Australian Government
Australian Maritime Safety Authority

Submission to the Senate Inquiry into the increasing use of so-called Flag of Convenience shipping in Australia

Rural and Regional Affairs and Transport References Committee

The Australian Maritime Safety Authority (AMSA) is a statutory authority established under the *Australian Maritime Safety Authority Act 1990* with its primary role to minimise the risk of shipping incidents and pollution in Australian waters, through ship safety and environment protection regulation and services, and maximise people saved from maritime and aviation incidents through search and rescue coordination.

AMSA's submission addresses those aspects of the terms of reference for the inquiry that relate to functions undertaken by AMSA. AMSA's submission relates to the terms of reference in (b) in full, in part to the terms of reference in (c) and (d) and in full to the terms of reference in (e).

September 2015

Terms of Reference (b): 'the general standard of Flag of Convenience vessels trading to, from and around Australian ports, and methods of inspection of these vessels to ensure that they are seaworthy and meet required standards'.

Inspection Methods

AMSA seeks to ensure that ships are seaworthy and meet required standards through:

- highly developed and timely ship monitoring, risk assessment and intelligence gathering arrangements;
- a stringent and highly effective port State control (PSC) regime;
- an international reputation that deters substandard ships from coming to Australia;
- "naming and shaming" substandard ships and associated parties;
- effective compliance and enforcement arrangements;
- highly trained and experienced staff; and
- international engagement at the International Maritime Organization (IMO) and at regional meetings and conferences of governments, operators, builders, owners, crew and Classification Societies.

Flag States have primary responsibility to ensure their ships are constructed, maintained, manned and operated according to international standards. PSC inspections are the internationally accepted method to ensure that foreign ships are in a seaworthy condition and operated in accordance with a range of international safety and environmental protection conventions when in the port of another State. The relevant conventions include the:

- International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended;
- International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 and by the Protocol of 1997 (MARPOL);
- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) as amended, including the 1995 and 2010 Manila Amendments;
- International Management Code for the Safe Operation of Ships and for Pollution Prevention (ISM Code); and
- International Labour Organization's Maritime Labour Convention, 2006.

AMSA carries out PSC inspections in Australian ports to verify compliance with the requirements of these international maritime conventions. PSC inspections are conducted by AMSA inspectors, who are appointed under the *Navigation Act 2012*. AMSA inspectors hold maritime qualifications and are required to participate in a comprehensive training and auditing programme to support their professionalism, consistency and accountability.

The specific recruitment and training programme and associated detailed instructions and documentation, does not limit the ability of individual AMSA inspectors to act upon local knowledge and professional experience to determine which ships are inspected and the appropriate level of inspection in specific circumstances. For example, this is often borne out with more focus on charts and navigational practices in Great Barrier Reef ports than in north-west Australian ports, and more focus on structural aspects of bulk carriers in north-west Australian ports than in south-eastern ports.

AMSA has applied PSC inspection rate targets based on calculated risk of detention since 2000. AMSA engaged the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in 2007 to re-assess the method of risk assessment and, based on the outcome of this research, refined AMSA's risk assessment and inspection target. The risk factor takes into account criteria such as, but not limited to, ship type, flag, age and inspection history. This has allowed AMSA to more efficiently target higher risk ships and to allocate resources accordingly.

Prior to 2007 AMSA aimed to inspect 50 per cent of all eligible ships (not inspected in the previous six months). The refined risk profile aligned AMSA's inspection targets with the level of risk posed. For example, the inspection target for low risk ships is 20 per cent and the high risk ship inspection target is now 80 per cent. While a ship is selected for inspection primarily based on AMSA's risk-based ship inspection targeting scheme, other specific safety or environmental risks or specific complaints can also influence the decision to inspect a ship.

Since the original 'Ships of Shame' inquiry, the level of oversight of shipping around the Australian coast has increased substantially. Modern communications - such as Inmarsat polling, automatic identification systems (AIS), satellite AIS and shore-based radar deliver a clear representation of ships in Australian waters. In addition, the level of ship incident, breakdown and stoppage reporting has increased significantly in recent decades as a result of AMSA's efforts. Based on this information, AMSA has virtually 'real-time' maritime awareness of all ships within Australian waters. This allows far greater monitoring of ship activities than ever before and this information is used to assist in the targeting of ships for inspection based on not only historical data such as inspection history but also based on recent operational activities.

National and regional co-operative arrangements have developed significantly over the last decade. These co-operative arrangements have delivered substantial communication channels with other organisations and countries that bring better information to enable refined and very responsive targeting techniques. These communication channels allow Australia to pursue matters with foreign administrations when a ship is outside Australian waters.

Ships can be issued with deficiencies where they are found to be in breach of convention requirements or poorly operated and are detained should deficiencies be identified which render them sub-standard or unseaworthy.

Where a review of performance identifies that ships and/or companies pose an increased risk to the safety or welfare of seafarers, or jeopardise the protection of the environment, AMSA may issue a Direction Notice under the *Navigation Act 2012* refusing a ship access to Australian ports for a specified duration or requiring that the ship meet specific requirements when approaching or using Australian ports. The duration that a ship is refused access is escalated for repeated incidences of non-compliance. Direction Notices have been issued by AMSA that refuse ships access for a period of up to 12 months. Direction Notices have also been issued to ships requiring specific actions be taken when approaching any Australian port. Prior to the introduction of the *Navigation Act 2012* the ability to ban a ship from Australian ports had not existed in Australian maritime legislation. These powers of direction have now been used by Australia.

These new direction powers also allow AMSA to take action against all ships under the management of an operator. In the past, compliance action was limited to a single ship and specifically for items identified on that ship.

AMSA routinely assesses shipping trends, based on both historical information and port and cargo growth expectations.

When shipping trends and ship risk profiles are combined with maritime domain awareness, this information allows AMSA to reposition itself to respond to changes in shipping around Australia's coast. For example, based on these assessments, AMSA has increased resources in the far north-west of Australia, opened a new office in Geraldton and increased resources in ports such as Newcastle and Gladstone.

AMSA is highly respected internationally in the area of PSC activities and remains an active participant in developing guidance on the conduct of PSC inspections at the IMO to enhance consistency in the conduct of inspection, recognition of deficiencies of a ship, its equipment or its crew, and the application of control procedures. AMSA was instrumental in the development of the IMO Resolution on the Procedures for Port State Control (Resolution A.1052(27)) which defines how PSC is conducted around the world.

PSC is an effective means of ensuring safe shipping internationally. However, it does not negate the need to effectively foster a safety culture by responsible owners/managers on ships under their control and the oversight of those ships by the flag State under international convention requirements.

