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IMO’s Sub-Committee on Flag State Implementation (FSI) was established in 1992 to focus on perhaps the most important aspect of IMO’s work: the implementation of its instruments. This article gives an overview of the work of the FSI Sub-Committee.

The International Lifeboat Federation (ILF) was presented with the International Maritime Prize for 1998 at IMO headquarters in London in September. For full story and ILF paper see pages 9–11. The cover photograph shows the Swedish rescue boat Ronald Bergmann in action. (Photograph courtesy ILF)
The Assembly approved budgetary appropriations totalling £36,612,200, representing zero nominal growth over the previous biennium. The total comprises an appropriation of £18,155,000 for 2000 and £18,457,200 for 2001.

In 1998–1999, appropriations also totalled £36,612,200, comprising an appropriation of £17,946,100 for 1998 and £18,666,100 for 1999.

The Assembly elected a new Council for the next biennium and adopted a number of technical resolutions relating to the work of the Organization.

The Assembly normally meets once every two years. All 157 Member States and two Associate Members are entitled to attend, as are the inter-governmental organizations with which agreements on co-operation have been concluded and the non-governmental organizations which have consultative status with IMO.

The Assembly was attended by a total of 817 delegates. These included representatives of 138 Member States and two Associate Members, and observers from eight inter-governmental organizations and 36 non-governmental organizations.

**Electoral of new IMO Council**

The Assembly elected the following 32 States to the Council for the 2000–2001 biennium:

**Category (a)**

Eight States with the largest interest in providing international shipping services: China, Greece, Italy, Japan, Norway, Russian Federation, United Kingdom, United States.

**Category (b)**

Eight other States with the largest interest in international seaborne trade: Argentina, Brazil, Canada, France, Germany, India, Netherlands, Sweden.

**Category (c)**

Sixteen States not elected under (a) or (b) above which have special interests in maritime transport or navigation, and whose election to the Council will ensure the representation of all major geographic areas of the world: Australia, Bahamas, Cyprus, Egypt, Finland, Indonesia, Malta, Mexico, Morocco, Panama, Philippines, Republic of Korea, Singapore, South Africa, Spain, Turkey.

In 1998–1999, Members of the Council in categories (a) and (b) were the same, but in category (c) the Members elected for 1998–1999 were: Algeria, Australia, Cyprus, Egypt, Finland, Indonesia, Liberia, Mexico, Panama, Philippines, Poland, Republic of Korea, Singapore, South Africa, Spain, Tunisia.

The Council is the executive organ of IMO and is responsible, under the Assembly, for supervising the work of the Organization. Between sessions of the Assembly the Council performs all functions of the Assembly except that of making recommendations to Governments on maritime safety and pollution prevention.

**Work programme**

The Assembly approved the work programme for the next biennium, the long-term plan up to 2006 and long-term objectives for the 2000s.

**Diplomatic conferences approved**

The Assembly approved the holding of three diplomatic conferences in the 2000–2001 biennium to adopt new legal instruments:

- Conference to adopt a Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol). To be held in March 2000.
- Conference to adopt a legal instrument to regulate the use of shipboard anti-fouling systems, in particular to phase out those containing organotins such as tributyltin (TBT). To be held in 2001.
- Conference to adopt a new convention on liability and compensation for pollution from ships’ bunkers. To be held in 2001.

**Adoption of resolutions**

The Assembly adopted 28 resolutions, including those submitted by the Maritime Safety Committee (MSC). IMO’s senior technical body, the Marine Environment Protection Committee (MEPC) and other IMO subsidiary bodies.

**Council – 83rd session: 26 November 1999**

The Council’s 83rd session was held on Friday 26th November.

Mr. G. A. Dubbeld of the Netherlands was re-elected Chairman of the Council for the 2000–2001 biennium and H.E. Mr. S. Oflate of Mexico was elected as Vice-Chairman.

**Resolutions adopted**

A.874(21) Relations with non-governmental organizations

Endorses the enjoyment of consultative status of 52 non-governmental organizations.

A.875(21) Arrears of contributions

The resolution urges Member States to make payment of any arrears at the earliest possible date. It notes that the level of contributions in 1995–1997 has not been maintained. (In 1995 and 1996, the level of contribution receipts reached 95% and 96% respectively, while for 1999 to the date of the Assembly the level of payment for contributions reached 87.6%.)

A.876(21) Presentation of accounts and audit reports

Resolutions adopted by the 21st Assembly

A.874(21) Relations with non-governmental organizations
A.875(21) Arrears of contributions
A.876(21) Presentation of accounts and audit reports
A.878(21) Appointment of the external auditor
A.879(21) Long-term work plan of the Organization (up to 2006)
A.880(21) Implementation of the International Safety Management (ISM) Code by 1 July 2002
A.881(21) Self-assessment of flag State performance
A.882(21) Amendments to the procedures for port State control (resolution A.787(19))
A.883(21) Global and uniform implementation of the Harmonized System of Survey and Certification (HSSC)
A.884(21) Amendments to the Code for the Investigation of Marine Casualties and Incidents (resolution A.849(20))
A.885(21) Procedures for the identification of particularly sensitive sea areas and the adoption of associated protective measures and amendments to the guidelines contained in resolution A.720(17)
A.886(21) Procedure for the adoption of, and amendments to, performance standards and technical specifications
A.887(21) Establishment, updating and retrieval of the information contained in the registration databases for the global maritime distress and safety system (GMDSS)
A.888(21) Criteria for the provision of mobile satellite communication systems in the global maritime distress and safety system (GMDSS)
A.889(21) Pilot transfer arrangements
A.890(21) Principles of safe manning
A.891(21) Recommendations on training of personnel on mobile offshore units (MOUs)
A.892(21) Unlawful practices associated with certificates of competency and endorsements
A.893(21) Guidelines for voyage planning
A.895(21) Anti-fouling systems used on ships
A.896(21) Provision and use of port waste reception facilities
A.897(21) Amendments to the revised specifications for the design, operation and control of crude oil washing systems (resolution A.446(XI) as amended by resolution A.497(XII))
A.898(21) Guidelines on shipowners' responsibilities in respect of maritime claims
A.899(21) Acceptance of CLC insurance certificates
A.900(21) Objectives of the Organization in the 2000s
A.901(21) IMO and technical co-operation in the 2000s

The resolution approves budgetary appropriations totalling £36,612,200, representing zero nominal growth over the previous biennium. The total comprises an appropriation of £18,155,000 for 2000 and £18,457,200 for 2001.

The resolution also approves the work programme for the 2000–2001 biennium, comprising ten major programmes divided into programmes and sub-programmes.

A.878(21) Appointment of the external auditor
Approves the appointment of India as external auditor for the Organization.

A.879(21) Long-term work plan of the Organization (up to 2006)
The resolution sets out the work plan for the Maritime Safety Committee, the Legal Committee, the Marine Environment Protection Committee, the Technical Cooperation Committee and the Facilitation Committee for the period up to 2006.

A.880(21) Implementation of the International Safety Management (ISM) Code by 1 July 2002
The resolution urges Member Governments, Contracting Governments to SOLAS and the shipping industry to take urgent appropriate action to ensure that ships and shipping companies liable to ISM certification on 1 July 2002 comply with the Code’s requirements by that date.

The ISM Code entered into force on 1 July 1998 for passenger ships, including passenger high-speed craft; and oil tankers, chemical tankers, gas carriers, bulk carriers and cargo high-speed craft of 500 gross tonnage and above. It applies to other cargo ships and mobile offshore drilling units of 500 gross tonnage and above not later than 1 July 2002.

The resolution also notes that SOLAS does not provide for any extension of implementation dates for the introduction of the ISM Code.

A.881(21) Self-assessment of flag State performance
The resolution includes a Flag State Performance Self-Assessment Form, which is intended to establish a uniform set of internal and external criteria which can be used by flag States on a voluntary basis to obtain a clear picture of how
well their maritime Administrations are functioning and to make their own assessment of their performance as flag States.

The resolution states that flag States have the primary responsibility to have in place an adequate and effective system to exercise control over ships entitled to fly their flag and to ensure they comply with relevant international rules and regulations. It urges Member Governments to carry out a self-assessment of their capabilities and performance in giving full and complete effect to the various instruments to which they are Party.

The resolution also encourages Member Governments to use the Self-Assessment Form when seeking technical assistance from or through IMO – however, it notes that submission of a completed form is voluntary and is not a prerequisite for receiving technical assistance.

The resolution invites Member Governments to submit a copy of their self-assessment report in order to enable the establishment of a database which would assist IMO in its efforts to achieve consistent and effective implementation of IMO instruments.

A.882(21) Amendments to the procedures for port State control (resolution A.787(19))

The resolution is aimed at updating resolution A.787(19), which contains comprehensive guidelines and recommendations on port State control procedures.

New sections incorporate procedures for port State control relating to the International Safety Management (ISM) Code.

A.883(21) Global and uniform implementation of the harmonized system of survey and certification (HSSC)

The resolution is aimed at encouraging all States to implement the harmonized system of survey and certification (HSSC), even if they are not parties to the relevant Protocols, which enter into force on 3 February 2000.


All of these instruments require the issuing of certificates to show that requirements have been met, and this has to be done by means of a survey which can involve the ship being out of service for several days. The harmonized system is intended to alleviate the problems caused by survey dates and intervals between surveys which do not coincide, so that a ship should not have to go into port or repair yard for a survey required by one convention shortly after doing the same thing in connection with another instrument.

The harmonized system of survey and certification was introduced by the 1988 Protocols to SOLAS and the Load Lines Convention. MARPOL 73/78 was amended on 16 March 1990 to introduce the harmonized system of survey and certification, with the proviso that the amendments enter into force at the same time as the entry-into-force date of the 1988 SOLAS Protocol and the 1988 Load Lines Protocol.

A.884(21) Amendments to the Code for the Investigation of Marine Casualties and Incidents (resolution A.849(20))

The resolution adds Guidelines on investigation of human factors to resolution A.849(20) – which requests flag States to conduct an investigation into all very serious and serious marine casualties and to supply the Organization with all relevant findings.

Flag States should use as a basis the Code for the Investigation of Marine Casualties and Incidents, which is aimed at providing a standard approach to the investigations, in order to correctly identify the causes and underlying causes of casualties and incidents.

The Guidelines on investigation of human factors were developed by a Joint IMO/International Labour Organization (ILO) Working Group on Investigation of Human Factors in Maritime Casualties.

A.885(21) Procedures for designation of particularly sensitive sea areas and the adoption of associated protective measures and amendments to the guidelines contained in resolution A.720(17)

The resolution includes new procedures for designation of a “particularly sensitive sea area” (PSSA) which supersedes the procedures set out in the guidelines in resolution A.720(17) (adopted in 1991).

There are currently two designated PSSAs: the Great Barrier Reef, Australia, and the Sabana-Camagüey Archipelago in Cuba. The Sabana-Camagüey Archipelago was designated a PSSA in September 1997. In these two areas, international shipping has to comply with specific measures, including routing measures, to protect the environment and amenities in the designated areas.

Under the Guidelines, an application to IMO for identification of a PSSA and the adoption of Associated Protective Measures, or an amendment thereto, may be submitted by a Member Government or by two or more Members where there is a common interest.

A.886(21) Procedure for adoption of, and amendments to, performance standards and technical specifications

The resolution states that the MSC and the MEPC should be responsible for adopting performance standards and technical specifications, as well as amendments to them.

The resolution is intended to establish a uniform procedure for the adoption of, and amendments to, any performance standards and technical specifications developed by the MSC and the MEPC to ensure that such standards and specifications are kept abreast of technological and industry developments.

The resolution replaces an earlier resolution A.825(19), Procedure for adoption and amendment of performance standards for radio and navigational equipment, which gave the MSC the responsibility for performance standards and technical specifications for that type of equipment.
**A.887(21) Establishment, updating and retrieval of the information contained in the registration databases of the global maritime distress and safety system**

The resolution includes recommended procedures to follow to ensure that information on ships using GMDSS equipment is up-to-date and easily and continuously available, for example to Maritime Rescue and Coordination Centres (MRCCs).

The resolution revokes resolution A.764(18), Establishment, updating and retrieval of the information contained in the registration databases of satellite EPIRBs.

**A.888(21) Criteria for the provision of mobile-satellite communication systems for the global maritime distress and safety system (GMDSS)**

The resolution recommends that Governments provide the mobile-satellite system elements necessary for the proper operation of the GMDSS.

The annex to the resolution outlines criteria for the provision of satellite communications systems and coast earth stations in the GMDSS, including giving priority to distress alerts and to urgency and safety calls. Governments providing mobile-satellite systems and coast earth stations should inform IMO, so that the information can be analysed with a view to possible acceptance of those systems for the GMDSS.

The resolution notes that the Inmarsat system is at present the only mobile-satellite system recognized by SOLAS Contracting Governments for use in the GMDSS, but that the Organization needs to have in place criteria against which to evaluate the capabilities and performance of other mobile-satellite systems which may in the future be proposed for the GMDSS.

**A.889(21) Pilot transfer arrangements**

The resolution includes Recommendation on pilot transfer arrangements, which notes that ship designers, equipment designers and manufacturers are encouraged to consider all aspects of pilot transfer arrangements at an early stage in design. The aim is to ensure the safety of pilots, especially in embarking/disembarking a ship.

The resolution revokes three earlier resolutions relating to pilot transfer: A.257(VIII), A.426(XI) and A.667(16).

**A.890(21) Principles of safe manning (to replace resolution A.481(XI))**

The resolution replaces resolution A.481(XII), adopted in 1981, and is intended to take into account developments in the shipping industry since 1981.

It includes basic principles to be applied when considering manning levels in order to ensure the safe operation of the ship.

Each ship should be issued with a "minimum safe manning document", specifying the minimum safe manning levels for that particular ship. The document can then be produced for inspection during port State control.

The resolution includes detailed guidelines for the application of principles of safe manning and guidance on contents of the minimum safe manning document as well as a model format.
A.891(21) Recommendations on training of personnel on mobile offshore units (MOUs)

The resolution includes a recommendation on training of personnel on mobile offshore units (MOUs). The resolution covers minimum standards for familiarization and basic safety training instructions and competencies for all MOU personnel; recommendations on specialized training and qualifications of key personnel (offshore installation manager, barge supervisor, ballast control operator, maintenance supervisor); and guidance on safety and emergency response drills and exercises.

