

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT
Geneva

***REVIEW OF MARITIME
TRANSPORT
2008***

Report by the UNCTAD secretariat

**UNITED NATIONS
New York and Geneva, 2008**

Chapter 6

LEGAL ISSUES AND REGULATORY DEVELOPMENTS

This chapter provides information on some recent legal developments in the fields of transport and trade facilitation, together with information on the status of the main maritime conventions.

A. NEGOTIATIONS ON TRADE FACILITATION AT WTO

Trade facilitation negotiations are one of the less contentious areas in the WTO Doha Round, where there is strong support from both developing and developed member States. Essentially, many countries believe that trade facilitation is a win–win scenario that can provide real benefits to both Government and business, and can be a major factor in enhancing trade competitiveness and transparency.

The negotiations are aimed at clarifying and improving the relevant aspects of General Agreement on Tariffs and Trade (GATT) articles V, VIII and X (respectively, freedom of transit, fees and formalities, and publication and administration of trade regulations), with a view to further expediting the movement, release and clearance of goods, including goods in transit.¹⁰² Over the past year, the WTO Negotiating Group on Trade Facilitation considered a range of new and revised technical proposals from member States and focused on consolidating the over 130 proposals received to date into legal text-based proposals¹⁰³ that could be

used in a possible future WTO agreement on trade facilitation.

Discussions also focused on the special and differential treatment for trade facilitation. This is a key element for developing and least developed countries, calling for an enhanced approach to special and differential treatment that goes beyond the traditional granting of transitional periods for implementing commitments, and includes the provision of adequate technical assistance and capacity-building to implement the measure(s) prior to obligation. Current proposals on the topic¹⁰⁴ suggest that developing and least developed countries notify WTO members regarding proposals for which they require additional time and/or technical assistance and capacity-building before implementation.

In order to assist such countries assess their current situations regarding the proposals, WTO, with the support of the so-called annex D organizations,¹⁰⁵ has embarked on an extensive programme of national self-assessment workshops. These workshops bring together key stakeholders in individual countries to review the proposals, determine their current level of compliance

(i.e. already comply, could comply in time, or will require technical assistance and capacity-building), and outline their implementation and technical assistance priorities.¹⁰⁶ The outcome of the workshops also provides feedback and direction to their national delegates at WTO.

The results of the self-assessment could be used by countries to develop their capacity-building plans to implement the measures. As laid out in proposal TN/TF/W/142, such plans could include details on areas such as the obligations for which technical assistance and capacity-building are required, the implementation period for each specific provision, the capacity-building and technical assistance required, and the potential donor. This would obviously require individual country discussions with perspective donors to determine the extent and areas of technical assistance and capacity-building to be provided.¹⁰⁷ The exercise would, logically, also have to integrate with other existing or planned national trade facilitation initiatives to provide an overall strategic implementation framework.

Feedback from countries that have undertaken the self-assessments is very positive. Countries have indicated that the trade facilitation self-assessment workshop is the first time they have undertaken such a wide consultation in-country on WTO related matters — the result being greater awareness and buy-in by stakeholders in the negotiating process. Such workshops also strengthen the political will for implementation — a key ingredient in trade facilitation.

Together with the other annex D organizations, UNCTAD provides facilitators to assist in undertaking these workshops. UNCTAD also provides a programme of support to developing and LDCs in preparing for the self assessment.

B. LEGAL ISSUES AFFECTING TRANSPORTATION

(1) Overview of recent developments relating to maritime and supply chain security

(a) World Customs Organization

In 2005, the Council of the World Customs Organization (WCO) adopted the *Framework of Standards to Secure and to Facilitate Global Trade (SAFE Framework)*, which has fast gained widespread international

acceptance as the main global supply-chain security framework. As of June 2008, 154 WCO member administrations had expressed their intention to implement the WCO SAFE Framework.

Core features of the SAFE Framework were presented in previous editions of the *Review of Maritime Transport*. One of the integral aspects of the customs-to-business network arrangements envisaged by the SAFE Framework is the concept of the Authorized Economic Operator (AEO), defined as “party involved in the international movement of goods ... that has been approved by or on behalf of national customs administrations as complying with the WCO or equivalent supply chain security standards. Authorized Economic Operators include, inter alia, manufacturers, importers, exporters, brokers, carriers, consolidators, intermediaries, ports, airports, terminal operators, integrated operators, warehouses, distributors”¹⁰⁸ Detailed AEO guidelines have been issued and, in June 2007, were integrated in a revised version of the SAFE Framework. The requirements for AEO recognition, applicable to AEOs and/or to customs administrations, were briefly presented in the *Review of Maritime Transport 2007*, but are repeated here for ease of reference. A number of elements that need to be satisfied are listed, each of them accompanied by specific detailed requirements applicable to AEOs, customs, or to both.¹⁰⁹ These elements include:

- (a) Demonstrated compliance with customs requirements;
- (b) Satisfactory system for management of commercial records;
- (c) Financial viability;
- (d) Consultation, cooperation and communication;
- (e) Education, training and awareness;
- (f) Information exchange, access and confidentiality;
- (g) Cargo security;
- (h) Conveyance security;
- (i) Premises security;
- (j) Personnel security;

- (k) Trading partner security;
- (l) Crisis management and incident recovery; and
- (m) Measurement, analyses and improvement.