Recognising that greater effectiveness of PSC activities is achieved through regional cooperation, AMSA fosters regional cooperation through the Asia Pacific Memorandum of Understanding (Tokyo MOU) on port State control and the Indian Ocean Memorandum of Understanding on port State control (IOMOU).

Through these MOUs, data sharing via the Asia Pacific Computerized Information System (APCIS) and the Indian Ocean Computerised Information System (IOCIS) have enhanced access to detailed information about a ship's inspection history. AMSA has developed a comprehensive database, referred to as Shipsys. The Shipsys database contains information received from various sources on a large number of ships. This information includes general particulars of a ship along with the PSC inspection history from within both the IOMOU and Tokyo MOU.

AMSA also acknowledges that PSC is a highly responsive mechanism which primarily addresses issues after they have arisen. To be proactive, AMSA utilises its website to publish information about its inspection regime (including information about the methods of inspection and potential matters AMSA is looking to address). This assists ship crews and operators to arrive in Australia in an appropriate condition. AMSA also participates in international forums to educate traders to Australia about the Australian community's expectations whilst they operate within Australian waters.

Following the initial '*Ships of Shame*' report, AMSA commenced publishing details of all detentions on a monthly basis. This includes details of the ship, the owner, operator, charterer and nature of detention. In addition, PSC annual reports review the past year's performance. AMSA has used traditional and social media to draw attention to ships/operators that do not meet acceptable standards and recognise the commercial significance of publically available information and the subsequent response generated. For example, after using direction powers to ban a company's ships from operating to Australia ports, and publishing the ban, the company's Chief Executive Officer issued a press release which stated, in part:

> ***"We will be going all out to take the necessary preventive actions to improve safety and we will spare no efforts in our obligation to meet and exceed the high International standards which AMSA is safe guarding."***

As a means of receiving independent feedback on Australia's approach, in 2008 AMSA participated in the IMO voluntary audit scheme. The objective of the audit scheme is to determine the extent to which member States meet obligations imposed upon them through their adoption of the applicable mandatory IMO instruments and to determine the effectiveness of their implementation. The audit scheme will become mandatory under the IMO Instruments Implementation (III) Code for all IMO member States from 2016.

Following the 2008 audit, the audit team, comprising of IMO member State representatives from the United States, Turkey and India, concluded that:

> ***"Australia substantially meets its obligations in respect of the mandatory IMO instruments, 2007. The audit identified a number of areas of good practice which were innovative and of considerable assistance to the maritime community"***

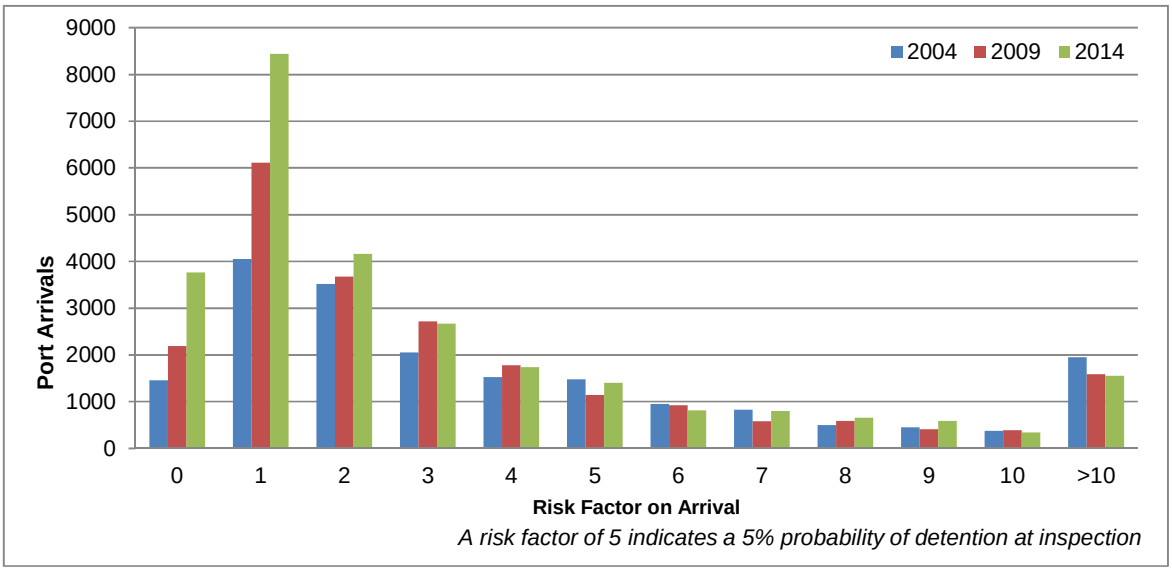
General Standard of Shipping

The age of a ship is a significant factor in determining a ship's risk profile. In 2014, the average age of the world fleet was 20.2 years; the average age of ships in the top 10 flag fleets (by gross tonnage) was 13.1 years; and the Australian flagged fleet's average age was 19.8 years[1]. The average age of foreign ships visiting Australian ports in 2014 was 8.4 years.

The fact that the average age of ships visiting Australia is less than half the average age of the world fleet demonstrates the outcomes achieved through AMSA's PSC inspection regime and is a measure of the effectiveness of AMSA's reputation in conducting rigorous PSC inspections.

Improvements in the quality of foreign flag ships visiting Australia is also evident through the reduction in the 'probability of detention' of ships visiting Australia over the last 10 years. The graph below identifies a significant increase in the arrival of 'low risk' ships or ships with a probability of detention of less than one per cent. This also demonstrates a reduction in the arrival of 'high risk' ships or ships with a greater than 10 per cent probability of detention.

Graph 1: Probability of Detention



In relation to individual ships, 82 per cent of the foreign fleet visiting Australian ports in 2014 had a probability of detention of less than three per cent.

Details of the results of PSC inspections conducted within Australia are reported in the annual PSC reports available at http://www.amsa.gov.au/forms-and-publications/International/publications/Ship-Safety/PSC-Annual-Reports/index.asp.

[1] World Fleet *(Clarkson Research Services)*

A summary of the PSC and flag State control (FSC) activity over the last 11 continuous years, along with relevant data for 1994, is provided in Table 1 and Table 2.