A.892(21) Unlawful practices associated with certificates of competency and endorsements

The resolution highlights the problem of fraudulent certificates of competency issued in relation to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978, as amended, and encourages action by Member States to eliminate the circulation of fraudulent certificates.

The resolution follows concern about a proliferation of fraudulent certificates of competency, or authentic certificates reportedly issued on the basis of forged foreign certificates, which have been found during port State control inspections and applications for recognition of certificates.

The resolution urges Member Governments to take all possible steps to investigate cases and to prosecute, or assist in the investigation and prosecution of, those found to be involved in the processing or obtaining of fraudulent certificates or endorsements, including the holders of such certificates or endorsements.

The resolution also urges Governments who endorse certificates issued by another Party to first confirm the authenticity of the original certificate from the issuing authority and to include details of the underlying certificate on the new document.

A.893(21) Guidelines on voyage planning

The resolution includes guidelines on voyage planning and notes the view of the MSC that voyage planning is important for all ships engaged on international voyages.

The Guidelines note that the development of a plan for voyage or passage as well as the close and continuous monitoring of the vessel’s progress and position during the execution of such a plan is of essential importance for the safety of life at sea, the safety and efficiency of navigation and the protection of the marine environment.

Voyage and passage planning includes: appraisal, i.e. gathering all information relevant to the contemplated voyage or passage; detailed planning of the whole voyage or passage from berth to berth, including those areas necessitating the presence of a pilot; execution of the plan; and the monitoring of the progress of the vessel in the implementation of the plan.

These components of voyage/passage planning are outlined in detail in the Guidelines.

The Guidelines update Guidance on voyage planning, which was issued as a Safety of Navigation Circular (SN/Circ.92) in 1978.


The resolution sets out the procedure for updating the Manual, which was jointly developed by IMO and the International Civil Aviation Organization (ICAO).

The resolution gives the MSC the responsibility for adopting amendments to the IAMSAR Manual after receiving and evaluating, through its subsidiary bodies, proposals for amendments and/or additions.

The IAMSAR Manual, which was published by IMO/ICAO in 1999, is designed to help States meet their obligations under the Convention on Civil Aviation, SOLAS and the SAR Convention.

The IAMSAR Manual replaced two manuals earlier developed by IMO: the Merchant Ship Search and Rescue Manual (MERSAR), adopted by the IMO Assembly in 1971; and the IMO Search and Rescue Manual (IMOSAR), adopted in 1978 by the MSC.

A.895(21) Anti-fouling systems used on ships

The resolution states that the MEPC should develop a global legally binding instrument to address the harmful effects of anti-fouling systems used on ships.

It states that the global instrument should ensure a global prohibition on the application of organotin compounds which act as biocides in anti-fouling systems on ships by 1 January 2003, and a complete prohibition on the presence of organotin compounds which act as biocides in anti-fouling systems on ships by 1 January 2008.

A.896(21) Provision and use of port waste reception facilities

The resolution requests the MEPC to develop guidelines on the provision and use of port waste reception facilities.

The resolution notes that while the IMO Comprehensive Manual on Port Reception Facilities provides guidance and technical advice, there is a need for guidelines on how best to plan the provision and utilization of port waste reception facilities that meet the needs of their users.

A.897(21) Amendments to the revised specifications for the design, operation and control of crude oil washing systems (resolution A.446 (XI) as amended by resolution A.497(XII))

The resolution includes amendments to resolution A.446(XI), as amended by resolution A.497(XII), relating to specifications for the design, operation and control of crude oil washing systems.

Crude oil washing, which was introduced into MARPOL 73/78 as part of the 1978 Protocol, involves cleaning of oil tanks using crude oil, rather than water – in other words, the cargo itself. When sprayed onto the sediments clinging to the tank walls, the oil simply dissolves them, turning them back into usable oil that can be pumped off with the rest of the cargo. There is no need for slop tanks to be used since the process leaves virtually no oily wastes.
The amendments are aimed at simplifying the system for monitoring and controlling COW in order to avoid any health risks associated with internal examinations of tanks by surveyors.

A.898(21) Guidelines on shipowners’ responsibilities in respect of maritime claims
The resolution includes guidelines intended to encourage all shipowners to take steps to ensure that claimants receive adequate compensation following incidents involving their ships – in other words, to establish the minimum insurance cover that ships should carry.

A.899(21) Acceptance of CLC insurance certificates
The resolution clarifies the validity of certificates relating to the 1969 International Convention on Civil Liability for Oil Pollution Damage (CLC) and those relating to the 1992 CLC Protocol.

States Parties to the 1992 CLC ceased to be party to the 1969 CLC from 16 May 1998.

The resolution invites States Parties to CLC 69 not to require 1992 CLC ships holding 1992 CLC certificates to obtain 1969 CLC certificates and to accept certificates issued under the provisions of the 1992 CLC Protocol as meeting the requirements of CLC 69; urges States Parties to the CLC 69 to become parties to the 1992 CLC Protocol as soon as possible; invites CLC 69 States Parties to issue to 1992 CLC ships 1969 CLC certificates only if they are requested to do so by the States whose flag these ships are entitled to fly; and requests the IMO Secretary-General to intensify his efforts to ensure the wider acceptance of the 1992 CLC Protocol.

A.900(21) Objectives of the Organization in the 2000s
The resolution identifies IMO’s main objectives for the 2000s as follows:

- taking measures to implement the proactive policy agreed in the 1990s more actively than in the past, so that trends which might adversely affect the safety of ships and those on board and/or the environment may be identified at the earliest feasible stage and action be taken to avoid or mitigate such effects. In implementing this directive, Formal Safety Assessment should be used to the extent possible in any rule-making process;
- shifting emphasis onto people;
- ensuring the effective uniform implementation of existing IMO standards and regulations;
- ensuring the wide early acceptance of those Annexes to the MARPOL Convention which have not yet entered into force;
- developing a safety culture and environmental conscience;
- avoiding excessive regulation;
- strengthening the Organization’s technical co-operation programmes;
- promoting the intensification by Governments and industry of efforts to prevent and suppress unlawful acts which threaten the security of ships, the safety of those on board and the environment (in particular, terrorism at sea, piracy and armed robbery against ships, illicit drug trafficking, illegal migration by sea and stowaway cases); and
- to continue observing resolution A.500(XII), Objectives of the Organization in the 1980s, and resolution A.777(18), Work methods and organization of work.

The resolution highlights the efforts of the Secretary-General to promote:

- the objectives of the Organization (in particular, his decisive action and leadership provided towards enhancing the safety of ro-ro passenger ships and bulk carriers and the expeditious revision of the STCW Convention); and
- the world-wide implementation of the standards and regulations adopted by the Organization (in particular, his efforts to ensure the wide and effective implementation of the revised STCW Convention, ISM Code, MARPOL 73/78 and the FAL Convention).

The resolution also notes the special contribution of the World Maritime University, the IMO International Maritime Law Institute and the IMO International Maritime Academy in achieving the IMO objectives.

A.901(21) IMO and technical co-operation in the 2000s
The resolution states that capacity-building for safer shipping and cleaner oceans is the main objective of IMO’s technical co-operation programme during the 2000s.

It states that the development and implementation of IMO’s Integrated Technical Co-operation Programme (ITCP) should continue to be based on a number of key principles, including the following:

- ownership of the development and implementation process rests with the recipient countries themselves;
- integration of IMO’s regulatory priorities in the programme-building process;
- development of human and institutional resources, on a sustainable basis, including the advancement of women;
- promotion of regional collaboration and technical co-operation among developing countries;
- promotion of partnerships with Governments, the industry and international development aid agencies;
- mobilization of regional expertise and resources for technical assistance activities;
- co-ordination with other development aid programmes in the maritime sector;
- feedback from recipients on the effectiveness of the assistance being provided; and
- monitoring systems and impact assessment so that programme targets are met and lessons learned are transferred back to the programme-building process.

The resolution invites Member States, the industry and partner organizations to continue, and if possible increase, their support for the ITCP and affirms that the ITCP can and does contribute to sustainable development.
International Lifeboat Federation receives the International Maritime Prize for 1998

Representatives of the International Lifeboat Federation receive the International Maritime Prize from the Secretary-General, Mr. William A. O’Neill. They are (from left to right) Michael Vlasto [Royal National Lifeboat Institution, UK (RNLI)]; John Horton [Canadian Lifeboat Institution, Canada]; Baron Casyn Lambert van Tül [Koninklijke Nederlandse Redding Maatschappij, Netherlands]; Andrew Freemantle, Director, RNLI; William O'Neill; Michael Woodroffe [RNLI]; Ray Kipling [RNLI]; Dana Goward [United States Coast Guard, USA]; Anthony Walters [Royal Volunteer Coastal Patrol, Australia]; Sigenori Tokunaga [Japan Association of Marine Safety, Japan]; Torp Peterson [Royal Danish Administration of Navigation and Hydrography, Denmark] and Rolf Westerstrom [Swedish Sea Rescue Institution, Sweden].

The International Lifeboat Federation (ILF) was presented with the International Maritime Prize for 1998 by IMO Secretary-General Mr. William A. O’Neill on 29 September 1999 at IMO Headquarters in London.

The International Maritime Prize is awarded annually by the Organization to the individual or organization judged to have made the most significant contribution to the work and objectives of IMO.

The prize was received on behalf of the ILF by Mr. Andrew Freemantle, MBE, Director, Royal National Lifeboat Institution.

Mr. O’Neill said: “Each year, thousands of people around the world owe their lives to the International Lifeboat Federation, due to the efforts of its member organizations, by voluntary or State-administered. The International Maritime Prize is recognition of the ILF’s work in contributing to safety at sea, one of the main objectives of the International Maritime Organization.”

The ILF has 57 members in 44 countries and was granted consultative status with IMO in 1985. The Royal National Lifeboat Institution (RNLI) in the United Kingdom provides a permanent secretariat for the Federation and represents the ILF at IMO meetings. The ILF was nominated for the award by the United Kingdom, Germany and Canada.

In 1824 the RNLI was the first national lifeboat service to be established. Two lifeboat organizations were established in the Netherlands in the same year and others were established in other European countries shortly afterwards. Voluntary organizations have been set up in numerous countries since then.

The ILF was formed in 1924 and celebrates its 75th anniversary this year, while the RNLI is celebrating its 175th anniversary. Many members of the ILF are voluntary organizations which rely for their funds on donations from the public. Others are State-administered.

However they are organized and funded, the members of the ILF have saved thousands of lives. The German Sea Rescue Service, which has been in existence for 130 years, has rescued 62,000 lives in that time while in the United Kingdom and Ireland it is estimated that the RNLI saves 1,300 lives every year.
“Safer ships, cleaner oceans”; these two simple phrases sum up IMO's mission but cannot illuminate the huge amount of work needed to deliver them.

That considerable workload is undertaken by IMO staff, delegates from Member States, maritime Administrations and a diverse group of bodies which have been granted consultative status at IMO. Just as the consultative bodies come at the end of the list, so one of them, the International Lifeboat Federation, comes at the end of the work chain of all IMO seeks to do. For ILF members are sea rescuers; they are called when all else has failed. In this context, “lifeboat” means “search and rescue craft”, a specialist vessel, rather than a ship’s lifeboat.

Safety is a complicated subject and needs constant refinement on the basis of experience. Taken to its simplest level in the maritime environment, safety depends on three factors; ships, people and environment.

IMO’s work on ship design, stability and the upholding of internationally agreed standards through port State control has done much to improve ship safety. More remains to be done. For example, the evacuation of survivors from high-sided vessels is extremely difficult, particularly where they are ferries with fixed de-fendering or belting.

Mass evacuation cannot be achieved by helicopters due to their limited passenger capacity, time available on task and the slow speed of winching. Deployment of ships' lifeboats and liferafts and their capability remain matters of concern. All of these are points for further work.

Standards of training and watch-keeping are in place to deal with the biggest cause of accidents; human error. Even the best-trained person can make mistakes, so somebody with inadequate skills and experience is bound to be a higher risk. Pressures on crewing costs often work against safety, with many multi-national crews struggling to communicate effectively due to lack of a common language. Add in fatigue, poor conditions on board, inadequate or outdated equipment and the risks start to multiply.

These pressures are on merchant ships and fishing vessels alike, and fishing is now one of the most dangerous occupations in the world.

Prevention, through legislation and standard setting followed by training and implementation, must be the first port of call to improve safety. But what happens if all this is in place and there are, as there inevitably will be, accidents?

A global search and rescue system is needed. This is where the IMO and the ILF come together. Three elements can again be identified to give an overview of what is needed for a global SAR plan.

The first is responsibilities. Every square mile of ocean needs to be watched over by a nation. This is quite apart from sovereignty, and is to ensure that seafarers know that a distress message will be picked up and acted upon once broadcast.

The second element is communication. The Global Maritime Distress and Safety System (GMDSS) is designed to receive and pass on to SAR authorities any distress message from anywhere around the globe. Finally, and most importantly, there must be a rescue system – and in many parts of the world this does not exist.

So here is a great challenge for the future. To protect seafarers and fishermen, maritime nations need to examine their SAR systems and judge whether they are adequate.

Once again there are three basic building blocks to a maritime SAR system, and these are communications, people and hardware. In some places these are already integrated into a SAR system, but in a surprising number of countries all three elements exist unintegrated and a SAR system could be developed at very little extra cost.

Communications start any rescue. The vessel in trouble needs to tell others of its distress. GMDSS is designed to do this effectively and to provide vital extra information on location. Then there needs to be a reliable communication link with potential rescuers, either from dedicated or designated rescue vessels or from other ships at sea. This will need coordination, which is the role of the Maritime Rescue Co-ordination Centre (MRCC). In rescue work, sovereignty should not be a factor, so it is often sensible to share resources (for example, ground stations for GMDSS) regionally.

Once a distress alert has been received, action must be taken.

If there is a SAR system, then there will be a co-ordination centre where decisions are taken about how to effect the rescue. Far out in the oceans, the only chance will be to involve other ships in the area. However, in fact, the vast majority of maritime casualties of all types (merchant ships, fishing vessels and pleasure craft) occur within coastal waters, a zone perhaps 50 miles off land which can be effectively and quickly reached by both air and sea rescue units.

If they can be afforded, dedicated rescue boats and helicopters should be provided. These will have crews on alert and they will be trained in SAR. They need not necessarily be full-time or be paid; many systems rely on well-trained volunteers who are highly operationally effective and cost-effective. The advantage of dedicated assets is that both they and their crews are specialists with equipment designed for SAR.