Although the SAFE Framework and the AEO guidelines have been in place for some time, it is not yet clear how much progress has been achieved in successfully implementing the requirements at national levels. One of the main challenges in respect of successful global implementation of the SAFE Framework, in particular from the perspective of developing economies, remains the mutual recognition of AEOs that are certified by different customs administrations. In the longer term, mutual recognition of AEO status will be critical to ensure that operators who comply with the criteria set out in the SAFE Framework and have obtained AEO status in their own country are in fact able to enjoy the benefits outlined in the SAFE Framework and may participate in international trade on equal terms. In the absence of a system for global mutual recognition of AEO status, traders from some countries, in particular developing economies, may find themselves at a serious competitive disadvantage; this could become even more of a concern if protectionist pressures, already growing in many countries as a result of a slowing world economy, increase. Progress on the issue of mutual recognition remains slow, however. Although some guidelines on the development of mutual recognition agreements are provided in the SAFE Framework, emphasis is also placed on the fact that “a global system of mutual recognition of AEO status will require some time to accomplish”. In this respect, it is noted that “just as it has been suggested by WCO members and the secretariat that the SAFE Framework be implemented in a progressively “phased approach”, so too should be the expectations for the future application of mutual recognition of customs systems of control for partnership programmes. Bilateral, subregional or regional initiatives are being developed as useful stepping stones toward such a global system”.¹¹⁰

According to information by WCO, as of December 2007, some five countries had operational AEO programmes. This suggests that much remains to

be done and that both benefits and challenges associated with the operation of AEO programmes at a global level will take some time yet to become apparent. Following the establishment of AEO programmes, customs administrations should endeavour to develop mutual recognition agreements with other administrations that have similar AEO programmes. The United States–New Zealand Mutual Recognition Agreement, announced in June 2007, appears to have been the first bilateral mutual recognition agreement relating to AEOs, providing for improved cooperation and coordination between the United States Customs Trade Partnership Against Terrorism programme (C-TPAT) and the New Zealand Customs Service Secure Export Scheme.¹¹¹ According to WCO, as of December 2007, three further pilot programmes on mutual recognition agreements were underway¹¹² involving Australia–New Zealand, EU–China, and the customs administrations of the East African Community,¹¹³ respectively.

In 2006, WCO launched a number of capacity-building programmes, notably the Columbus Programme, Aid for SAFE Trade,¹¹⁴ to help the modernization of member customs administrations and to assist in the implementation of the new security framework, as well as prepare countries for the possible outcome of WTO negotiations on trade facilitation. The programme consists of three phases:

- (a) Phase 1: Needs Assessment – this phase concluded in June 2007, with over 100 diagnostic missions conducted;
- (b) Phase 2: Implementation – this phase focuses on strategic planning, programme and project initiation, development of management infrastructures and monitoring and supporting the implementation process undertaken by WCO members. The WCO secretariat has published a “Capacity-building development compendium”,¹¹⁵ a guide to key management techniques to enable member administrations to control their own organizational development. The compendium will be updated at regular intervals to reflect the reforms and the modernization process of different customs administrations;

One of the main challenges in respect of successful global implementation of the SAFE Framework, in particular from the perspective of developing economies, remains the mutual recognition of AEOs that are certified by different customs administrations.

- (c) Phase 3: Monitoring and evaluation – this phase is dedicated to evaluation and follow-up of implementation progress of the Columbus Programme beneficiaries.

Two reports, both entitled “WCO trends and pattern report – a capacity-building estimate”, were published in 2007 with a further relevant report being published in June 2008.¹¹⁶ The first report, focusing on the results of the needs assessment phase, finds that member customs administrations are aware of the new challenges but need support to develop the business skills required to implement the SAFE Framework. While most Columbus members appear to have adequate customs law in place to ensure authority for the key responsibility of customs — i.e. the basic control of goods and people crossing borders — primary and secondary legislation on, inter alia, the AEO concept appears often to be missing and closer cooperation between customs and with business partners is needed in order to facilitate the development of AEO programmes.

In relation to container scanning equipment, also referred to as non-intrusive inspection equipment or non-intrusive inspections, the acquisition of which is reportedly growing rapidly, attention is drawn in both 2007 reports to the need for caution. The first report highlights some of the problems diagnosticians have identified as part of the first phase of the Columbus Programme.¹¹⁷ These include instances where scanning equipment is put in place before the necessary risk assessment infrastructure to ensure the effective targeting of high-risk containers for scanning and inspection. The report notes, “A worrisome trend, however, is that some countries are using scanners without risk assessment, proper sequencing, clear strategies, or sufficient infrastructures”. The report also states that “some administrations are purchasing non-intrusive inspections without first analysing what equipment is really needed, how it will be used under the new risk management system, what training will be needed, and maintenance requirements. In addition, selling scanners is profitable; WCO diagnosticians noted examples of sellers profiting from the overemphasis on scanners for countries that are not yet prepared for their usage”. As is also emphasized in the report, scanning

Member customs administrations are aware of the new challenges but need support to develop the business skills required to implement the SAFE Framework.

“A worrisome trend, however, is that some countries are using scanners without risk assessment, proper sequencing, clear strategies, or sufficient infrastructures”.

equipment is very expensive and, due to continuous technological improvements, the costs of acquiring such equipment may be prohibitive, especially for many developing economies, which lack the financial resources and remain heavily dependent on donors and payment schemes. In relation to container scanning equipment, the second WCO trends and patterns report reiterates the concerns identified as part of the Columbus Programme needs assessment phase and notes: “A large or growing number of functioning scanners could be a positive metric, but only if it is accompanied with a strategic plan describing purpose and usage; an operational risk assessment system; a process for maintenance and contingency plans for disrepair; contributes to rather harm trade facilitation; and does not involve 100 per cent scanning and physical inspection”.¹¹⁸ The 2008 issue of the trends and patterns report presents information on the activities of the Columbus Programme as well as concrete results achieved in the six WCO regions.

