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LEGAL ISSUES AND REGULATORY DEVELOPMENTS

This chapter provides information on legal issues and recent regulatory developments in the fields of transport and trade facilitation, and on the status of the main maritime conventions. Important issues include the recent adoption of amendments to the 1996 Convention on Limitation of Liability for Maritime Claims (1996 LLMC), as well as a range of regulatory developments relating to maritime and supply-chain security, maritime safety and environmental issues.

Among the regulatory measures worth noting is a set of technical and operational measures to increase energy efficiency and reduce greenhouse gas (GHG) emissions from international shipping that was adopted under the auspices of the International Maritime Organization (IMO) in July 2011 and is expected to enter into force on 1 January 2013. To assist in the implementation of these new mandatory measures, four sets of guidelines were also adopted at IMO in March 2012. Discussions on possible market-based measures for the reduction of GHG emissions from international shipping continued and remained controversial. In respect of liability and compensation for ship-source oil pollution, a new UNCTAD report provides an overview of the international legal framework as well as some guidance for national policymaking.

At the World Trade Organization (WTO), negotiations continued on a future Trade Facilitation (TF) Agreement. While negotiators advanced on the draft negotiating text, it has been suggested that an agreement in TF might be reached earlier than in other areas of the Doha Development Round of negotiations.

A. IMPORTANT DEVELOPMENTS IN TRANSPORT LAW

Adoption of amendments to the 1996 Convention on Limitation of Liability for Maritime Claims

National legislation or international legal instruments may give shipowners and others linked with the operation of a ship the right to limit their liability in respect of certain claims, whatever the basis of liability may be. Under these so-called global limitation regimes, limits of liability are calculated using either the ship's value or a value calculated on the basis of the size of the ship and in particular on the basis of the ship's tonnage.[1] The most important global limitation regimes are the Convention on Limitation of Liability for Maritime Claims, 1976 (1976 LLMC),[2] and the 1976 LLMC as amended by its 1996 Protocol[3] (hereafter 1996 LLMC).

Both the 1976 LLMC and the 1996 LLMC set specific limits of liability for two types of claims against shipowners (and certain other persons),[4] namely, claims for loss of life or personal injury, and claims for property damage, as further defined.[5] In each case, the shipowner is entitled to limitation of liability except in certain cases of wilful misconduct.[6] While the approach to limitation is the same under both regimes, there are important differences. In particular, the actual amounts to which the limitation is limited are higher under the 1996 LLMC.

An important development, of interest to parties engaged in international trade, was the adoption at IMO, in April 2012, of amendments increasing the compensation limits set by the 1996 LLMC.[7] In light of experience with relevant incidents, as well as inflation, the limitation amounts specified in the 1996 Protocol were considered inadequate to cover the costs of claims, especially those arising from incidents involving bunker fuel spills. The new compensation limits, representing an increase of 51 per cent over previous limits, are expected to enter into force for Contracting States to the 1996 LLMC on 19 April 2015, 36 months from the date of adoption, under the tacit acceptance procedure.[8] In outline, the amendments may be summarized as follows: with respect to claims for loss of life or personal injury on ships with a tonnage not exceeding 2,000 tons, the limit of liability is 3.02 million Special Drawing Rights (SDR) (up from 2 million SDR).[9] For larger ships, the following additional amounts apply when calculating the limit of liability:

- For each ton from 2,001 to 30,000 tons, 1,208 SDR (up from 800 SDR);
- For each ton from 30,001 to 70,000 tons, 906 SDR (up from 600 SDR);
- For each ton in excess of 70,000 tons, 604 SDR (up from 400 SDR).[10]

The limit of liability for property claims for ships not exceeding 2,000 tons is 1.51 million SDR (up from 1 million SDR).[11] For larger ships, the following additional amounts apply when calculating the limit of liability:

- For each ton from 2,001 to 30,000 tons, 604 SDR (up from 400 SDR);
- For each ton from 30,001 to 70,000 tons, 453 SDR (up from 300 SDR);
- For each ton in excess of 70,000 tons, 302 SDR (up from 200 SDR).[12]

With the adoption of increased limits of liability, the protection of maritime claimants has been strengthened. However, it should be noted that the amendments affect limitation of liability only under the 1996 LLMC.[13] While many States have adopted the 1996 LLMC, some continue to adhere to the unamended 1976 LLMC, or the earlier International Convention Relating to the Limitation of the Liability of Owners of Seagoing Ships, 1957.[14] Few States now continue to adhere to the first international convention in the field, the International Convention for the Unification of Certain Rules relating to the Limitation of Liability of Owners of Seagoing Vessels, 1924. While each of the relevant Conventions deals with the issue of limitation of liability for maritime claims, there are substantive differences. Limitation of liability amounts vary significantly, with the highest amounts, that is, those most favourable to claimants, under the 1996 LLMC.[15] In view of the most recent amendments, policy makers in States that are not yet Contracting States to the 1996 LLMC may wish to consider afresh the merits of accession.

B. REGULATORY DEVELOPMENTS RELATING TO THE REDUCTION OF GREENHOUSE GAS EMISSIONS FROM INTERNATIONAL SHIPPING AND OTHER ENVIRONMENTAL ISSUES

1. Reduction of greenhouse gas emissions from international shipping

For several years, efforts aimed at establishing a regulatory regime to control and reduce emissions of

GHGs from ships have been dominating substantive discussions at the Marine Environment Protection Committee (MEPC) of IMO.[16] Relevant discussions focus on technical and operational measures, which, according to an IMO study published in 2009,[17] have a significant potential for reduction of GHG emissions from international shipping,[18] but also on the more controversial issue of potential market-based measures (MBMs).[19]

An overview of relevant recent developments at IMO is provided in the following sections. Attention should also be drawn to an UNCTAD-edited volume *Maritime Transport and the Climate Change Challenge*, published in May 2012, which provides detailed insight into a range of the potential implications of climate change for this key sector of global trade.[20]

(a) Adoption of new regulations on energy efficiency for ships and guidelines for their implementation

A key development under the auspices of IMO includes the finalization and adoption of mandatory regulatory measures for GHG emissions control. A set of technical and operational measures[21] to increase energy efficiency and reduce emissions of GHGs from international shipping were adopted during the sixty-second session of the MEPC, which was held from 11 to 15 July 2011. The package of measures – adopted by roll-call vote rather than by consensus – was added by way of amendment to the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 (MARPOL), Annex VI[22] Regulations on the Prevention of Air Pollution from Ships, as a new chapter (chapter 4) entitled "Regulations on energy efficiency for ships". The amendments are expected to enter into force on 1 January 2013.[23]

Four sets of guidelines[24] intended to support the uniform implementation of these mandatory regulations were subsequently adopted during the sixty-third session of MEPC, which was held from 27 February to 2 March 2012. At the same session, the discussion continued on proposed MBMs that would complement the technical and operational measures already adopted.

Regulations on energy efficiency for ships

The Regulations make the Energy Efficiency Design Index (EEDI) mandatory for new ships and the Ship Energy Efficiency Management Plan (SEEMP) mandatory for all ships.[25] The EEDI establishes a minimum energy efficiency requirement (CO_2 emissions per capacity mile) for new ships, depending on ship type and size. This required level will be reduced every five years, with ships required to be increasingly efficient through technical improvements to elements of design and components influencing fuel efficiency. Reduction rates are set until 2025, when a 30 per cent reduction is mandated over the average efficiency for ships built between 1999 and 2009. The EEDI is a performance-based mechanism, and as long as the required energy-efficiency level is attained, the industry is free to use the most cost-efficient technology for their ships to comply with the relevant Regulations. The current EEDI will cover about 70 per cent of emissions from new oil tankers, gas tankers, bulk carriers, general cargo, refrigerated cargo and container ships, as well as combination carriers (liquid/dry bulk).[26]

Under the Regulations, it will also become mandatory for ships to carry a SEEMP after 1 January 2013. The SEEMP is intended to be a practical tool to help shipowners manage their environmental performance and improve and monitor ship and fleet efficiency over time. It establishes a mechanism for operators to improve the energy efficiency of ships through use of the Energy Efficiency Operational Indicator (EEOI) as a monitoring tool.[27] International Energy Efficiency (IEE) Certificates for ships subject to the Regulations will be issued by the respective Governments.[28]

As of 1 January 2013, the new Regulations shall apply to all ships of 400 tons and above. However, administrations may waive the requirement for such ships to comply with the EEDI requirements. According to the Regulations, this waiver may not be applied to ships above 400 tons:

> "1. for which the building contract is placed on or after 1 January 2017; 2. in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after 1 July 2017; 3. the delivery of which is on or after 1 July 2019; or 4. in cases of a major conversion of a new or existing ship, … on or after 1 January 2017."[29]

The required EEDI and the attained EEDI shall be calculated for:

> "1. each new ship; 2. each new ship which has undergone a major conversion; and 3. each new or existing ship which has undergone a major conversion that is so extensive that the ship

> is regarded by the Administration as a newly constructed ship …."

In addition:

> "the attained EEDI shall be specific to each ship and shall indicate the estimated performance of the ship in terms of energy efficiency. It will be accompanied by the EEDI technical file that contains the information necessary for the calculation of the attained EEDI and that shows the process of calculation."[30]

The calculation shall be done taking into account guidelines developed by IMO.

Guidelines for implementation of energy efficiency measures

Four sets of guidelines intended to assist in the implementation of the mandatory Regulations on energy efficiency for ships in MARPOL Annex VI were adopted by MEPC during its sixty-third session from 27 February to 2 March 2012.[31] They are:

- *2012 Guidelines on the Method of Calculation of the Attained Energy Efficiency Design Index (EEDI) for New Ships*;
- *2012 Guidelines for the Development of a Ship Energy Efficiency Management Plan (SEEMP)*;
- *2012 Guidelines on Survey and Certification of the Energy Efficiency Design Index (EEDI)*;
- *Guidelines for Calculation of Reference Lines for use with the Energy Efficiency Design Index (EEDI)*.[32]

Administrations were invited to take these Guidelines into account when developing and enacting national laws which give force to and implement provisions set forth in the respective Regulations of MARPOL Annex VI, as amended, as well as to bring SEEMP to the attention of masters, seafarers, shipowners, ship operators and any other interested groups.

The 2012 Guidelines address some of the concerns that had been raised regarding the safety of the EEDI, both in debates among States at IMO discussions[33] and within the shipping industry.[34] The key concern in this respect had been that while the EEDI formula value can easily be met by using vessels with smaller, lower-power engines, these are potentially dangerous since they do not have enough reserve power available for emergency conditions, such as extreme weather or special manoeuvring in ports when necessary. The 2012 Guidelines on the method of calculation of the attained EEDI for new ships contain a provision which allows vessels to be built with whatever engine power the owner thinks necessary, as long as it is limited to provide a suitable shaft power to give the required EEDI value. In an emergency, the limiter will be deactivated or overridden so that more power can be used.[35]

An updated work plan[36] was also agreed upon, for the development of further guidelines and energy-efficiency frameworks for those ships not covered by the current EEDI regulations. According to the work plan, these guidelines are set to be finalized by the end of the sixty-fifth session of the MEPC, to be held in 2013.

Draft MEPC resolution on promotion of technical cooperation and transfer of technology relating to the improvement of energy efficiency of ships

Another new Regulation in chapter 4 of MARPOL Annex VI is that concerning "Promotion of technical cooperation and transfer of technology relating to the improvement of energy efficiency of ships." Under this Regulation, administrations, in cooperation with IMO and other international bodies, are required to promote and provide as appropriate – directly or through IMO – support to States, especially developing States, that request technical assistance. The Regulation also requires administrations to cooperate actively with one another, and, subject to their national laws, regulations and policies, "to promote the development and transfer of technology and exchange of information to States which request technical assistance, particularly developing States, in respect of the implementation of measures to fulfil the requirements of chapter 4 [of MARPOL Annex VI]."[37]

Linked to the implementation of this Regulation, and of the other energy efficiency measures, a draft resolution on the "Promotion of technical co-operation and transfer of technology relating to the improvement of energy efficiency of ships"[38] was discussed during the sixty-third session of MEPC. A group of member States submitted an informal paper during the session, providing comments and proposing additional amendments to the draft resolution, on:

> "a methodology for assessing implementation, the necessary financial, technological and capacity-building support for developing countries by developed countries, taking into account the principles of common but differentiated responsibilities and respective capabilities

> under the UNFCCC [United Nations Framework Convention on Climate Change] and its Kyoto Protocol."[39]

A working group was established to finalize the draft resolution, but could not reach consensus on some of the proposals. Work on the draft resolution will continue during the sixty-fourth session of the MEPC, to be held from 1 to 5 October 2012.