However, it is almost as effective to designate other craft for rescue duties. For example, navy, air force, army and police have ships and aircraft which can be used for SAR, but it is necessary for them to be designated for the purpose so that they can carry relevant equipment and be available and reach the area of the incident in good time for rescue duties.

It is also necessary for their crews to receive SAR training. Port authorities usually have 24-hour-manned radio stations, which can double as co-ordination centres. Pilot vessels and harbour craft can soon be adapted for
rescue duties and multi-tasked to do both cost-effectively.

There are examples of all of these ideas around the world, with some SAR systems being entirely Government-run whilst others use a mixture of Government and voluntary or private assets.

The important point is that each is developed into a system, so that when there is a maritime incident each party knows what is expected of them and the mariner in distress knows that there will be action to try and effect a rescue.

The ILF, which was awarded consultative status at IMO in 1985, has recently been honoured by the award of the IMO International Maritime Prize for 1998. This is the first time that an organization has been awarded the prize, and ILF members are keenly aware of the tribute that has been paid to them.

The ILF comprises rescue organizations from some 40 nations around the world. It was founded in 1924 by Britain and Ireland’s Royal National Lifeboat Institution (RNLI) and now includes in its membership large State bodies such as the United States Coast Guard and the China Salvage Company and smaller voluntary organizations such as the rescue organizations on the Caribbean islands.

The ILF is very concerned that there are not enough national maritime SAR organizations to support the global SAR plan. To this end, ILF is seeking to expand its membership in order to fulfill its mission of promoting the free exchange of information between lifeboat and SAR services around the world. This is achieved by regular publications and conferences and by bilateral exchanges, often involving experts on various subjects visiting countries to give free advice. Some countries have benefited from procurement of new rescue boat designs or even rescue boats themselves at favourable prices. There is also a wealth of expertise available on rescue and survival equipment and other technical matters.

The area of most demand is training. Search and rescue is a specialist subject, and performance (and ultimately rescues) will be improved if the SAR personnel, whether full-time, volunteer or from other maritime services, have specialist SAR knowledge. This is another area where ILF members benefit by the constant exchange of information and personnel.

A number of ILF organizations have their own training colleges, and others can second staff for short periods to other countries to set up training programmes or to train directly.

The nature of the training depends on the needs. Heavy-weather rescue-boat handling, driving rigid inflatables, SAR planning, running an MRCC, first aid at sea, helicopter rescue techniques, drills for fire fighting, man overboard, effective towing; all of these are specialist areas where training is available.

Probably the biggest challenge is to persuade Governments to take maritime SAR seriously. IMO has invested considerable time and effort in creating the global SAR plan. It now exists, albeit with some work still to finalize. As with so much of IMO’s work, the critical point is implementation. An organized SAR system is the responsibility of every maritime nation, and the IMO, supported by the ILF, can offer expert advice on its establishment.

Of course, even when there are SAR systems, they can be improved.

Every time another accident occurs, the maritime community should ask “What can we learn from this?”

The answer may be about standards of ship or crew or it may be about the adequacy of the rescue services. After the Estonia tragedy (in 1994), there were a number of people in the water or liferaft who died before rescuers could get to them.

Yachtsmen died in the 1998 Sydney to Hobart race. Fishermen die every day of the week, all around the world. Small ferries, usually overcrowded, are involved in tragedies in many developing nations without the rescue infrastructure to cope.

IMO has already set up a fund to promote SAR provision world-wide. The ILF, rather than resting on its laurels following the award of the Maritime Prize, is determined to play its part in supporting IMO’s endeavour to improve the safety of seafarers on all of the world’s oceans and seas.
Abandonment, personal injury and death of seafarers need urgent action, says IMO/ILO Working Group

The problems of abandonment, personal injury and death of seafarers need urgent remedial action, according to a Joint International Maritime Organization (IMO)/International Labour Organization (ILO) Ad Hoc Expert Working Group on Liability and Compensation regarding Claims for Death, Personal Injury and Abandonment of Seafarers which met at IMO Headquarters from 11 to 15 October.

The Working Group noted that although there were a considerable number of international instruments which dealt with certain aspects of the problems relating to abandonment, death and personal injury of seafarers, none adequately addressed the problem comprehensively.

The Working Group, which was established following submissions to the IMO Legal Committee during 1998 and 1999, agreed that a joint IMO/ILO approach was the best way to examine the problems and make recommendations to the parent bodies.

A number of ILO instruments contain clauses relating to conditions of work on board ships and the rights and duties of shipping employers and employees, while IMO is the United Nations agency concerned with safety of shipping and protection of the marine environment and is concerned with ensuring that ships comply with international standards, including financial security.

The Working Group noted that compliance with international standards was essential and that nothing should be done that would encourage substandard shipping.

The Working Group agreed that:

- Flag States should establish real and effective mechanisms to meet their obligations and to ensure that shipowners repatriate their crew members/seafarers and address all aspects of the problem. The main issues arising from problems of abandonment of ships’ crew include: repatriation; support for crew members while stranded; immigration status; and the question of the payment of outstanding remuneration.

- The ILO should: promote ratification of Repatriation of Seafarers Convention (Revised), 1987 (No. 166); evaluate the extent of non-compliance with existing relevant ILO instruments; and assess the inherent weakness of these conventions with regard to crew claims.

- The Working Group should meet again to discuss the main issues. In particular, the Group should assess information on existing mechanisms to address the problems of abandoned crew members/seafarers and consider possible arrangements for financial security, such as the establishment of an international fund or national measures of comparable effectiveness.

- The issues of abandonment, personal injury and death were real and serious matters, with a human and social dimension, and that it was urgent to find solutions to address them.

The Working Group is expected to meet again during 2000, following discussions at IMO and ILO. It is expected to review existing instruments relating to abandonment, death and personal injury of seafarers and to consider possible longer-term arrangements, such as the establishment of an international fund or national measures.

The Working Group agreed it would need further information, to be submitted by ILO/IMO Member States and other organizations, relating to the following:

- The reasons for the low rates of ratification of relevant existing international instruments.

- Lessons learned from various civil liability regimes and their impact on certification schemes.

- Existing national schemes and systems for dealing with financial security for personal injury and death.

Based on this information, the Working Group is expected to be able to examine and evaluate possible new approaches for dealing with the issues of abandonment, personal injury and death of seafarers. The Group would examine a number of possible solutions to the problems as follows:

**Relating to abandonment:**
- National funds
- An international fund
- Compulsory insurance
- Systems based on Bank Guarantees or similar mechanisms
- Other, such as the establishment of Focal Points (national representatives) and preparation of guidelines.

**Relating to personal injury and death:**
- Compulsory insurance
- Personal accident insurance
- National funds
- An international fund
- Other.

**Existing international instruments relating to issues of abandonment, personal injury and death of seafarers**

**ILO Shipowners’ Liability (Sick and Injured Seamen) Convention, 1936 (No. 55)**

Entered into force in 1939; ratified by 16 Member States. Deals with the shipowner’s liability in respect of sickness and injury or death occurring during the seafarer’s engagement [article 2(1)].

**ILO Sickness Insurance (Sea) Convention, 1936 (No. 56)**

Entered into force in 1949; 19 ratifications to date. Provides that every person employed as master or member of the crew or otherwise in the service
of the ship, on board any vessel registered in a territory for which this Convention applies, shall be insured under a compulsory sickness insurance scheme (article 1).

ILO Health Protection and Medical Care (Seafarers) Convention, 1987 (No. 164)

Has received 16 ratifications. Provides that medical care and health protection are to be provided free of charge to the seafarer and that the health protection and medical care are to be comparable to that enjoyed by workers ashore [article 4(a) and (d)].

ILO Social Security (Seafarers) Convention (Revised), 1987 (No. 165)

Entered into force in 1992; two ratifications (Hungary, Spain). It revises the Sickness Insurance (Sea) Convention, 1936 (No. 56) and the Social Security (Seafarers) Convention, 1946 (No. 70). Convention No. 165 provides that Members are under an obligation to provide seafarers with social security protection not less favourable than that enjoyed by shoreworkers in respect of the branches of social security.

ILO Repatriation of Seafarers Convention, 1987 (No. 166)

Entered into force in 1991; ratified by seven Member States. It revised the Repatriation of Seamen Convention, 1926 (No. 23), which itself has received 57 ratifications. Convention No. 166 provides for the entitlement of the seafarer to repatriation in a number of circumstances which include the expiry abroad of an engagement for a specific period or voyage, in the event of shipwreck, illness, injury or other medical condition, or where the shipowner is not able to fulfil his or her legal or contractual obligations (article 2).

The International Labour Conference also adopted at the same time a Resolution concerning the expediting of legal proceedings in cases of abandonment of seafarers and in the sale of arrested vessels.

ILO Seafarers’ Welfare Convention, 1987 (No. 163)

Ratified by 11 countries. Provides that the Member State is to ensure that adequate welfare facilities and services are provided to the seafarer both in port and on board ship and that the necessary arrangements for financing such facilities and services are provided (article 2).

ILO Protection of Workers’ Claims (Employer’s Insolvency) Convention, 1992 (No. 173)

This instrument entered into force in 1995 and has received 11 ratifications. It is not a specifically maritime instrument but covers the case of insolvency of the employer, which would include the shipowner where the latter is the employer.

ILO Recruitment and Placement of Seafarers Convention, 1996 (No. 179)

Four ratifications will enter into force on 22 April 2000. It revises the Placing of Seamen Convention, 1920 (No. 9). Convention No. 179 addresses the question of setting up compulsory arrangements to deal with losses incurred by seafarers as a result of the default of a recruitment service.

ILO Seafarers’ Wages, Hours of Work and the Manning of Ships Recommendation, 1996 (No. 187)

The Recommendation provides that national laws and regulations should take into consideration, amongst other factors, the need to ensure that “to the extent that seafarers’ claims for wages and other sums due in respect of their employment are not secured in accordance with the provisions of the International Convention on Maritime Liens and Mortgages, 1993, such claims should be protected in accordance with the Protection of Workers’ Claims (Employer’s Insolvency) Convention, 1992, of the International Labour Organization” [paragraph 6(k)]. These provisions are non-binding in character.

ILO Merchant Shipping (Minimum Standards) Convention, 1976 (No. 147) and optional Protocol, 1996

Entered into force in 1981; supplemented by an optional Protocol in 1996; has received 40 ratifications. Convention No. 147 sets minimum standards, including standards relating to safety, hours of work and manning, social security, and shipboard conditions of employment and living arrangements, to be observed by States in respect of ships registered in their territory.
IMO/UNCTAD International Convention on Maritime Liens and Mortgages, 1993

Ratified by five States; will enter into force 6 months following the date of registration of the tenth instrument of ratification or acceptance. According to article 4 of the Convention, claims for wages and other sums due to crew members in respect of their employment, including costs of repatriation and social insurance contributions, as well as claims in respect of loss of life or personal injury occurring in direct connection with the operation of the vessel are secured by a maritime lien on the vessel.


Has received 11 ratifications; is not yet in force. The objectives of the above Convention as set out in article 1 are to ensure or strengthen the genuine link between a State and the ships flying its flag, and in order to exercise effectively its jurisdiction and control over such ships with regard to the identification and accountability of shipowners and operators as well as with regard to administrative, technical and social matters. This Convention places on the flag State or the State of registration the obligation to ensure that shipowners comply with their obligations in respect of claims which may arise relating to death, injury and abandonment of the seafarer.

UN/IMO International Convention on Arrest of Ships, 1999

Will enter into force 6 months after the date of registration of the tenth instrument of ratification or acceptance. The Convention is an attempt to establish international uniformity in the field of arrest of ships, which is defined as “any detention or restriction on removal of a ship by order of a Court to secure a maritime claim” (article 1, paragraph 2). For the purposes of the Convention, “maritime claim” is taken to mean a claim arising, inter alia, out of the “loss of life or personal injury occurring in direct connection with the operation of the ship”, “costs or expenses relating to the [...] preservation of an abandoned ship and maintenance of its crew”, and “wages and other sums due to the master, officers and other members of the ship’s complement in respect of their employment on the ship, including costs of repatriation and social insurance contributions payable on their behalf” (article 2, paragraph 1).

IMO Athens Convention on Carriage of Passengers and their Luggage by Sea

Entered into force on 28 April 1987. Establishes a regime of liability for damage suffered by passengers on a seagoing vessel and makes a carrier liable for damage or loss suffered by a passenger if the incident causing the damage occurred during the course of the carriage and was due to fault or neglect of the carrier. Liability can be limited as long as the carrier did not act with intent to cause damage or recklessly. IMO is currently in the process of drafting a revised text of the Athens Convention and its 1990 Protocol.

ICAO Montreal Convention 1999

Adopted by the International Conference on Air Law with a view to modernizing the Warsaw Convention system regulating international liability relating to passengers involved in international civil aviation accidents. The Convention requires ratification by 30 Contracting States for its entry into force.

Other regimes

Protection and Indemnity (P&I) cover

The vast majority of the world’s merchant shipping is covered by P&I insurance. P&I Club Rules, however, impose no obligation to take crew claims coverage, nor do they impose limits on deductibles, which can, therefore, be very high. The guarantees provided under P&I cover are limited in three respects: the scope of the coverage itself, the privity between the insurer and the insured party (the insured is the shipowner, not the seafarer), and the “pay to be paid” mutualist principle according to which the P&I Club reimburses claims which the shipowner has already settled. Abandonment and unpaid wage claims are classified as uninsurable eventualities – breaches of contractual or statutory obligations – and are expressly excluded from the scope of P&I cover.
Women take the helm at WMU’s 1999 graduation ceremony

Seventeen women were among the 106 students from 50 different countries who received their postgraduate degrees from the World Maritime University’s Chancellor, Mr William O’Neil, Secretary-General of the International Maritime Organization, on Sunday, 10 October 1999.

The Guest of Honour at the graduation ceremony was Professor Bill Ritchie, Vice-Chancellor of Lancaster University in Britain, an international expert on academic quality who has been associated with WMU for many years.

“We were very proud that 17 women received their degrees at this graduation ceremony,” said WMU’s Rector, Dr Karl Laubstein. “It is the highest proportion of female graduates that we have ever had, and really shows the growing impact of women in the maritime world, traditionally a very masculine one. The University and our financial sponsors have put a lot of effort into attracting well-qualified women to the University, and we are delighted to be able to celebrate their success at the graduation ceremony.”

