevant supporting documents.

Health certificate for the high-risk seafoods issued by the authority of the country of origin has to be submitted to the D&C, Level 2, MND Building, Maxwell Road, Singapore 069110 for approval of an import permit. Upon importation, these products will be subject to inspection, sampling and testing by the FISB and VPHL.

All local fish processing plants are licensed by the PPD. PPD's enforcement strategy is that of a system audit, inspecting and testing at critical control points of the production processes. The whole system is backed up by a comprehensive laboratory monitoring programme.

Each export consignment, which needs certification, would be inspected by the FISB. Samples are collected for laboratory examination in accordance with the sampling and testing protocols of the export certification programme depending on destination. The VPHL would issue the health certificate when the testing criteria are met.

TAIWAN PROVINCE OF CHINA 1

Name of Organisation:

Department of Health,
The Executive Yuan

Full Address:

No. 100 Ai Kuo E. Road
Taipei, Taiwan Province of China
Tel. (8862) 393-8209
Fax. (8862) 392-9723

Products of Discipline:

- Fishery products for export/import/
domestic use
- Fresh and frozen fishery products
only
- Chilled fishery products
- Dried fishery products only
- Others

Mandatory or Voluntary:

Mandatory

Description of Organisations:**Import**

- (1) National Quarantine Service, Department of Health
- (2) Bureau of Commodity Inspection and Quarantine, Ministry of Economic Affairs (Commissioned by the Department of Health)

Domestic

- (1) Department of Health
- (2) Health Bureaus of Local Governments

Policies and Regulations that Support the Inspection System:

- (1) Quarantine Regulations for Cholera on Imported Fishery Products
- (2) Law Governing Food Sanitation

Description of Inspection and Certification Systems:**Import**

- (1) Sampling test of toxigenic *Vibrio cholerae* may be conducted at the entry ports by the quarantine authorities. For fishery products imported from districts infected with cholera, a certificate of *Vibrio cholerae* negative issued by the exporting country must be submitted.
- (2) Inspection is conducted to check if fishery products meet the requirements of the Law Governing Food Sanitation.

Domestic

Fishery products is free for sale on market unless they do not conform to sanitary standards, which are prescribed by the Department of Health, the Executive Yuan. The products on market are under regular monitoring by health bureaus of local governments.

TAIWAN PROVINCE OF CHINA 2

Name of Organisation:

Bureau of Commodity Inspection
and Quarantine (BCIQ)
Ministry of Economic Affairs
(MOEA)

Full Address:

No. 4, Chinan Road,
Sec. 1, Taipei,
Taiwan Province of China
Tel. (8862) 343-1700
Fax. (8862) 393-2324

Products of Discipline:

- Fishery products for export/
import/domestic use
- Fresh and frozen fishery products
only
- Chilled fishery products
- Dried fishery products only
- Others

Mandatory or Voluntary:

Inspection for fishery products subject to inspection is applied mandatory, inspection for those not subject to inspection is applied voluntarily.

Description of Organisation:

BCIQ has been established as the national agency of commodity inspection. One of BCIQ's responsibilities is to conduct export/import inspection for agricultural products (including fishery products), machinery/electronic apparatus, chemical products, and mineral/ metal products. BCIQ has headquarters in Taipei and six branch offices throughout the island. Each office has its own laboratories, including testing room for fishery products, to conduct inspection work.

Policies and Regulations that Support the Inspection System:

According to Commodity Inspection Act, fishery products which have been promulgated by the Ministry of Economic Affairs (MOEA) to be subject to inspection must pass the inspection of BCIQ before they can be exported or imported.

Description of Inspection and Certification Systems:

Commodities subject to inspection shall not be exported or imported unless they have passed inspection and been certified by BCIQ. For these commodities, the application for inspection shall be filed with BCIQ by the owner of the commodities or the agent thereof by filling out an application form and submitting it together with inspection fees.

