



Australian Government

Australian Maritime Safety Authority

PORT STATE CONTROL 2016 REPORT AUSTRALIA



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This report and AMSA detention data is available on the ship safety pages of www.amsa.gov.au.

2016 PORT STATE CONTROL REPORT



AUSTRALIA

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PURPOSE OF THIS REPORT

Australia has one of the largest mixed market economies, and is the largest continental landmass in the world surrounded by water. Therefore, our national livelihood remains focused on ensuring that maritime trade to and from Australia remains safe, efficient and complies with all relevant international conventions. Australia relies on sea transport for 99 per cent of its exports, which equates to around 10 per cent of the world's sea trade. Port State control (PSC) is an essential element in this process and Australia is renowned for having a rigorous and effective PSC control regime.

This report summarises the PSC activities of the Australian Maritime Safety Authority (AMSA) and reports on the performance of commercial shipping companies, flag States and Classification Societies for the 2016 calendar year.

AMSA is a statutory authority established under the Australian Maritime Safety Authority Act 1990 (the AMSA Act).

Our principal functions are:

- promoting maritime safety and protection of the marine environment
- preventing and combating ship-sourced pollution in the marine environment
- providing infrastructure to support safety of navigation in Australian waters
- providing a national search and rescue service to the maritime and aviation sectors.

To meet government and community expectations, we are empowered to perform an enforcement function for maritime trade through the implementation of rigorous flag State control (FSC) and PSC regimes. The operation of professional, consistent FSC and PSC regimes are essential in ensuring vessels comply with minimum standards in a manner that promotes maritime safety, seafarer welfare and protection of Australia's 60,000 kilometres of coastline (including 12,000 islands) from environmental damage.

We work closely in cooperation with the International Maritime Organization (IMO) and PSC partner nations across the Asia-Pacific region and Indian Ocean, sharing PSC information and actively participating in international policy development. These efforts are aimed at ensuring we are a transparent, trusted and consistent member of the maritime community.

Under our FSC program, we are responsible for operational safety standards of Australian-registered trading ships wherever they may be in the world.

As information on PSC activities is used by a diverse customer base on a regular basis, we supply current information via our website (amsa.gov.au), including monthly ship detentions, ongoing PSC activities, current shipping trends and emerging issues. We identify and promulgate government regulation and important marine observations through marine orders and marine notices respectively.

YEAR IN REVIEW

Introduction

The changes to the shipping industry's regulatory framework by the *Navigation Act 2012* and the adoption of the *Maritime Labour Convention, 2006* (MLC) had their third full year in effect in 2016. This has enabled a maturing of the knowledge of the implementation of the MLC.

In 2016, Australia's response to ships and operators who performed poorly on a consistent basis resulted in the use of the directions power provided in section 246 of the *Navigation Act 2012* to ban two ships from entering or using Australian ports for periods from 3-12 months.¹

The PSC processes used for the MLC are now more established and it appears the understanding of what is expected with respect to compliance has improved. This has resulted in a reduction in the total number of MLC deficiencies and deficiencies per inspection in the period from 2014 to 2016. However, the ratio of detainable MLC deficiencies increased.

A number of detentions appeared to be related to the down turn in the global shipping industry leaving some ship owners and operators in financial difficulties. We understand this factor may present a challenge in maintaining the quality of ships visiting Australian ports. Such factors emphasise the need for maintenance of a firm, but fair, PSC inspection regime.

¹ In exercising this power it is important to note that we only employ this mechanism where normal PSC intervention has not been effective in achieving a lasting change in behaviour. It is only used where a systemic failure has been identified. The essential intent of the process is to improve performance rather than simply remove problem vessels from Australian ports.