Three other categories of issues relating to GHGs were considered during the sixty-third session of MEPC, namely the application of EEDI to existing ships, uncertainty in emission data, and a performance standard for fuel consumption measurement. Following concerns expressed by industry and supported by a large number of parties, the Committee confirmed that EEDI had been developed as a regulatory tool for new ships only; as a design index, extension of its application to the existing fleet would be inappropriate.[40] The MEPC took note of concerns that the reduction effects of the EEDI and SEEMP may have been overestimated, and noted that uncertainty existed in the estimates and projections of emissions from international shipping.[41] The Committee agreed that further work should take place "to provide the Committee with reliable and up-to-date information to base its decisions on and requested the secretariat to investigate possibilities and report to future sessions."[42] The Committee also agreed that development of an IMO performance standard for fuel consumption measurement for ships could be a useful tool and should be considered further.

(b) Market-based measures, and related matters

While a set of technical and operational measures to increase energy efficiency of ships has now been adopted, discussions on possible MBMs for the reduction of GHG emissions from international shipping continue, and remain highly controversial.[43] As reported in the *Review of Maritime Transport 2011*, an extensive debate on how to progress in the development of an MBM had been held during the sixty-first session of MEPC.[44] The MBM proposals under review ranged from those envisaging a contribution or levy on all CO_2 emissions from all ships, or only for those generated by ships not meeting the EEDI requirement, to emissions trading schemes and to schemes based on a ship's actual efficiency both by design (EEDI) and operation (EEOI).[45] Subsequently, the third Intersessional Meeting of the Working Group on GHG Emissions from Ships (GHG-WG3), which was dedicated to further work on MBMs, was held from 28 March to 1 April 2011.[46] Due to time constraints, MEPC had been unable to address the issue of MBMs during its sixty-second session, held from 11 to 15 July 2011, and agreed to defer consideration of relevant submissions to its sixty-third session.

During its sixty-third session, MEPC continued its discussion of proposed MBMs, which would complement the technical and operational measures already adopted. It was agreed that the focus should be on a more comprehensive impact assessment of the possible consequences of introducing an MBM from international shipping under IMO. The discussions on MBMs covered a number of different topics which are briefly summarized below.

The sixty-third session of MEPC adopted the report of GHG-WG3, *Reduction of GHG Emissions from Ships*,[47] and, in this respect, noted that the third Intersessional Meeting had completed, as far as possible, the terms of reference given to it by the Committee and had placed the MBM proposals into two groups: (1) focus on in-sector and, (2) in-sector and out-of-sector, based on the emission reduction mechanism used by the MBM proposals.[48] Inter alia, MEPC further noted:

- That there were two opinions as to whether a compelling "need and purpose of an MBM" for international shipping under IMO had been clearly demonstrated, and agreed to return to the issue in due course;
- The debate on the "relation to relevant conventions and rules", and agreed to consider the issue further, partly based on a submission by one delegation;
- The debate on "strengths and weaknesses" and that, for the MBM proposals identified under each group, the proponents had identified and listed strengths and weaknesses[49] and that other delegations which were not proponents of MBMs had identified additional weaknesses for all the MBM proposals;[50]
- That the Intersessional Meeting acknowledged the findings and conclusions of the study of the Expert Group on Feasibility Study and Impact Assessment of Possible Market-based Measures (MBM-EG),[51] including its identification that there would be a need for further study of both the "direct and indirect impacts on developing countries" due to the introduction and non-introduction of an MBM for international shipping under IMO;

- That two documents submitted by delegations,[52] or relevant parts thereof, should be considered further at its current session.

The debate continued on the issue of further impact assessment of proposed MBMs for international maritime transport. Two documents prepared by the Chairperson were considered as part of this debate. The first document[53] set out proposals on how an impact assessment may be undertaken to determine the possible effects of introduction of an MBM for international shipping, including the method and criteria for the assessment. The second document[54] contained proposed draft terms of reference for a steering committee for the impact assessment of MBM proposals, to be established in order to supervise the impact assessment and to assist and provide advice to the IMO secretariat. The MEPC also noted that the feasibility study called for by the work plan for further consideration of MBMs had been successfully completed by the MBM-EG, which had concluded that all MBM proposals under review could be implemented, notwithstanding the challenges associated with the introduction of new measures.[55]

To illustrate the controversial nature of issues related to the introduction of MBMs, especially from the perspective of some developing countries, two submissions by national delegations are particularly pertinent, as detailed below.

A document submitted by India presented the findings of an MBM impact study on the country's shipping sector and trade.[56] According to the study, the adoption of an MBM would lead to adverse impacts on trade and growth and create an inequitable burden on Indian consumers. Moreover, it could have "a deleterious impact on the environment as consumers of coal in India may resort to use of poor quality Indian coal."[57] Based on the results of the study, India reiterated its concerns about the economic implications of MBMs on consumers in developing countries, whose contribution to GHG emissions per capita, were minimal.

Another document submitted by China[58] highlighted the need to carry out further impact assessment on developing countries, and proposed a list of revised criteria to be taken into account for the assessment. Nine criteria were proposed, namely:

(i) The "environmental effectiveness" of the proposed MBMs, particularly in limiting GHG emissions from international shipping;

(ii) The "cost-effectiveness" of the proposed MBMs and the direct and indirect socio-economic impacts on trade, consumers and industries in developing countries, particularly in least developed countries (LDCs) and small island developing states (SIDSs);

(iii) The "potential of the proposed MBMs to provide incentives to technological reform and innovation";

(iv) The "economic, technical and operational feasibility" of implementing the proposed MBMs;

(v) The "potential additional financial, workload and technical burden" for the shipbuilding industry and the maritime sector in developing countries of implementing and enforcing the proposed MBMs, and the "need for financial support, technology transfer and capacity-building";

(vi) The "consistency of the proposed MBMs with other relevant conventions", such as UNFCCC, Kyoto Protocol and World Trade Organization (WTO) rules, "especially the principle of [common but differentiated responsibilities and respective capabilities] CBDR, as well as its compatibility with customary international law, as depicted in the [United Nations Convention on the Law of the Sea] UNCLOS";

(vii) When there is a potential to raise funds, the "costs borne by and benefits for developing countries";

(viii) The "potential additional administrative burden", and the legal aspects for national administrations relating to the implemention and enforcement of the proposed MBMs;

(ix) The "compatibility of the proposed MBMs with the existing enforcement and control provisions" under the IMO legal framework.

It was agreed by consensus that there was a need for a continued impact assessment and that its focus should be on possible impacts on consumers and industries in developing countries. Despite the efforts made to develop the draft terms of reference for further impact assessment of proposed MBMs, including the methodology and criteria for the assessment, a number of issues were still pending. One issue concerned whether the methodology for the impact assessment should be carried out by an expert group or by commissioned research institutes. Another issue

concerned the scope of impact assessment. It was agreed to consider the terms of reference further at the next session of MEPC.

As part of the discussions on consideration and possible consolidation of MBM proposals, various submissions by delegations were considered.[59] It was agreed that MBM proposals that would be subject to the impact assessment were those set out in the report of the GHG-WG3.[60] Regarding consolidation of proposals, it was noted, inter alia, that:

- "A number of delegations felt it desirable to carry out the analysis with a reduced number of MBM proposals, but also recognized that, in so doing, vital information could be lost which could be used at a later stage when the final MBM had been advanced in its development; the resultant MBM could be a combination of elements of different MBMs or some compromise solution rather than any of the proposals in their initial form";[61]
- "Some delegations opposed further consideration of MBM, stating that IMO should focus on technical and operational measures";[62]
- A large number of delegations were not ready to select a possible MBM proposal at this time; the presence or absence of draft legal text associated with proposals "[was] not directly linked to the maturity of the proposals and should not be used as the benchmark for selection."[63]

No proposal was eliminated at the session. All proposals should be further developed and finalized in time for the sixty-fourth session of the Committee, where they were expected to be considered further in order to determine whether they could be analysed against all criteria.

The issue of climate finance and possible use of MBM revenues was also considered, including its relation to the wider efforts of the international community to mobilize climate finance for use in developing countries.[64] Once again, as is illustrated by the summary of the discussions in the report of the meeting, the issue is one where consensus has not yet been achieved. The Committee noted, inter alia, that:

- "Divergent views were expressed on the use of revenues and the relation between an IMO MBM and climate finance, with a number of delegations advocating disbursement of revenues as a way to accommodate (reconcile) both CBDR and the IMO principles,[65] while others opposed this, if applied universally to all ships, and advocated an approach that would ensure no net incidence on developing countries";[66]
- "A large number of delegations expressed the view that the greater part of any MBM revenues should be used for climate finance in developing countries";[67]
- "A number of delegations expressed the view that an MBM for international shipping under IMO should not be used as a source for general climate finance in the context of the Green Climate Fund where funding should be provided by developed countries";[68]
- "A number of delegations stated that the Rebate Mechanism (RM)[69] – which aims to reconcile different principles of shipping and climate change conventions – "[was] an innovative and constructive proposal that addresses the CBDR principle and should be analysed and considered further."[70]

The Committee also noted:

(i) The ongoing work under UNFCCC on climate finance;

(ii) The *Report of the Secretary-General's High-level Advisory Group on Climate Change Financing* (AGF);[71]

(iii) The G20 report by the World Bank and the International Monetary Fund on mobilizing funding sources for the Green Climate Fund,[72] which had identified international shipping as one possible source of finance.

It is also pertinent that the international shipping industry – which, in respect of potential MBMs, has indicated a preference for a fuel levy rather than an emissions trading scheme – has expressed the view that potential revenues should, inter alia, be used for the purposes of adapting ports in developing countries to the impacts of climate change.[73]

Regarding the relation of an MBM to WTO rules, it was recalled that a large number of delegations at GHG-WG3 had concluded that no incompatibility existed between a potential MBM for international shipping under IMO and the WTO rules. However, the view was also expressed that a WTO presentation on this matter at GHG-WG3[74] had to be viewed with caution, as it expressed the position of the WTO secretariat, and some delegations continued to remain concerned about inconsistency issues between an MBM and the WTO rules.[75] The MEPC agreed to continue the debate at its sixty-fourth session, and further submissions and contributions were invited.

(c) Matters concerning the United Nations Framework Convention on Climate Change

With respect to matters concerning UNFCCC, it was noted that the United Nations Climate Change Conference held in Durban from 28 November to 11 December 2011 resulted in the adoption of a number of decisions and conclusions,[76] including those relevant to the control of GHG emissions from international transport,[77] to IMO as the custodian of the London Convention and the London Protocol,[78] and to the next annual Climate Change Conference, planned to take place from 26 November to 7 December 2012 in Doha, Qatar.[79] The MEPC requested the IMO secretariat "to continue its well-established cooperation with the UNFCCC secretariat, to attend relevant UNFCCC meetings, including the meetings concerning the identification of possible funding sources for the Green Climate Fund, and to bring the outcome of IMO's work to the attention of appropriate UNFCCC bodies and meetings."[80]

2. Ship-source pollution and protection of the environment

(a) Developments at the United Nations Conference on Trade and Development

Based on its mandate in the Accra Accord[81] and in the outcome documents adopted at the conclusion of the thirteenth session of the United Nations Conference on Trade and Development (UNCTAD XIII), held from 21 to 26 April 2012 in Doha, Qatar, UNCTAD, as part of its work in the field of transport, has recently published an analytical report with a focus on ship-source oil pollution. The report, entitled *Liability and Compensation for Ship-Source Oil Pollution: An Overview of the International Legal Framework for Oil Pollution Damage from Tankers,*[82] has been prepared to assist policy makers, particularly in developing countries, in their understanding of the complex international legal framework and in assessing the merits of accession to the relevant international legal instruments.

By way of background, it should be noted that approximately half the global crude oil production is carried by sea. Much of this navigation is taking place in relative proximity to the coasts of many countries, in some cases transiting through constrained areas or chokepoints, such as narrow straits or canals. At the same time, the steady increase in the size and carrying capacity of ships transporting cargo of any type means that significant quantities of heavy bunker fuel are carried across the oceans and along coastal zones. While the number and extent of large oil pollution incidents has decreased over time, exposure to ship-source oil pollution remains a potentially significant economic threat for coastal States, in particular for developing countries and SIDS with economies heavily dependent on income from fisheries and tourism.

The international legal framework concerning oil pollution from tankers is very robust and provides significant compensation for loss due to oil pollution incidents. Relevant legal instruments, collectively known as the Civil Liability Convention–International Oil Pollution Compensation Fund (CLC–IOPC Fund) regime,[83] enjoy broad support and have been widely adopted at the international level. However, a considerable number of coastal States, including developing countries that are potentially exposed to ship-source oil pollution incidents, are not yet Contracting Parties to the latest legal instruments in the field and, as a result, would not benefit from significant compensation in the event of an oil-spill affecting their coasts or other areas under their marine jurisdiction (territorial waters and exclusive economic zones). It is against this background that the report has been prepared, to assist policy makers, particularly in developing countries, in their understanding of the relevant legal instruments and in assessing the merits of accession.