(b) *European Union*

At EU level, Regulation (EC) No. 1875/2006¹¹⁹ had been adopted in December 2006 to introduce a number of measures to increase the security of shipments into and out of the EU and to implement Regulation (EC) No. 648/2005, which had first introduced the AEO concept into the Community Customs Code. Regulation (EC) No. 1875/2006 includes detailed rules regarding implementation of the AEO programme and envisages that reliable economic operators that meet the conditions and criteria required for recognition of AEO status may be issued with AEO certificates as of 1 January 2008.¹²⁰ It should be noted that an “economic operator” is defined as “a person who, in the course of his business, is involved in activities covered by customs legislation”.¹²¹ This would cover, for instance, manufacturers producing goods for export, but not a supplier of raw materials already in free circulation, or a transport operator that moves only free circulation goods within the customs territory of the European Community.¹²² According to the European Commission, in February 2008, 266 AEO applications from all actors in the supply chain were uploaded on the Community

ICT system developed for this purpose.¹²³ Companies seeking AEO status must comply with such criteria as:

- (a) Presence of an automated system that manages trade and transport data;
- (b) Proven financial solvency (over the last three years);
- (c) Adequate safety/security standards (physical security, access control, screening of personnel, etc.).

There are three types of certificate that may be applied for:

- (a) Customs Simplifications – AEOs benefit from certain simplifications provided for under the customs rules;
- (b) Security and Safety – AEOs benefit from facilitation of customs controls relating to security and safety at the entry or exit of the goods to the customs territory of the Community;
- (c) Customs Simplifications/Security and Safety jointly – AEOs will be entitled to benefit from both.

A number of guidance documents and tools have been prepared by the European Commission, including detailed AEO guidelines, published in June 2007, a common framework for risk assessment of economic operators, called COMPACT, published in June 2006,¹²⁴ an AEO self-assessment tool and an AEO e-learning tool.¹²⁵ The EU is also in the process of negotiating mutual recognition of the business partners programmes (AEO and similar) with its major trading partners, such as the United States, Canada, Japan and China, and also with neighbouring countries (e.g. Switzerland and Norway).

In 2007, the EU and the United States started negotiations towards the mutual recognition of the United States' C-TPAT and the EU's AEO supply chain programmes. While there are significant differences between the two customs-business partnership schemes,

a “Joint roadmap towards mutual recognition of trade partnership programmes” was adopted by the United States Customs and Border Protection and the European Commission in March 2008.¹²⁶ The roadmap focuses on six areas that will be addressed by the United States and the EU to achieve mutual recognition: political, administrative, legal, policy, technical/operational and evaluation. It is envisaged that the following tasks will be accomplished by the United States and the EU, in an effort to achieve mutual recognition by 2009:

- (a) Establish guidelines regarding the exchange of information, including validation/audit results and legalities associated with the disclosure of membership details;
- (b) Perform joint verifications to determine remaining gaps between AEO/C-TPAT;
- (c) Explore and test an export component for C-TPAT;
- (d) Exchange best practices through joint visits and conferences;
- (e) Continue dialogue on legal and policy developments under the respective administrations ;
- (f) Endorse and sign a mutual recognition arrangement; and
- (g) Evaluate mutual recognition benefits for AEO/C-TPAT members.¹²⁷

The EU is also in the process of negotiating mutual recognition of the business partners programmes (AEO and similar) with its major trading partners, such as the United States, Canada, Japan and China, and also with neighbouring countries (e.g. Switzerland and Norway).

On 30 January 2008 the EU and Japan signed an Agreement on Cooperation and Mutual Administrative Assistance in Customs Matters (CCMAA).¹²⁸ The agreement entered into force on 1 February 2008. A first meeting of the EC–Japan Joint Customs

Cooperation Committee was held in Brussels on 11 February 2008 to discuss the implementation of the CCMAA. The discussions focused mainly on the following topics:

- (a) Supply chain security – recognizing the importance of mutual recognition of their AEO

programmes and security measures and deciding on the creation of a working group that will make recommendations on these matters;

- (b) The protection of intellectual property rights; and
- (c) Mutual administrative assistance to fight against frauds and irregularities.¹²⁹

As reported in the *Review of Maritime Transport 2007*, in December 2006, the EU and China launched a pilot project on secure and smart trade lanes.¹³⁰ As part of the project, the customs administrations of the United Kingdom, the Netherlands and China were, as of November 2007, exchanging for the first time electronic information on sea containers leaving their territory through the ports of Felixstowe, Rotterdam and Shenzhen. According to the European Commission, following close technical cooperation between the EU and China, China is furthermore in the process of adopting and implementing legislation on security and trade facilitation based on and compatible with the EU legislation on AEO.¹³¹

The European Commission, together with the member States, has also undertaken a major review of the role of customs to adapt customs to global trade, and to the new threats of terrorism and climate change. In this context, the adoption of a Modernized Community Customs Code (MCCC) represents a major development, simplifying the legislation and administration procedures for both administrations and traders. A common position on the MCCC¹³² was adopted on 15 October 2007 by the EU Council of Ministers and, after approval by the European Parliament, Regulation (EC) No. 450/2008 laying down the Modernized Community Customs Code was adopted on 23 April 2008.¹³³ The regulation entered into force on 24 June 2008 but, in respect of a large number of implementing provisions which have yet to be drafted, it will apply at the earliest as from 24 June 2009, and no later than 24 June 2013.¹³⁴ The MCCC:

- (a) Introduces the electronic lodging of customs declarations and accompanying documents as the rule;

- (b) Provides for the exchange of electronic information between the national customs and other competent authorities;

- (c) Promotes the concept of “centralized clearance”, under which authorized traders will be able to declare goods electronically and pay their customs duties at the place where they are established, irrespective of the member State through which the goods will be brought into or out of the EU customs territory or in which they will be consumed;

- (d) Offers bases for the development of the “single window” and “one-stop-shop” concepts, under which economic operators provide information on goods to only one contact point (“single window” concept), even if the data should reach different administrations/agencies, so that controls on them for various purposes are performed at the same time and in the same place (“one-stop-shop” concept).¹³⁵

The MCCC also assimilates the security amendments resulting from Regulation No. 648/2005¹³⁶ such as the AEO status, pre-arrival

and pre-departure declarations and the risk management framework.