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22G1

ADM

GROSS 24000 KG
52910 LB
TARE 2330 KG
.140 LB
NET 21670 KG
47.770 LB
CUBE 33.1 CU.M
1.169 CU.FT

UGMU 872
22G1

GROSS 24000
52910
TARE 2330
5.140
NET 21670
47.770
CUBE 33.1
1.169

EMJU 3636299
22G1

GROSS 30.480 KG
67.200 LB
TARE 2.400 KG
5.290 LB
NET 28.080 KG
61.910 LB
CUBE 33.1 CU.M
1.169 CU.FT

EISU 352
22G1

GROSS 24000 KG
52910 LB
TARE 2400 KG
5.280 LB
NET 21600 KG
47.620 LB
CUBE 33.1 CU
1.169 CU



2016 summary of PSC activity

- During the calendar year there were:
 - 27,516 ship arrivals by 5719 foreign-flagged ships
 - 3675 PSC inspections
 - 246 ship detentions.
- Bulk carriers accounted for 51% of ship arrivals and 58% of PSC inspections.
- PSC inspections were carried out in 54 Australian ports.
- The average gross tonnage per visit was 50,505 GT compared to 48,011 GT in 2015.
- The average age of vessels in 2016 was nine years, compared to 10 in 2015.
- Our surveyors conducted 8576 inspections of all types in 2016 compared to 10,536 in 2015. This decrease was through better targeting of higher risk ships.

10-year summary of inspection, detentions and deficiency rate

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total inspections	2963	2795	2994	3127	3002	3179	3342	3742	4050	3675
Total detentions	159	225	248	222	275	210	233	269	242	246
Detention %	5.4	8.1	8.3	7.1	9.2	6.6	7.0	7.2	6.0	6.7
Deficiencies per inspection	2.5	3.3	3.0	2.4	2.8	2.4	2.4	2.9	2.3	2.4

Snapshot comparison to previous year

		2015	2016	When compared to 2015	
Arrivals	Total arrivals	27344	27516	0.6%	(an increase of 172)
	Individual ships which made those arrivals	5644	5719	1.3%	(an increase of 76)
	Ships Eligible for PSC Inspection	5418	5502	1.6%	(an increase of 84)
PSC inspections	Total PSC inspections	4050	3675	-9.0%	(a decrease of 363)
	Total PSC inspections - by individual ships	3502	3271	-6.6%	(a decrease of 231)
	Inspection rate of eligible ships %	65%	59.5%		
	Total deficiencies	9484	8942	-5.7%	(a decrease of 542)
Deficiencies	Total detainable deficiencies	347	353	1.7%	(an increase of 6)
	Rate of deficiencies per inspection	2.3	2.4	4.3%	
Detentions	Total detentions	242	246	1.7%	(an increase of 4)
	Detentions as a percentage of total inspections	6.0%	6.7%	11.7%	

Key points

- The number of inspections decreased in 2016.
- In 2016 the number of foreign-flagged arrivals increased by 172 (0.6%) to 27,516. The arrivals were made by 5719 individual ships, an increase of 76 (1.3%). The number of PSC inspections conducted during 2016 decreased by 283 (9.3%) to 3765 inspections. This is due to fewer inspections of lower priority ships.
- Inspections of all types carried out by our surveyors also decreased from 10,536 in 2015 to 8576 in 2016, a decrease of 22.8%. This was due in part to the rationalisation of some inspection types and changes to domestic legislation.
- Ships had mixed performance in 2016. There was a 5.7% decrease in the number of deficiencies—from 9484 deficiencies in 2015 to 8942 deficiencies in 2016—but a 1.7% increase in the number of detainable deficiencies from 347 detainable deficiencies in 2015 to 353 detainable deficiencies in 2016.
- The number of detained vessels was 246, four more (2%) than the 242 detentions recorded in 2015. This is slightly higher than the 10 year median of 238.
- There was also a slight increase in the average number of deficiencies per inspection rising from 2.3 in 2015 to 2.4 in 2016 with the detention rate increasing from 6% in 2015 to 6.7% in 2016.

While there was an increase in the detention rate and rate of deficiencies per inspection, both values remain low in the context of the 10 year summary table. The overall picture indicates our PSC regime continued to exert a positive influence on the quality of shipping in 2016.

Top five initial PSC inspections by flag State 2016

<p>There was a total of 3675 foreign- flag vessels inspected in 2016.</p> <p>The top five flags accounted for 65% of all inspections while the top 12 accounted for 86% of the total.</p>	Flag State (number of inspections)
	Panama (942) 25.6%
	Hong Kong (426) 11.6%
	Singapore (368) 10%
	Liberia (360) 9.8%
	Marshall Islands (358) 9.7%

Top five detention rates by flag State 2016

<p>There was a total of 246 foreign- flagged vessels detained in 2016.</p> <p>The average detention rate for all vessels was 6.7%.</p>	Flag State (detention rate)
	Taiwan (Province of China) (4) 22.2%
	Netherlands (2) 11.8%
	Italy (2) 10%
	Antigua and Barbuda (5) 10%
	France (1) 8.3%

Note: This table only covers vessel types with 10 or more inspections

Trends for 2016

Looking at past PSC annual reports, the most prevalent cause of detention since 2010 relates to operation of the safety management system required by the International Safety Management (ISM) Code. Issues to do with passage planning and conduct of voyages contributed significantly to the number of ISM detentions and remain a concern for us.