The report highlights central features of the international legal framework and provides an analytical overview of key provisions of the most recent of the international legal instruments in force. It also offers considerations for national policymaking, focusing, inter alia, on:

- The relative benefits of adherence to the latest of the relevant international legal instruments;
- The relevant financial burden associated with such adherence;
- Levels of protection available to victims of tanker oil pollution depending on which of the different legal instruments have been adopted.

In conclusion, the report suggests that accession to relevant legal instruments could offer considerable benefits to a number of coastal developing States that may be vulnerable to oil pollution from tankers.

While the report focuses on the international liability and compensation framework for oil pollution from tankers, it also highlights some of the key features of two

important related international Conventions that cover other types of ship-source oil pollution. These are:

- The 2001 Bunker Oil Pollution Convention,[84] providing for liability and compensation in the event of bunker oil spills from ships other than oil tankers (for example, container vessels, reefers, chemical tankers, general cargo ships, cruise ships and ferries);
- The 1996 Hazardous and Noxious Substances (HNS) Convention[85] and its 2010 amending Protocol[86] (2010 HNS Convention), which provides for compensation relating to incidents arising in connection with the carriage of a broad range of hazardous and noxious substances, including non-persistent oil.

(b) Developments at the International Maritime Organization

During its sixty-third session, MEPC also adopted amendments to MARPOL relating to regional arrangements for port reception facilities, and adopted guidelines related to the implementation of the revised MARPOL Annex V (Garbage), and the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (Hong Kong Convention).[87] The Committee also granted basic and final approval to a number of ballast water management systems that make use of active substances.

Air pollution from ships: establishment of new emission control areas (ECAs)

While CO_2 is the main GHG emitted by ships, other relevant substances include sulphur oxides (SOx) and nitrogen oxides (NOx). These significantly contribute to air pollution from ships and are covered by MARPOL Annex VI,[88] which had been amended in 2008 to introduce more stringent emission controls.[89] With effect from 1 January 2012, Annex VI establishes reduced SOx thresholds for marine bunker fuels, with the global sulphur cap reduced from 4.5 per cent (45,000 ppm) to 3.5 per cent (35,000 ppm). The global sulphur cap will be reduced further to 0.50 per cent (5,000 ppm) from 2020 (subject to a feasibility review in 2018).[90] Annex VI also contains provisions allowing for special SOx emission control areas (ECAs) to be established where even more stringent controls on sulphur emissions apply. Since 1 July 2010, these ECAs have SOx thresholds for marine fuels of 1 per cent (from the previous 1.5 per cent); from 1 January 2015, ships operating in these areas will be required to burn fuel with no more than 0.1 per cent sulphur. Alternatively, ships must fit an exhaust gas cleaning system or use any other technological method to limit SOx emissions.

The first two SOx ECAs, the Baltic Sea and the North Sea areas, were established in Europe, and took effect in 2006 and 2007 respectively. The third area established was the North American ECA, taking effect on 1 August 2012. In addition, in July 2011, a fourth ECA, the United States Caribbean Sea ECA, was established, covering certain waters adjacent to the coasts of Puerto Rico (United States) and the United States Virgin Islands, and will take effect on 1 January 2014.[91]

Progressive reductions in NOx emissions from ship engines have also been agreed. For ships that operate in ECAs, the strictest controls are applicable to ships constructed on or after 1 January 2016.

It should be noted that the shipping industry, while supportive of the 2008 amendments, has expressed concerns about some aspects of the implementation of the requirements. This includes, in particular, the availability of compliant low sulphur fuel to meet the new demand.[92]

Port reception facilities, sewage from ships and garbage management

Garbage from ships can be just as dangerous to marine life as oil or chemicals. At its sixty-second session in July 2011, MEPC adopted amendments to MARPOL Annex V[93], and these are expected to enter into force on 1 January 2013. The revised Annex V prohibits the discharge of all garbage into the sea, except as provided otherwise. An overview of the revised MARPOL Annex V discharge provisions is provided in table 5.1.

At its sixty-third session, MEPC also adopted:

- Amendments to MARPOL Annexes I, II, IV, V and VI,[94] which are aimed at enabling SIDS to comply with requirements for port States to provide reception facilities for ship waste through regional arrangements. These amendments are expected to enter into force on 1 August 2013;[95]
- A resolution[96] calling for the development, without delay, of proven, adequate and cost-effective technical on-board equipment to make it possible to meet the discharge standards for passenger ships operating in the Baltic Sea (designated a Special Area under MARPOL Annex IV Regulations for the Prevention of Pollution by Sewage from Ships);[97]

Table 5.1. Simplified overview of the discharge provisions of the revised MARPOL Annex V (resolution MEPC.201(62)) which will enter into force on 1 January 2013 (for more detailed guidance regarding the respective discharge requirements please refer to the text of MARPOL Annex V or to the 2012 Guidelines for the Implementation of MARPOL Annex V)

Type of garbage	Ships outside special areas	Ships within special areas	Offshore platforms (more than 12 nm from land) and all ships within 500 m of such platforms
Food waste comminuted or ground	**Discharge permitted** ≥3 nm from the nearest land, en route and as far as practicable	**Discharge permitted** ≥12 nm from the nearest land, en route and as far as practicable	**Discharge permitted**
Food waste not comminuted or ground	**Discharge permitted** ≥12 nm from the nearest land, en route and as far as practicable	**Discharge prohibited**	**Discharge prohibited**
Cargo residues[1] not contained in wash water	**Discharge permitted** ≥12 nm from the nearest land, en route and as far as practicable	**Discharge prohibited**	**Discharge prohibited**
Cargo residues[1] contained in wash water		**Discharge permitted** ≥12 nm from the nearest land, en route, as far as practicable and subject to two additional conditions[2]	**Discharge prohibited**
Cleaning agents and additives1 contained in cargo hold wash water	**Discharge permitted**	**Discharge permitted** ≥12 nm from the nearest land, en route, as far as practicable and subject to two additional conditions[2]	**Discharge prohibited**
Cleaning agents and additives[1] in deck and external surfaces wash water		**Discharge permitted**	**Discharge prohibited**
Carcasses of animals carried on board as cargo and which died during the voyage	**Discharge permitted**	**Discharge prohibited**	**Discharge prohibited**
All other garbage including plastics, synthetic ropes, fishing gear, plastic garbage bags, incinerator ashes, clinkers, cooking oil, floating dunnage, lining and packing materials, paper, rags, glass, metal, bottles, crockery and similar refuse	**Discharge prohibited**	**Discharge prohibited**	**Discharge prohibited**
Mixed garbage	When garbage is mixed with or contaminated by other substances prohibited from discharge or having different discharge requirements, the more stringent requirements shall apply		

Source: www.imo.org.

[1] These substances must not be harmful to the marine environment.

[2] According to regulation 6.1.2 of MARPOL Annex V the discharge shall only be allowed if: (a) both the port of departure and the next port of destination are within the special area and the ship will not transit outside the special area between these ports (regulation 6.1.2.2); and (b) if no adequate reception facilities are available at those ports (regulation 6.1.2.3).

- The *2012 Guidelines for the Implementation of MARPOL Annex V*[98] and the *2012 Guidelines for the Development of Garbage Management Plans*.[99] These guidelines are intended to assist in the implementation of the revised MARPOL Annex V Regulations for the Prevention of Pollution by Garbage from Ships, which was adopted at the sixty-second session of MEPC in July 2011 and is expected to enter into force on 1 January 2013.

Ship recycling

At its sixty-third session, MEPC also adopted the *2012 Guidelines for Safe and Environmentally Sound Ship Recycling*[100] and the *2012 Guidelines for the Authorization of Ship Recycling Facilities*.[101] These guidelines, along with the *2011 Guidelines for the Development of the Inventory of Hazardous Materials*[102] and the *2011 Guidelines for the Development of the*

Ship Recycling Plan[103] that were adopted during the sixty-second session of the MEPC, are intended to assist ship-recycling facilities and shipping companies to commence introducing voluntary improvements to meet the requirements of the Hong Kong Convention,[104] which had been adopted in May 2009.

Ballast water management

After considering the reports of the 18th, 19th and 20th meetings of the Joint Group of Experts on the Scientific Aspects of Marine Environment Protection (GESAMP), the Committee granted basic approval to three,[105] and final approval to five, [106] ballast water management systems that make use of active substances.

Even though ballast water is essential to ensure safe operating conditions and stability for vessels at sea, it often carries with it a multitude of marine species that may survive to establish a reproductive population in the host environment, becoming invasive, out-competing native species and multiplying into pest proportions. In February 2004, under the auspices of IMO, the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM) was adopted to prevent, minimize and ultimately eliminate the risks to the environment, human health, property and resources arising from the transfer of harmful aquatic organisms carried by ships' ballast water from one region to another.[107]

With regard to the availability of ballast water management systems, MEPC at its sixty-third session noted that there were already 21 type-approved systems available. While some delegations[108] expressed concerns regarding the implementation of the BWM Convention due to lack of approved technologies, limited shipyard capacity, time availability and costs involved, other delegations[109] were of the view that there are sufficient ballast water treatment technologies and shipyard capacity, and encouraged shipowners to start installing ballast water management systems on their ships in order to avoid possible bottlenecks at a later stage. It was noted that despite some differences in views there was consensus regarding the need for additional information on the pace of implementation, and the availability of technologies and shipyard facilities and member States were invited to provide updated information regarding the status in their respective countries, according to an agreed template.[110]

The MEPC also adopted a number of amendments to BMW-related guidelines, including the *2012 Guidelines on Design and Construction to Facilitate Sediment Control on Ships (G12)*.[111] These are one of the 14 sets of guidelines developed to assist in the implementation of the BWM Convention – G12 updates the previous version adopted in 2006. The MEPC also urged those countries that had not already done so to ratify the BWM Convention, at their earliest possible opportunity, so that it could enter into force.[112]

Dangerous chemicals and oil spill response

In an effort to develop further measures to prevent pollution from ships, the International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC) was adopted in 1990. The OPRC requires Contracting States to establish measures for dealing with pollution incidents, either nationally or in cooperation with other countries. A Protocol to the OPRC relating to hazardous and noxious substances (OPRC-HNS Protocol) was adopted in 2000. To assist States in implementing the Convention, the OPRC-HNS Technical Group of MEPC was set up. At its sixty-third session, MEPC approved the following guidance manuals, which were developed by the OPRC-HNS Technical Group:

- *IMO/IPIECA Guidance on Sensitivity Mapping for Oil Spill Response*;
- *Guideline for Oil Spill Response in Fast Currents*;
- *Operational Guide on the Use of Sorbents;*
- *Oil Spill Waste Management Decision Support Tool*.

For the finalized drafts of the four guides, see MEPC annexes 62/8, 62/8/1, 62/8/2 and 62/8/3, respectively.

C. OTHER LEGAL AND REGULATORY DEVELOPMENTS AFFECTING TRANSPORTATION

This section highlights some key issues in the field of maritime security and safety, which may be of particular interest to parties engaged in international trade and transport. These include developments relating to maritime and supply chain security, as well as the entry into force of the International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel, 1995. Issues related to piracy will, for reasons of space, not be covered. However, a separate document on issues related to piracy is in preparation by the secretariat.

1. Maritime and supply-chain security

There have been a number of developments in relation to existing maritime and supply-chain security standards that had been adopted under the auspices of various international organizations such as the World Customs Organization (WCO), IMO and the International Organization for Standardization (ISO), as well as at the European Union (EU) level and in the United States, both important trade partners for many developing countries.

(a) World Customs Organization–SAFE Framework of Standards

As noted in previous editions of the *Review of Maritime Transport*, in 2005, WCO had adopted the Framework of Standards to Secure and Facilitate Global Trade (the SAFE Framework),[113] with the objective of developing a global supply-chain framework. The SAFE Framework provides a set of standards and principles that must be adopted as a minimum threshold by national customs administrations. These standards are contained within two pillars – pillar 1: customs-to-customs network arrangements, and pillar 2: customs–business partnerships.[114] The SAFE Framework has fast gained widespread international acceptance and as of 1 March 2011, 164 out of 177 WCO members had expressed their intention to implement it.[115]

An important feature of the SAFE Framework is the concept of Authorized Economic Operators (AEOs),[116] which are essentially parties that have been accredited by national customs administrations as compliant with WCO or equivalent supply-chain security standards. Special requirements have to be met by AEOs in respect of physical security of premises, hidden camera surveillance and selective staffing and recruitment policies. In return, AEOs are typically rewarded by way of trade facilitation benefits, such as faster clearance of goods and fewer physical inspections.