THAILAND - 1

Member Economy:

Thailand

Name of Organisation:

Fish Inspection and Quality
Control Division
Department of Fisheries

Full Address:

Kasetsart University Campus
Phaholyothin Road, Chatuchak,
Bangkok 10900, Thailand.
Tel : (662) 579-6729, 579-6915
Fax : (662) 579-6687

Products of Discipline:

- Fishery products for export/
import/domestic use
- Fresh and frozen fishery products
only
- Chilled fishery products
- Dried fishery products only
- Others

Mandatory or Voluntary:

Mandatory (export only)

Description of Organisation:

The Department of Fisheries is the competent authority in conducting inspection and quality assurance for fish and fishery products. Inspection and certification of fish and fishery products is the responsibility of the Department of Fisheries. The Department of Fisheries conducts mandatory inspection of processors and packers of fish and fishery products and final products prior to exporting. Certificates will be issued, if the processing plants and products are in compliance with standard requirements set by the Department and standard requirements of importing countries. Such services are backed up by research and development work including international cooperations.

The current seafood safety and quality control programme is based on Good Manufacturing Practices and the Hazard Analysis and Critical Control Point (HACCP) principles.

The Department has established 6 regional services as follows:

- Fish Inspection Centre (Bangkok)
- Fish Inspection Centre (Songkhla)
- Fish Inspection Centre (Surattha-ni)
- Fish Inspection Centre (Samutsa-korn)

Policies and Regulations that Support the Inspection System:

- Fisheries Act
- Import/Export Control Act

Description of Inspection and Certification Systems:

1. Fish processing establishments intend to export fish and fishery products are subject to plant inspection. Plant inspection is carried out at the rate of 2 - 4 times/plant/year. The inspection is made up of three inspectors. The inspection involves raw material, conditions and maintenance of construction, equipment, processing operations, plant hygiene and personnel. The plant must be in compliance with the standards established by the Department of Fisheries. The Department will maintain the list of approved establishments, during this period of approval the processors/exporters can apply for preshipment inspection of products. If the plant is found not in compliance to the requirements, corrections of defects are allowed time frame, usually not more than 3 months, for re-inspection by inspectors.

2. A company requesting certificates must provide in advance the following information:

- certificate type
- lot location
- lot size
- product description
- consignee
- consignor
- manufacturer

The inspector of the Certification Sub-division will inform the inspector supervising the sampling of the sampling schedule (date/time) and details from the requesting company.

3. The inspector of sampling section will determine plan, calculate lot size, sample size and withdraw sample from the lot. Samples will be withdrawn by authorized fishery officers only.

5. Within 24 hours, the sample will be prepared and laboratories will perform analysis according to AOAC methods unless specified by import authorities.

6. Once the analysis is done, the supervisor of the laboratory will review and verify results and identify whether the sample is conformed to the requirements or not.

7. The lot will pass or fail based on results of laboratory inspection. If the lot passes, a certificate will be issued by Certification Sub-division to be reviewed by the Director of FIQD and then be submitted for the approval of the Director of the Department of Fisheries (DOF). The Director of DOF or the designated staff may sign the certificate. If the lot fails to comply with the standards, a certificate will not be issued for the lot, resampling may be conducted based on reason of failure.

THAILAND - 2

Name of Organisations:

Department of Medical Sciences
Division of Food-for-Export Analysis

Full Address:

Division of Food-for-Export Analysis
693 Bamrung Muang Road,
Bangkok 10100 Thailand
Tel. (662) 223-3772
Fax. (662) 222-

Products of Discipline:

- Fishery products for export/
import/domestic use
- Fresh and frozen fishery
products only
- Chilled fishery products
- Dried fishery products only
- Others

Mandatory or Voluntary:

In case of canned products are mandatory base
and the rest are voluntary base.

Description of Organisations:

The Department of Medical Sciences (DMSc.), one of the agencies of 14 Divisions located in Bangkok and Nonthaburi Province and 9 Regional Medical Sciences Centres. Its major responsibilities are research, services, training and others in the field of medical and health sciences. One important responsibility of the Department is to provide services concerning food safety and quality standards assessment and certification of food for export according to the requirements of importing countries and or importers. These activities are performed to facilitate international trade of food at the Division of Food-for-Export Analysis in Bangkok and the Regional Medical Sciences Centres in Songkhla, Chonburi, Trang and Chiangmai Provinces. The Department plans to expand food export certification services to other Regional Medical Sciences Centres as required by the industry.