The University’s goal is that women should make up a quarter of the annual intake, and it is on target to achieve this with the students who will enter WMU in 2000.

The students graduating in 1999 bring the total of WMU graduates to almost 1,500 from 135 countries around the world, from Albania to Zambia. The graduates take up senior positions as managers, administrators, policy advisers and educators in the maritime field, and their impact on safety and marine pollution prevention world-wide is growing every year.

The University offers four Master of Science programmes in Maritime Safety & Environmental Protection, Port Management, Shipping Management and Maritime Education & Training, as well as an extensive programme of short-term Professional Development Courses and a growing programme of applied research and consultancy for maritime Administrations and industry.
WMU Alumni Association established in Bangladesh

A get-together of Bangladeshi graduates of the World Maritime University was held on 8th October at the Marine Academy, Chittagong, Bangladesh. The Academy has been a branch of the WMU since 1990. Since 1983, 45 Bangladeshis have graduated from the WMU. They include 14 seagoing Chief Engineers, 11 seagoing Captains, 10 Civil Officers, 4 Engineers, 3 Naval Officers, 2 Harbour Pilots and 1 Naval Architect.

The WMU Alumni Association has been established to help the Bangladeshi WMU graduates to apply the knowledge and expertise they have acquired in the maritime sector of Bangladesh and to maintain professional and social links. Under the chairmanship of Commodore Ghulam Rabbani, Chairman of Chittagong Port Authority, the present graduates have formed an executive committee. The chairman is Capt. Muhammad Helaluddin, the Commandant of the Marine Academy.

Books received

Brown’s Nautical Almanac, published by Brown, Son and Ferguson, Ltd., 4-10 Darnley Street, Glasgow, G41 2SD, U.K. Price £42.


Yearbook of International Co-operation on Environment and Development 1999/2000, produced by the Fridtjof Nansen Institute. Website http://www.ext.grida.no. Published by Earthscan Publications Ltd., 120 Pentonville Road, London, N1 9JN, U.K. Website http://www.earthscan.co.uk; E-mail earthinfo@earthscan.co.uk.

Graduating students are congratulated by the Chancellor, Mr. William O’Neil, and the Guest of Honour, Professor Bill Ritchie.

WMU Technical Journal

The World Maritime University is introducing a new journal – WMU Technical Journal – to be published annually.

The WMU Technical Journal is a means of giving the staff and student body (of the University) the opportunity to pass on to a wider public the results of research done and conclusions drawn from the study of different subjects in the maritime field.

If you would like to be put on the circulation list for the WMU Technical Journal, please contact:

WMU Technical Journal
The World Maritime University
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201 24 Malmö
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IMO holds floating workshop on Black Sea pollution

A four-day workshop on marine pollution caused by the uncontrolled discharge of ships’ ballast water was held by IMO in the Black Sea from 14 to 17 September. The workshop was supported by the IMO Technical Cooperation Fund, with the assistance of the United Nations Development Programme (UNDP).

The workshop was attended by representatives of countries in the Black Sea and Caspian Sea region and took place on a specially chartered research ship, the Georgiy Ushakov. The ship sailed from Odessa, Ukraine, to Constanța, Romania and then to Varna, Bulgaria, enabling participants to view the problems faced by the Black Sea at first hand.

Ships have to take on water as ballast at times (such as when travelling to load a cargo or to balance a load) to ensure that the propeller and rudder are immersed and that the ship has proper stability. But the water that is pumped on board may contain exotic aquatic organisms and harmful pathogens and other forms of marine life which are returned to the sea at the end of the voyage, often thousands of miles away. They then become established, especially where natural predators do not exist, sometimes causing havoc to existing marine life in their new environment.

More than 35 non-indigenous species are known to exist in the Black Sea biota, including the comb jelly Mnemiopsis leidyi, the soft-shell clam Mya arenaria and the Japanese predatory snail Rapana thomasi ana. The latter devastated oyster fisheries, before itself becoming a target of fishermen. Mnemiopsis leidyi was probably brought in ballast from North America in the early 1980s and has destroyed zooplankton, which is the food of young fish, as well as fish larvae. The “alien invaders”, combined with other forms of pollution, largely generated on land, have cost hundreds of millions of dollars in lost fishing and tourist revenues.

The purpose of the workshop was to raise awareness of the problems caused by the introduction of exotic species in ballast water and to improve the ability of participating countries to establish mechanisms whereby the unique ecology of the Black Sea and Caspian Sea can be better protected.

The workshop consisted of lectures by experts and discussion groups. The ship had a fully staffed research laboratory capable of analysing seawater and ballast water for zooplankton, phytoplankton and other life forms. During the voyage, samples of the seawater were taken and analysed and the results were explained to the participants. During the last stage of the workshop the results were summarized and a final report was prepared.

Among the topics covered during the workshop were the following:

- The background to and the consequences of the introduction of exotic species through ballast water
- IMO’s role and activities in the control and management of ships’ ballast water
- Sampling and analysis of ballast water
- Alternative treatment methods – techniques, efficiency and costs
- Open-sea ballast water exchange; a demonstration.

It is hoped that the workshop will enhance national capacities to implement ballast water management strategies, improve monitoring capacities and increase knowledge of the most sensitive aquatic values at risk in the Black Sea.
Alien invaders - putting a stop to the ballast water hitch-hikers

Alien life forms that hitch a ride across the oceans in the ballast water of ships have been creating significant problems for the marine environment, public property and human health. Unlike oil spills and other marine pollution caused by shipping, exotic organisms and marine species cannot be cleaned up or absorbed into the oceans. Once introduced, they can be virtually impossible to eliminate and in the meantime may cause havoc.

The International Maritime Organization is working through its Member States to tackle the ballast water problem. Guidelines for the Control and Management of Ships’ Ballast Water to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens were adopted in 1997 (replacing earlier guidelines on the subject initially adopted in 1981) and IMO is now working towards adopting mandatory regulations on the management of ballast water.

The Great Lakes

Invasion of alien species to the Great Lakes dates back to the opening of St. Lawrence Seaway (1959). By 1980, more than 130 alien species had been identified, including the European zebra mussel and the gooby fish.

**EUROPEAN ZEBRA MUSSEL**
*Dreissena polymorpha*

*Origin:* Eurasia
*Introduction to Great Lakes first sighting: 1986*

By 1990, the United States federal government pledged 11 million US dollars per year to fight zebra mussels, which were causing problems by smothering water intake pipes of power plants and factories, in some cases clogging them completely. The zebra mussel also competes with native fish for plankton, affecting native fish populations.

**ROUND Goby**
*Neogobius melanostomus*

*Origin:* Caspian and Black Seas
*Introduction to Great Lakes first sighting: Lake Superior, 1995*

Round gobies are aggressive fish and voracious feeders which vigorously defend spawning sites, thereby restricting access of other less aggressive species to prime spawning sites.

**RUFFE**
*Gymnocephalus cernuus*

*Origin:* Eurasia
*Introduction to Great Lakes first sighting: 1990s*

Because the ruffe grows very fast, has a high reproductive capacity and adapts to a wide variety of environments, it is considered a serious threat to commercial and sport fishing.

**TROPICAL GREEN ALGAE**
*Codium fragile*

*Origin:* Tropical seas, but may be an accidental transit used for ornamental purposes in aquaria. Introduced to the Mediterranean: First sighting 1980s*

It replaces native sea grasses and limits the natural habitat for larval fish and invertebrates. In 1984 it was first recorded covering an area of just one square metre off Murcia, today it covers thousands of hectares along the coasts of France, Spain, Italy and Croatia.

**AMERICAN CHITONPHORE**
*Artipe tuberculata*

*Origin:* East coast of the Americas
*Introduction to the Black Sea: First sighting 1970s*

The comb jelly (an organism with similarities to a jellyfish) is a voracious predator of zooplankton, fish and larvae - thereby denying other species of fish the chance to feed. It is partly responsible for the collapse of the fish and shrimp fishing industries in the Black Sea.

**NORTHERN PACIFIC KELP**
*Laminaria japonica*

*Origin:* Northern Pacific
*Introduction to: Tasmania and Port Phillip Bay, Australia First sighting: 1960*

In Japan it is extensively cultivated as a raw and dried food product but in Australian coastal waters it is competing with native seaweeds and may significantly alter the feeding habitat of many indigenous Australian marine fish and shellfish species.

**GIANT FAN WORM**
*Isabella splendens*

*Origin:* Mediterranean
*Introduction to Southern ports of Australia First sighting: 1980*

Now well-established in most southern ports of Australia, its main threat is to southern seafloor fisheries and other aquaculture industries.

**NORTHERN PACIFIC SEASTAR**
*Astropecten amurensis*

*Origin:* Japanese and Alaskan waters
*Introduction to: Tasmania, Australia First sighting 1986*

Efforts to control the spread of this extremely fertile seastar have been unsuccessful and it is evident of plague proportions threatening the shellfish industry.

Bailast water facts:

- **Ballast water:** probably scooped up and pumped to the ballast tanks in or near the port where the cargo has been delivered, may contain all life stages of aquatic organisms.
- **Global transfer of ballast water:** 10 billion tonnes/year (est.)
- **Ballast water per ship:** Several hundred times to more than 100,000 tons, depending on the size and purpose of the vessel.
- **Number of species of animals and plants transported in ballast water:** 3,000/day (est.)
- **Shipping is a crucial element in world trade, transporting more than 50 percent of goods and commodities around the world. Ballasting of ships is a necessary requirement for their safe operation when sailing empty to pick up a cargo, or with a light load, and it has been recognized that currently the only effective way to stop the spread of unwanted organisms is to prevent them being dumped in foreign ports.**

Some ships require large amounts of ballast water, primarily for journeys when the ship is empty, including oil tankers, container ships, ferries, general cargo ships, passenger ships, oil, gas, fertilizer, and military ships. Other ships require smaller quantities of ballast in almost all loading conditions, to ensure stability, trim and load. They include container ships, ferries, general cargo ships, passenger ships, oil, gas, fertilizer, and military ships.

(Gráfico: Los Guajillos/MARCO-AREA: Albert Gómez y Rubí/Atlas del Oceano; Diseño: Dani Clos, Indra, con cortesía de University of Minnesota Sea Grant Program; Port Phillip Bay, Australia; Cartografía: CSIRO, Sea Research, Australia.)
The ballast water problem

Ships have always needed to take on ballast at certain times in order to maintain essential seagoing properties. Originally the ballast consisted of bricks, stone, iron and other substances, but after the introduction of iron- and steel-hulled ships, seawater was used. But when the water was taken on board, local life forms were scooped up as well. Many of these survived inside the ship until they were pumped back into the sea as the voyage neared its end.

Although this was first recognized as long ago as 1903, when a mass occurrence of an Asian phytoplankton alga was discovered in the North Sea, the full extent of the problem did not become apparent until much later in the century.

In 1990 IMO’s Marine Environment Protection Committee (MEPC) set up a working group to consider the problem and the following year the Committee adopted guidelines for preventing the introduction of unwanted aquatic organisms and pathogens from ships’ ballast water and sediment discharges.

In 1992 the United Nations Conference on Environment and Development (UNCED) also recognized the ballast water threat. IMO continued its work, and in 1993 the IMO Assembly adopted resolution A.774(18), which was based on the 1991 guidelines. An updated version was adopted in 1997 as Assembly resolution A.868(20), Guidelines for the control and management of ships’ ballast water to minimize the transfer of harmful aquatic organisms and pathogens. One way of preventing the problem is by exchanging ballast water in mid-ocean, where marine organisms are not so common as they are closer to land. However, this needs to be done very carefully, and in 1997 the MEPC and IMO’s Maritime Safety Committee (MSC) issued a joint circular containing guidance on safety aspects relating to the exchange of ballast water at sea.

IMO is now looking into ways of introducing mandatory requirements concerning ballast water. In June-July 1999 the MEPC met again to consider the issue. A working group reviewed a number of key issues based on the current proposed draft regulations, with progress being reported in achieving consensus on the content of certain draft regulations. However, a number of important issues and aspects remain open for further consideration, including:

- the preferred approach to application – whether the globalized approach, the designation of Ballast Water Management Areas or other approaches;
- development of a range of standards, e.g., for evaluation and acceptance of new ballast water management and control options;
- development of a regularization concept; and
- the extent of application of the provisions to some categories of vessels, such as fishing vessels, pleasure boats, etc.

The overall outline of a draft legal instrument was prepared and some draft text was developed, but the Committee agreed that preparation of the instrument was not sufficiently advanced to be able to propose (to the IMO Council, which meets prior to the Assembly in November) the holding of a diplomatic conference to adopt an instrument in the next biennium (2000-2001).

The issue will remain a high-priority item in the work programme, and the Committee agreed that the Working Group on Ballast Water should continue its work at the next session, due to be held in the spring of 2000.

Options for introducing the proposed regulations include:

- a new Annex to MARPOL 73/78; and
- a completely new convention on ballast water management, under which the terms for entry into force would be determined by a conference, instead of having to comply with existing terms established by MARPOL 73/78.

Current options for preventing the spread of harmful aquatic organisms in ballast water include exchanging the ballast water in deep ocean, where there is less marine life and where organisms are less likely to survive. Other options include filtration and thermal, chemical, and radiation treatments of the ballast water en route to kill the living organisms.

A Focus paper on the ballast water issue – Alien Invaders – Ballast Water Hitch Hikers – is available from the Information Office. The paper can also be found on the IMO website at www.imo.org under the Focus on IMO section.

The section also includes a comprehensive report, Removal of Barriers to the Effective Implementation of Ballast Water Control and Management Measures in Developing Countries, prepared by Dr. Stephan Gollasch of Germany for a joint United Nations Development Programme/Global Environmental Facility/IMO project of the same name begun in 1997. The long-term objective of the project is to assist developing countries in establishing capacities, such as through training programmes, to reduce the transfer of harmful organisms and pathogens in ships’ ballast water, in accordance with IMO guidelines on ballast water management.
The work of the Sub-Committee on Flag State Implementation

by Dr. Heike Hoppe
Technical Officer, Maritime Safety Division
International Maritime Organization

IMO’s Sub-Committee on Flag State Implementation (FSI) was established in 1992 to focus on perhaps the most important aspect of IMO’s work: the implementation of its instruments. IMO Member States recognized that the development of internationally agreed regulations was of little value unless they were effectively and consistently implemented. It is also recognized that some countries, particularly developing countries, may need assistance in the implementation of conventions and other instruments. Since its first meeting in 1993, the FSI Sub-Committee has also looked at port State control issues and provides a forum for both flag and port States to meet and openly discuss issues relating to implementation.