(c) *International Maritime Organization*

Since 2005, IMO has participated in the implementation of the United Nations Global Counter-Terrorism Strategy (contained in General Assembly Resolution A/Res/60/288) and has been fully committed to the work of the United Nations Counter Terrorism Implementation Task Force. As part of this international involvement, IMO attended the fifth special meeting of the Counter-Terrorism Committee with International, Regional and Subregional Organizations, held in Nairobi, Kenya, 29–31 October 2007,¹³⁷ on “Prevention of Terrorist Movement and Effective Border Security”.¹³⁸ On the occasion of the meeting, IMO presented its global counter-terrorism regulations, including the 1974 International Convention for the Safety of Life at Sea (SOLAS Convention) and the International Ship and Port

The European Commission, together with the member States, has also undertaken a major review of the role of customs to adapt customs to global trade, and to the new threats of terrorism and climate change. In this context, the adoption of a Modernized Community Customs Code (MCCC) represents a major development, simplifying the legislation and administration procedures for both administrations and traders.

Facility Security Code (ISPS Code, chapter XI-2 of the SOLAS Convention), and the 1988 Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation and its 2005 Protocol.¹³⁹ Some of the obstacles identified in the implementation of the maritime security regime included lack of appropriate administrative and verification arrangements, absence of proper and effective national legislative frameworks, a shortage of qualified human resources and lack of funding.¹⁴⁰ To ensure the efficacy of maritime security measures, the following steps were proposed:

- (a) Continued review of the implementation of the IMO special measures on maritime security;
- (b) Continued collaboration at regional and subregional level by putting action plans into practice, with a focus on vital shipping lanes;
- (c) Training of more maritime security personnel using revised and new model courses;
- (d) Organizing seminars and workshops in order to enhance the capacity of SOLAS contracting parties to exercise control and compliance;
- (e) Continued cooperation with the United Nations Counter-Terrorism Implementation Task Force.

The report of the special meeting, together with a joint statement and associated plan of action adopted by the meeting was presented to the 84th session of the Maritime Safety Committee, in May 2008.¹⁴¹ The joint statement confirmed the intention, *inter alia*, to:

- (a) Strengthen further working relationships through increased interaction and communication;
- (b) Increase the effectiveness of efforts against terrorism;
- (c) Continue to work with member States to facilitate the implementation of the provisions of Security Council resolution 1373 (2001) and United Nations Global Counter-Terrorism Strategy that are relevant to the control and security of borders and adoption of pertinent legislative and administrative measures;

- (d) Continue efforts to encourage member States to become parties to the existing international and relevant regional counter-terrorism conventions and protocols, and to put into place the required border control and security measures, and assist them in implementing the relevant provisions in domestic laws and practices;
- (e) Continue to work with member States to identify shortfalls and challenges in their implementation of border security and counter-terrorism measures and the technical assistance required by member States;
- (f) Continue to facilitate the provision of technical and other assistance to member States with their consent, recognizing that capacity building is a core element in the fight against terrorism;
- (g) Continue to build on the body of best practices and international codes and standards to ensure the control and security of borders in the broader counter-terrorism effort and promote broader application of these best practices, codes and standards;
- (h) Ensure that any measure that is undertaken to enhance the control and security of borders must comply with international law, including the Charter of the United Nations, and relevant international conventions and protocols;
- (i) Continue to assist member States in ensuring the preservation and integrity of the institution of asylum and the diligent implementation of its core principles when implementing the provisions of United Nations Security Council resolution 1373 (2001) and the United Nations Global Counter-Terrorism Strategy that are relevant to the control and security of borders;
- (j) Continue to review efforts to strengthen cooperation and coordination among international, regional and subregional organizations in combating terrorism at a future special meeting of the Counter-Terrorism Committee by, *inter alia*, conducting periodic stocktaking of progress and share results with all participants.

It should be noted that SOLAS regulation V/19-1 on a Long-Range Identification and Tracking System (LRIT), which had been adopted in 2006, entered into force on 1 January 2008. The regulation applies to ships over 500 GT constructed on or after 31 December 2008, with a phased-in implementation schedule for ships constructed before 31 December 2008. The purpose of the regulation is to allow for continuous monitoring of all vessels over 500 GT in order to help combat any threats to global security. The LRIT system is intended to be operational from 31 December 2008 and consists of the following:

- (a) Ship-borne LRIT information transmitting equipment;
- (b) Communication service providers(s);
- (c) Application service provider(s); and
- (d) LRIT data centre(s) including vessel monitoring system(s), the LRIT Data Distribution Plan and the International Data Exchange (IDE). LRIT Data Centers exchange their information and data through the IDE.

During its 83rd session, IMO's Maritime Safety Committee (MSC) accepted the offer of the United States to host, build and operate the International LRIT Data Exchange (IDE);¹⁴² at its 84th session, the MSC adopted a relevant resolution on the "Establishment of the International LRIT Data Exchange on an interim basis". In order to ensure the timely implementation of the LRIT system, a number of other relevant decisions were made by the MSC at its 84th session.¹⁴³ Inter alia, the committee agreed on a number of circulars to provide guidance on implementation, operation and technical specifications of the LRIT system and authorized the ad hoc LRIT group "to consider and adopt amendments to technical specifications for the LRIT system on behalf of the committee during the period between MSC 84 and MSC 85". The ad hoc LRIT group was also instructed to "develop, agree and adopt the documentation for the testing and integration of the LRIT system" and to "consider and report to MSC 85 on all matters relating to the development of a plan for

the continuity of the LRIT system and, if possible, develop such a plan".¹⁴⁴

Other relevant security-related decisions of the MSC, adopted at its 83rd session, included:

- (a) Based on recommendations by the re-established Ad-Hoc Working Group on Maritime Security, the committee decided on the creation of a correspondence group on security arrangements for vessels that are not covered by the SOLAS chapter XI-2 and the ISPS Code (non-SOLAS vessels). The correspondence group was invited to develop relevant recommendatory guidelines to enhance maritime security to complement measures required by SOLAS chapter XI-2 and the ISPS Code;
 - (b) Regarding container security, the MSC endorsed the joint MSC/FAL circular on security and facilitating international trade, which had been developed by the MSC/FAL working group "Security and facilitation of the movement of closed transport units and of freight containers transported by sea".¹⁴⁵
- (c) The MSC also endorsed draft amendments to the International Convention on Standards of Training, Watchkeeping and Certification for Seafarers (STCW Convention). The proposed amendments concern regulation VI/1 and sections A-VI/1 and B-VI/1 addressing the basic security-related training, and security-related familiarization training for seafarers without designated security-related duties and for all shipboard personnel. A new regulation VI/6 and new sections A-VI/6 and B-VI/6 were proposed, addressing standards of competency and security-related familiarization training, for seafarers with security designated duties. These draft amendments will be reviewed by the Subcommittee on Standards of Training and Watchkeeping (STW) in conjunction with a comprehensive review of the STCW Convention and the STCW Code. Furthermore, the MSC decided that seafarers serving on non-SOLAS vessels should be required to undertake basic security-related training or instruction.

SOLAS regulation V/19-1 on a Long-Range Identification and Tracking System (LRIT), which had been adopted in 2006, entered into force on 1 January 2008. The regulation applies to ships over 500 GT constructed on or after 31 December 2008, with a phased-in implementation schedule for ships constructed before 31 December 2008.

(d) *International Organization for Standardization*

As reported in the previous edition of this review, the International Organization for Standardization (ISO) has developed a range of voluntary international industry standards on supply chain management systems. In 2005, the ISO/PAS 28000 series *Specification for security management systems for the supply chain* was adopted. This series of international standards is intended for application by organizations involved in manufacturing, service, storage or transportation by all modes of transport at any stage of the production or supply process. The aim is to facilitate and improve controls of flows of transport, to fight smuggling, to deal with the threats of piracy and terrorism, and to enable secure management of supply chains. In 2007, the ISO 28000 series of standards were upgraded from their status of Publicly Available Specifications to that of full-fledged International Standards.

Maritime and supply chain regular standards published by ISO in 2007 and replacing previous Publicly Available Specifications (PAS) include the following:¹⁴⁶

- (a) ISO 20858:2007: *Ships and marine technology – maritime port facility security assessments and security plan development*. The standard is designed to assist in the uniform industry implementation of the ISPS Code. It replaces the PAS previously published on 1 July 2004;
- (b) ISO 28000:2007: *Specification for security management systems for the supply chain*. It outlines the requirements to enable an organization to establish, implement, maintain and improve a security management system, including those aspects critical to security assurance of the supply chain. This standard can be implemented on its own, but it is designed to be fully compatible with ISO 9001:2000 and ISO 14001:2004, which companies using these management systems may use as a baseline;
- (c) ISO 28001:2007: *Security management systems for the supply chain – best practices for implementing supply chain security – assessments and plans – requirements and*

In 2007, the ISO 28000 series of standards were upgraded from their status of Publicly Available Specifications to that of full-fledged International Standards.

guidance. The standard is designed to assist industry to meet best practices as outlined in the WCO SAFE Framework, the EU Customs Security Programme AEO, and the United States' CTPAT. It "provides requirements and guidance for organizations in international supply chains to develop and implement supply chain security processes; establish and document a minimum level of security within a supply chain(s) or segment of a supply chain; assist in meeting the applicable authorized economic operator (AEO) criteria set forth in the WCO SAFE Framework and conforming national supply chain security programmes".¹⁴⁷ It also establishes documentation requirements to allow for verification;

- (d) ISO 28003:2007: *Security management systems for the supply chain – requirements for bodies providing audit and certification of supply chain security management systems*; references ISO 19011:2002: *Guidelines for quality and/or environmental management systems auditing* and ISO/IEC 17021: *Conformity assessment – Requirements for bodies providing audit and certification of management systems with any necessary security-related modifications or change*. It provides harmonized guidance for the accreditation of certification bodies applying for ISO 28000 (or other specified supply chain security management system requirements) certification/registration;
- (e) ISO 28004:2007: *Security management systems for the supply chain – guidelines for the implementation of ISO 28000*. This standard provides advice on the application of ISO 28000:2007, explaining the underlying principles and the intent as well as typical inputs, processes and typical outputs for each requirement of ISO 28000;
- (f) ISO 28005: *Ships and marine technology – computer applications – electronic port clearance (EPC)*. This standard is currently being developed. It provides for computer to computer data transmission.

(2) Legal instruments and other developments relating to the environment

IMO's Marine Environment Protection Committee (MEPC), at its 56th and 57th sessions, adopted some important decisions related to amendments to MARPOL¹⁴⁸ annex VI regulations, to reduce air pollution from ships and made important progress in its work on greenhouse gas (GHG) emissions. The committee also reviewed the current draft of a proposed ship recycling convention and pursued its work related to the Ballast Water Management Convention.