Table 1: Port State Control

	1994	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Inspections	2266	3201	3072	3080	2963	2795	2994	3127	3002	3179	3342	3742
Detentions	143	173	154	138	159	225	248	222	275	210	233	269
Detention %	**6.3%**	**5.4%**	**5%**	**4.5%**	**5.4%**	**8.1%**	**8.3%**	**7.1%**	**9.2%**	**6.6%**	**7%**	**7.2%**
Deficiencies	8699	7467	7980	8972	7290	9083	9059	7488	8405	7775	8183	10892
Deficiency rate	**3.8**	**2.3**	**2.6**	**2.9**	**2.5**	**3.3**	**3**	**2.4**	**2.8**	**2.4**	**2.4**	**2.9**
Arrivals at Australian ports	11800 (est)	19138	20265	20793	21295	22922	22101	23168	23786	25115	25697	26936
Individual foreign flagged ships	2406	3311	3593	3688	3800	4025	4341	4598	4899	5102	5447	5674

The increasing percentage of detentions since 2007 identified in Table 1 in part reflects the refined and improved risk-based targeting of higher risk ships. Since 2007 a significant number of international requirements have been imposed. Whilst contributing to better safety outcomes, there has been an increase in the number of requirements and the number of deficiencies available to be issued.

While ship requirements have not remained static and a direct comparison of performance based on detention or deficiency rates is not possible, overall, the quality of foreign flag ships visiting Australian ports is continually improving. This is largely due to Australia's reputation for rigorous PSC activity.

The following table gives the detention and deficiency rates for Australian flagged ships subject to inspections by AMSA. The level of FSC inspection applied by AMSA is very similar to that applied to PSC.

Table 2: 10 Year Summary of Flag State Control

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Inspections	111	94	99	88	90	79	84	76	93	80
Detentions	0	1	3	2	2	3	6	3	5	3
Detention	**-**	**1.1%**	**3%**	**2.3%**	**2.2%**	**3.8%**	**7.1%**	**3.9%**	**5.4%**	**3.8%**
Deficiency rate	**2.8**	**3.5**	**3.9**	**3.8**	**3.9**	**3.4**	**4.4**	**2.7**	**3.9**	**4**

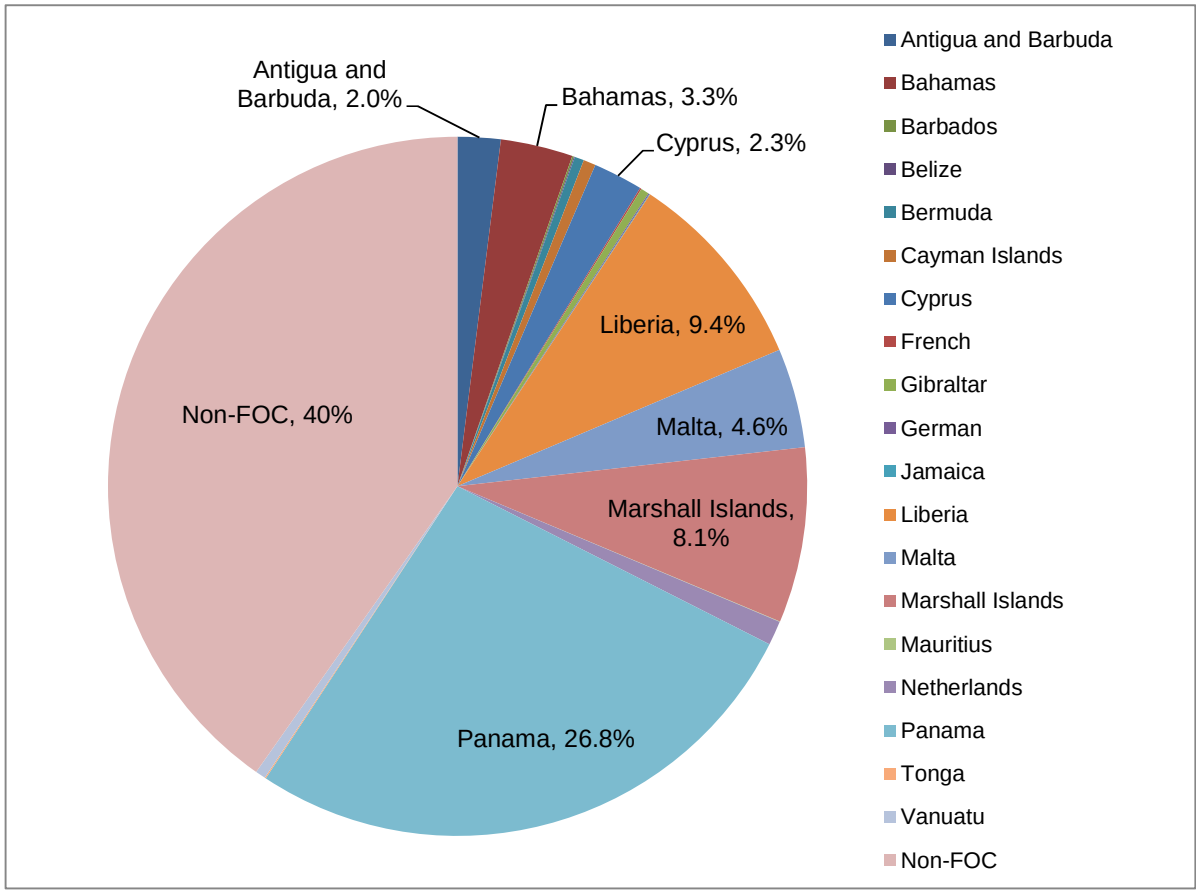
'Flag of Convenience'

The following 34 countries have been declared as '*flag of convenience*' by the International Transport Federation's Fair Practices Committee:

Antigua and Barbuda	Faroe Islands (FAS)	Moldova
Bahamas	French International Ship Register	Mongolia
Barbados	German International Ship Register	Netherlands Antilles
Belize	Georgia	North Korea
Bermuda (UK)	Gibraltar (UK)	Panama
Bolivia	Honduras	Sao Tome and Príncipe
Burma	Jamaica	St Vincent
Cambodia	Lebanon	Sri Lanka
Cayman Islands	Liberia	Tonga
Comoros	Malta	Vanuatu
Cyprus	Marshall Islands (USA)	
Equatorial Guinea	Mauritius	

The *flag of convenience* ships accounted for 60 per cent of all PSC inspections carried out in 2014, as shown in the graph below:

Graph 2: Share of PSC Inspections in Australia *(flags with more than 25 inspections)*



In 2014, *flag of convenience* ships accounted for 60 per cent of inspections. However, of the nine flag States that had a deficiency rate greater than the average (2.9), 56 per cent (five out of nine) were *flag of convenience* States. In addition, of the 14 flag States that had detention rates greater than the average (7.2 per cent), only 50 per cent were *flag of convenience* States (seven out of 14).