This article gives an overview of the work of the FSI Sub-Committee since its inception.


Regulations were amended and new ones drawn up, but when the Maritime Safety Committee (MSC) met in April 1992 for its 60th session, the Committee felt that there was an urgent need to improve maritime safety through stricter and more uniform application of existing regulations. Submissions by Canada, Norway, Sweden, the United Kingdom and the United States called for standards to be established for the effective implementation of IMO conventions and codes by flag States. The Committee also highlighted the need for close co-operation between the MSC and the Marine Environment Protection Committee (MEPC) to achieve its target of wider compliance with IMO’s regulations on safety and prevention of marine pollution.

As a result, a Joint MSC/MEPC Working Group on Flag State Compliance was established at MSC 60 to discuss the possible creation of a sub-committee on flag State compliance and to prepare its terms of reference. The Joint Working Group recommended that a new sub-committee be established, reporting to both the MSC and the MEPC and dealing in depth with the implementation of IMO instruments and associated matters.

The MEPC at its 33rd session in November 1992 and the MSC at its 61st session, a month later, agreed on the establishment of the new sub-committee under the joint co-ordination of both Committees, to deal with the whole question of flag State implementation and to find ways of assisting Administrations in implementing and, more importantly, enforcing IMO instruments.

Meanwhile a Joint MSC/MEPC Working Group on Flag State Compliance met during MSC 61, paving the way for the work of the new Sub-Committee on Flag State Implementation (FSI), which met for its first session in April 1993.

The FSI Sub-Committee’s primary objective is the identification of measures necessary to ensure effective and consistent global implementation of IMO instruments and also the consideration of special related difficulties faced by developing countries. The effectiveness of IMO safety and pollution-prevention instruments depends primarily on the application and enforcement of their requirements by the States party to them, and there is an increasing awareness that States have experienced difficulties in complying fully with the provisions of the instruments.

The Sub-Committee was assigned the following terms of reference:

1. to identify the range of the flag State obligations emanating from the IMO treaty instruments;

2. to assess the current level of implementation of IMO instruments by flag States;

3. to identify those areas where flag States have difficulty in fully implementing IMO instruments;

4. to assess problems in the involvement of the States party to the IMO instruments in their capacity as port States, coastal States and as countries training and certifying officers and crews;

5. to identify the reasons for the difficulties identified in .3 and .4 above;

6. to make proposals to assist Parties in implementing and complying with IMO treaty instruments, these proposals to be implemented by States or by the Organization; and

7. to monitor the performance of actions taken.

To a certain extent, the FSI Sub-Committee is still, after seven sessions, in the process of readjusting to establish its true identity vis-à-vis its main objective and the terms of reference of the other IMO sub-committees. Increased participation by representatives from developing countries and enhanced response to convention and other instrument requirements is considered to be of paramount importance.

Since its inception, the Sub-Committee has produced several important sets of guidelines and recommendations. The IMO Assembly, the MSC and the MEPC have already adopted some, while others are still in draft form.

The Sub-Committees’ work can be grouped under five general headings:

- Implementation of IMO instruments;
- Port State control;
- Survey and certification;
• Casualty statistics and investigations; and
• Technical assistance.

Implementation of IMO instruments

Implementation of IMO instruments represents the core of the Sub-Committee’s work and has resulted in the development of various guidelines and recommendations, either adopted as resolutions or circulated by means of MSC/MEPC or FSI circulars.

The most important instruments developed by the Sub-Committee are described below.

Guidelines for the authorization of organizations acting on behalf of the Administration

The Joint MSC/MEPC Working Group on Flag State Compliance, during MSC 61 in December 1992, agreed to establish a correspondence group for the development of guidelines for the delegation of authority to bodies acting on behalf of flag States and minimum standards for classification societies and other bodies acting on behalf of flag States.

FSI 1, which met in April 1993, combined the proposed guidelines and minimum standards into a single resolution which was adopted by the 18th IMO Assembly in November 1993 as resolution A.739(18). Guidelines for the authorization of organizations acting on behalf of the Administration (including minimum standards for recognized organizations acting on behalf of the Administration).

Model agreement for the authorization of organizations acting on behalf of the Administration

Following relevant proposals by Member States, the Sub-Committee felt that there was a need for a model agreement to assist Administrations in setting up a formal agreement with recognized organizations.

A working group was established to develop a model agreement, which was approved by MSC 65 and MEPC 37 and issued as MSC/Circ.710/MEPC/Circ.307, Model agreement for the authorization of organizations acting on behalf of the Administration. The model agreement is for use by Administrations when formalizing in writing the delegation of authority for having statutory certification services rendered by a recognized organization on their behalf.

Guidelines to assist flag States in the implementation of IMO instruments

The Joint MSC/MEPC Working Group on Flag State Compliance in December 1992 had dealt with the development of general guidelines for flag States, guidelines for flag States on monitoring bodies acting on their behalf and minimum training and experience requirements for staff assigned implementation and monitoring duties. FSI 1 in April 1993 agreed preliminary guidelines which were adopted in November 1993 by the 18th Assembly as resolution A.740(18), Interim guidelines to assist flag States, and instructed the Committees to keep them under continuous review and update them in the light of developments.

FSI 3 in 1994 established a correspondence group to review resolution A.740(18) in the light of submissions to FSI 3; to submit a relevant report to FSI 4 for consideration and to develop, as a separate annex, basic guidance on the infrastructure, personnel and capabilities necessary for a flag State to carry out its obligations under the conventions.

FSI 4 agreed in general on a draft Assembly resolution on guidelines to assist flag States in the implementation of IMO instruments. However, some references in the draft resolution to the International Convention for the Training, Certification and Watch-keeping of Seafarers (STCW) had to be made compatible with the 1995 STCW amendments, which came into force on 1 February 1997, and the Sub-Committee referred the draft resolution to FSI 5 for further consideration.

FSI 5 agreed the finalized draft resolution, which was adopted at the 20th Assembly in November 1997 as resolution A.847(20), Guidelines to assist flag States in the implementation of IMO instruments, revoking resolution A.740(18).

Specifications for the survey and certification functions of recognized organizations

FSI 1, during discussions on minimum standards for classification societies and other bodies acting on behalf of flag States, agreed to develop detailed specifications for recognized organizations acting on behalf of the Administration in terms of certification and survey functions. A correspondence group was set up to prepare draft specifications.

FSI 3 decided that they should take the form of an Assembly resolution, and the 19th Assembly adopted resolution A.789(19). Specifications on the survey and certification functions of recognized organizations acting on behalf of the Administration.

MSC and MEPC agreed to make the Specifications mandatory by adopting an amendment to the International Convention for the Safety of Life at Sea (SOLAS), 1974, regulation XI/1, and making a reference to the relevant Assembly resolution in a footnote. The new regulation XI/1 was adopted by MSC 66. The amendment entered into force, together with a whole new SOLAS chapter XI (Special measures to enhance maritime safety), on 1 January 1996.

Guidelines on the implementation of the ISM Code by Administrations

The International Safety Management (ISM) Code was adopted by a SOLAS Conference in May 1994 (for entry into force for certain types of ships on 1 July 1998); in May 1995, MSC 64 instructed the FSI Sub-Committee to finalize guidelines on the implementation of the ISM Code by Administrations, based on the work of a correspondence group at MSC 63 and the work of the Joint MSC/MEPC Working Group on the Human Element during MSC 64.

FSI 3 agreed on draft guidelines for submission to MSC 65. The guidelines were adopted by the 19th Assembly in November 1995 as resolution A.788(19), Guidelines on implementation of the International Safety Management (ISM) Code by Administrations.

MSC 67, in 1996, issued MSC/Circ.771 on implementation of the International Safety Management (ISM) Code, stressing the importance of compliance with the 1994 SOLAS Conference Resolution 2 (Implementation of chapter IX of the 1974 SOLAS Convention) and MSC/Circ.761/MEPC/Circ.311 (Timely and effective implementation of the ISM Code).

Meanwhile, in January 1997, FSI 5 prepared, on the basis of MSC/Circ.771, a draft Assembly resolution inviting
Governments and the industry to take action on ISM implementation. This was adopted by the 20th Assembly in November 1997 as resolution A.848(20). Implementation of the International Safety Management (ISM) Code.

Amalgamation of relevant guidelines, minimum standards, specifications, model agreements, etc., relating to the authorization of recognized organizations

FSI 3 in 1994 recommended to the Committee the amalgamation of all relevant guidelines, minimum standards, specifications, model agreements, etc., relating to the authorization of organizations acting on behalf of the Administration, contained in different resolutions and MSC/MEPC circulars, into a single document for ease of reference and implementation by flag States.

FSI 5 in January 1997 reiterated that the amalgamated publication should be circulated in the form of a joint MSC/MEPC circular, and the Secretariat subsequently issued MSC/Circ.788/MEPC/Circ.325 on authorization of recognized organizations acting on behalf of Administrations, incorporating resolution A.739(18), resolution A.789(18) and MSC/Circ. 710/MEPC/Circ. 307.

Self-assessment of flag State performance

In 1996, at FSI 4, several delegations expressed concern that, after three sessions of the Sub-Committee, little had been done to discourage sub-standard shipping. A mechanism was required that would ensure that flag States met their treaty responsibilities. A number of proposals were put forward, including the development of a new binding instrument on flag State responsibility, but the Sub-Committee was unable to reach consensus, so agreed to continue considering the issue at its next session, including:

1. examination of possible criteria for assessing flag State performance and possible measures to ensure that States fulfil their responsibilities;
2. preparation of an Assembly resolution on the interpretation of SOLAS regulations I/1 to 20 (covering general provisions, including surveys and certification) and the revision of SOLAS chapter I (General provisions);
3. compilation of a list of States that have "repeatedly disregarded their obligations" and the study of the provisions of regulation I/7 of the 1995 amendments to the STCW Convention (Communication of information) and the associated STCW Code.

FSI 5 in January 1997 discussed at length various documents regarding responsibilities of Governments,
non-observance of international rules and standards, and flag State responsibilities and established a working group to consider and develop requirements for effective flag State implementation and criteria for assessing performance in meeting these requirements and also to review the content of a proposed draft self-assessment form. As a result, the Sub-Committee agreed to a set of internal and external criteria for assessing flag State performance as a starting point for further consideration. It also reviewed a draft flag State performance self-assessment form and established a correspondence group to look at the issue.

FSI 6 in 1998 discussed the various proposals and eventually agreed on a Flag State Performance Self-Assessment Form (SAF) which was approved by MEPC 42 and MSC 70 in 1998 and issued as MSC/Circ.889/MEPC/Circ.353. Member Governments were invited to use the Form for assessment purposes and to provide the Organization with a copy of the completed SAF. They were also invited, when seeking technical assistance through IMO, to consider communicating a copy of the SAF to the Secretary-General.

In discussing the SAF, the Committees instructed the FSI Sub-Committee to prepare a draft Assembly resolution, to which the approved SAF should be attached, and to draw up clear criteria against which the success of the performance of a flag State might be assessed.

FSI 7 in March 1999 prepared a draft Assembly resolution on self-assessment of flag State performance, which was subsequently approved by MSC 71 in May 1999 and MEPC 43 in June-July 1999, before being submitted to the 21st Assembly in November 1999 for adoption.

In the draft resolution, Member Governments are urged to use the SAF for the purpose of identifying their weaknesses in discharging their responsibilities as flag States under the various IMO conventions and might also use the form for the purpose of seeking technical assistance through IMO. Member Governments are invited to communicate to IMO, on a voluntary basis, a copy of their SAF to enable the FSI Sub-Committee to establish a relevant database.

Criteria for the self-assessment of flag State performance
FSI 7 in March 1999 also dealt with the issue of criteria for the self-assessment of flag State performance, concentrating on identifying principles for the determination of fair and unbiased, internal and external criteria which would not exceed the provisions in IMO instruments. The Sub-Committee invited Members to prepare relevant submissions for its next session in 2000 as well as to submit their completed SAFs to the Organization with a view to establishing a database and to enable a working group at the next session to evaluate submitted SAFs in order to establish qualitative aspects for the criteria.

The Sub-Committee established a working group on flag State performance to draw up a preliminary list of criteria for the self-assessment of flag State performance. The working group considered the goal of self-assessment criteria for selecting what is to be assessed and performance indicators on how to assess the criteria. By analysing the performance of flag States, strengths and weaknesses related to implementation and enforcement of relevant IMO instruments could be identified. The Sub-Committee agreed that the working group should continue its work by correspondence, ahead of FSI 8 in 2000.

Port State control
Many of IMO's technical conventions contain regulations enabling Governments to inspect ships visiting their ports to make sure that they meet IMO standards. This process is known as port State control, which is seen as a crucial step towards the eradication of sub-standard ships. By allowing the inspection of foreign-flagged vessels, it can act as a safety net when shipowners, classification societies, insurers or flag State administrators have in one way or another failed to do their job.

Under port State control, the FSI Sub-Committee considers operational matters referred to it by the Committees as well as continuous items such as regional co-operation on PSC. Experience has shown that port State control works best when there is co-operation on a regional basis, and there are now six regional agreements in operation around the world.

Some of the achievements of the Sub-Committee in the field of PSC are detailed below.

Guidelines for the control of operational requirements
At FSI 1 in April 1993, revised draft guidelines for the port State control of operational requirements related to the safety of ships and pollution prevention were discussed at some length. MSC 62, in May 1993, finalized the guidelines, which were adopted at the 18th Assembly in November 1993 as resolution A.742(18), Procedures for the control of operational requirements related to the safety of ships and pollution prevention, revoking the earlier resolution A.681(17). Procedures for the control of operational requirements related to the safety of ships and pollution prevention.

Training and qualification requirements for PSC officers
In order to exercise effective and fair control as provided for in IMO conventions, great emphasis needs to be placed on the competence and ability of the surveyors carrying out the inspection. MSC 62 instructed the Sub-Committee to consider and develop guidelines for PSC officers' qualifications. FSI 3 in February 1995 agreed on interim minimum qualifications and training requirements for PSC officers. MSC and MEPC approved the draft guidelines and they were incorporated into a draft Assembly resolution on procedures for PSC as a new chapter 2.5 "Qualification and training requirements of PSCOs" (port State control officers).