In recent years, a number of agreements on mutual recognition of AEO programmes have been concluded, mainly on a bilateral level.[117] However, there still appears to be a lack of consensus on what mutual recognition means in practice. According to the SAFE Framework, for a system of mutual recognition to work it is essential that:

- There is an agreed set of common standards that include sufficiently robust action provisions for both customs and AEOs;
- Standards are applied in a uniform manner so that one customs administration may have confidence in the authorization of another;
- If the certification process is delegated to a designated authority by an authorizing customs administration, that there is an agreed-upon mechanism and standards for that authority;
- Legislation to enable the implementation of a mutual recognition system is in place.[118]

In June 2010, WCO issued its SAFE Package, bringing together all WCO instruments and guidelines that support its implementation.[119] A number of updates have recently been made to this package. This includes the 2011 version of the SAFE Framework, providing a separate annex for data elements for security purposes and incorporating the remaining 10 + 2 data elements into those that were listed in the previous version of 2007, with the aim of improving WCO members' risk assessment capabilities in this area. The 2011 version of the SAFE Framework also includes definitions of the terms scanning and screening to clarify their use in day-to-day customs work. Other updates include 2011 versions of the *Compendium of Authorized Economic Operator (AEO) Programmes*, reflecting relevant data as of June 2011, and of the *WCO Guidelines for the Procurement and Deployment of Scanning/NII Equipment*.

In addition, a new set of *Guidelines for Developing a Mutual Recognition Arrangement/Agreement* was added to the SAFE Package. As noted above, mutual recognition is a broad concept embodied within the WCO SAFE Framework, and its interpretation might still be unclear. Therefore, the issuance of the new Guidelines aims to assist States and industry in this respect. According to the Guidelines, mutual recognition is a concept "whereby an action or decision taken or an authorization that has been properly granted by one customs administration is recognized and accepted by another customs administration" – based on a formalized document generally termed Mutual Recognition Agreement (MRA) or Mutual Recognition Arrangement. As concerns the objective of mutual recognition, the Guidelines note: "one customs administration recognizes the validation findings and authorizations by the other customs administration issued under the other programme and agrees to provide substantial, comparable and, where possible, reciprocal benefits/facilitation to the mutually recognized AEOs. This recognition is generally

premised on the existence (or creation) of both relevant legislation (where applicable) and operational compatibility of both or more programmes."[120]

The issue of mutual recognition is also addressed in a WCO research paper,[121] where the concept is clarified, in line with the general WCO approach, as follows:

> "Mutual recognition of AEOs is perceived as an arrangement or agreement between two or more customs administrations (or governments) that recognize each other's audits, controls and authorizations as equivalent and therefore provide reciprocal benefits to AEOs. In practice, this means that AEOs authorized by the partner country are recognized as being as secure and reliable as AEOs authorized by their own administration and will, therefore, receive benefits such as reduced risk score and reduced controls when importing into the customs territory."

The research paper also suggests, however, that some advocate a more expansive interpretation. Some assert that an AEO accredited by one mutual recognition agreement party should have exactly the same status and be recognized as an AEO by the other party or parties to that agreement, and thus need not apply in the country of the other party. It is unclear whether this last interpretation is significant or necessary, considering that international trade is dominated by SMEs with a limited geographic range of trade compared to multinationals.[122]

In recent years, a number of MRAs have been adopted by customs administrations, usually on a bilateral basis. However, it is hoped that these will, in due course, form the basis for multilateral agreements at the subregional and regional levels. The first MRA was concluded between the United States and New Zealand in June 2007. As of 30 June 2012, 19 bilateral MRAs have been concluded and a further 10 are being negotiated between the following: China-EU, China-Japan, Japan-Malaysia, China-Republic of Korea, Hong Kong (China)-Republic of Korea, India-Republic of Korea, Israel-Republic of Korea, New Zealand-Singapore, Norway-Switzerland and Singapore-United States. Many countries already having customs compliance programmes[123] are also in the process of adopting legislative measures and taking other steps necessary to establish their own AEO programmes. As of 30 June 2012, 23 AEO programmes have been established in 49 countries[124] and eight more countries plan to establish them in the near future.[125]

(b) Developments at the European Union level and in the United States

At the regional level, EU and the United States have continued to develop measures to improve maritime and supply-chain security. Given the particular importance for many developing countries of trade with EU and the United States, it is pertinent to mention certain developments in this context.

As regards EU, previous editions of the *Review of Maritime Transport* have provided information on the security amendment to the Customs Code (Regulation 648/2005 and its implementing provisions), which aims to ensure an equivalent level of protection through customs controls for all goods brought into or out of the customs territory of EU. The *Review of Maritime Transport 2011*[126] provided an analysis of the major changes this amendment introduced to the Customs Code, and related developments.

Part of these changes involved the introduction of provisions regarding AEOs, a status that reliable traders may be granted and which entails benefits in terms of trade facilitation measures. Subsequent relevant developments, such as the recommendation for self-assessment of economic operators to be submitted together with their application for AEO certificates,[127] and the issuance of a revised self-assessment questionnaire,[128] to guarantee a uniform approach throughout all EU member States, are also worth mentioning.

The EU is in the process of negotiating MRAs with third countries, including major trading partners[129] such as the United States.[130] In this respect, it is worth noting that EU and the United States signed a decision on mutual recognition of their "secure traders" programmes, namely the EU AEO and the United States Customs–Trade Partnership Against Terrorism (C-TPAT)[131] programmes, on 4 May 2012.[132] The decision represents a formal agreement on mutual recognition of safe traders, allowing these companies to benefit from faster controls and reduced administration for customs clearance, enjoy lower costs, simplified procedures and greater predictability in their transatlantic activities. Importantly, mutual recognition is also expected to improve security on imports and exports by enabling customs authorities to focus their attention on genuine areas of risk. The joint decision started to be implemented from 1 July 2012.[133]

As noted in previous editions of the *Review of Maritime Transport*, a legislative requirement was introduced into United States law in 2007[134] to provide, by July 2012,

for 100 per cent scanning of all United States-bound cargo containers before being loaded at a foreign port. In October 2009, the United States Department of Homeland Security (DHS) had acknowledged that the implementation of this scanning requirement was unlikely to be met, and that the target date would be postponed until July 2014.[135] Relevant concerns relating to the feasibility of implementing the legislation appear, however, to remain,[136] as is illustrated by the conclusions of a recent_United States Government Accountability Office (GAO) report.[137] On 2 May 2012, an official notification letter was submitted by the DHS Secretary to the US Congress, thus giving effect to the anticipated deferral of the requirement for 100 per cent scanning of United States-bound maritime containers at foreign ports for two years until 1 July 2014.[138] Inter alia, the letter states that 100 per cent scanning of containers was neither the most efficient nor a cost-effective way to secure the supply chain against terrorism. In addition, diplomatic, financial and logistical challenges of such a measure would cost an estimated $16 billion.[139]

(c) International Maritime Organization

(i) Measures to enhance maritime security

Both the Maritime Safety Committee (MSC) and the Facilitation Committee (FAL) of IMO consider measures to enhance maritime security as part of their agenda. In this respect, certain developments at the most recent sessions of these Committees over the past year, relating to the effective implementation of the International Convention for the Safety of Life at Sea (SOLAS) chapter XI-2 and the International Ship and Port Facilities Security (ISPS) Code, to voluntary self-assessment for port facilities and ship security, as well as to the search for solutions to stowaway cases, are relevant to the present Review.

At its ninetieth session, held from 16–25 May 2012, MSC recalled that it had previously urged SOLAS Contracting Governments and international organizations to bring to its attention, at the earliest opportunity, the results of the experience gained from the use of the relevant maritime security guidance[140] for consideration of action to be taken. One country informed the Committee that it had, in early 2012, conducted and completed a voluntary self-assessment of its port facilities and ship security using the guidance provided in the above circulars, which had demonstrated to it the value of these self-assessment tools.[141]

A number of maritime security-related measures were considered during the thirty-seventh session of FAL, held from 5–9 September 2011. During the session the Committee adopted resolution FAL.11(37), *Revised Guidelines on the Prevention of Access by Stowaways and the Allocation of Responsibilities to Seek the Successful Resolution of Stowaway Cases*.[142] Finding a solution to stowaway cases can be challenging because of differences between the national legislation of, potentially, several involved States: the State of embarkation, the State of disembarkation, the flag State of the ship, the State of apparent, claimed or actual nationality/citizenship or right of residence of the stowaway, and States of transit during repatriation. The revised Guidelines outline comprehensive strategies to improve access control and prevent intending stowaways from gaining access to ships. They also provide guidance for public authorities, port authorities, shipowners and masters, to enable them to cooperate to the fullest extent possible in order to resolve stowaway cases expeditiously and ensure that an early return or repatriation of the stowaway will take place.

The Committee also endorsed the inclusion, in the Global Integrated Shipping Information System (GISIS), of a module on stowaways, and urged member States to make as much use as possible of the GISIS reporting facilities. In 2008, 494 reports of stowaway cases were received by IMO, 314 in 2009, 253 in 2010 and 47 in 2011 (up to August 2011). The reported cases involved 2,052 stowaways in 2008, 1,070 in 2009, 721 in 2010 and 147 in the first eight months of 2011. However, the low number of reporting sources meant that meaningful analysis of the reports was difficult.[143] Associating the increasing problem of stowaways with a lack of proper implementation of physical security measures and access controls on board ships and within port facilities, member States' obligations to implement fully the provisions of SOLAS chapter XI-2 and the ISPS Code were recalled and, in particular, the requirement for flag States to assess, on a continuous basis, all threats to ships entitled to fly their flag, to set the security level accordingly, and to ensure that ships implement fully the security procedures appropriate to the security level as detailed in the ship security plan.[144]

(ii) Measures to improve security and facilitation of international trade and transport

A number of developments aimed at improving security and facilitation of international trade and transport are

also relevant. In particular, FAL, at its thirty-seventh session, adopted a set of *Guidelines for Setting up a Single Window System in Maritime Transport*.[145] Single window systems enable information to be provided to multiple users through a single report. Hence they facilitate trade and decrease the administrative burden on the shipmaster, while at the same time improving the information flow to both individual port authorities and government agencies concerned. The Committee also adopted a revised *IMO Compendium on Facilitation and Electronic Business*.[146] The compendium provides updated information, guidance and recommended formats for electronic exchange of information required by public authorities for the arrival, stay and departure of the ship, persons and cargo in order to facilitate clearance processes.

At its ninetieth session, MSC adopted *Amendments to the International Maritime Dangerous Goods (IMDG) Code*[147] which are intended to harmonize the IMDG Code with the amendments to the United Nations Economic Commission for Europe (UNECE) *Recommendations on the Transport of Dangerous Goods* (17th revised edition). The Committee also issued a circular, *Interim Measures for Early Implementation of the Draft Amendments to the International Maritime Solid Bulk Cargoes (IMSBC) Code*;[148] these measures are set to be adopted in 2013, following recent incidents associated with the liquefaction of cargoes.

(d) International Organization for Standardization

During the last decade, ISO has been actively engaged in matters of maritime transport and supply chain security. Shortly after the release of the ISPS Code, and to facilitate its implementation by the industry, the

Box 5.1. The current status[149] of the ISO 28000 series of standards

Published standards:

- **ISO 28000:2007** – *Specification for Security Management Systems for the Supply Chain*. This provides the overall umbrella standard.
- **ISO 28001:2007** – *Security Management Systems for the Supply Chain – Best Practices for Implementing Supply Chain Security, Assessments and Plans*. This standard is designed to assist the industry meet the requirements for AEO status.
- **ISO 28002:2011** – *Security Management Systems for the Supply Chain – Development of Resilience in the Supply Chain – Requirements with Guidance for Use*. This standard provides additional focus on resilience, and emphasizes the need for an ongoing, interactive process to prevent, respond to and assure continuation of an organization's core operations after a major disruptive event.
- **ISO 28003:2007** – *Security Management Systems for the Supply Chain – Requirements for Bodies Providing Audit and Certification of Supply Chain Security Management Systems*. This standard provides guidance for accreditation and certification bodies.
- **ISO 28004:2007** – *Security Management Systems for the Supply Chain – Guidelines for the Implementation of ISO 28000*. The objective of this standard is to assist users to implement ISO 28000.
- **ISO 28005-2:2011** – *Security Management Systems for the Supply Chain – Electronic Port Clearance (EPC) – Part 2: Core Data Elements*. This standard contains technical specifications that facilitate efficient exchange of electronic information between ships and shore for coastal transit or port calls, as well as definitions of core data elements that cover all requirements for ship-to-shore and shore-to-ship reporting as defined in the ISPS Code, FAL Convention and relevant IMO resolutions.