Noting that in 2014 the average rate of detention was 7.2 per cent and the average rate of deficiencies per inspection was 2.9, in regard to the *flag of convenience* fleet performance, Table 3 provides some insight.

Table 3 - Summary of 2014 Flag State PSC Performance in Australia *(with 10 or more PSC inspections)*

Flag State	PSC Inspections	Deficiencies	Deficiency Rate	Detentions	Detention Rate	Share of PSC Inspections	Share of Detentions
Antigua And Barbuda*	**74**	**321**	**4.34**	**15**	**20.3%**	**2.0%**	**5.6%**
Bahamas*	**125**	**371**	**2.97**	**11**	**8.8%**	**3.3%**	**4.1%**
Bermuda*	**16**	**22**	**1.4**	**0**	**0.0%**	**0.4%**	**0.0%**
Cayman Islands	**21**	**22**	**1.0**	**0**	**0.0%**	**0.6%**	**0.0%**
China	103	222	2.16	1	1.0%	2.8%	0.4%
Cyprus*	**86**	**334**	**3.88**	**10**	**11.6%**	**2.3%**	**3.7%**
Denmark	22	68	3.09	1	4.5%	0.6%	0.4%
Gibralta	14	41	2.9	0	0.0%	0.4%	0.0%
Greece	78	167	2.14	11	14.1%	2.1%	4.1%
Hong Kong	431	1077	2.50	19	4.4%	11.5%	7.1%
India	11	30	2.73	1	9.1%	0.3%	0.4%
Indonesia	15	175	11.67	10	66.7%	0.4%	3.7%
Isle Of Man	70	128	1.83	1	1.4%	1.9%	0.4%
Italy	15	32	2.13	1	6.7%	0.4%	0.4%
Japan	68	92	1.35	2	2.9%	1.8%	0.7%
Korea, Republic Of	73	192	2.63	4	5.5%	2.0%	1.5%
Liberia*	**350**	**978**	**2.79**	**31**	**8.9%**	**9.4%**	**11.5%**
Malaysia	16	48	3.00	2	12.5%	0.4%	0.7%
Malta*	**172**	**523**	**3.04**	**15**	**8.7%**	**4.6%**	**5.6%**
Marshall Islands*	**303**	**767**	**2.53**	**19**	**6.3%**	**8.1%**	**7.1%**
Netherlands	42	78	1.9	0	0.0%	1.1%	0.0%
Norway	44	62	1.4	0	0.0%	1.2%	0.0%
Panama*	**1002**	**3272**	**3.27**	**74**	**7.4%**	**26.8%**	**27.5%**
Philippines	29	138	4.76	3	10.3%	0.8%	1.1%
Singapore	376	1030	2.74	18	4.8%	10.0%	6.7%
Switzerland	11	47	4.27	1	9.1%	0.3%	0.4%
Taiwan	13	38	2.9	0	0.0%	0.3%	0.0%
Thailand	11	22	2.0	0	0.0%	0.3%	0.0%
United Kingdom	34	72	2.12	3	8.8%	0.9%	1.1%
Vanuatu*	**18**	**47**	**2.61**	**2**	**11.1%**	**0.5%**	**0.7%**

**Flag of Convenience state*

While noting the difficulty of using detention and deficiency rates as a measure of comparable performance, AMSA has examined the performance of so-called *flag of convenience* ships compared to all PSC inspections and PSC inspections for non-flag of convenience ships. AMSA has also examined the average amount of time a ship was delayed beyond its scheduled sailing time as a potential indicator of the relative significance of detentions. A summary of the analysis is provided in Tables 4 and 5.

Table 4: Detentions – 20 year PSC and FSC summary

	FSC Detention rate	**PSC*** Detention rate (all)	**PSC*** Detention rate (FOC only)	**PSC*** Detention rate (non-FOC)	% detained ships delayed beyond scheduled sailing	Average delay over all detained ships
1994	0	6.3%	6.9%	5.9%	-	2.1 days
2004	1.1%	5.4%	5.8%	4.4%	25%	0.3 days
2014	3.8%	7.2%	8.3%	5.8%	39%	0.6 days

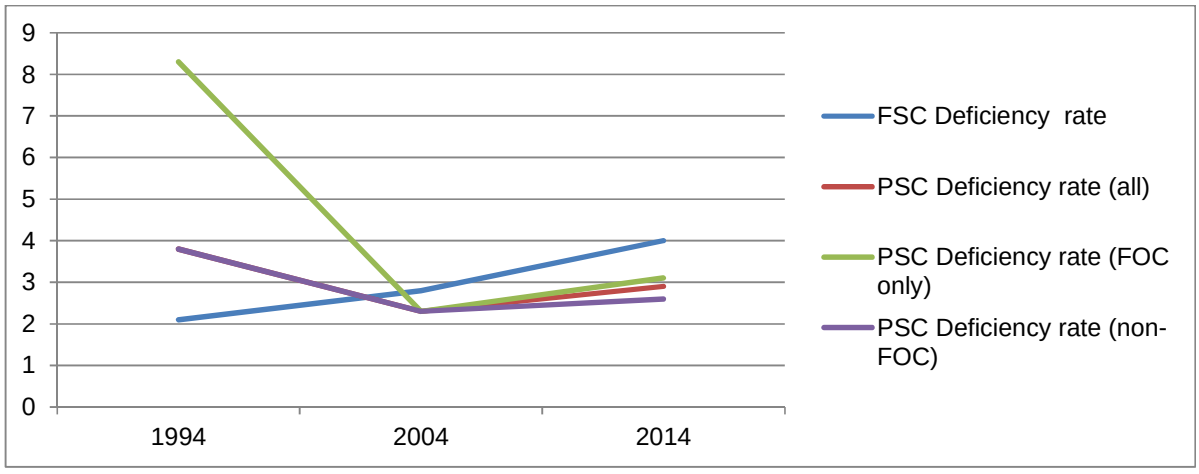
Table 5: Deficiencies – 20 year PSC and FSC summary

	FSC Deficiency rate	**PSC*** Deficiency rate (all)	**PSC*** Deficiency rate (FOC only)	**PSC*** Deficiency rate (non-FOC)
1994	2.1	3.8	8.3	3.8
2004	2.8	2.3	2.3	2.3
2014	4.0	2.9	3.1	2.6

** includes data for flags with more than 10 PSC inspections*

In regard to the rate of deficiencies, *flag of convenience* ships had a significant improvement between 1994 and 2004. Since 2004 *flag of convenience* ships have performed comparably to all foreign flag ships. It is also noted that Australian flag ship deficiency rates have steadily been increasing, which is likely to be due to the increasing age of the Australian fleet.