Code of conduct for PSC officers
MEPC 34 in 1993 agreed that a code of conduct for PSC officers should be developed, following the establishment of regional agreements for co-operation in PSC activities and recognizing the need to provide guidance to Administrations on common procedures in the conduct of port State control inspections. FSI 3 agreed interim procedural guidelines for PSC officers conducting port State control inspections, to be incorporated into the draft Assembly resolution on procedures for PSC as a new chapter 2.6 "General procedural guidelines for PSCOs".
Procedures for port State control (resolution A.787(19))

Since its 12th session in 1981, the IMO Assembly has adopted various resolutions and circulars relating to port State control. The recommendations, however, have not always been consistent, due mainly to the diversity of disciplines involved in PSC inspections and related procedures.

FSI 1, in April 1993, recognized that these recommendations needed to be harmonized and consolidated into a single instrument that would make PSC procedures more user-friendly and less prone to misinterpretation. It established a correspondence group, which prepared a text amalgamating and harmonizing all existing PSC resolutions and circulars. Following some further refining to take into account necessary modifications following the 1995 STCW Conference, the 19th Assembly in 1995 adopted resolution A.787(19), Procedures for port State control. The resolution was published in 1997 as a booklet, Procedures for Port State Control.

FSI 6 in 1998 considered amendments to A.787(19), proposed in various submissions, but could not finalize them and agreed to further consider the matter at FSI 7. However, in view of the importance and urgency of the matter, it considered guidelines for port State control related to the ISM Code, and prepared a draft circular which was approved by MSC 70 and MEPC 42 with some modifications and disseminated as MSC/Circ.890/MEPC/Circ.354 on interim guidelines for port State control related to the ISM Code.

At FSI 7, the Sub-Committee established a working group to review A.787(19) and prepare a relevant draft Assembly resolution. The proposed amendments concerned the establishment of “clear grounds” for more detailed inspections, accidental damage, reports of remedial action and additions to the list of certificates and documents. It was also agreed to incorporate the interim Guidelines for PSC related to the ISM Code.

MSC 71, in May 1999, and MEPC 43, in June-July, agreed on additional modifications to the draft Assembly resolution on amendments to the procedures for port State control (resolution A.787(19)), which has been submitted to the 21st Assembly for adoption. A revised composite text of resolution A.787(19) will be prepared and published.

Survey and certification

In 1996, MSC 67 agreed that the FSI Sub-Committee should henceforth deal with survey and certification matters, and some of these issues are detailed below.

Authorization of recognized organizations

A list of non-governmental organizations authorized to carry out surveys and issue certificates on behalf of Administrations is regularly issued by the Secretariat for the sessions of the FSI Sub-Committee, including also information on the recognized organizations authorized to conduct ISM Code surveys.

FSI 7 agreed that the information would in future be issued as an FSI circular, to be updated yearly.

Revision of Survey guidelines (resolution A.746(18)) and of Guidelines on surveys (resolution A.560(14))

The Sub-Committee deals regularly with amendments to resolution A.746(18), Survey guidelines under the harmonized system on survey and certification. The Sub-Committee decided that resolution A.560(14), Guidelines on surveys required by the 1978 SOLAS Protocol, the IGC Code and the IBC Code, should be the subject of amendments in line with those proposed for resolution A.746(18).

The harmonized system of survey and certification covering international shipping regulations will enter into force on 3 February 2000 and will cover survey and certification requirements of SOLAS, 1974, the International Convention on Load Lines (LL), 1966 and the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), as well as the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code) and the International Gas Carrier (IGC) Code.

All of these instruments require the issuing of certificates to show that requirements have been met, and this has to be done by means of a survey which can involve the ship being out of service for several days. The harmonized system will alleviate the problems caused by survey dates and intervals between surveys which do not coincide, so that a ship should no longer have to go into port or repair yard for a survey required by one convention shortly after doing the same thing in connection with another instrument.

However, a number of flag States will not be party to the harmonized system, although they will be encouraged to apply it regardless.

FSI 6 dealt with provisions for surveys of emergency towing arrangements and satellite EPIRBs, which were adopted by MSC 70 as resolution MSC.83(70), Amendments to the survey guidelines under the harmonized system of survey and certification (resolution A.746(18)), concerning testing and servicing of 406 MHz EPIRBs and survey of emergency towing arrangements. In addition, resolution MSC.84(70), Amendments to the guidelines on surveys required by the 1978 SOLAS Protocol, the International Bulk Chemical Code and the International Gas Carrier Code (resolution A.560(14)), concerned the survey of emergency towing arrangements.

Casualty statistics and investigations

In SOLAS regulation I/21, Administrations undertake to conduct investigations of casualties when that investigation “may assist in determining what changes in the present regulations might be desirable”. Governments are also expected to supply the Organization with pertinent information concerning the findings of such investigations.

The FSI Sub-Committee reviews a summary of the casualty investigation reports that have been forwarded by flag States as well as a document compiled by the Secretariat containing a list of very serious casualties selected according to agreed criteria and prepared on the basis of information contained in the Lloyd’s Register of Shipping Casualty Returns and the Institute of London Underwriters’ monthly returns.
Casualty reports and casualty analysis

Casualty statistics are prepared using casualty data submitted by countries to the Organization. This includes statistics on casualties of fishing vessels and fishermen and preliminary information on very serious and serious casualties from rescue co-ordination centres.

FSI 5 established a permanent correspondence group on casualty analysis, which reports the findings of their analysis of relevant casualty reports regularly to the sessions of the Sub-Committee. The findings of the group are also transmitted to relevant IMO sub-committees in order to enable recommendations for future specific actions based upon casualty information.

MSC 70, in December 1998, endorsed the decision of FSI 6 to instruct the Secretariat to prepare draft presentations of statistical data on certain types of casualties and any other information to relevant sub-committees for advice. In addition, the work programmes of all sub-committees should include a continuous agenda item on casualty analysis, with the FSI Sub-Committee acting as the co-ordinator.

MSC 71 endorsed the Sub-Committee’s proposal that data on casualties and deficiencies should be made available in an electronic format on the IMO Secure Internet, with data accessible to Member Governments only via login and password.

Code for the Investigation of Marine Casualties and Incidents

The differing procedures and practices in marine incident and accident investigations adopted by various States, and the differing purpose and status of such investigations, was creating some difficulties for the proper analysis of these reports. As a result, FSI 3 in February 1995 agreed to develop a Code and to give it the force of law through relevant provisions in the SOLAS Convention.

FSI 5 in 1997 changed the title to “Code for the investigation of marine casualties and incidents”. It was agreed that the Code would only apply in so far as national law allows and that technical guidelines to assist investigators when collecting general information relating to the casualty and the human element factor should be attached to the final version. The 20th Assembly adopted the Code as resolution A.849(20), Code for the Investigation of Marine Casualties and Incidents.

The resolution notes that the investigation and proper analysis of marine casualties and incidents can lead to greater awareness of casualty causation and result in remedial measures, including better training, for the purpose of enhancing safety of life at sea and protection of the marine environment. It requests flag States to conduct an investigation – using as a basis the Code for the Investigation of Marine Casualties and Incidents – into all very serious and serious marine casualties and to supply the Organization with the relevant findings.

Meanwhile, a Joint ILO/IMO ad hoc Working Group on Investigation of Human Factors in Maritime Casualties, in January 1998 at its second session, agreed draft guidelines on the investigation of the human factor in maritime casualties and incidents, to be submitted to the 69th session of the MSC in May 1998 and to the Governing Body of the International Labour Organization (ILO) for adoption.

The purpose of the Guidelines is to provide advice for the investigation of human factors in maritime accidents, so that on the basis of analysis of casualties, preventive action can be taken. It has been estimated that 80% of maritime casualties are due to “human error”. Human factors which need to be taken into account when considering whether an accident was due to human error include fatigue, stress, health, communications, working conditions and skills.

The guidelines were revised and approved at MSC 71 in May 1999 and also by MEPC 42 in June-July 1999 in the form of a draft Assembly resolution to enable the guidelines to be attached to the Code for the Investigation of Marine Casualties and Incidents (resolution A.849(20)).

The draft Assembly resolution on amendments to the Code for the Investigation of Marine Casualties and Incidents (resolution A.849(20)) is being submitted to the 21st session of the Assembly for adoption.

Technical assistance

One of the aims of the FSI Sub-Committee is to conduct a comprehensive analysis of difficulties encountered by Member Governments in the implementation of IMO instruments, with a view to identifying needs and appropriate solutions. In this way, appropriate technical co-operation projects can be drawn up and the necessary funds sought from donor countries, institutions and UN agencies.

Widespread use of the Flag State Self-Assessment Form and its submission to IMO could prove useful in conducting this assessment. In the meantime, there are mechanisms at hand to help those Administrations that have genuine difficulties in fulfilling their international obligations but lack the necessary resources. The first step could not be simpler; they only need to inform the Organization of their problems and request the appropriate assistance.

Conclusion

The FSI Sub-Committee has many challenges for the years ahead, as it works to develop guidelines and procedures to reduce maritime casualties and mitigate marine pollution through the universal and full implementation of relevant conventions and other instruments, primarily by the flag State. Yet safety of shipping and the prevention of marine pollution by ships are common aims for all States, whether flag States, port States or neither.

The FSI Sub-Committee provides a forum for all States to get together and co-operate in achieving IMO aims of safer shipping and cleaner oceans.

Resolutions and circulars produced by the FSI Sub-Committee

Assembly resolutions

A.739(18) Guidelines for the authorization of organizations acting on behalf of the Administration
A.740(18) Interim guidelines to assist flag States
A.741(18) International Management Code for the Safe Operation of Ships and for Pollution Prevention (International Safety Management (ISM) Code)
A.742(18) Procedures for the control of operational requirements related to the safety of ships and pollution prevention
A.787(19) Procedures for port State control
A.788(19) Guidelines on implementation of the International Safety Management (ISM) Code by Administrations
A.789(19) Specifications on the survey and certification functions of recognized organizations acting on behalf of the Administration
A.847(20) Guidelines to assist flag States in the implementation of IMO instruments
A.848(20) Implementation of the International Safety Management (ISM) Code
A.849(20) Code for the Investigation of Marine Casualties and Incidents

MSC resolutions

MSC.83(70) Amendments to the Survey Guidelines under the harmonized system of survey and certification (resolution A.746(18)) (concerning testing and servicing of 400 MCE EPITRNs and survey of emergency towing arrangements)
MSC.84(70) Amendments to the Guidelines on surveys required by the 1978 SOLAS Protocol, the International Bulk Chemical Code and the International Gas Carrier Code (resolution A.560(14)) (concerning the survey of emergency towing arrangements)

MSC/MEPC circulars

MSC/Circ.620 Amendments to resolution A.466(XII), Procedures for the control of ships
MSC/Circ.630 Procedures for the control of ships – Information on available inspection services
MSC/Circ.753 Report on fishing vessels and fishermen statistics
MSC/Circ.710/MEPC/Circ.307 Model agreement for the authorization of organizations acting on behalf of the Administration
MSC/Circ.772/MEPC/Circ.319 Guidelines for the development and approval of reporting requirements in non-mandatory instruments and reports
MSC/Circ.781/MEPC.6/Circ.2 National contact points for safety and pollution prevention
MSC/Circ.788/MEPC/Circ.325 Authorization of recognized organizations acting on behalf of Administrations
MSC/Circ.802/MEPC/Circ.332 Provision of preliminary information on serious and very serious casualties by rescue co-ordination centres
MSC/Circ.827/MEPC/Circ.333 Reports on marine casualties and incidents – Harmonized reporting procedures – Reports required under SOLAS regulation 1/21 and MARPOL 73/78 articles 8 and 12
MSC/Circ.889/MEPC/Circ.353 Self-assessment of flag State performance
MSC/Circ.890/MEPC/Circ.354 Interim guidelines for port State control related to the ISM Code

FSL circulars

FSL/Circ.1 Baseline assessment questionnaire
FSL/Circ.2 Questionnaire on current practices for the training and qualifications of port State control officers
FSL/Circ.3 to Circ.6 Authorization of recognized organizations under the ISM Code

FACILITATION COMMITTEE – 27TH SESSION: 6–10 SEPTEMBER 1999

Amendments to FAL Convention adopted

The Committee adopted amendments to the Convention on Facilitation of International Maritime Traffic (FAL), 1965, relating to the combating of illicit drug trafficking; arrival, stay and departure of ships, passengers, crews and cargo; and the use of electronic data interchange (EDI) for ship clearance purposes.

The amendments are due to enter into force on 1 January 2001 under tacit acceptance.

EDI: (Section 1, chapter C). Amendments upgrade Recommended Practice 1.4, on introducing EDI, to a Standard; Standards 1.5, 1.6 and 1.8 and Recommended Practice 1.7 also amended.

Illicit drug trafficking: Amendments add to section 1 a new chapter D on illicit drug trafficking, relating to cooperation between shipowners and parties concerned to improve ability to combat drug smuggling.

Arrival, stay and departure of the ship: Amendments made to Recommended Practices 2.3.1 and 2.5.2 (in section 2).

Arrival and departure of persons: Amendments add new Standard 3.3.3, new Recommended Practice 3.3.4 and new Standard 3.3.6 in section 3. Standards and Recommended Practices relate to responsibility of the shipowner for passengers and crew. In addition, Standard 3.15.1 is replaced and new Standard 3.15.2 is added.

Arrival, stay and departure of cargo and other articles: (Section 4). Amendments revise Recommended Practice 4.3 and add new Standard 4.4 and new Recommended Practice 4.5. The title of chapter B is changed to “Clearance of Cargo”. Recommended Practice 4.7 is replaced and new Standards and Recommended Practices numbered 4.8 to 4.12 are added.

Stowaways

The Committee agreed to establish a correspondence group to review information relating to stowaway incidents, to review existing national legislation for dealing with stowaways and to develop draft text for a possible future binding instrument on dealing with the problem.

Several Member States and international organizations had submitted information relating to a considerable number of stowaway incidents in the past year, and the Committee expressed concern about the heavy burden on ships and crews and on the shipping industry as a whole.
Since September 1998, 504 stowaway incidents have been reported to IMO.

The issue has been addressed previously at IMO – the IMO Assembly at its 29th session in 1997 adopted Guidelines on the allocation of responsibilities to seek the successful resolution of stowaway cases (resolution A.871(20)), which establish basic principles to be applied in dealing with stowaways. The resolution also requests the Facilitation Committee to monitor the effectiveness of the Guidelines; to keep them under review; and to take such further action, including the development of a binding instrument, as may be considered necessary.