Standards under development:

- **ISO 28004-Addenda** – *Additional Guidance for Adopting and Certifying ISO 28000:*
  - For use in medium & small seaport operations;
  - Adopting ISO 28000 for small–medium-sized businesses (SME);
  - For security requirements for AEOs.
- **ISO 28005-1** – *Security Management Systems for the Supply Chain – Electronic Port Clearance (EPC) - Part 1: Message Structures*. Provides for computer-to-computer data transmission.
- **ISO 28006** – *Security Management Systems for the Supply Chain – Security Management of RO-RO Passenger Ferries.* Includes best practices for application of security measures.
- **ISO 20858** – *Uniform Implementation of ISPS Code*. If IMO revises the ISPS Code, ISO 20858 may also need revision.

ISO Technical Committee ISO/TC 8 published ISO 20858:2007, *Ships and Marine Technology – Maritime Port Facility Security Assessments and Security Plan Development*.

Another important contribution is the ongoing development of the ISO 28000 series of standards, *Security Management Systems for the Supply Chain,* which are designed to help the industry successfully plan for, and recover from, any disruptive event (see box 5.1). These standards promote a holistic, risk-based approach to managing risks associated with any disruptive incident in the supply chain, before, during and after the event.

The core standard, ISO 28000:2007, *Specification for Security Management Systems for the Supply Chain*, serves as an umbrella management system that enhances all aspects of security: risk assessment, emergency preparedness, business continuity, sustainability, recovery, resilience and/or disaster management, whether relating to terrorism, piracy, cargo theft, fraud, and many other security disruptions. The standard also serves as a basis for AEO and C-TPAT certifications. Various organizations adopting such standards may tailor an approach compatible with their existing operating systems.

2. Maritime safety: entry into force of the International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel, 1995 (STCW-F)

A Convention containing special rules on standards of training, certification and watchkeeping applicable to fishing vessel personnel was adopted on 7 July 1995.[150] The STCW-F Convention, consisting of 15 articles and an annex containing technical regulations, sets the certification and minimum training requirements for crews of seagoing fishing vessels of 24 metres in length and above. Seventeen years after its adoption, the Convention finally entered into force on 29 September 2012, having reached the required number of ratifications twelve months earlier on 29 September 2011.[151] The entry into force of the STCW-F Convention coincided with a diplomatic conference, held from 9 to 11 October 2012, in South Africa for the purpose of adopting an international agreement on the implementation of the 1993 Protocol[152] relating to the 1977 Torremolinos International Convention for the Safety of Fishing Vessels.

The safety of fishermen and fishing vessels constitutes an important part of the mandate of IMO. However, the two instruments on fishing vessel safety mentioned above, that is, the 1977 Convention and its 1993 Protocol, have not come into force due to a variety of technical and legal obstacles and unfortunately many lives continue to be lost in accidents involving fishing vessels every year. With the entry into force of the STCW-F Convention on 29 September 2012, and the renewed efforts to reach agreement at the diplomatic conference held from 9 to 11 October 2012, it is expected and hoped that the Torremolinos Protocol will also meet its entry force requirements as soon as possible.[153]

D. STATUS OF CONVENTIONS

A number of international Conventions in the field of maritime transport have been prepared or were adopted under the auspices of UNCTAD. Box 5.2 provides information on the status of ratification of each of these Conventions, as at 19 September 2012.

Box 5.2. Contracting States to selected international conventions on maritime transport, as at 19 September 2012

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, 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, Egypt, Ethiopia, Finland, France, Gabon, Gambia, Ghana, Guatemala, Guinea, Guyana, Honduras, India, Indonesia, Iraq, Italy, Jamaica, Jordan, Kenya, Kuwait, Lebanon, Liberia, Madagascar, Malaysia, Mali, Mauritania, Mauritius, Mexico, Montenegro, Morocco, Mozambique, 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 Republic of Tanzania, Uruguay, Venezuela (Bolivarian Republic of), Zambia. **(76)**
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	Albania, Benin, Ecuador, Estonia, Lithuania, Monaco, Nigeria, Peru, Russian Federation, Spain, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Serbia, Syrian Arab Republic, Tunisia, Ukraine, Vanuatu. **(17)**
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, Libya, Mexico, Morocco, Oman, Syrian Arab Republic. **(15)**
International Convention on Arrest of Ships, 1999	Entered into force 14 September 2011	Albania, Algeria, Benin, Bulgaria, Ecuador, Estonia, Latvia, Liberia, Spain, Syrian Arab Republic. **(10)**

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

E. TRADE FACILITATION IN INTERNATIONAL AGREEMENTS

1. Towards multilateral rules on trade facilitation at the World Trade Organization: the early or only harvest of the Doha Round?

Eight years since their official start in 2004, the WTO negotiations on trade facilitation (TF) may be close to delivering what could be the early – if not the only – harvest of the Doha Round. Indeed, while the Round itself is now largely considered to be failing,[154] TF is increasingly seen as a rare success story of the negotiations. At the same time, the WTO Negotiating Group on Trade Facilitation (NGTF) has yet to finalize the draft consolidated negotiating text on the individual TF measures. What is also lacking at this stage of the negotiations is an agreement on the degree of commitment of the developed members to delivering technical assistance and capacity building (TACB) to developing and least developed countries in exchange for their commitments to implement TF.

The fate of the future WTO agreement, therefore, hinges on two elements: delinking TF from the WTO Doha Round, and finalizing the TF agreement itself and, in particular, its provisions on special and differential treatment (SDT).

2. Delinking trade facilitation from the WTO Doha Round

In the climate of uneasiness and scepticism surrounding the Doha Round and its unsuccessful last ministerial meeting in December 2011, some WTO members, representatives of the business community and high-level WTO officials issued official statements where they singled out TF as one of the very few areas where an agreement was within the reach.[155]

The support expressed by G20 Ministers in Mexico, April 2012, for breaking up the Doha Round into its component parts, with an emphasis on TF, fuelled the appeals for the delinking of TF from the rest of the Doha issues. The idea is widely discussed and supported by such countries or groups of countries as Australia, Canada, Chile, the United States, and the European Union and their business communities. In June 2012, the World Bank and Regional Development Bank Presidents issued a personal press article, published later in the press around the world and in developing countries. In the article they urged, in particular, the countries to conclude the TF Agreement and reiterated the commitment for capacity-building projects and technical assistance to address the needs of developing countries so that they may be able to fully implement the Agreement.[156]

The proponents of de-linking TF from the Doha Round emphasize that the expected benefits from a TF Agreement in WTO represent more than 40 per cent of the expected benefits of the entire Round, with two thirds of these gains benefiting developing and the least developed countries.[157] They also consider that the current negotiating text on TF is close to receiving the overall consensus. In his speech at the UNCTAD Multi-year Expert Meeting on Transport and Trade Facilitation in December 2011, the Ambassador and Permanent Representative of Sweden to the WTO voiced strong support for the WTO TF Agreement in 2012, presenting the Agreement as a "win–win", especially in the light of its benefits for developing countries and LDCs. He argued that this was a unique opportunity to muster a much-needed boost to world economy and the best way to address the key legitimate concern of poorer developing countries, that is, getting adequate and sustained support for their TF reforms, through the mechanism of SDT.[158]

The opponents of the idea of de-linking TF from the Doha Round include major emerging economies, such as Argentina, Brazil, China, India and South Africa. They stress the importance of the rest of the Doha package (agriculture subsidies, duty-free/quota-free market access and a services waiver for LDCs) for the developing countries. For them an agreement on TF could not and should not be separated from the rest of the negotiations and, therefore, should share the final fate of the other major elements of the Doha Round. They also reiterate that implementing TF commitments would be much more onerous for developing countries, as opposed to the industrialized countries, who have already implemented most of the TF measures under consideration.[159] In their eyes, agreeing on other Doha issues that would be of benefit to developing countries would tip the overall balance in favour of signing up to legal obligations in the TF area.

The idea of TF as an early harvest, which has emerged timidly over the last two years, is now a frequent

feature of the trade talks, media reports and speeches of the high level officials from WTO, the World Bank and other major financial institutions. It remains to be seen whether the economic and political benefits of agreeing on TF would sway the opposition, leading to the signature of the agreement in the near future. But, while the debates on delinking TF from the Doha Round are intensifying and gaining prominence, some work remains to be done to finalize the TF Agreement itself.

3. Finalizing the TF provisions, including the commitments on the special and differential treatment

The draft consolidated negotiating text, currently in its 12th revision, released on 8 May 2012 (TN/TF/W/165/12), contains a total of 26 articles[160] with 675 pairs of square brackets, denoting provisions or parts of provisions yet to be finalized. Only one substantial provision (draft article 14 on the National Committee on Trade Facilitation) contains no such brackets.

The provisions of the current draft consolidated negotiating text can be divided into three sets:[161]

(a) Provisions on the individual TF measures;

(b) Institutional arrangements;

(c) Provisions on the special and differential treatment.

(a) Provisions on individual measures – codifying the best practices in trade facilitation

The individual TF measures currently included in the draft consolidated negotiating text constitute what can generally be seen as a set of the TF best practices (box 5.3).

Many of these measures are present in such classical TF instruments as the Revised International Convention on the Simplification and Harmonization of Customs Procedures (Revised Kyoto Convention) of the World Customs Organizations, the 1982 Convention on the Harmonization of Frontier Controls of Goods, and the United Nations trade facilitation recommendations.[162] In addition, the draft article 10 paragraph 4 – in its more binding version – aims to establish the obligation to use relevant international standards or parts thereof for their importation, exportation or transit formalities and procedures. This potentially includes in the scope of the agreement international TF standards, so far used on a voluntary basis, such as the United Nations Layout Key (UNLK)[163], the United Nations Trade Data Element Directory and the WCO Data Model. Furthermore, as documented by UNCTAD in the *Review of Maritime Transport 2011* and in a special technical note on *Trade Facilitation in Regional Trade Agreements*, the TF measures being negotiated by WTO are increasingly part of the regional and bilateral trade agreements, reinforcing their status as generally recognized and promoted measures of trade facilitation.[164]

The draft negotiating text, therefore, constitutes already at this stage a framework of reference on TF best practices and is already used as a basis for the national and/or regional TF strategies, bilateral and regional trade cooperation, as well as in TF technical and financial assistance delivered by the international organizations.[165] At the same time, almost all provisions on TF measures need significant fine tuning of the exact language and, thus, of the scope and the strictness of the measure. The objective of the negotiations, as reported by some countries, is to identify the elements of the substantial disagreement so that a political decision can be taken, and to make a decision on the desired degree of precision in the legal wording.[166]

(b) Institutional arrangements – coordinating at the World Trade Organization and the national levels

The draft consolidated negotiating text also addresses the issue of creating and maintaining institutional arrangements at both WTO and national levels.

The draft article 13 establishes a WTO TF Committee, which is to carry out specific responsibilities as assigned to it by agreement or by the members, such as receiving notifications on the modalities of the implementation of certain obligations (publication, Internet publication, implementation categories and schedules), overseeing the implementation of SDT, identifying relevant international standards on export, import and transit procedures and, possibly, carrying out dispute settlement during a transitional period. The mandate of the Committee is potentially vast, as, according to the current draft, it can address "any matters related to the operation of this Agreement or the furtherance of its objectives", which it is expected to do in close contact with other international organizations dealing with TF to avoid duplication of efforts.

At the national level, the draft negotiating text of article 14 of the Agreement contains a future obligation

Box 5.3. Individual measures currently included in the draft negotiating text

TF measures currently included in the draft consolidated negotiating text

1.	Publication	21.	[Authorized operators]
2.	Information available through Internet	22.	Expedited shipments
3.	Enquiry points	23.	Prohibition of consular transaction requirement
4.	Notification	24.	Border agency cooperation
5.	Interval between publication and entry into force	25.	[Declaration of trans-shipped or in transit goods] [domestic transit]
6.	Opportunity to comment on new and amended rules	26.	Review of formalities and documentation requirements
7.	Consultations	27.	Reduction/limitation of formalities and documentation requirements
8.	Provision of advance ruling	28.	Acceptance of copies
9.	Right of appeal	29.	Use of international standards
10.	Appeal mechanism [in a custom union] [that is a WTO Member]	30.	Single window
11.	Import alerts/rapid alerts	31.	[Elimination of] [Mandatory] Pre-shipment [and Post-shipment inspections]
12.	Detention	32.	Use of customs brokers
13.	Test procedures	33.	Common border procedures [and requirements]
14.	Disciplines on fees and charges imposed on or in connection with importation and exportation	34.	Uniform forms and documentation requirements relating to clearance
15.	Penalty disciplines	35.	Option to return rejected goods to the exporter
16.	Pre-arrival processing	36.	Temporary admission of goods
17.	Separation of release from final determination and payment of customs duties, taxes, fees and charges	37.	Inward and outward processing
18.	Risk management	38.	Freedom of transit
19.	Post-clearance audit/customs audit	39.	Customs cooperation
20.	Establishment and publication of average release times	40.	National committee on Trade Facilitation

for all members to establish a national committee on TF to facilitate both domestic coordination and implementation of the agreement. This proposal is based on a particular set of TF best practices traditionally promoted by the United Nations (UNCTAD and the United Nations regional commissions) and international financial institutions, such as the World Bank and the Asian Development Bank (ADB).[167] The usefulness of such a mechanism is widely recognized and in many countries the WTO negotiations on TF created the momentum and the political support for such bodies. Setting up and, much more importantly, maintaining such a committee is not an easy task, especially for developing countries and LDCs, where ensuring the domestic coordination and cooperation on TF is often very difficult in the absence of a clear legal basis, the strong political support and regular technical assistance. Article 14 may, therefore, provide the much needed legal basis and, where appropriate, solid grounds for requesting and receiving long-term technical assistance, ensuring the viability and the adequate performance of such a mechanism.