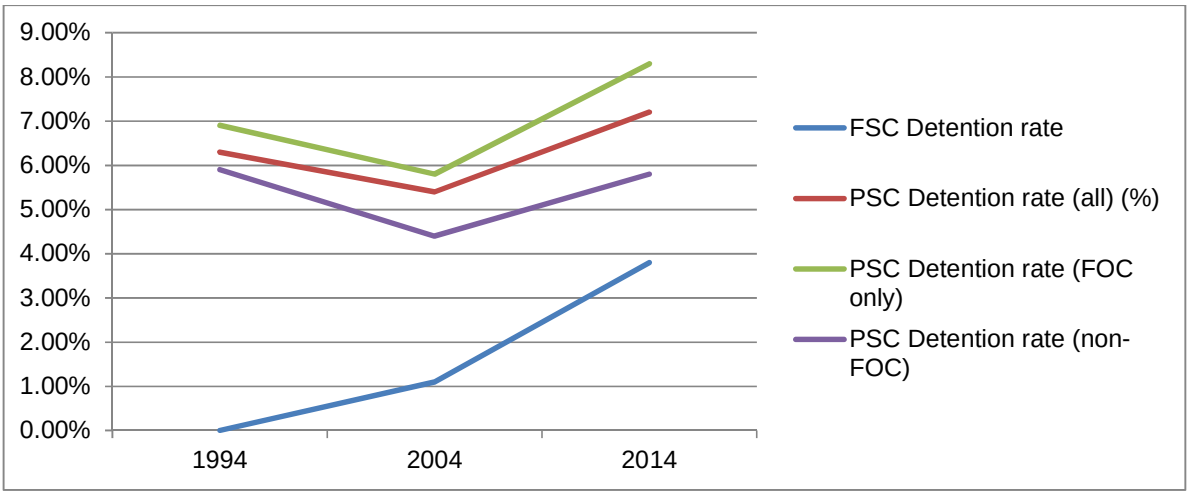
Graph 3: Rates of Deficiency – *flag of convenience* ships 1994 - 2014



In regard to detention, the rate for *flag of convenience* ships continues to be higher than that of other foreign flagged ships calling to Australian ports. However, the relative difference has remained reasonably consistent, with only a minor increase over the last 20 years.

It is also clear that over the last two decades the average duration of delay beyond the scheduled departure time has reduced significantly. In the context that the duration of port stays has also reduced significantly over this period, this reduction in periods of delay means the trend is more significant and strongly suggests that the severity of detentions has also reduced.

Graph 4: Rates of Detention – *flag of convenience* ships 1994 - 2014



Terms of Reference (c): 'the employment and possible exposure to exploitation and corruption of international seafarers on Flag of Convenience ships'.

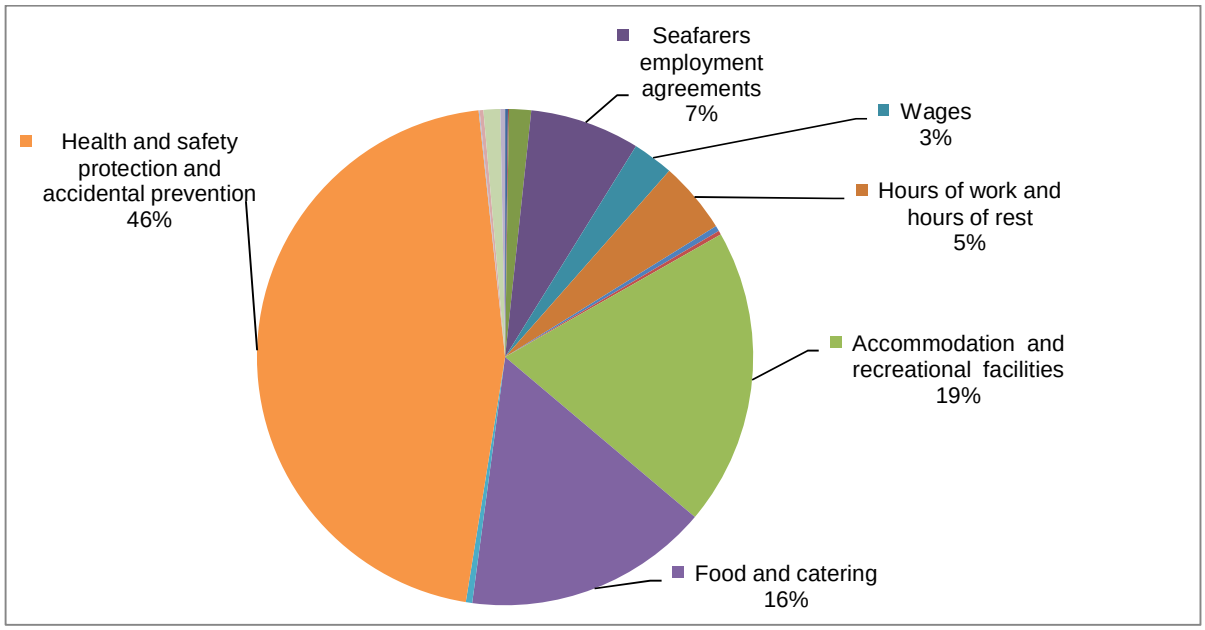
AMSA is charged with ensuring seafarers' working and living conditions are in accordance with the mandatory requirements of the *Maritime Labour Convention* 2006 (MLC), an international convention developed under the International Labour Organization (ILO). Australia ratified this convention on 21 December 2011 and the MLC entered into force internationally on 20 August 2013.

Among the essential elements of the MLC is the right to decent working and living conditions on board, fair terms of employment and a safe and secure workplace. The MLC applies to all international vessels visiting Australian ports.

The MLC is implemented in Australia through the *Navigation Act 2012* and *Marine Order 11 (Living and working conditions on vessels) 2015*. These legislative instruments provide for a variety of enforcement actions.

Compliance with the MLC is verified during PSC inspections. In 2014, there were a total of 1,652 MLC related deficiencies identified during the 3,742 PSC inspections carried out - this equates to 15 per cent of all deficiencies issued. The nature of these MLC deficiencies are categorised below.