The Committee established a quarterly incident reporting system as well as an annual statistical information and analysis report and also approved a revised version of FAL.2/Circ.50, Reports on stowaway incidents, asking Member Governments and international organizations in consultative status with IMO to provide the Organization, on a monthly basis, with statistical data on stowaway incidents and information on their experience gained with the Guidelines.

The revised Circular also invites Member Governments to provide the Organization with a summary of their national legislation addressing stowaway incidents and a summary of current practice.

The correspondence group has been tasked with examining the effectiveness of the existing Guidelines, and identifying the issues and major priorities which could be addressed by any future regulation as well as proposing the best and quickest way to proceed to give effect to the content of the Guidelines. This could be by including binding regulations in the FAL Convention or by drafting a new binding instrument.

The correspondence group will also consider whether any elements of the Recommendations to Governments for preventing and suppressing piracy and armed robbery against ships, annexed to MSC/Circ.622/Rev.1, and the Guidance to shipowners and ship operators, shipmasters and crews on preventing and suppressing acts of piracy and armed robbery against ships, annexed to MSC/Circ.642/Rev.1, could be applied to stowaway cases.

Harmonization of ships’ certificates
The Committee agreed to work towards harmonizing ships’ certificates – simplifying and unifying existing documents and reducing their number where possible.

IMO Secretary-General Mr. William A. O’Neil told the Committee in his opening speech that the many certificates currently required were causing problems and that IMO should give serious consideration to the possibility of combining or even eliminating some of them.

The Committee’s drafting group drew up a list dividing the ships’ certificates into groups, as a first step towards possibly combining some of them. The Committee agreed that this served as a good basis to move forward at the next session.

The list drawn up by the drafting group includes:

**Ship’s certificate** – to include:
- Certificate of Registry
- International Tonnage Certificate (1969)
- International Load Line Certificate

**Safety certificates**
- Passenger Ship Safety Certificate
  - Search and rescue co-operation plan
  - Decision support system for masters
  - List of operational limitations
- Cargo Ship Safety Certificate
  - Cargo Ship Safety Construction Certificate
  - Cargo Ship Safety Equipment Certificate
  - Cargo Ship Safety Radio Certificate
- High-Speed Craft Safety Certificate
  - Permit to Operate High-Speed Craft

**Special certificates**
- Exemption Certificate(s)
- Special Trade Passenger Ships Safety Certificate
  - Special Trade Passenger Ships Space Certificate
- Special Purpose Ships Safety Certificate
- Mobile Offshore Drilling Unit Safety Certificate
- Dynamically Supported Craft Construction and Equipment Certificate
- Diving System Safety Certificate

**Ship’s documents**
- Intact Stability Booklet
- Bulk Carrier Booklet
- Damage Control Booklet
- Dangerous goods manifest or stowage plan
- Cargo Securing Manual
- Document of authorization for carriage of grain
- Document of compliance with the special requirements for ships carrying dangerous goods
- Noise survey report

**Environmental certificates**
- International Oil Pollution Prevention Certificate
- International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (NLS Certificate)
- Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk
- International Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk
- Certificate of Fitness for the Carriage of Liquefied Gases in Bulk
- International Certificate of Fitness for the Carriage of Liquefied Gases in Bulk
- Certificate of Fitness for Offshore Support Vessels
- International Certificate of Fitness for the Carriage of INF Cargo

**Ship’s documents**
- Oil Record Book
- Garbage Record Book
- Garbage Management Plan
- Record of oil discharge monitoring and control system for the last ballast voyage
- Enhanced survey report file
- Shipboard Oil Pollution Emergency Plan
- NLS Cargo Record Book
- NLS Shipboard Marine Pollution Emergency Plan for Noxious Liquid Substances

**Management certificates**
- Minimum safe manning document
- Document of Compliance
- Safety Management Certificate

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Guidelines on minimum standards for the training of port marine personnel to be developed

The Committee agreed to work on developing guidelines for minimum standards for training of port marine personnel and added the item to its work programme with a target completion date of 2002. The work will be carried out under the supervision of the FAL Committee as well as the MSC and the MEPC.

The need to develop guidelines on minimum standards for training of port marine personnel arises from concern about a foreseeable shortfall in qualified port marine staff, as they are generally recruited from seagoing personnel whose numbers world-wide are falling.

Specifically, the Committee noted that there were currently no known internationally recognized guidelines on this subject. Secondly, rapid technological change in the port and marine industry and increased safety and environmental consciousness of the public made it even more important that port marine personnel are adequately trained whether or not they have seagoing experience.

Thirdly, the predicted shortfall in seagoing staff will likely have a knock-on effect on secondary industries such as ports. Fourthly, in order to encourage a first career in ports which may become the norm in the future, as opposed to a seagoing career followed by a port-based career it is essential to have some form of guidelines for training of marine port personnel.

EDI messages – correspondence group re-established

The Committee agreed to re-establish the correspondence group on the development of uniform electronic message systems for the arrival, stay and clearance of ships, persons and cargoes.

Draft circular approved

The Committee approved a draft joint MSC/FAL Circular on safety at solid bulk cargo terminals (requirements for terminal representatives) for endorsement by the MSC at its next session.

Draft revised SOLAS chapter V completed


Some points in a number of draft regulations remain open for discussion by the Maritime Safety Committee, which meets in May 2000 for its 72nd session.

The revised chapter V will be longer than the existing chapter, with nearly twice as many regulations, and is being reformatted. It is intended that the revised chapter V will enter into force on 1 July 2002, in accordance with the four-year interval agreed by the Maritime Safety Committee for bringing into force amendments to mandatory instruments.

The aim is for MSC 72 to finalize and approve the draft new chapter V, so it can be circulated and eventually adopted at MSC 73, scheduled for December 2000.

Automatic identification systems (AIS)

The Sub-Committee agreed in principle to include carriage requirements for automatic identification systems (AIS) in the draft revised chapter V regulation on carriage requirements and performance standards for shipborne navigational systems and equipment.

The Sub-Committee also agreed to a phase-in implementation schedule for different types/sizes of ships for shipborne navigational systems and equipment in general and for AIS in particular. According to the draft revised regulation, new ships built after the date of entry into force of the new chapter V would be required to be fitted with AIS. For ships built before that date, the requirement would initially apply to passenger ships and tankers one year after the date of entry into force, with the implementation for other types of ships phased in over a five-year period.

AIS transponders are intended to automatically provide – to appropriately equipped shore stations, other ships and aircraft – information, including the ship’s identity, type, position, course, speed, navigational status and other safety-related information; to receive such information from similarly fitted ships; and also to monitor and track ships, including the exchange of data with shore-based facilities.

Recommended performance standards for AIS were adopted by the Maritime Safety Committee in May 1998 by resolution MSC.74(69).

According to the performance standards, the AIS should be capable of providing, to ships and to competent authorities, information from the ship, automatically and with the required accuracy and frequency, to facilitate accurate tracking. Transmission of the data should be with the minimum involvement of ship’s personnel and with a high level of availability.

New draft regulation – voyage data recorders

The Sub-Committee agreed on the need for passenger ships on international voyages to carry voyage data recorders (VDRs) and agreed that existing ro-ro passenger ships should comply with the requirement on the date of entry into force of the new regulations.

However, the Sub-Committee did not reach consensus regarding application to other types of ships and agreed that the MSC should decide whether to include in the regulation a phase-in implementation schedule for other ships.

Some delegations favoured a resolution to be adopted which calls on Administrations to consider the use of VDR also on other ships and, in the light of the experience gained, to consider whether this regulation should be extended to cover other ships in future.
Performance standards for shipborne VDRs were adopted at the twentieth Assembly in 1997 by resolution A.861(20).

Draft performance standards agreed
The Sub-Committee agreed draft performance standards for the following:
- Night vision equipment for high-speed craft
- Daylight signalling lamps
- Devices to measure and indicate speed and distance

Ships’ routeing measures and ship reporting system approved
The Sub-Committee approved the following ships’ routeing measures, including a ship reporting system, for adoption by the MSC at its next session:
- Amended traffic separation schemes in the approaches to the ports of Iquique and Punta Arenas (Chile);
- New traffic separation schemes along the Peruvian coast, including:
  - Landfall and approaches to Paita Bay;
  - Approaches to Puerto Callao;
  - Landfall and approaches to Puerto San Martin; and
  - Landfall and approaches to Puerto Ilo.
- Mandatory ship reporting system in the waters off Chengshan Jiao Promontory (China) for ships of 300 gross tonnage and upwards and a new ships’ routeing system in the waters Off Chengshan Jiao Promontory (China);
- Recommended tracks for navigation of certain ships off the coast of California;
- Area to be avoided off the north coast of Cuba.

The measures to be adopted by the MSC will enter into force at 0000 hours UTC six months after their adoption.

Voyage planning guidelines – draft resolution agreed
The Sub-Committee finalized a draft Assembly resolution on guidelines on voyage planning for submission to the 21st Assembly in November 1999.

Draft circular on chart datums agreed
The Sub-Committee agreed a draft Safety of Navigation circular containing guidance on chart datums and the accuracy of positions on charts. The circular will be submitted to the MSC for approval.

Accident investigation – Norwegian Dream/Ever Decent
The Sub-Committee considered a joint submission by Bahamas and Panama giving details into a collision of two vessels, the Bahamian passenger ship Norwegian Dream and the Panamanian container ship Ever Decent, in the Dover Strait on 23 August 1999.

The paper notes that a full investigation is being conducted by the authorities of both the Bahamas and Panama, the results of which will be sent to IMO when the final reports are complete.

The Organization will await the final report on the incident before deciding on any course of action.

IMO-related websites
The Internet is proving to be an invaluable source of information, and those wishing to find out more about shipping will find thousands of sites. For those interested in IMO and its activities, a number of sites should be of special interest.

IMO’s own site is at http://www.imo.org. It contains a wide range of information about IMO and is regularly updated.

Technical co-operation is one of IMO’s most important activities, and one of the most important projects in this area is the Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas, which is operated by IMO in conjunction with the United Nations Development Programme and the Global Environment Facility. It is based in Manila, and its website can be found at http://www.imo.org.ph.

The Regional Marine Pollution Emergency, Information and Training Center for the Wider Caribbean Region (REMPEITC-Carib) is based in Curaçao, and its website can be found at http://www.curbiz.com/rempeitc/.

The International Mobile Satellite Organization (Inmarsat) was created by means of an IMO Convention adopted in 1976. Inmarsat is based in London; information about the organization can be found at http://www.inmarsat.org/index3.html.

In 1971 IMO adopted the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (FUND), 1971. The Fund entered into force in 1975 and an international organization bearing the same name was set up to provide compensation for victims of oil pollution damage. It is based in London and further information can be found at http://www.iopcfund.org.

The World Maritime University was established by IMO in 1983 to help provide high-level training in shipping administration, training and related activities. The University is based in Malmö (Sweden) and has its own website – http://www.wmu.se.

A new website aimed at WMU graduates has been set up by Yong Moo Kim, a 1991 graduate who now works for the Korean Shipowners Association – http://www.seanet.co.kr/wmu.

The IMO International Maritime Training Academy is based in Trieste. Details can be found at http://www.imtia.org.

Another important training centre is the IMO International Maritime Law Institute, based in Msida (Malta). Information can be found at http://www.imli.org.
Guidelines for application of de minimis concept approved

The Meeting approved Guidelines for the application of the de minimis concept under the London Convention, 1972— in other words, guidelines to define when a material can be considered non-radioactive for the purpose of applying the regulations contained in the London Convention.

The dumping of radioactive matter into the sea is prohibited under the 1993 amendments to the International Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (known as the London Convention or LC). However, virtually all materials are intrinsically “radioactive” since they contain radionuclides.

The Guidelines were developed by an Ad Hoc Group of Experts on the Definition and Application of the de minimis concept under the London Convention (London Convention de minimis Group), which met in May 1999, based on a report by the International Atomic Energy Agency (IAEA) which was reviewed at the last Consultative Meeting.

The Guidelines include a step-by-step evaluation procedure for establishing whether a material can be considered de minimis for the purpose of the Convention (and can therefore be dumped) or whether further evaluations are needed. The Guidelines will be kept under review in the light of scientific and technical developments.

The de minimis concept

According to the IAEA, the term “de minimis”, in the context of the London Convention, 1972, incorporates two distinct concepts:

- Exclusion — covering a situation that is outside the regulation because it is unamenable to control by the regulation irrespective of the magnitude of the dose;
- Exemption — covering a situation of no concern to the regulator because of its triviality, even though it is of relevance to the regulation.

The basis for the Guidelines relates to the fact that all materials, including natural and inert materials, contain natural radionuclides and are frequently contaminated with artificial radionuclides. However, Contracting Parties to the London Convention do not intend to consider all such materials as radioactive in implementing the provisions of the Convention and therefore need to address the question of how to discriminate between “radioactive” and “non-radioactive” materials for the purposes of the Convention.

Materials defined as “non-radioactive” could then be considered for dumping at sea without any consideration of their radioactive constituents or the radiological consequences associated with their disposal—in general terms, either because the radiation is unamenable to control due to its being of natural origin or because the risk of harm to individuals is extremely low.

Radioactive waste sea dumping controls

The dumping into the sea of high-level radioactive waste was prohibited under the 1972 London Convention, and amendments adopted in 1993 (they entered into force on 20 February 1994) extended the ban to low-level radioactive wastes. As a result of the 1993 amendments, the London Convention currently bans the dumping into the sea of “radioactive wastes or other radioactive matter” (annex 1, paragraph 6). As part of the 1993 amendments, the Contracting Parties introduced the de minimis concept, adding a new paragraph stating that the ban on dumping into the sea of these materials “does not apply to wastes or other materials (e.g. sewage sludge and dredged material) containing de minimis (exempt) levels of radioactivity as defined by the IAEA and adopted by the Contracting Parties” (annex 1, paragraph 9).

The IAEA report on the de minimis concept stemmed from progress in the field of radiation protection and discussions between Contracting Parties to the London Convention. At the 19th Consultative Meeting of Contracting Parties to the London Convention, 1972 in December 1997, it was agreed that the IAEA should be requested to provide guidance on whether materials planned to be dumped could be exempted or whether specific assessments were needed.