In 2016 material issues such as fire safety (13.9%), emergency systems (12.5%) and lifesaving appliances (12.5%) continued to be a regular cause of detention. This has been a consistent trend over the years 2014-16.

Top 5 detainable deficiencies 2014-2016

2014	2015	2016
ISM – 31.2%	ISM – 29.7%	ISM – 27.8%
Fire safety - 14.0%	Fire safety – 15.9%	Fire safety – 13.9%
Pollution prevention – 10.4%	Pollution prevention – 11.2%	Emergency systems – 12.5%
Emergency systems – 8.3%	Emergency systems – 9.8%	Lifesaving appliances – 12.5%
Lifesaving appliances – 11.4%	Lifesaving appliances – 8.6%	Water/weather-tight conditions – 4.8%

During 2016, we continued to work with flag States and ship owners to try and improve performance with regards to requirements related to fire safety, lifesaving appliances and pollution prevention.



Summary of shipping industry activity 2016

With more than 99% of Australia's international trade by weight transported by sea, and the majority of that being dry bulk cargoes, the recent growth in demand for iron ore and coal exports has resulted in much lower shipping growth in arrivals of 0.6% in 2016 compared to 4.7% per cent in 2014.

As was the case in 2015, the growth in cargo volumes is typically being delivered by a combination of more port visits and larger ships. The fleet profile of foreign-flagged ships visiting Australian ports has not changed much, although the average age of vessels continued to decrease.

The main trends in 2016 were as follows:

- Foreign-flagged port visits totalled 27,516 in 2016, an increase of 0.6% from 2015. The number of individual ships that made these port calls increased slightly to 5719, an increase of 76 (1.3%) over the 5644 in 2015.
- Bulk carrier port arrivals showed 2.7% growth in 2016 maintaining 51% of foreign-flagged port arrivals. Gas carriers continued the increasing trend, with 28.4% of arrivals. General cargo and livestock vessel arrivals decreased by 10% and 9% respectively.
- The growth in foreign-flagged shipping activity remains geographically disparate. Port Hedland remains the busiest Australian port for foreign ship visits, accounting for 10.3% of arrivals nationwide.
- The trend of visiting ships increasing in size continued with average gross tonnage increasing from 48,011 in 2015 to 50,505 in 2016.
- The average age of all foreign vessels arriving continued to decrease. The average vessel age was nine years in 2016.
- From 2013-16 there was a steady reduction in the number and proportion of priority one vessels and an increase in the number and proportion of priority four vessels (see table 1).

Table 1 – Port visits

Priority*	2014		2015		2016	
	Number of visits	Fleet share	Number of visits	Fleet share	Number of visits	Fleet share
P1	4,756	17.7%	4,660	17.1%	4,282	15.6%
P2	3,128	11.6%	2,906	10.6%	3,274	11.9%
P3	6,846	25.4%	7,468	27.3%	6,867	25.0%
P4	12,206	45.3%	12,310	45.0%	13,093	47.6%
Total	26,936	100.0%	27,344	100.0%	27,516	100.0%

* See page 31 for more details on priority groups.

2016 Maritime Labour Convention results

The Maritime Labour Convention, 2006 (MLC) is an international convention developed by the International Labour Organization. It consolidates a number of existing labour conventions and introduces modern standards relating to the living and working conditions of the world's 1.5 million seafarers.

In 2016 we received a total of 133 complaints pertaining to 179 alleged breaches of the MLC with respect to the living and working conditions on board vessels. These complaints originated from a number of sources, including seafarers themselves, other government agencies, seafarer welfare groups, pilots and members of the general public with a vested interest in the welfare of seafarers. Following investigation of the complaints received, deficiencies were issued against 32 vessels and seven vessels were detained for MLC-related breaches. During this time there were a total of 246 port State detentions across all deficiency types.

A breakdown of the complaints received per regulation for 2016, are detailed in table 2.