The Division of Food-for-Export Analysis (DFEA) has the responsibilities in providing laboratory

services for exporters and food producers for export; issuing certificates for food export consignments in the fields of food safety and health standards according to the requirements of importing countries and/or importers and promotion of food export industry with reference to health requirements.

The Division of Food Analysis is responsible for laboratory checking in domestic and imported foods, to ensure the consumer safety according to the Food Act B.E. 2522 (1979).

Policies and Regulations that Support the Inspection System:

Food Act B.E. 2522 (1979).

Legal Food Control in Thailand: Current Laws and Regulations

Food Control System in Thailand is exercised in accordance with the Food Act B.E. 2522 under the administration of the Ministry of Public Health. The Act is composed of 8 chapters describing administrative procedures for legal food control operations. They are the establishing of Food Commission, applications of licences and issuance of licences, duties of licensees with regard to food, control of food, licensing and advertising of foods, competent officers, suspension or revocation of licences and penalties. The Ministry of Public Health Notifications have been issued in pursuance of the Food Act B.E. 2522 describing quality standards and relevant information on Foods, labelling including labelling for exported foods, processing procedures and food packaging materials.

Prepackaged processed foods including canned foods, milk, dairy products, bottled drinking water and some traditional foods have been declared to be specific-controlled foods by the Minister of Public Health. Their quality standards and labellings have been described in the Ministry of Public Health Notifications.

The scope of food control system covers all types of foods both for domestic consumption and import.

The Food and Drug Administration (FDA) is responsible for the legal control of food products in Thailand, and imported into the country.

Who is Who in Fish Inspection of APEC Economies

Economies	No. of Agency	Agency Name	Address	Main Contact Person(s)
Australia	1	Australian Quarantine and Inspection Service (AQIS)	Edmund Barton Building, Blackall St., Barton ACT 2600, GPO Box 858 Canberra ACT 2601 Tel. (616) 272-4725; Fax. (616) 272-3682	Mr. Steve Bailey
Brunei Darussalam	1	Department of Fisheries Ministry of Industry and Primary Resource	5th Floor Athirah Plaza, Jalan Kubah Makam Diraja, Negara Brunei Darussalam 2069 Tel. (6732) 242-067; Fax. (6732) 242-069	Director General
Canada	1	Canadian Food Inspection Agency (Fish, Seafood and Production Div.)	59 Camerot Drive, Napean, Ontario K1A 0Y9 Canada Tel. (613) 990-0144; Fax. (613) 993-4220	Mr. Cameron Prince Director
Chile	1	Servicio Nacional de Pesca	Yangay N° 1731, 4° piso, Valparaiso, Chile Tel. (5632) 217-390, 212-090; Fax. (5632) 259-564	Dr. Juan Rusque Director
China	1	National Center for Quality Supervision and Test of Aquatic Products	106 Nanjing Road, Qingdao 266071, Shan Dong Province, P.R. China Tel. (86 532) 582-6579; Fax. (86 532) 581-1514	Li Xiao Chuan Director of Center
Hong Kong, China	1	Agriculture and Fisheries Department	Canton Road, Government Offices, 12/F, 393 Canton Road, Kowloon Hong Kong SAR Tel. (852) 2733-2208, 2873-8326 Fax. (852) 2311-3731, 2814-0018	Veterinary Officer Health Certification
Taiwan Province of China	2	1. Department of Health, The Executive Yuan 2. Bureau of Commodity Inspection and Quarantine (BCIQ), Ministry of Economic Affairs (MOEA)	No. 100 Ai Kuo E. Rd., Taipei, Taiwan Province of China Tel. (8862) 393-8209; Fax. (8862) 392-9723 No. 4, Chinan Rd., Sec. 1, Taipei, Taiwan Province of China Tel. (8862) 343-1700; Fax. (8862) 393-2324	Dr. Shu-Kong Chen Director, Bureau of Food Sanitation Mr. Chin-Ping Houng Director of 1st Department
Indonesia	1	Sub Directorate of Fish Inspection and Quality Control	Jl. Harsono R.M. No. 3, Pasar Minggu, Jakarta 12550 Indonesia Tel. (6221) 789-1479; Fax. (6221) 789-1479 Telex. 47318 djikan ia	Dr. Josephine Wiryaniti