(a) Air pollution from ships

Ocean shipping is the dominant mode of transport for international cargo. Ocean-going vessels transport about 80 per cent of the world's goods and represent the most fuel-efficient way to carry cargo. International shipping largely uses energy obtained from fossil fuels. The combustion of these fossil fuels creates significant emissions such as Nitrogen Oxides (NO_x) and Sulphuric Oxides (SO_x) which have been linked to a variety of adverse public health¹⁴⁹ outcomes and also Carbon Dioxide (CO₂) which causes global warming. However, it should be noted that bunker fuel emissions from international shipping are not covered by the international regulatory framework as set out in the Kyoto Protocol.¹⁵⁰

MARPOL 1973/1978, the main international convention dealing with pollution from ships and covering different types of pollution (oil, chemicals, pollutants in packaged form, sewage and garbage) did not cover air pollution until 1997, when a new annex VI on "Regulations for the Prevention of Air pollution from Ships" was adopted at a special conference. MARPOL annex VI entered into force in May 2005 and, as of 30 June 2008, had been ratified by 51 countries, representing approximately 80.36 per cent of the gross tonnage of the world's merchant fleet.¹⁵¹ Annex VI deals with SO_x, NO_x emissions and particulate matter, but does not cover CO₂ emissions, which are subject to separate discussions within IMO. In this context, it is important to note that IMO work on GHG emissions, while still at an early stage, is intended to culminate in the adoption, in 2009, of a coherent and comprehensive IMO regime to control

GHG emissions from ships engaged in international trade.¹⁵²

At its 56th session, the MEPC confirmed the need to update an IMO GHG study which had been completed in 2000¹⁵³ and agreed on the relevant scope and terms of reference, as well as a time-frame for this updated study. According to the terms of reference, the new GHG study should analyse:

- (a) Current global inventories of GHG's and relevant substances emitted from ships engaged in international transport;
- (b) Methodological aspects and future emission scenarios;
- (c) Progress made so far to reduce GHG emissions and other substances;
- (d) Possible future measures to reduce GHG emissions and undertake a cost benefit analysis, including environmental and public health impacts, of options for current and future reductions in GHG emissions and other relevant substances resulting from international shipping; and
- (e) The impact of the shipping emissions on climate change.¹⁵⁴

However, it should be noted that bunker fuel emissions from international shipping are not covered by the international regulatory framework as set out in the Kyoto Protocol.

The updated study is being conducted by an international consortium of research institutions and is being carried out in two phases:

- (a) Phase one is to cover a CO₂ emission inventory from international shipping and future emission scenarios, with a relevant report to be submitted to IMO by August 2008 for consideration by MEPC 58 in October 2008;
- (b) Phase two is to cover GHG emissions other than CO₂ and relevant substances emitted from ships engaged in international transport, in accordance with the methodology adopted by the United Nations Framework Convention on Climate Change, as well as consideration of future reduction potentials by technical, operational and

market-based measures. The final report covering both phases is expected to be ready by 1 March 2009 for consideration by MEPC 59.¹⁵⁵

During its 56th session, MEPC also commissioned a comprehensive study to evaluate the effects on the environment, on human health and on the shipping and petroleum industries of different fuel options, proposed as part of the revision of MARPOL annex VI¹⁵⁶. The study was conducted by an “informal cross-government/industry scientific group of experts”, and was funded by donations from member States and non-governmental organizations. The cross-government/industry scientific group of experts finalized its work in the form of a report,¹⁵⁷ which was submitted to the MEPC ahead of its 57th session. The report estimates total CO₂ emissions from shipping at 1.12 billion tons in 2007, representing about 4 per cent of global CO₂ emissions from fuel combustion. By 2020, emissions from shipping are projected to increase by over 30 per cent to reach 1.47 billion tons. As these figures are considerably larger than existing estimates for emissions in the shipping as well as the aviation sector, the shipping sector may face increasing demands to address the issue of GHG emission control.¹⁵⁸

At its 57th session, from 31 March to 4 April 2008, the MEPC endorsed a number of amendments to MARPOL annex VI regulations, relating to SO_x and particulate matter emissions:

- (a) As from 1 March 2010, the sulphur limit applicable in emission control areas would be 1.00 per cent (10,000 ppm) instead of 1.50 per cent (15,000 ppm);
- (b) As from 1 January 2012, the global sulphur cap would be reduced from 4.50 per cent (45,000 ppm) to 3.50 per cent (35,000 ppm);
- (c) As from 1 January 2015, the sulphur limit applicable in emission control areas would be 0.10 per cent (1,000 ppm);

The report estimates total CO₂ emissions from shipping at 1.12 billion tons in 2007, representing about 4 per cent of global CO₂ emissions from fuel combustion. By 2020, emissions from shipping are projected to increase by over 30 per cent to reach 1.47 billion tons. As these estimates are considerably larger than current figures for emissions in the aviation sector, the shipping sector may face increasing demands to address the issue of GHG emission control.

(d) The global sulphur cap would be reduced to 0.50 per cent (5,000 ppm) from 2020 (subject to a feasibility review in 2018; in case of a negative conclusion of the review the new global cap should be applied from 1 January 2025);

(e) Introduction of a fuel availability provision under regulation 18 on fuel availability and quality that describes the appropriate actions that should be taken in case of non-compliance with the requirements of regulation 14.

The committee also endorsed a circular on “Unified Interpretations related to the verification of sulphur content in fuel oil”.¹⁵⁹ These interpretations will have to be applied until the 2008 amendments to MARPOL annex VI enter into force.

Other amendments endorsed by the MEPC relate to NO_x emissions from ships. Nitrogen emission standards on tier III engines¹⁶⁰ operating in emissions control

areas will be reduced to 3.4 g/kWh. Outside such areas, the NO_x emissions limit will be the one applied for tier II engines,¹⁶¹ i.e. 14.5 g/kWh. The limit for tier I engines¹⁶² is 17g/kWh. The MEPC also approved some amendments to the NO_x technical code¹⁶³ that includes a new chapter 7 related to the certification of an existing engine. The amended text also includes provisions related to direct measurement and monitoring measures, a certification procedure for existing engines and test cycles applicable to tier II and tier III engines.