Of the complaints received, 52 were through the International Transport Workers Federation (ITF), 38 directly from seafarers, 20 from various welfare groups, 13 from government agencies and 10 from other sources.

A total of 68 complaints were substantiated, nine were forwarded to the Fair Work Ombudsman for investigation and four were unable to be investigated due to the vessel departing and not returning to Australian waters. No evidence could be found to substantiate the remaining complaints.

Table 2 – Percentage breakdown of complaints received per regulation in 2016

Note. One complaint may contain several categories.

Category of complaints received for 2016	
Wages	48
Seafarers Employment Agreement	14
Hours of work and hours of rest	15
Food and catering	40
Accommodation and recreational facilities	9
Health and safety protection and accident prevention	11
Repatriation	16
Entitlement to leave	5
Manning levels	2
Medical care on board ship and ashore	7
Manning levels	2
Onboard complaint procedures	1
Bullying and harassment	11

Table 3 – 2016 MLC results

	Total deficiencies	MLC deficiencies	Total detainable deficiencies	MLC detainable deficiencies	Total detentions	MLC detentions
Bulk carrier	5918	615	214	17	157	12
Chemical tanker	208	38	10	1	8	1
Container ship	753	149	32	3	22	1
Gas carrier	75	7	7	0	4	0
General cargo/ Multipurpose ship	527	78	33	2	20	2
Heavy load carrier	68	19	4	1	2	1
Livestock carrier	151	15	3	0	3	0
NLS tanker	33	6	3	0	3	0
Offshore service vessel	21	1	1	0	1	0
Oil tanker	309	52	11	0	5	0
Passenger ship	75	16	2	0	1	0
Refrigerated cargo vessel	18	5	0	0	0	0
Ro-ro cargo ship	27	3	1	0	1	0
Special purpose ship	31	1	4	0	2	0
Tugboat	216	15	14	1	7	1
Vehicle carrier	264	38	9	3	7	2
Wood-chip carrier	212	32	5	0	3	0
Other types of ship	36	1	0	0	0	0
	8942	1091	353	28	246	20





As 2016 was the third full year after the implementation of the MLC, it is notable that the rate of deficiencies and percentage of total deficiencies remained quite steady.

- In 2016 the rate of MLC deficiencies per inspection dropped slightly to 0.3 compared to 0.4 for 2015 and 2014.
- The number of MLC deficiencies recorded in 2016 dropped by 24.3% from 1443 in 2015 to 1091. Noting the reduction in the total number of deficiencies from 9484 in 2015 to 8942 in 2016, the relative proportion of MLC deficiencies decreased marginally from 15.2% in 2015 to 12.2% in 2016.

Of the 353 detainable deficiencies issued in 2016, 28 were related to MLC requirements. This accounted for 8 per cent of the total detainable deficiencies making the category the sixth most prevalent cause of detention in 2016. MLC was also the sixth most prevalent cause of detention in both 2014 and 2015.

A comparison of the 2015 and 2016 results indicates a slight improvement with respect to number of MLC deficiencies and deficiencies per inspection. Detainable deficiencies are relatively static over the two years suggesting consistency in the port State control inspections. An MLC inspection snapshot for 2016 and 2015 is provided in table 4.

Table 4 – Comparative MLC inspection snapshot for 2016 and 2015

	Statistics for MLC	
	2016	2015
We inspected 3675 ships and issued 8942 deficiencies in 2016.	1091 deficiencies issued	1443 deficiencies issued
	MLC deficiencies 12% of the total	MLC deficiencies 15.2% of the total
353 of these deficiencies were detainable	0.3 deficiencies per inspection relate to MLC	0.4 deficiencies per inspection related to MLC
	28 detainable deficiencies	26 detainable deficiencies
	8% of detainable deficiencies	7.5% of detainable deficiencies

ANALYSIS OF 2016 INSPECTION RESULTS

Arrivals

We conducted PSC inspections in 54 ports across Australia. The growth in traffic and ship size was distributed unevenly across the 69 ports visited by foreign ships in 2016.