(c) Provisions on the special and differential treatment – overcoming the stumbling block of the commitment on technical assistance and capacity building?

While progress has been made on identifying and fleshing out the legal text for individual TF measures, achieving the agreement between all the negotiators on SDT for developing countries and LDCs is still seen as problematic and far from guaranteed.

Special and differential treatment is built into the draft negotiating text and is embodied in the introduction of three categories of commitments for developing country and LDC members, using which these

countries can delay the implementation of some measures and/or make it conditional upon receiving the appropriate TACB.[168] Special and differential treatment is also expressed in other elements, such as the proposed "grace period" for the application of the WTO dispute settlement mechanism (the period of time for which has yet to be agreed on).

Setting aside the technicalities of making this differentiated speed of the implementation of the TF measures possible, which are yet to be finalized, the stumbling block in the eyes of many negotiators and analysts is the reticent attitude of the developed members vis-à-vis the inclusion of a clear legal commitment to provide TACB to developing countries and LDCs and to report on the assistance provided individually or through international aid agencies.

It is true that, to date, linking implementation flexibilities to technical assistance delivery, and introducing the mandatory reporting obligations on the TACB provided is unprecedented in the WTO.[169] Furthermore, the developed countries explain their reservations by pointing out the fact that the global TF-related assistance is booming and, therefore, the needed TACB is already available to the countries in need of the assistance and in sufficient quantity.[170] In the course of the negotiations, some developed country WTO members submitted several comprehensive reports to NGTF either on their financing of the projects in the area of TF, or with TF illustrating this point.[171] The overall share of TACB assigned to TF has, in fact, been increasing significantly over the last years. At the same time, the UNCTAD calculations, based on data provided by OECD, also show a difference between the middle-income developing countries and the LDCs. The share of technical assistances assigned to TF is much lower in LDCs than in middle-income developing countries.[172] This element, coupled with the reasonable expectations that the costs of TF implementation will be the highest in LDCs, lends grounds to the concern of the developing countries regarding a legally binding promise of TACB. Linking TF commitments to a technical assistance was already incorporated in some bilateral trade agreements more than a decade ago, as illustrated by the 2001 Canada–Costa Rica Free Trade Agreement, and references to technical assistance are increasingly included in the new bilateral and regional trade agreements.[173]

4. Conclusion: Window of opportunity for the World Trade Organization trade facilitation agreement?

Eight years after their official launch, TF negotiations in WTO have gained sufficient technical and political momentum to deliver, perhaps, multilateral legally binding rules and the institutional setting for their implementation. While the speed of the negotiations may appear relatively moderate, it is important to bear in mind that drafting technical agreements on trade and transport facilitation issues usually requires several years even at the regional level. Already at this stage, the WTO negotiations on TF have an impact on the current regional and bilateral trade agreements, on the TF-related TACB and national TF strategies.[174]

At present, TF seems to have a definite window of opportunity in WTO. What, in the end, will dictate the ultimate fate of the agreement is the negotiators' willingness and ability to meet each other halfway both in delinking TF from Doha and in finalizing the text of the agreement. Whatever their final outcome, the WTO TF negotiations are already a definite and important chapter of the international regulatory and legal framework of TF.

ENDNOTES

1 For further detail on relevant international regimes, see Reynolds, BWB and Tsimplis MN (2012) *Shipowners' Limitation of Liability*, AH Alphen aan den Rijn, Wolters Kluwer, Part II.

2 1976 LLMC entered into force on 1 December 1986. As at 30 June 2012 it had 53 States Parties representing 53.75 per cent of world tonnage.

3 The 1996 Protocol to the Convention on Limitation of Liability for Maritime Claims, 1976. It entered into force on 13 May 2004. As at 30 June 2012 this Protocol had 46 States Parties representing 45.95 per cent of world tonnage.

4 For further detail on persons entitled to invoke limitation and on the types of vessel in respect of which limitation is available, see Reynolds, BWB and Tsimplis, MN (2012), fn 1 above, chapters 3 and 4. See also fn 13, below.

5 See Arts. 2 and 3 of the 1976 LLMC and 1996 LLMC. Art. 2 lists a set of broad categories of claims subject to limitation and Art. 3 provides for a subset of claims that is excluded from limitation of liability (e.g. claims covered by specialized international liability regimes). For detailed commentary, see Reynolds, BWB and Tsimplis, MN (2012), fn 1 above, chapter 5.

6 See Art. 4 of the 1976 LLMC and 1996 LLMC: "A person liable shall not be entitled to limit his liability if it is proved that the loss resulted from his personal act or omission, committed with the intent to cause such loss, or recklessly and with knowledge that such loss would probably result".

7 The IMO Legal Committee (LEG) during its ninety-ninth session held from 16 to 20 April 2012, adopted amendments to increase the limits of liability in the 1996 Protocol. See Resolution LEG.5(99), *Report of the Legal Committee on the work of its ninety-ninth session*, LEG 99/14, Annex 2.

8 Under the "tacit acceptance" procedure, amendments enter into force on a specified date unless an agreed number of States Parties object before that date.

9 9 Article 3(a)(i).

10 Article 3(a)(ii).

11 Article 3(b)(i).

12 Article 3(b)(ii). The daily conversion rates for Special Drawing Rights (SDRs) can be found on the International Monetary Fund (IMF) website, www.imf.org.

13 The 1996 LLMC applies in respect of proceedings before the courts of a Contracting State (see Art. 15); however, a State may choose not to apply the limits of the Convention in relation (a) to a person who does not have his habitual residence in a State Party, or does not have his principal place of business in a State Party or (b) any ship in relation to which the right of limitation is invoked or whose release is sought and which does not at the time specified above fly the flag of a State Party. See also fn 4, above.

14 The 1957 Limitation of Liability Convention entered into force in 1968, and still has 14 States Parties.

15 The scope of application of the 1976 LLMC is identical to that of the 1996 LLMC (see fn 13 above). The 1924 Limitation of Liability Convention and the 1957 Limitation of Liability Convention also apply in principle to proceedings before the courts of a Contracting State. However, under each of the Conventions a State may choose not to apply the limits to certain categories of person or ship that lack a nexus to the Contracting State.

16 An overview of the deliberations on the reduction of GHG emissions form shipping, during the sixty-first session of the MEPC held from 27 September to 1 October 2010 was provided in chapter 5 of the *Review of Maritime Transport 2011*.

17 See the Second IMO GHG Study 2009, available at http://www.imo.org/blast/blastDataHelper.asp?data_id=27795&filename=GHGStudyFINAL.pdf . The study suggests that if implemented, relevant measures could increase energy efficiency and reduce the emissions rate by 25-75 per cent below the current levels.

18 For an overview of the discussions on the different types of measures, see the *Review of Maritime Transport 2010*, p.118-119 and *2011,* p.114-116.

19 In respect of market-based measures, see particularly the *Review of Maritime Transport 2011*, p.114 and 117-119.

20 The book, a UN co-publication with Earthscan/Routledge, includes contributions from experts from academia, international organizations - such as the IMO, the UNFCCC secretariat, OECD, IEA and the World Bank - as well as the shipping and port industries. Issues covered include the scientific background; greenhouse gas emissions from international shipping and potential approaches to mitigation; the state of play in terms of the relevant regulatory and institutional framework; potential climate change impacts and approaches to adaptation in maritime transport; and relevant cross-cutting issues such as financing and investment, technology and energy. For further information, see the UNCTAD website at www.unctad.org/ttl/legal.

21 For the text of the new Regulations, see the *Report of the Marine Environment Protection Committee at its Sixty-Second Session*, MEPC 62/24/Add.1, Resolution MEPC.203(62), Annex 19.

22 The International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978 (MARPOL 73/78), Annex VI (MARPOL Annex VI), sets limits on sulphur oxide and nitrogen oxide emissions from ship

exhausts and prohibits deliberate emissions of ozone depleting substances. It also contains provisions allowing for special SOx Emission Control Areas (SECAS) to be established with more stringent controls on sulphur emissions. MARPOL Annex VI entered into force on 19 May 2005 and as of 30 June 2012 had 70 States Parties representing 93.29 per cent of world tonnage.

23 The Regulations were formally voted on and adopted by a majority of the States Parties to MARPOL Annex VI that were represented in the sixty-second session of the MEPC, by a roll-call vote, rather than by consensus. The results of the vote were: 49 parties of MARPOL Annex VI in favour, 5 against and 2 abstained. The Regulations are expected to enter into force for the States Parties to MARPOL Annex VI as of 1 January 2013.

24 For the text of the Guidelines see the *Report of the Marine Environment Protection Committee on its sixty-third session*, MEPC 63/23 and MEPC 63/23 Add.1, Resolutions MEPC.212-215(63), Annex 8-11.

25 For a brief description of these measures, see *Review of Maritime Transport 2011,* p.114-116.

26 The current regulations cover ships with conventional diesel propulsion. Other ship types such as Ro/Ros, passenger ships and ships with diesel-electric propulsion, turbine propulsion or hybrid propulsion will be subject to the energy efficiency requirements later.

27 For detailed requirements regarding EEDI and SEEMP see Regulations 20-22. See also *Objectives of IMO's strategies on GHG emissions*, http://www.imo.org/OurWork/Environment/PollutionPrevention/AirPollution/Documents/GHG%20Flyer%20WEB.pdf.

28 See Regulations 5-10 and Appendix VIII.

29 See Regulation 19.

30 See Regulation 20.

31 The guidelines were prepared by the *Second Intersessional Meeting of the Working Group on Energy Efficiency Measures for Ships* (EE-WG 2). EE-WG 2 also considered guidelines for determining minimum propulsion power and speed to enable safe manoeuvring in adverse weather conditions, and other important issues, such as EEDI requirement for large tankers and bulk carriers, and EEDI frameworks for ships not covered by the current EEDI, for further development at future sessions. For more information see the report of the intersessional meeting, MEPC/63/4/11.

32 See the *Report of the Marine Environment Protection Committee on its sixty-third session*, MEPC 63/23 and MEPC 63/23 Add.1, Resolutions MEPC.212-215(63), Annex 8-11.

33 For most recent IMO discussions, see MEPC 63/23, p.23-26.

34 For discussions in the context of BIMCO for instance, see *It has taken three years of often debate at the International Maritime Organization to finalize EEDI*, Lloyd's List, 23 March 2012.

35 See *2012 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships, Report of the Marine Environment Protection Committee on its sixty-third session*, MEPC 63/23, Annex 8.

36 MEPC 63/23 Add.1, Annex 12.

37 See Regulation 23.

38 For the text of the draft resolution see document MEPC 63/5/4.

39 See MEPC 63/23, p.32.

40 MEPC 63/23 at para. 5.54. Proponents of MBM proposals which rely on design benchmarks/parameters were invited to "clarify in their proposals the relation between such design benchmarks/parameters and the EEDI set out in the new chapter 4 to MARPOL Annex VI".

41 The concerns had been expressed in respect of an IMO commissioned study by Lloyd's Register (LR) in partnership with Det Norske Veritas (DNV) which had been finalized in October 2011 (*Air pollution and energy efficiency, Estimated CO_2 emissions reduction from introduction of mandatory technical and operational energy efficiency measures for ships,* see MEPC 63/INF.2 and MEPC 63/4/1). Concerns regarding the study related in particular to significant uncertainties regarding future emission projections, accuracy of the database used, as well as the fleet growth and scrapping rate scenarios. Moreover, it was argued, the study was optimistic in its estimate of the cost of complying with the EEDI requirements and there was a lack of transparency in terms of the calculation process. See MEPC 63/23, p.27.

42 MEPC 63/23 at para. 5.58. Member States were encouraged to submit documents to MEPC 64.

43 It should be noted that a range of concerns on matters of principle and policy concerning reduction of GHG emissions and in respect of potential MBMs have been expressed by a number of developing countries' delegations, including in particular the delegations of Brazil, China and India. For further details, see also the statements by several delegations, set out in Annexes 14-17 to the *Report of the Marine Environment Protection Committee on its sixty-third session*, MEPC 63/23 Add.1.