Economies	No. of Agency	Agency Name	Address	Main Contact Person(s)
Japan	1	Veterinary Sanitation Division, Environmental Health Bureau, Ministry of Health and Welfare	2-2, Kasumigaseki 1-Chome, Chiyoda-ku, Tokyo 100-45 Japan Tel. (813) 3503-1711 (ext. 2436) Fax. (813) 3503-7964	Mr. Toshiaki Kuwasaki D.V.M. Technical Official
Korea	1	National Fishery Products Inspection Service	Wonnam Dong 103, Chongrogu, Seoul, 110-450 Korea Tel. (02) 762-9214 Fax. (02) 765-1755	Mr. Roe Seong-Man Director Inspection 1 Division
Malaysia	2	1. Malaysian Fisheries Development Authority (MFDA) 2. Fisheries Research Institute, Department of Fisheries Malaysia	8th Floor Wisma PKNS, Jalan Raja Laut, P.O. Box 12630, 50784 Kuala Lumpur, Malaysia Tel. (03) 292-4044 Fax. (03) 291-1931 11960 Batu Muang, Penang, Malaysia Tel. (04) 626-3925/6 Fax. (04) 626-2210	Mr. Mustafa Hj. Ahmad Marketing Director Mr. Hamdan Bin Jaafar, Fish Inspection & Quality Control Center
Mexico	2	1. Ministry of Fisheries 2. Ministry of Health	Lateral Anillo Periferico Sur 4209, 5º piso, col. Jardines en la Montana 14050 Mexico, D.F. Donceles 39, col. Centro, C.P. 06010 Mexico, D.F. Tel. (52-5) 521-9134/3050 Fax. (52-5) 512-9628	Mara Angelica Murillo Correa, General Director of International Fishery Affairs Mr. Jose Meljem Moctezuma, General Director of Sanitary Control of Services and Goods
New Zealand	2	1. Ministry of Agriculture 2. Ministry of Health	Postal : P.O. Box 2526, Wellington, New Zealand Physical : ASB Bank House, 101-103 The Terrace Wellington, New Zealand Tel. (644) 474-4100 Fax. (644) 474-4239 Postal : P.O. Box 5013, Wellington, New Zealand Physical : 133 Molesworth Street, Wellington, New Zealand Tel. (644) 496-2000 Fax. (644) 496-2340	John Lee, National Manager Fish or Phil Busby, National Manager Shellfish Manager Food Administration

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Philippines	1	Bureau of Fisheries and Aquatic Resource (BFAR)	Arcadia Bldg., 860 Quezon Avenue, Quezon City, Metro Manila, 3008 Philippines Tel. (632) 973-617 Fax. (632) 987-871, 973-617	Dennis B. Araullo Director
Singapore	1	Veterinary Public Health & Food Supply Division Primary Production Department, Ministry of National Development	5 Maxwell Rd., #02-00/#03-00 Tower Block, MND Complex, Singapore 069110 Tel. (65) 265-0622 Fax. (65) 265-0784 Telex : RS 28851 PPD	Dr. Paul Chiew King Tiong, Head/Food Inspection Services Branch or Dr. Chew Siang Thai, Head/Veterinary Public Health Laboratory Branch
Thailand	2	1. Fish Inspection and Quality Control Division, Department of Fisheries 2. Department of Medical Sciences	Kasetsart University Campus, Paholyothin Rd., Chatuchak, Bangkok 10900 Thailand Tel. (662) 579-7738 Fax. (662) 579-6687 693 Bamrung Muang Rd., Bangkok 10100 Thailand Tel./Fax. (662) 223-3730, 589-9862	Mr. Montri Kitsaneephai-boon Director Director General
USA	2	1. Food and Drug Administration (FDA), Office of Seafood, Department of Health and Human Services 2. National Marine Fisheries Service (NMFS), Inspection Services Division, Department of Commerce	HFS-400, 200 C St., S.W. Washington D.C. 20204 Tel. (202) 418-3150 Fax. (202) 418-3196 1315 East-West Highway, Silver Spring, MD 20910 Tel. (301) 713-2355, (301) 713-1081	Director, Division of Programs and Enforcement Policy Mr. Richard Cano Chief Inspection Services Division