The 1996 Protocol to the London Convention, which is not yet in force, also contains reference to “de minimis (exempt) concentrations as defined by IAEA and adopted by Contracting Parties.”

Status of 1996 Protocol

Six countries have now ratified the 1996 Protocol to the London Convention (up to 8 October 1999), while three Contracting Parties to the 1972 Convention informed the meeting they were expecting to complete ratification during the first quarter of the year 2000.

The 1996 Protocol, which was adopted in November 1996, will enter into force 30 days after ratification by 26 countries, 15 of whom must be Contracting Parties to the 1972 treaty. A total of 77 countries have ratified or acceded to the 1972 Convention to date.

Whereas the current London Convention 1972 allows dumping of wastes at sea providing certain conditions are met, the 1996 Protocol prohibits dumping of wastes or other matter with the exception of certain materials listed in an annex. The Protocol adopts the “polluter pays” principle and applies the “precautionary approach”, requiring preventative measures when there is reason to believe that wastes or other matter introduced into the marine environment are likely to cause harm, even when there is no conclusive evidence to prove a causal relation between inputs and their effects.

The 1996 Protocol is intended to replace the 1972 Convention and is important because it represents a major change of approach to the question of how to regulate the use of the sea as a depository for waste materials.

The Protocol states (in article 4) that Contracting Parties “shall prohibit the dumping of any wastes or other matter with the exception of those listed in annex 1.”

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These are:
1 Dredged material
2 Sewage sludge
3 Fish waste or material resulting from industrial fish processing operations
4 Vessels and platforms or other man-made structures at sea
5 Inert, inorganic geological material
6 Organic material of natural origin
7 Bulky items primarily comprising iron, steel, concrete and similar unharmed materials for which the concern is physical impact, and limited to those circumstances where such wastes are generated at locations, such as small islands with isolated communities, having no practicable access to disposal options other than dumping.

The only exceptions to this are contained in article 8, which permits dumping to be carried out “in cases of force majeure caused by stress of weather, or in any case which constitutes a danger to human life or a real threat to vessels...”

Incineration of wastes at sea was permitted under the 1972 Convention, but was later prohibited under the amendments adopted in 1993. It is specifically prohibited by article 5 of the Protocol.

The Protocol also addresses concerns at the practice of exporting wastes which cannot be dumped at sea under the 1972 Convention from Contracting to non-Contracting Parties. Article 6 of the Protocol states that “Contracting Parties shall not allow the export of wastes or other matter to other countries for dumping or incineration at sea.”

Article 9 requires Contracting Parties to designate an appropriate authority or authorities to issue permits in accordance with the Protocol.

The Protocol recognizes the importance of implementation, and article 11 details compliance procedures under which, no later than two years after the entry into force of the Protocol, the Meeting of Contracting Parties “shall establish those procedures and mechanisms necessary to assess and promote compliance...”

A key provision is the so-called transitional period (article 26) which allows new Contracting Parties to phase in compliance with the Convention over a period of five years. This provision is supported by extended technical assistance provisions.

The Protocol contains three annexes: annex 1 lists materials which may be dumped; the other two deal with assessment of wastes and arbitral procedures.

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The Committee agreed to propose holding a diplomatic conference to adopt an international convention for liability and compensation for damage caused by oil from ships’ bunkers during the next two years. The aim of the proposed convention would be to establish a regime for spills of oil, when carried as fuel in ships’ bunkers, as current regimes covering oil spills do not include bunker oil spills.

The proposal for a conference will be recommended to the Council which meets prior to the IMO Assembly in November.

Work on the draft bunkers convention began in 1995 following a submission by several delegations to the Committee’s 73rd session which proposed the adoption of an international regime for liability and compensation for damage in the event of damage caused by oil from ships’ bunkers.

Experience of bunker spill clean-ups had illustrated the need for an international regime. Many general cargo ships carried more oil as bunkers than tankers as cargo, and it has been estimated that approximately 130 million tonnes of oil is carried on the world’s seas as cargoes at any one time. Bunker spills were also more expensive to clean up.

The Committee noted that sufficient progress had been made on developing the draft of the convention to ensure its successful adoption at a conference and subsequent entry into force.

The draft bunkers convention provides a free-standing instrument covering pollution damage only.

During the session, the Committee reviewed the draft articles in the proposed convention and agreed on the text of a number of articles.

The Committee decided to proceed on the basis of a definition of “shipowner” similar to that found in the 1976 Convention on Limitation of Liability for Maritime Claims (LLMC), which identifies a small group of responsible persons as the shipowner.

The Committee incorporated into the draft convention wording to require the registered owner to maintain compulsory insurance cover. The Committee also decided to maintain a requirement for direct action – this would allow a claim for compensation for pollution damage to be brought directly against an insurer.

The draft bunkers convention includes articles on:
- the scope of application – to cover only pollution damage in the territory, territorial sea, or exclusive economic zone of a contracting State;
- liability – establishes a small group of persons as the shipowner, who will be responsible for pollution damage caused by any bunker oil on board or originating from a ship;
- limitation of liability – addresses the right of the shipowner to limit the liability under national or international regimes;
- compulsory insurance – requires insurance or other financial security to be maintained to cover the shipowner’s liability under the convention;
- direct action – would allow a claim for compensation for pollution damage to be brought directly against an insurer; and
- entry into force criteria.

The draft convention is modelled on the International Convention on Civil Liability for Oil Pollution Damage, 1969.

Draft amendments to the 1974 Athens Convention (provision of financial security)

The Committee reviewed a draft protocol to and draft amendments to the 1974 Athens Convention relating to the Carriage of Passengers and their Luggage by Sea. The aim is to introduce the requirement of compulsory insurance for passenger claims.

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ICC Centre for Maritime Co-operation
Maritime House, 1 Linton Road, Barking, Essex IG11 8HG, UK
Tel: (44) (0)181 591 3000  Fax: (44) (0)181 594 2833
The Athens Convention of 1974, and its 1990 Protocol, make a carrier liable for damage or loss suffered by a passenger if the incident causing the damage occurs during the course of the carriage and is due to fault or neglect of the carrier. Liability can be limited so long as the carrier did not act with intent to cause damage, or recklessly.

The 1990 Protocol – which has not yet entered into force – increased the limits of compensation payable in the event of death to around US$225,000.

The 1990 Protocol has only been ratified by three States to date.

Opinions were divided on whether the limits established in the 1990 Athens Protocol should remain the same or be amended. Several delegations indicated that the reason for not becoming a party to the Protocol was the fact that it provided for limits which were considered too high. Other delegations were of the view that the limits were too low.

The Committee agreed to incorporate a provision to ensure compatibility with treaties regulating nuclear liability.

The Committee agreed on the proposed draft text for a number of other amendments but decided the work should continue at the next session, scheduled for March 2000, to resolve outstanding issues.

The Committee agreed that the draft would likely be sufficiently advanced for it to be considered for adoption at a diplomatic conference in the 2002-2003 biennium.

Draft resolution on Guidelines on shipowners’ responsibilities in respect of maritime claims

In connection with provision of financial security for other claims (i.e., other than passenger claims), the Committee approved a draft resolution incorporating IMO Guidelines on shipowners’ responsibilities in respect of maritime claims, for submission to the 21st Assembly in November.

The guidelines are intended to encourage all shipowners to take steps to ensure that claimants receive adequate compensation following incidents involving their ships – in other words, to establish the minimum insurance cover that ships should carry.

Draft wreck removal convention

The Committee reviewed a revised draft of the proposed wreck removal convention, which is intended to provide international rules on the rights and obligations of States and shipowners in dealing with wrecks and with drifting or sunken cargo which may pose a hazard to navigation and/or pose a threat to the marine environment. The draft convention is intended to clarify rights and obligations regarding the identification, reporting, locating and removal of hazardous wrecks, in particular those found beyond territorial waters.

The Committee urged the correspondence group on wreck removal to continue developing the draft text and to report at the next session.

The draft convention covers:

- reporting and locating ships and wrecks – covering the reporting of casualties to the nearest coastal State; warnings to mariners and coastal States about the wreck; action by the coastal State to locate the ship or wreck;
- determination of hazard – sets out who is responsible for determining whether a hazard exists when the wreck or ship is beyond territorial waters, based on a list of specific criteria, including depth of water above wreck and proximity of shipping routes;
- rights and obligations to remove hazardous ships and wrecks – sets out when the shipowner is responsible for removing the wreck and when a State may intervene;
- financial liability for locating, marking and removing ships and wrecks;
- time-bar – sets a time limit for claims for compensation;
- jurisdiction – sets out jurisdiction(s) where actions for compensation may be brought;
- financial security – sets out security required to cover liabilities regarding claims for compensation under the convention;
- settlement of disputes.

Correspondence group on HNS Convention implementation set up

The Committee agreed to establish a correspondence group to review progress and any issues relating to implementation of the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances (HNS) by Sea, 1996.

The Convention, when it enters into force, will make it possible for compensation to be paid to victims of accidents involving hazardous and noxious substances, such as chemicals.

The Convention to date has no contracting parties, and will only enter into force 18 months after the following conditions have been fulfilled:

- 12 States have accepted the Convention, four of which have not less than two million units of gross tonnage
- Provided that persons in these States who would be responsible to pay contributions to the general account have received a total quantity of at least 40 million tonnes of contributing cargo in the preceding calendar year.

The aim of the correspondence group is to provide a forum for an exchange of views concerning HNS implementation issues and to follow the implementation process in States. It aims to provide guidance on issues regarding the implementation and operation of the HNS Convention, with a view to an early entry into force of the HNS Convention at a global level.

IMO/LO working group on seafarer claims meets

The Joint IMO/International Labour Organization (ILO) Ad Hoc Expert Working Group on Liability and Compensation regarding Claims for Death, Personal Injury and Abandonment of Seafarers met during the session. (See separate article on page 12.)

The Committee noted that the full report on the outcome of the meeting would be submitted to the next session. The Working Group reports to the IMO Legal Committee and to the ILO Governing Body.
New publications from IMO

Recent titles from IMO's Publishing Service include a new edition of Ships' Routeing and several Model Courses updated to take account of the revised STCW Convention. There are also two new electronic publications and updates of several existing ones.

The seventh edition of IMO's Ships' Routeing incorporates all amendments up to and including those adopted in December 1998. There are new schemes off Spain, Singapore and South Africa and in the Straits of Malacca, as well as a whole new part H dealing with archipelagic sea lanes, including a partial system in Indonesian archipelagic waters.

IMO's programme of Model Courses followed the adoption of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978. Many Courses have now been revised and updated to reflect the changes in the Convention introduced by the 1995 amendments, for example: Model Courses 1.02, 1.04 and 1.06, which provide specialized training for oil, chemical and liquefied gas tankers; 1.07 and 1.08, which cover the use of radar and ARPA at the operational and management levels; 7.01 to 7.04, which provide the mandatory minimum training for master and chief mate, chief and second engineer officer, officer in charge of a navigational watch and engineer officer in charge of a watch. The process of updating continues, and many other Courses are scheduled to appear early in 2000. For a catalogue, see below.

On the electronic publications side, there are two new CD-ROMs. The IAMSAR Manual on CD-ROM provides the complete text of all three volumes of the joint IMO/ICAO International Aeronautical and Maritime Search and Rescue Manual in English, French and Spanish. IMO Labels and Symbols on CD-ROM provides digital files containing images of IMO symbols relating to life-saving appliances and arrangements, fire control plans, alarms and indicators and dangerous goods, as well as full information on their use.

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Sixteen West and Central African States have signed a Memorandum of Understanding (MOU) on port State control, at a meeting in Abuja, Nigeria which ended on 22 October 1999.

With the signing of the West and Central Africa MOU, only the Gulf area and the Black Sea remain uncovered by similar regional port State control agreements.

The first regional agreement on port State control was signed in Paris in 1982 and this Paris Memorandum for Europe was followed by the Viña del Mar Agreement for Latin America, the Tokyo Memorandum for Asia and the Pacific, the Caribbean, the Mediterranean and the Indian Ocean MOUs. Memorandums for the Gulf area and the Black Sea are expected to be signed early in 2000.

The Abuja meeting was organized by IMO and financed by the Nigerian Government.

The MOU was signed by Benin, Cape Verde, Congo, Côte d'Ivoire, Gabon, Gambia, Ghana, Guinea, Liberia, Mauritania, Namibia, Nigeria, Sénégal, Sierra Leone, South Africa and Togo. Angola, Cameroon and Equatorial Guinea, who attended the meeting, agreed to sign the MOU at a later date.

The Abuja meeting was attended by representatives of IMO, and supported by the Maritime Organization of West and Central Africa (MOWCA). The International Labour Organization (ILO), the Port Management Association of West and Central Africa (PMAWCA), and the Union of African Shippers Council (UASC) also participated in the meeting.

The foundations for the West and Central Africa MOU were laid during an initial preparatory meeting of the States concerned in Accra, Ghana, in February 1998, and the second preparatory meeting was held in January 1999 in Conakry, Guinea.

During the five-day meeting in Abuja, participants finalized the MOU as well as a set of administrative measures to carry out work in the three-year interim period until the MOU becomes fully effective.

Training measures to improve the maritime Administration infrastructure and human resource capability of the participating States, approved at the earlier meeting in Conakry, were endorsed. The aim is to develop a Regional Training Programme for Flag State surveyors and port State control inspectors for the West and Central African region.

The Regional Secretariat for the MOU will be established in Lagos, Nigeria while a regional Information Centre will be set up in Abidjan, Côte d'Ivoire.

The MOU that was signed in Abuja is similar to other regional PSC agreements already established around the world. All countries have the right to inspect ships visiting their ports to ensure they meet IMO requirements regarding safety and marine pollution-prevention standards, and experience has shown that port State control works best when it is organized on a regional basis.

The West and Central Africa MOU will also cover port State control inspections on smaller ships (below 500 gross tonnage) which are not generally covered by most IMO regulations. These ships tend to trade inter-regionally.

Like the other agreements, the West and Central Africa MOU requires each maritime authority which is a signatory to the agreement to establish and maintain an effective system of port State control and sets for the region's maritime Administrations an annual required total of inspections of at least 15% of the estimated total number of foreign merchant ships entering the region's ports during the year, within a period of three years after the MOU becomes effective.

The MOU encourages exchange of information so that standard ships can be identified and targeted. On the other hand, ships which have been inspected by one port State within the preceding six-month period and found to be complying with all safety and marine pollution-prevention rules will not be subject to dual or repetitive inspections.

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