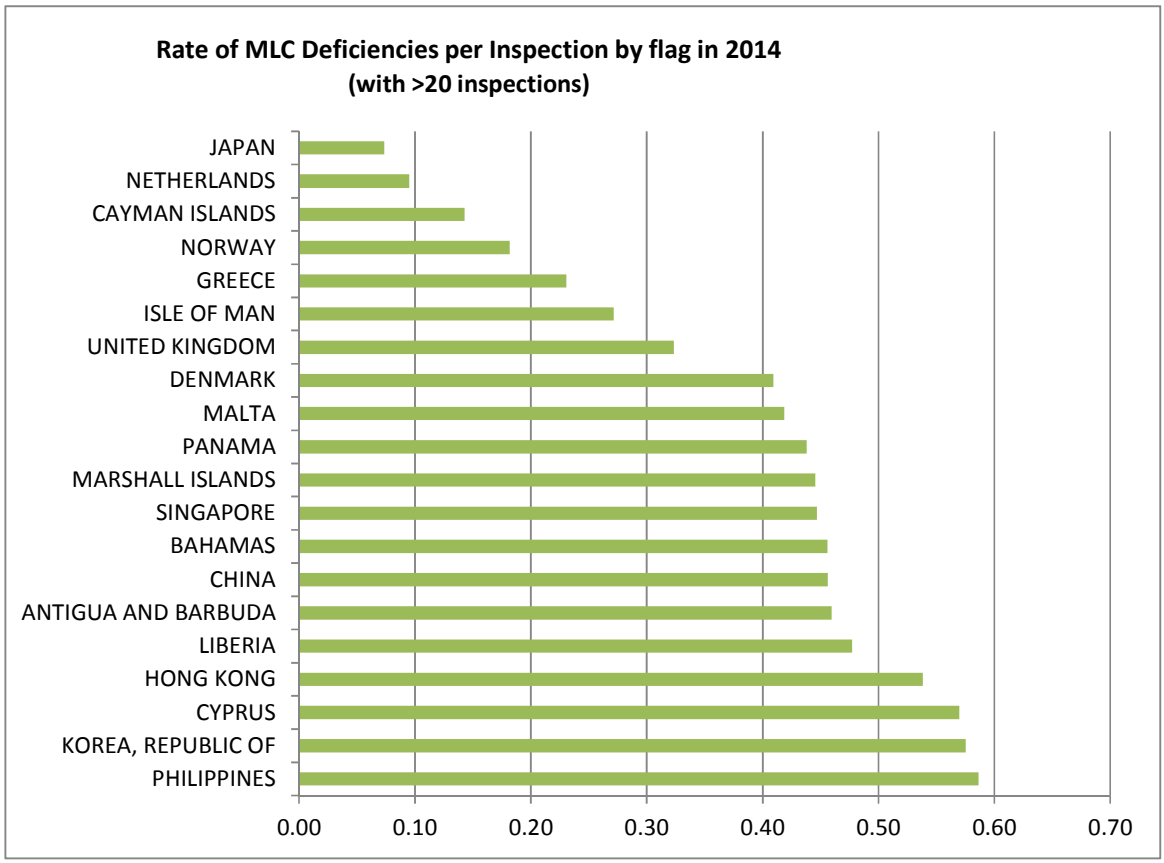
Graph 5: Nature of MLC Deficiencies 2014



In 2014, the deficiency rate for all PSC inspections was 2.9. Overall, the deficiency rate for MLC deficiencies in 2014 was 0.44. Graph 6 provides the rate of MLC deficiencies per PSC inspection in 2014 for flags with 20 or more PSC inspections.

In addition to the deficiency notices issued, ships that had not complied with MLC requirements were refused access to Australian ports.

Graph 6: Rate of MLC Deficiencies per inspection by flag in 2014



If analysis is limited to '*flag of convenience'* ships, the MLC deficiency rate for 2014 remains at 0.44.

The MLC requires ships to have an on board complaints procedure, allowing seafarers the opportunity to make a complaint about the working and living conditions on board without fear of recourse. The MLC also recognises that it may not always be appropriate for a seafarer to use the on board complaint system or that the complaint may not be able to be resolved at the shipboard level.

Accordingly, AMSA established an 'on shore' complaints reporting system providing avenues for seafarers to raise concerns external to ship board mechanisms. On shore complaints are provided to AMSA for consideration and, where considered justified, are subject to an investigation and more detailed inspection by AMSA.

In 2014, AMSA received 114 complaints from seafarers as well as other government agencies, seafarer welfare groups, agents, pilots and members of the general public with an interest in the welfare of seafarers. As a result, deficiencies were issued against 56 ships and eight ships were detained for MLC-related breaches. Thirty four of the 114 complaints were unsubstantiated (30 per cent), eight were resolved at shipboard level and eight were not related to MLC matters. There were also 16 complaints that were not actionable by AMSA because the ship was no longer in Australian waters and these matters were referred to the flag State for further investigation.

AMSA actively promotes compliance beyond the minimum standards. In doing so, AMSA surveyors foster relationships and actively encourage other government agencies, ships agents and port authorities to report on welfare irregularities and breaches of the MLC.

AMSA's commitment to implementation and ongoing enforcement of the MLC was recognised by the Australian Council of Trade Unions 2014 submission to the ILO on the application of conventions and recommendations:

Extract from Australian Council of Trade Unions submission - 2014 Comments to the ILO Committee of Experts on the Application of Conventions and Recommendations

MARITIME LABOUR CONVENTION (MLC)

80. The ACTU and our affiliate, the Maritime Union of Australia, welcome the ratification and implementation of the MLC.

81. The amendments made to the Navigation Act 2012 and to various Marine Orders made under that Act have ensured that Australian laws are fully compliant with the Convention. We consider that the introduction of the MLC in Australia has perhaps been the most successful in the world according to the Australian Inspectorate of the International Transport Workers Federation (ITF) which works closely with the Australian regulator, the Australian Maritime Safety Authority (AMSA), in implementing the Convention.

82. AMSA has worked with ITF inspectors in training all of their inspectors in how to best obtain opportunities within the MLC, and in assisting seafarers to ensure the benefits of the Convention, as applied through the law, are achieved.

83. Most importantly AMSA has established a national body to work around the distribution of seafarer's welfare information which is only a recommendation within the Convention and not a mandatory provision. The ITF Inspectorate has been highly active and has helped steer this body into a more defining and useful process to operationalise the MLC in Australia.

84. As evidence of the Australian commitment to implementation of the Convention, AMSA has detained more than 12 ships under the Convention.

Terms of Reference (d): 'discrepancies between legal remedies available to international seafarers in state and territory jurisdictions, opportunities for harmonisation, and the quality of shore-based welfare for seafarers working in Australian waters'.

AMSA has legislative authority to ensure vessel owners and operators fulfil their obligations under the MLC. However, shore-based welfare is not a mandatory requirement.