Concerning CO₂ emissions, the MEPC, at its 57th session,¹⁶⁴ made some important progress. The committee welcomed a proposal by the IMO’s Secretary-General¹⁶⁵ to expedite IMO’s work on GHG emissions, underlining the universally recognized importance and urgency to limit and control GHG emissions and the need to act in concert with broader international efforts to develop and adopt a global agreement by 2009, with a view to its entering into force by 2012. In this context, the Committee agreed on some principal characteristics of a future IMO Regulatory Framework on Greenhouse Gas Emissions from Ships, which should be:

- “1. Effective in contributing to the reduction of total global greenhouse gas emissions;
2. Binding and equally applicable to all flag States in order to avoid evasion;
3. Cost-effective;
4. Able to limit or at least effectively minimize competitive distortion;
5. Based on sustainable environmental development without penalizing global trade and growth;
6. Based on a goal-based approach and not prescribe specific methods;
7. Supportive of promoting and facilitating technical innovation and R&D in the entire shipping sector;
8. Accommodating to leading technologies in the field of energy efficiency; and
9. Practical, transparent, fraud-free and easy to administer.”

Further consideration of these principles is, however, envisaged at the next session of the MEPC, in particular in view of the reservations expressed by some delegations regarding the principle stated in point 2 above.

The committee also approved the report and proposed set of actions of a newly established working group on GHG emissions from ships.¹⁶⁶ The working group had reviewed in detail a number of short-term and long-term measures to reduce CO₂ emissions from ships that had been outlined in a report by the Intersessional Correspondence Group on GHG Related Issues,¹⁶⁷ which had been set up by MEPC 56 and was re-established by the committee at its 57th session. Relevant short-term measures under consideration include, inter alia, the creation of a global levy scheme on marine bunker fuel to address GHG emission reductions, as well as

Relevant short-term measures under consideration include, inter alia, the creation of a global levy scheme on marine bunker fuel to address GHG emission reductions, as well as measures related to the improvement of fuel consumption, the use of wind power, vessel speed reductions and onshore power supply.

measures related to the improvement of fuel consumption, the use of wind power, vessel speed reductions and onshore power supply. Relevant long-term measures under consideration include:

- (a) Technical measures for ship design;
- (b) Use of alternative fuels;
- (c) A CO₂ design index for new ships;
- (d) External verification scheme for CO₂ operational index;
- (e) Unitary CO₂ operational index limit, combined with penalty in case of non-compliance;
- (f) Emission trading scheme¹⁶⁸ and/or clean development mechanism; and
- (g) Inclusion of mandatory CO₂ element in port infrastructure charging.

The committee further approved broad terms of reference for an intersessional meeting of the GHG Working Group to be held in Oslo from 23 to 27 June 2008. A written report on the outcome of the intersessional meeting will be submitted to MEPC 58, however, according to an IMO press release issued after the meeting, the GHG Working Group made progress on “developing a mandatory CO₂ Design Index for ships

and an interim operational index”. It also held extensive discussions “on best practices for voluntary implementation and economic instruments with GHG reduction potential”.¹⁶⁹ The Committee also re-established the *Intersessional Correspondence Group on Greenhouse Gas Emissions from Ships*, which is to “prepare detailed proposals on the measures identified in the Correspondence Group report (MEPC 57/4/5; MEPC 57/4/5/Add.1), which have not been identified for further

consideration by the GHG Working Group at its intersessional meeting in Oslo (23–27 June 2008)”.¹⁷⁰ An interim report by the Intersessional Correspondence Group is to be presented to MEPC 58 with a final report to be presented to MEPC 59.

(b) Ship recycling

At its 56th session, the MEPC made further progress on the draft text of an International Convention for the Safe and Environmentally Sound Recycling of Ships. The draft convention aims to provide globally applicable ship recycling regulations for international shipping and for recycling activities. The MEPC agreed that the new draft recycling convention would provide regulations for:

- (a) The design, construction, operation and preparation of ships so as to facilitate safe and environmentally sound recycling, without compromising the safety and operational efficiency of ships;
- (b) The operation of ship recycling facilities in a safe and environmentally sound manner;
- (c) The establishment of an appropriate enforcement mechanism for ship recycling, incorporating certification and reporting requirements.¹⁷¹

In this regard, the committee also decided on a new intersessional meeting of the Working Group on Ship Recycling. The meeting will be held in October 2008 in order to prepare the final version of the draft convention which will be reviewed by the MEPC at its 58th session in October 2008. In June 2008, the IMO Council endorsed the holding of an ad hoc diplomatic conference in Hong Kong, China, in May 2009 in order to consider the Ship Recycling Convention for adoption.

(c) Ballast Water Management Convention and Wreck Removal Convention

At its 56th and 57th session, the MEPC also urged States to ratify the International Convention for the Control and Management of Ships' Ballast Water and Sediments

(BWM Convention). The convention, which dealt with harmful aquatic organisms in ballast water, had been adopted in February 2004, but has so far not attracted a sufficient number of ratifications to enter into force. It

It has been estimated that international shipping moves around 3 to 4 billion tons of ballast water each year, with a similar quantity of ballast water transferred in domestic and regional shipping. The associated introduction of large numbers of non-native invasive species of bacteria, plants and animals into marine environments poses a major threat to marine biodiversity and may also have broader economic impacts, such as in relation to fisheries, tourism and marine genetic resources.

has been estimated that international shipping moves around 3 to 4 billion tons of ballast water each year, with a similar quantity of ballast water transferred in domestic and regional shipping.¹⁷² The associated introduction of large numbers of non-native invasive species of bacteria, plants and animals into marine environments poses a major threat to marine biodiversity and may also have broader economic impacts, such as in relation to fisheries, tourism and marine genetic resources. The BWM Convention will enter into force 12 months after ratification by 30 States representing 35 per cent of the world merchant tonnage. As of June 2008, only 14 States, representing approximately a tenth

of the required global tonnage, had ratified the convention.¹⁷³ At its 56th session, the MEPC adopted guidelines for additional measures concerning water ballast management, aiming to assist in the implementation of the BWM Convention.¹⁷⁴ Furthermore, the committee adopted a set of guidelines for ballast water exchange in the Antarctic Treaty area. At its 57th session, the MEPC adopted a revised procedure for approval of ballast water management systems that make use of active substances (G9). At the same session, the committee

granted "basic approval" to four ballast water management systems and a "final approval" to one ballast water management system that makes use of Active substances.