44 See the *Review of Maritime Transport 2011*, p.114 and 117-119.

45 For a summary of the MBM proposals submitted at the MEPC, see *Review of Maritime Transport 2010*, p.119-122.

46 For a summary of the discussions, see the *Review of Maritime Transport 2011*, p.117-119.

47 Document MEPC 62/5/1.

48 MEPC 62/5/1, Annex 3.

49 Ibid., Annex 4.

50 Ibid., Annex 5.

51 Study of the *Expert Group on Feasibility Study and Impact Assessment of Possible Market-based Measures (MBM-EG),* MEPC 61/INF.2. For a brief summary see *Review of Maritime Transport 2010*, p.122-123.

52 GHG-WG 3/3/4 (Cyprus, Denmark, Marshall Islands and Nigeria) and GHG-WG 3/3 (Greece).

53 MEPC 63/5/2 (Note by the Chairman).

54 MEPC 63/WP.12 (Note by the Chairman).

55 Comments on the impact assessment and highlighting the need for further impact studies on developing countries, were provided as part of the discussion in documents MEPC 63/5/8 (India) presenting the findings of an MBM impact study on India's shipping sector and trade, and MEPC 63/5/11 (China).

56 Document MEPC 63/5/8 (India). The study assessed the potential impact of MBMs on freight rates and export/import prices of three essential commodities (capesize iron ore exports from India to China, imports of coal to India from Australia and imports of crude oil to India from Saudi Arabia).

57 It is to be noted that coal accounts for nearly 65% of India's CO_2 emissions. This will defeat the basic purpose of "Reduction of GHG emissions".

58 Document MEPC 63/5/11 (China).

59 See MEPC 63/23, p.34-44. The following documents were considered under this topic: MEPC 63/5/1 (Bahamas) and relevant parts of MEPC 62/5/13; MEPC 63/5/3 (Japan and WSC); MEPC 63/5/9 (Germany); MEPC 63/5/10 (Russian Federation); MEPC 62/5/7 (Greece); GHG-WG 3/3 (Greece); MEPC 62/5/8 (United States); MEPC 62/5/33 (Cyprus, Denmark, the Marshall Islands, Liberia, Nigeria, the Republic of Korea and IPTA); and GHG-WG 3/3/4 (Cyprus, Denmark, Marshall Islands and Nigeria). Documents related to climate finance were discussed subsequently. For discussions on earlier proposals under consideration see *Review of Maritime Transport 2010 and 2011.*

60 Annex 3 of MEPC 62/5/1, see fn 47, above, and accompanying text.

61 MEPC 63/23 at para. 5.25.

62 Ibid.

63 Ibid.

64 The MEPC had the following documents for consideration on this issue: MEPC 62/5/15 (Germany), MEPC 63/5/7 (France), MEPC 62/5/34 (France), MEPC 63/5/6 (WWF), and MEPC 62/5/14 (WWF).

65 The UNFCCC regime is based on the principle of "Common but Differentiated Responsibilities and Respective Capabilities" (CBDR) of States, whereas policies and measures adopted under the auspices of IMO are guided by its major principle of non-discrimination and equal treatment of ships (flag neutrality).

66 MEPC 63/23 at para. 5.34.

67 Ibid.

68 Ibid.

69 The "Rebate Mechanism" refers to a MBM proposal submitted by the International Union for the Conservation of Nature (IUCN), with further details submitted by the WWF; see MEPC 60/4/55, MEPC 61/5/33, MEPC 62/5/14, and MEPC 63/5/6. See also Stochniol A, "A rebate mechanism for an equitable maritime emission reduction scheme". In: Asariotis R and Benamara H. (2012) *Maritime Transport and the Climate Change Challenge*. London: Earthscan (Routledge/Taylor & Francis), chapter 7.

70 MEPC 63/23 at para. 5.34.

71 *Report of the Secretary-General's High-level Advisory Group on Climate Change Financing*, 5 November 2010, available at http://www.un.org/wcm/webdav/site/climatechange/shared/Documents/AGF_reports/AGF_Final_Report.pdf. See also MEPC 62/INF.2 (secretariat).

72 See *Mobilizing Climate Finance*. 6 October 2011, available at http://www.g20-g8.com/g8-g20/root/bank_objects/G20_Climate_Finance_report.pdf. The report's Annex 2, entitled "Market-based Instruments for International Aviation and Shipping as a Source of Climate Finance" is available at http://www.imf.org/external/np/g20/pdf/110411a.pdf. Information on and a request to consider the G-20 report and its Annex 2 was provided to the Committee in document MEPC 63/5/7, submitted by France.

73 See the remarks of a speaker from the International Chamber of Shipping (ICS) at an UNCTAD Ad-Hoc Expert Meeting on "Climate change impacts and adaptation: a challenge for global ports", held in September 2011. Audio-files of presentations at the meeting and a document presenting main outcomes and summary of discussions (UNCTAD/DTL/TLB/2011/3) are available on the UNCTAD website at www.unctad.org/ttl/legal. The ICS comments were widely reported in the press, see e.g. http://www.worldbunkering.com/news/industry-news/0730-ics-sells-levy-idea-at-unctad.html. For further information on the position of the ICS in respect of GHG emissions control, see www.marisec.org.

74 See document GHG-WG 3/WP.6.

75 On this matter, see also document MEPC 62/5/27 (India), *On possible incompatibility between WTO Rules and a Market-Based Measure for international shipping*. The delegation of India reiterated its concerns in a statement at the sixty-third session of the MEPC, see MEPC 63/23/Add.1, Annex 17.

76 These decisions and conclusions are summarised in MEPC 63/23 at paras 5.43-5.48. For further information on the outcome of the Durban Conference, see MEPC 63/5/5 (Note by the secretariat).

77 See the conclusion by SBSTA 35, which can be found in MEPC 63/5/5 at paras 23 to 26, as well as the continued consideration of issues related to addressing emissions from international aviation and maritime transport under AWG-LCA, which can be found in MEPC 63/5/5 at paras 18 to 21, and alternative sources.

78 See the decision referred to in MEPC 63/5/5 at para 8.5 to include carbon dioxide capture and storage in geological formations as a Clean Development Mechanism activity.

79 The Conference will be preceded by a two-week session in Bonn, Germany, and it is expected that additional intersessional meetings of the three ad hoc working groups will be held, as well as workshops related to further work on the Green Climate Fund, in accordance with the decision reproduced in MEPC 63/5/5 at para 8.4. See also MEPC 63/23, paras 5.35-5.44.

80 See MEPC 63/23, para. 5.47.

81 UNCTAD, as part of its mandated work programme in the field of transportation, carries out research and analysis "to help developing countries make informed policy choices to address the environmental challenges in relation to transport strategy and to help identify associated capacity-building needs and appropriate regulatory responses" (Accra Accord, para. 168).

82 Document UNCTAD/DTL/TLB/2011/4, available at www.unctad.org/ttl/legal.

83 These include the *International Convention on Civil Liability for Oil Pollution Damage*, 1969; *International Convention on Civil Liability for Oil Pollution Damage* 1992; *International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage*, 1971 (no longer in force); *International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage* 1992; and the *Protocol of 2003 to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage*, 1992.

84 *International Convention on Civil Liability for Bunker Oil Pollution Damage 2001*. The Convention entered into force on 21 November 2008 and as of 30 June 2012 had 66 States Parties representing 90 per cent of world tonnage.

85 *International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS) 1996*. The Convention has not yet entered into force.

86 *2010 Protocol to the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996*. The Protocol has not yet entered into force. See also *Review of Maritime Transport 2010* p.124-125.

87 The Convention has not yet entered into force. For more information on the Hong Kong Convention, see *Review of Maritime Transport 2010* p.123.

88 MARPOL annex VI came into force on 19 May 2005, and by 30 June 2012 it had been ratified by 70 States, representing approximately 93.29 per cent of world tonnage. Annex VI covers air pollution from ships, including SO_x and NO_x emissions and particulate matter.

89 See *Review of Maritime Transport* 2008 p.119.

90 In case of a negative conclusion of the review the new global cap should be applied from 1 January 2025.

91 See MEPC 62/24, Resolution MEPC.202(62), Annex 14.

92 See ICS http://www.marisec.org/2012_Text.htm#low sulphur fuel.

93 See resolution MEPC.201(62).

94 See resolutions MEPC.216(63) and MEPC.217(63), MEPC 63/23, Annex 20 and 21.

95 Resolution MEPC.221(63), MEPC 63/23, Annex 26.

96 Resolution MEPC.218(63), MEPC 63/23, Annex 22.

97 This resolution follows the adoption by MEPC 62 of amendments to MARPOL Annex IV designating the Baltic Sea as a "Special Area" under this Annex. Those amendments are expected to enter into force on 1 January 2013.

98 Resolution MEPC.219(63), MEPC 63/23, Annex 24.

99 Resolution MEPC.220(63), MEPC 63/23, Annex 25.

100 Resolution MEPC.210(63), MEPC 63/23, Annex 4.

101 MEPC.211(63), MEPC 63/23, Annex 5.

102 Resolution MEPC.197(62), MEPC 62/24, Annex 3.

103 Resolution MEPC.196(62), MEPC 62/24, Annex 2.

104 The Hong Kong Convention was open for accession since 1 September 2010, and it is not yet into force. It will enter into force 24 months after the date on which 15 States, representing 40 per cent of the world's merchant fleet tonnage have become Parties to it.

105 These were "Smart Ballast" Ballast Water Management System proposed by the Republic of Korea in document MEPC 62/2/8; DMU OH Ballast Water Management System proposed by China in document MEPC 63/2; and EcoGuardian™ Ballast Water Management System proposed by the Republic of Korea in document MEPC 63/2/4.

106 1These were: SiCURE™ Ballast Water Management System proposed by Germany in document MEPC 62/2/10; ERMA FIRST Ballast Water Management System proposed by Greece in document MEPC 63/2/1; MICROFADE™ Ballast Water Management System proposed by Japan in document MEPC 63/2/2; AquaStar™ Ballast Water Management System proposed by the Republic of Korea in document MEPC 63/2/3; and Neo-Purimar™ Ballast Water Management System proposed by the Republic of Korea in document MEPC 63/2/6.

107 See *The 2004 Ballast Water Management Convention with international acceptance growing, the Convention may soon enter into force,* UNCTAD, *Transport Newsletter No.50*, Second Quarter 2011, p.8.

108 The delegations of Brazil; Liberia; Malaysia; Malta; Panama; Singapore; Hong Kong, China and ICS.

109 The delegations of Germany, Ireland, Italy, Norway, the Republic of Korea and Spain.

110 See the *Report of the Marine Environment Protection Committee on its sixty-third session*, MEPC 63/23, p.12.

111 See Resolution MEPC.209(63), MEPC 63/23, Annex 3.

112 The BWM Convention has been open for accession by any State since 31 May 2005, and as of 30 June 2012, it had 35 Parties, representing 27.95 per cent of the world's merchant fleet tonnage. According to Article 18 of the BWM, the Convention will enter into force twelve months after the date on which not fewer than 30 States, the combined merchant fleets of which constitute not less than 35 per cent of the gross tonnage of the world's merchant shipping, have become Parties to it.

113 A June 2011 updated version of the SAFE Framework is available at: http://www.wcoomd.org/files/1.%20Public%20files/PDFandDocuments/Procedures%20and%20Facilitation/safe_package/safe_package_I_2011.pdf.

114 Pillar 1 is based on the model of the Container Security Initiative (CSI) introduced in the U.S. in 2002. Pillar 2 is based on the model of the Customs-Trade Partnership against Terrorism (C-TPAT) programme introduced in the U.S. in 2001. For more information on these as well as for an analysis of the main features of the customs supply chain security, namely advance cargo information, risk management, cargo scanning and Authorized Economic Operators (AEOs), see "WCO research paper No.18, *The Customs Supply Chain Security Paradigm and 9/11: Ten Years On and Beyond*", September 2011, available at www.wcoomd.org. For a summary of the various U.S. security programmes adopted after Septemeber 11 see UNCTAD report *Container Security: Major initiatives and related international developments* , UNCTAD/SDTE/TLB/2004/1, available at http://r0.unctad.org/ttl/ttl-docs-legal-reports+docs.htm.

115 For the list of WCO members who have expressed their intention to implement the SAFE Framework, see http://www.wcoomd.org/files/1.%20Public%20files/PDFandDocuments/Enforcement/FOS_bil_05.pdf.

116 The SAFE Framework AEO concept has its origins in the revised Kyoto Convention which contains standards on "authorized persons", and national programmes.

117 See text to fn. 122 below.

118 *WCO Safe Framework of Standards*, June 2011, p.49.