Nonetheless, recognising that a positive living and working environment contributes to safe working practices, better safety outcomes and reduces injuries, AMSA established the Australian Seafarers' Welfare Council (ASWC). This group is facilitated, organised and chaired by AMSA. Membership comprises representatives from the shipping industry, government, the International Transport Federation (ITF) and seafarer welfare organisations.

The ASWC is a consultative forum that promotes seafarer welfare and the services available in Australian ports to support and protect seafarers. ASWC members are committed to ensuring a seafarer's well-being on board and ashore. Since its establishment, the ASWC has made a concerted effort to promote, encourage and support implementation and delivery of seafarer welfare services at Australian ports as well as facilitating a national network of seafarer support arrangements.

In addition to supporting the work of the ASWC, AMSA surveyors play an active role in the maritime community and are members of various seafarer welfare groups which keep them abreast of welfare matters.

Whilst the AMSA on shore complaints system is not technically a legal remedy, it is one effective method for seafarers to resolve matters of wellbeing such as pay, employment conditions, leave, food, etc.

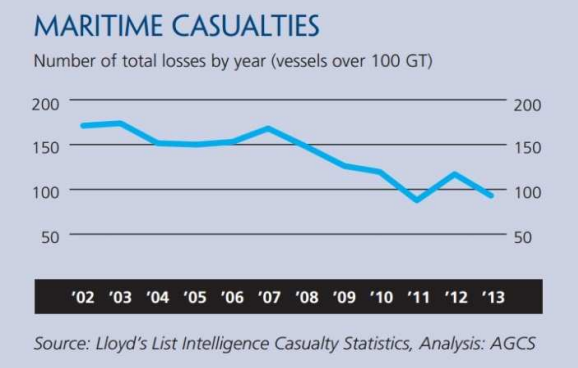
Terms of Reference (e): 'progress made in this area since the 1992 House of Representatives Standing Committee on Transport, Communications and Infrastructure report *Ships of shame: inquiry into ship safety'.*

AMSA is at the forefront with other sectors of the maritime industry in recognising the more critical aspect of seafarer wellbeing.

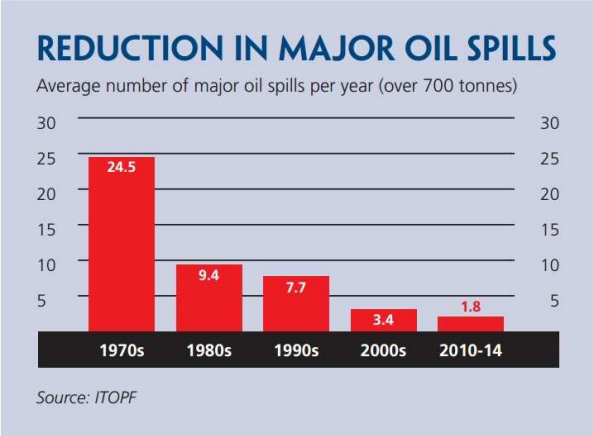
The principal areas of concern identified in the *Ships of Shame* report related to the international effort in improving ship safety - of the ship, its operation and treatment of crew. Major achievements have been made to the international maritime industry since 1992, with improvements to international conventions and arrangements which deliver better safety outcomes, notably:

- The SOLAS Chapter XI-1 and Resolution A.1049(27) International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers, 2011 resolution details survey inspection requirements, including supporting documentation to be available onboard, survey programme, structural plans, repair history, cargo and ballast history, inspections by ships personnel history and any other information that would help to identify critical structural areas and/or potential areas requiring inspection.
- The mandatory MARPOL requirement (implemented in 1993) for tankers to be fitted with double hulls was made mandatory for new ships built beyond this date. The IMO also accelerated the phase-out schedule for single hull tankers.
- The ISM Code, promulgated by the IMO, began application from 1998 and was fully implemented by 2001. This quality management code for shipping companies and their ships has directly improved the quality levels of international shipping.
- STCW 95 and the STCW Manila amendments increased the emphasis internationally on crew competencies and ship operations, along with a focus on fatigue.
- Improved governance and accountability of Classification Societies. Most flag States delegate responsibilities for applying and monitoring compliance with international standards on board ships to these organisations.
- Improved and new ship vetting services to enable users of shipping to be informed of the risks posed by the ships they might charter.

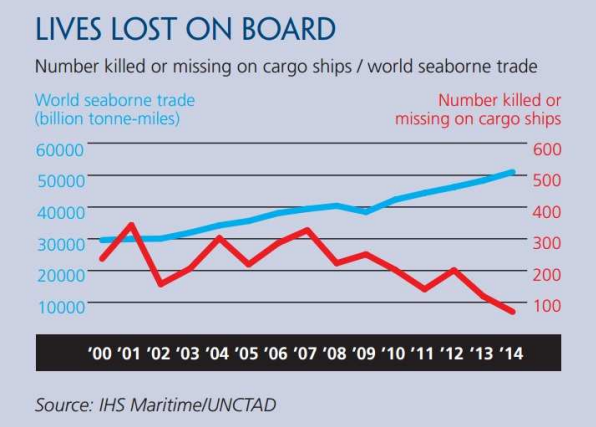
These improvements are considered to directly correlate to the reduction in maritime casualties, serious oil spills and the number of lives lost on board international trading cargo ships. While it is too early to identify a direct correlation, it is anticipated that the MLC will have a similar effect on safety outcomes. The following charts published by the International Chamber of Shipping provide the average statistics on maritime casualties, serious oil spills and lives lost on board:



Graph courtesy of International Chamber of Shipping



Graph courtesy of International Chamber of Shipping



Graph courtesy of International Chamber of Shipping

Port State Control

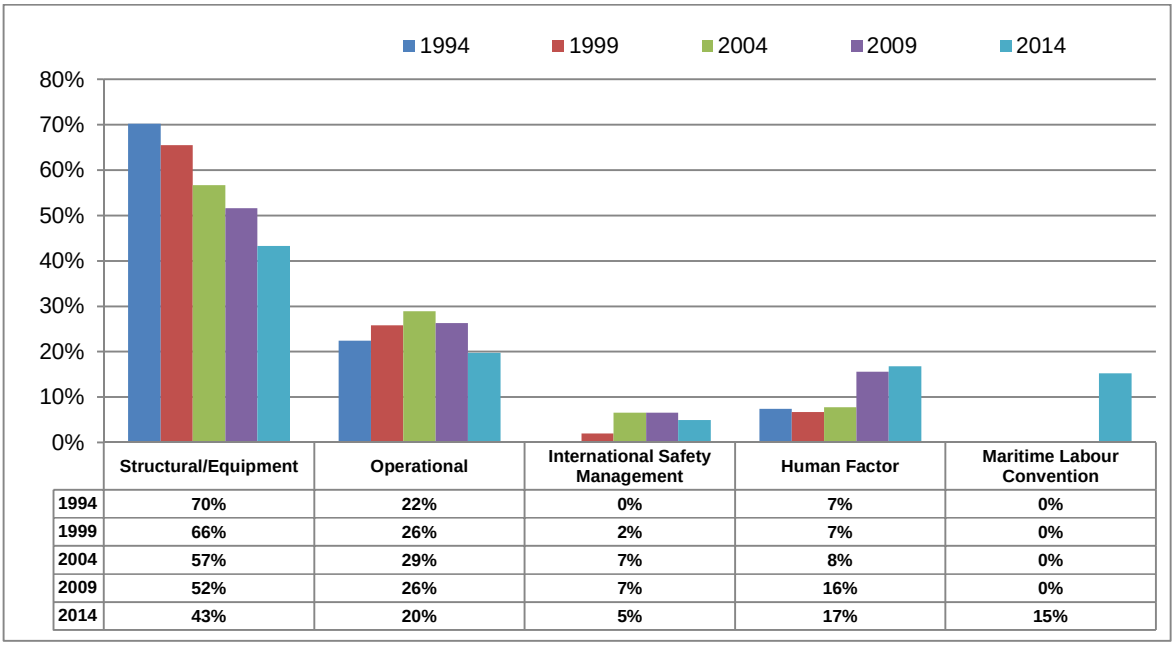
The 1992 *Ships of Shame* inquiry recognised Australia's reputation for conducting PSC inspections as tangible proof that a vigorous PSC inspection programme can be effective in deterring substandard ships from coming to Australia.

The 1992 *Ships of Shame* Report identified that internationally:

> *"Of the 47 bulk carriers lost between 1988 and 1991, 80 per cent suffered structural failure and 92 per cent of them were over 10 years old"*

Graph 7 identifies the improvements in the number and nature of deficiencies identified on ships, particularly in relation to ship structure and equipment. In 1994, 70 per cent of deficiencies related to the structure and equipment of the ship. In stark contrast, in 2014, 43 per cent equate to deficiencies related to the structure and equipment of ships. A dramatic reduction in the number and nature of deficiencies is testament to Australia's vigilance with PSC inspection.

Graph 7: Nature of deficiencies (1994 - 2014)



	Structural/Equipment	Operational	International Safety Management	Human Factor	Maritime Labour Convention
1994	70%	22%	0%	7%	0%
1999	66%	26%	2%	7%	0%
2004	57%	29%	7%	8%	0%
2009	52%	26%	7%	16%	0%
2014	43%	20%	5%	17%	15%

In addition, the severity of deficiencies identified in the 1990s - compared to deficiencies found today - differ significantly. No ship has been detained in an Australian port for extensive and widespread corrosion of structural members that has threatened the overall integrity of the hull "girder" for some years.

Ship operations

The improved structural quality of ships has enabled AMSA to focus more on operational aspects of ship safety. The enhanced focus on operational matters explains the increase over time in the number of deficiencies in Operational, International Safety Management and Human Factors.

In further recognition of the importance of promoting a safety culture, AMSA established a dedicated Ship Operations Section to promote the development and integration of Human Factors and System Safety best-practice within the maritime domain.

International shipping

The 1992 *Ships of Shame* report noted that actions to improve ship safety need to be taken at the national and international level.

AMSA maintains a strong international presence and actively promotes and influences continuous improvements to international shipping practice. Examples include:

- Appointment of an Australian Permanent and Alternate Permanent Representative to the IMO.
- The recent appointment of an AMSA senior executive as Chairman of the IMO Maritime Safety Committee, the senior technical body on safety-related matters.
- Australian Chairmanship of the IMO Human Element, Training and Watchkeeping sub-committee.
- Participation by AMSA in development of the IMO Code which stipulates the principles to which member States should adhere to achieve a maritime administration capable of improving performance standards that achieve best practice for the benefit of maritime safety and pollution prevention.
- Australian chairmanship of working and correspondence groups in the development and review of the IMO resolution on PSC.
- Australia's current review of the IMO fatigue management guidelines to incorporate contemporary fatigue science and useful management tools with the assistance of international partners.
- Australia has advanced environmental protection measures through the IMO, such as the Particularly Sensitive Sea Areas of north-east Australia and associated protective measures, including 'areas to be avoided' in north-west Australia.
- Australia is a signatory to and active member of both the Tokyo MOU and Indian Ocean MOU. The Tokyo MOU was established in 1994 and now consists of 19 member authorities in the Asia-Pacific region. The Indian Ocean MOU was established in 1999, and now consists of 17 member authorities.
    - These arrangements have enhanced the effectiveness of identifying unsafe ships, coordinating action to ensure serious deficiencies are rectified before departure and ensures that all deficiencies are rectified within appropriate timelines.

AMSA has a proven history in supporting technical capacity building, particularly in the Asia-Pacific, actively supporting partnerships in the international maritime community to transfer skills and knowledge and is a regular participant of the IMO Technical Cooperation Committee. Continued engagement ensures collaboration and achieves tangible safety outcomes through activities such as:

- A Memorandum of Understanding (MOU) with the IMO on technical cooperation;
- Tokyo and Indian Ocean MOUs;
- Asia Pacific Heads of Maritime Safety Agencies (APHOMSA);
- Indonesian Transport Safety Assistance Package (ITSAP) – which aims to build the domestic training capacity in Indonesia for greater self-reliance on maritime safety;
- MOU with China Maritime Safety Authority and China Classification Society;
- Pollution response training; and
- Maritime Professional Development Program.

Australia is a longstanding member of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) Council. Australia plays a leading role in IALA's work in key areas such as vessel traffic services and e-navigation. The use of vessel monitoring data and the transmission and display of navigational information in electronic form is vital to the future of maritime safety across the globe. Australia is at the forefront of influencing developments in these areas and in the areas of aids to navigation management and engineering.

Classification Societies

The 1992 *Ships of Shame* inquiry highlighted consistent international application of operating criteria for Classification Societies.

AMSA has recognised a number of Classification Societies, all of which are members of the International Association of Classification Societies. These Classification Societies provide survey and certification for ships registered in Australia. AMSA's agreements with Classification Societies were recently amended to implement the III Code, a mandatory code to provide criteria for States to comply with to meet their obligations as flag and port States as well as the framework and procedures for the IMO member State audit scheme. Accepting that these Classification Societies also provide the same services to other flag States, AMSA monitors the performance history of ships classed by Classification Societies.