Finally, attention should be drawn to the fact that the Republic of Estonia was the first State to sign the International Convention on the Removal of Wrecks that had been

adopted in Nairobi in May 2007.¹⁷⁵ The Wreck Removal Convention will be open for signature until 18 November 2008 and will enter into force 12 months after 10 States have either signed without reservation or have deposited instruments of ratification, acceptance, approval or accession with the Secretary-General of IMO.

In June 2008, the IMO Council endorsed the holding of an ad hoc diplomatic conference in Hong Kong, China, in May 2009 in order to consider the Ship Recycling Convention for adoption.

(3) Seafarers

In February 2008, the IMO Secretary-General, Mr. Efthimios E. Mitropoulos, endorsed a joint campaign by the International Shipping Federation, the International Chamber of Shipping and the International Transport Workers Federation to promote the implementation and monitoring of the IMO/International Labour Organization (ILO) Guidelines on Fair Treatment of Seafarers in the event of Marine Accidents.¹⁷⁶ The guidelines were adopted by IMO's Legal Committee in April 2006 at its 91st session. The joint campaign serves to promote the guidelines widely. The guidelines stress the need for better cooperation and communication between all the actors involved¹⁷⁷ and on ensuring a fair treatment of seafarers in the case of maritime accidents.

C. STATUS OF CONVENTIONS

There are a number of international conventions affecting the commercial and technical activities of maritime transport. Box 2 provides information on the status of international maritime conventions prepared or adopted under the auspices of UNCTAD, as of 14 October 2008. Comprehensive and updated information about these and other relevant conventions is available on the United Nations website at www.un.org/law. This site also provides links to, inter alia, a number of organizations' sites, which contain information on the conventions adopted under the auspices of each organization. Those organizations are the following: IMO (www.imo.org/home.html), ILO (www.ilo.org) and the United Nations Commission on International Trade Law (www.uncitral.org).

Box 2

Contracting States parties to selected conventions on maritime transport, as of 14 October 2008

Title of convention	Date of entry into force or conditions for entry into force	Contracting States
United Nations Convention on a Code of Conduct for Liner Conferences, 1974	Entered into force 6 October 1983	Algeria, Bangladesh, Barbados, Belgium, Benin, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chile, China, Congo, Costa Rica, Côte d'Ivoire, Cuba, Czech Republic, Democratic Republic of the Congo, Denmark, Egypt, Ethiopia, Finland, France, Gabon, Gambia, Germany, Ghana, Guatemala, Guinea, Guyana, Honduras, India, Indonesia, Iraq, Italy, Jamaica, Jordan, Kenya, Kuwait, Lebanon, Liberia, Madagascar, Malaysia, Mali, Mauritania, Mauritius, Mexico, Montenegro, Morocco, Mozambique, Netherlands, Niger, Nigeria, Norway, Pakistan, Peru, Philippines, Portugal, Qatar, Republic of Korea, Romania, Russian Federation, Saudi Arabia, Senegal, Serbia, Sierra Leone, Slovakia, Somalia, Spain, Sri Lanka, Sudan, Sweden, Togo, Trinidad and Tobago, Tunisia, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, Uruguay, Venezuela, Zambia (81)
United Nations Convention on the Carriage of Goods by Sea, 1978 (Hamburg Rules)	Entered into force 1 November 1992	Albania, Austria, Barbados, Botswana, Burkina Faso, Burundi, Cameroon, Chile, Czech Republic, Dominican Republic, Egypt, Gambia, Georgia, Guinea, Hungary, Jordan, Kazakhstan, Kenya, Lebanon, Lesotho, Liberia, Malawi, Morocco, Nigeria, Paraguay, Romania, Saint Vincent and the Grenadines, Senegal, Sierra Leone, Syrian Arab Republic, Tunisia, Uganda, United Republic of Tanzania, Zambia (34)
International Convention on Maritime Liens and Mortgages, 1993	Entered into force 5 September 2004	Ecuador, Estonia, Lithuania, Monaco, Nigeria, Peru, Russian Federation, Spain, Saint Vincent and the Grenadines, Syrian Arab Republic, Tunisia, Ukraine, Vanuatu (13)
United Nations Convention on International Multimodal Transport of Goods, 1980	Not yet in force — requires 30 contracting parties	Burundi, Chile, Georgia, Lebanon, Liberia, Malawi, Mexico, Morocco, Rwanda, Senegal, Zambia (11)
United Nations Convention on Conditions for Registration of Ships, 1986	Not yet in force — requires 40 contracting parties with at least 25 per cent of the world's tonnage as per annex III to the Convention	Albania, Bulgaria, Côte d'Ivoire, Egypt, Georgia, Ghana, Haiti, Hungary, Iraq, Liberia, Libyan Arab Jamahiriya, Mexico, Oman, Syrian Arab Republic (14)
International Convention on Arrest of Ships, 1999	Not yet in force — requires 10 contracting parties	Algeria, Bulgaria, Estonia, Latvia, Liberia, Spain, Syrian Arab Republic (7)

Source: For official status information, see www.un.org/law/.