119 See also *Review of Maritime Transport 2011*, p.121-122. The Package included the *SAFE Framework of Standards*, *Customs Guidelines on Integrated Supply Chain Management*, *AEO Implementation Guidance*, *AEO Compendium*, *Model AEO Appeal Procedures*, *AEO Benefits: A contribution from the WCO Private Sector Consultative Group*, *Guidelines for the Purchase and Deployment of Scanning/Imaging Equipment*, *SAFE Data Element Maintenance Mechanism*, *Trade Recovery Guidelines*, and *FAQ for Small and Medium Enterprises*. The SAFE package is available at: www.wcoomd.org/home_pfoverviewboxes_safepackage.htm.

120 See *Guidelines for developing a mutual recognition arrangement/agreement, 2011,* p.2.

121 See WCO research paper No.18, *The Customs Supply Chain Security Paradigm and 9/11: Ten Years On and Beyond*, September 2011, available at http://www.wcoomd.org/files/1.%20Public%20files/PDFandDocuments/research/18_CSCSP_911.pdf.

122 Ibid.

123 Customs compliance programmes are mainly focused on traditional fiscal rather than security criteria.

124 Due to the fact that 27 EU countries have one common uniform AEO programme.

125 According to information provided by the WCO secretariat. For more information see *Compendium of AEO Programmes, 2012 Edition*, available at www.wcoomd.org/home_research_researchseries.htm.

126 See p.122-123.

127 There are three types of certificate that may be applied for: Customs Simplifications (AEO-C), Security and Safety (AEO-S) and Customs Simplifications/Security and Safety jointly (AEO-F). According to information provided by the European Commission's Directorate General for Taxation and Customs Union, as of 8 February 2012, a total of

13,027 applications for AEO certificates had been submitted, and a total of 9,894 certificates had been issued. The total number of applications rejected up until that date was 1,201 (13 per cent of the applications received), and the total number of certificates revoked was 289 (3 per cent of certificates issued). The number of applications received in the space of one year from 1 January to 31 December 2011 was 5,533. The number of certificates issued during that same period was 4872 (an average of 406 per month). The breakdown reported per certificate type issued was: AEO-F 4700 (49 per cent); AEO-C 4531 (48 per cent); and AEO-S 258 (3 per cent).

128 For the self-assessment questionnaire, see http://ec.europa.eu/taxation_customs/resources/documents/customs/policy_issues/customs_security/aeo_self_assessment_en.pdf . Explanatory notes are also available at http://ec.europa.eu/taxation_customs/resources/documents/customs/policy_issues/customs_security/aeo_self_assessment_explanatory_en.pdf.

129 MRAs have already been concluded with Switzerland, Norway and Japan. A similar agreement is also being explored with China.

130 The EU and the USA are strategic trade partners, with imports and exports accounting for almost €500 billion in 2011.

131 Membership in the C-TPAT has reached 10,221 companies as of January 12, 2012. CBP currently has signed MRAs with the European Union, New Zealand, Canada, Jordan, Japan and the Republic of Korea and is continuing to work towards similar recognition with Singapore, Taiwan and other countries.

132 Preparatory work on mutual recognition was completed in November 2011, when they came to an agreement to mutually recognize each others secure traders programmes. A copy of the decision is published in the Official Journal of the European Union, L 144/44, 5 June 2012, p.44-47, at http://eur-lex.europa.eu.

133 See *Customs: EU and USA agree to recognize each other's "trusted traders"*, EU Press Release IP/12/449, 4 May 2012.

134 *Implementing Recommendations of the 9/11 Commission Act of 2007*. Public Law 110-53, 3 August 2007. For an analysis of the respective provisions, see UNCTAD's *Transport Newsletter* no.45, first quarter 2010, available at www.unctad.org/ttl.

135 See *Review of Maritime Transport 2010*, p.128.

136 See also *"Balancing maritime security and trade facilitation: Protecting our ports, increasing commerce and securing the supply chain"*, Joint Statement by DHS before the House Committee on Homeland Security Subcommittee on Border and Maritime Security, 7 February 2012, available at: http://homeland.house.gov/sites/homeland.house.gov/files/Testimony%20Heyman%2C%20Zunkunft%2C%20McAleenan.pdf.

137 *Container Security Programs Have Matured, but Uncertainty Persists over the Future of 100 Percent Scanning*, Statement of Stephen L. Caldwell, Director Homeland Security and Justice, 7 February 2012, GAO-12-422T, available at: www.gao.gov/products/GAO-12-422T. The report states that "uncertainty persists over how the Department of Homeland Security (DHS) and the United States Customs and Border Protection (CBP) will fulfil the mandate for 100 per cent scanning given that the feasibility remains unproven in light of the challenges the CBP has faced implementing a pilot program for 100 per cent scanning. In response to the SAFE Port Act requirement to implement a pilot program to determine the feasibility of 100 per cent scanning, CBP, the Department of State, and the Department of Energy announced the formation of the Secure Freight Initiative (SFI) pilot program in December 2006. However, logistical, technological, and other challenges prevented the participating ports from achieving 100 per cent scanning and CBP has since reduced the scope of the SFI program from six ports to one. In October 2009, GAO recommended that CBP perform an assessment to determine if 100 per cent scanning is feasible, and if it is, the best way to achieve it, or if it is not feasible, present acceptable alternatives".

138 In order for a two-year extension to take effect, the Secretary of the Department for Homeland Security (DHS) was required to provide a report to Congress 60 days before 1 July 2012 (i.e. by 2 May 2012). See Section 1701 (b)(2) of the *Implementing Recommendations of the 9/11 Commission Act of 2007 (9/11 Act)* which amends the *SAFE Port Act*.

139 For the full text of the letter, see www.brymar-consulting.com/wp content/uploads/security/Scanning_deferral_120502.pdf.

140 MSC.1/Circ.1192 on Guidance on voluntary self-assessment by SOLAS Contracting Governments and by port facilities; MSC.1/Circ.1193 on Guidance on voluntary self-assessment by Administrations and for ship security; and MSC.1/Circ.1194 on Effective implementation of SOLAS chapter XI-2 and the ISPS Code.

141 See document MSC 90/4/1 (Australia).

142 Resolution FAL.11(37), *Report of the Facilitation Committee on its thirty-seventh session*, FAL 37/17 Annex 1.

143 See FAL 37/17, p.18. Reports on stowaway incidents were received by the IMO from nine Member States; one Associate Member and one NGO in 2008; from eight Member States, one Associate Member and one NGO in 2009, from five Member States and one Associate Member in 2010, and one Member State in 2011.

144 Ibid., p.21.

145 FAL.5/Circ.36.

146 FAL.5/Circ.35.

147 For more information on these amendments adopted during the ninetieth session of the MSC see the report of the MSC on its ninetieth session, document MSC 90/28, Annex 4.

148 MSC.1/Circ.1441.

149 For more information see www.iso.org. See also FAL 37/8/3, *ISO 28000 Series Standards Update, submitted by the International Organization for Standardization (ISO)* reflecting information as of 1 July 2011. The procedure of preparing International Standards at the ISO is as follows: Draft International Standards adopted by the technical committees (TCs) are circulated to the member bodies for voting. Approval by at least 75% of the member bodies casting a vote is requested for an International Standard to be published. When there is an urgent market requirement for such documents, a TC may decide to publish other types of documents, such as an ISO Publicly Available Specification (ISO/PAS) or an ISO Technical Specification (ISO/TS). An ISO/PAS is accepted for publication if it is approved by more than 50% of the members of the parent committee casting a vote, while an ISO/TS is accepted for publication if it is approved by 2/3 of the members of the TC casting a vote. An ISO/PAS or ISO/TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If an ISO/PAS or ISO/TS is confirmed, it is reviewed again for a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

150 For further information see http://www.imo.org/about/conventions/listofconventions/pages/international-convention-on-standards-of-training,-certification-and-watchkeeping-for-fishing-vessel-personnel-.aspx.

151 According to Article 12 of the Convention, it will enter into force 12 months after the date on which not fewer than 15 States have ratified it. On 29 September 2011, the Republic of Palau was the fifteenth State to ratify the Convention, increasing its level of ratification to 4.75 per cent of world tonnage.

152 The 1993 Protocol had been adopted to amend the original Torremolinos Convention of 1977.

153 For information on another related convention of a more general nature, the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978, and its subsequent amendments, see *Review of Maritime Transport* 2011, p.126-128.

154 Policy Brief, Global Governance Programme, Issue 2011/1, June 2011; Bridges Weekly Trade News Digest, Volume 15, Number 15, 27 April 2011.

155 See reports on the recent informal ministerial trade talks in Paris on 22 May 2012, as reported by 24 May 2012 issue of Washington Trade Daily and the Wall Street Journal on 23 May 2012; Joint Statement of 13 December 2011 of ANTAD (Mexico), EuroCommerce (Europe), the Conseil québécois du commerce de détail (Canada), FTA (Europe) and NRF (US) and P. Lamy (WTO) on March 19 2012, as reported by Reuters (US Edition) on 19 March 2012.

156 "A Down Payment on Development: Conclude a WTO Trade Facilitation Deal", 27 June 2012, Ahmad Mohamed Ali Al-Madani, President of the Islamic Development Bank, Donald Kaberuka, President of the African Development Bank, Haruhiko Kuroda, President of the Asian Development Bank, Thomas Mirow, President of the European Bank for Reconstruction and Development, Luis Alberto Moreno, President of the InterAmerican Development Bank and Robert B. Zoellick, President of the World Bank Group.

157 Interview with Pablo Longueira, Minister of Economics, Development and Tourism of Chile and Gabriel Duque, Deputy Minister of Trade of Colombia, 19 April 2012, transcribed by the office of the Australian Minister for Trade and Competitiveness.

158 "The Case for a WTO agreement – now", Mr. Joakim Reiter, Ambassador and Permanent Representative of Sweden to the WTO, 8 December 2011, UNCTAD Multi-year Expert Meeting on Transport and Trade Facilitation.

159 For a recent overview, see 4-5 June 2012 talks of the trade ministers from the 21 Asia-Pacific Economic Cooperation (APEC), as reported by Bridges Weekly Trade News Digest, Volume 16 · Number 22, 6 June 2012.

160 Section I contains 16 articles and section II on STD, while not divided in articles, contains 11 distinct provisions.

161 The text also deals with the cross-cutting matters which include relationship to other WTO agreements, dispute settlement, final provisions, implementation schedules and exceptions. Due to the limited space, they are not analysed here.

162 See, for instance, Recommendation No. 18 on Facilitation Measures Related to International Trade Procedures of the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT).

163 In some trade and transport agreements, however, such as the abovementioned Harmonization Convention, however, the Contracting Parties commit to align their documents on UNLK.

164 UNCTAD, Transport and Trade Facilitation, Series No.3, "Trade Facilitation in Regional Trade Agreements", UNCTAD/DTL/TLB/2011/1.

165 In several of its ongoing capacity-building projects and regional workshops on TF, UNCTAD is using the draft negotiating text of WTO as a reference for assessing the state of TF in the participating countries. For more information, see http://unctad.org/en/Pages/DTL/Trade-Logistics-Branch.aspx.

166 Switzerland, Note on TF negotiations, August 2011.

167 See UNCTAD, Technical Notes on Trade Facilitation Measures UNCTAD/DTL/TLB/2010/1, and UNCTAD, Trade Facilitation Handbook (Part I): National Facilitation Bodies: Lessons from Experience, UNCTAD/SDTE/TLB/2005/1 (currently under revision).

168 The proposed categories are as follows:
Category A: Provisions that a developing country member or a least developed country member has designated for implementation upon entry into force of the agreement.
Category B: Provisions that a developing country member or a least developed country member has designated for implementation on a date after a transitional period of time following the entry into force of the agreement.
Category C: Provisions that a developing country member or a least developed country member has designated for implementation on a date as requiring a transitional period of time after the entry into force of the agreement and technical and/or financial assistance and support for capacity building.

169 See UNCTAD, Reflection on a Future Trade Facilitation Agreement : Implementation of WTO obligations. A comparison of existing WTO agreements, UNCTAD/DTL/TLB/2010/2, p.45.

170 "The Case for a WTO agreement – now", supra, p.5.

171 For the most recent example, see the communication from the European Union, TN/TF/W/149/Rev.3 of 12 May 2012.

172 Challenges and policy options for transport and trade facilitation, Note by UNCTAD secretariat, 28 September 2011, TD/B/C.I/MEM.1/11, pp. 65-68.

173 A detailed analysis of the TF related provisions in bilateral and regional agreements is available in the abovementioned note by UNCTAD on "Trade Facilitation in Regional Trade Agreements".

174 For a recent example, see the presentation by Argentina at the last UNCTAD Multi-year Expert Meeting on Transport and Trade Facilitation on 7-9 December 2011.