Ship arrivals in Australian ports for 2016

A total of 27,516 ships arrived at Australian ports during 2016.	Arrivals – top 5 Ports
	Port Hedland 2829 (10.3%)
	Brisbane 2393 (9%)
	Newcastle 2248 (8%)
	Sydney 2098 (8%)
	Melbourne 2018 (7%)

Port Hedland was the busiest port based on foreign-flagged vessel arrivals, being predominantly bulk iron ore. Port Hedland and Newcastle indicate the dry bulk market has a large share of arrivals, with the ports of Brisbane, Sydney and Melbourne predominantly the liner container trade.



Figure 1 – 2016 port arrivals by ship type

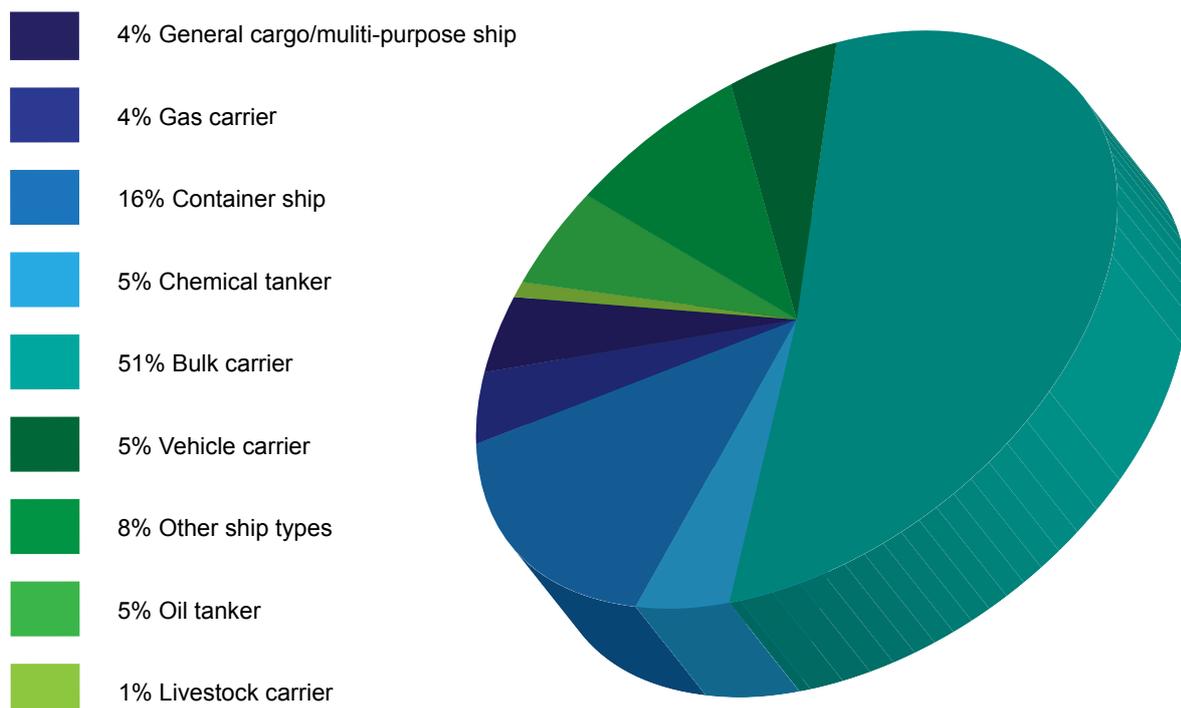


Table 5 – Ship arrivals in 2016 compared to 2015

Ship type	2015	2016	Change
Bulk carrier	13826	14145	2.7%
Chemical tanker	1445	1380	-4.1%
Container ship	4288	4340	1.3%
Gas carrier	825	1057	28.4%
General cargo/Multi-purpose	1265	1164	-10.4%
Livestock carrier	401	366	-9.0%
Oil tanker	1194	1276	4.4%
Vehicle carrier	1480	1484	0.3%
Other	2620	2304	-11.7%
Total arrivals	27,344	27516	2.0%

Inspections by ship type

In 2016, our surveyors carried out 3675 initial PSC inspections and 2391 PSC follow up inspections in compliance with international conventions, associated codes, resolutions and Australian legislation.

PSC inspections by ship type

We conducted 3675 PSC inspections in 2016.	2016 top 5
	1. Bulk carrier - 2132 (58%)
	2. Container ships - 342 (9.3%)
	3. Oil tankers - 227 (6.2%)
	4. Chemical tanker - 208 (5.7%)
	5. Vehicle carrier - 197 (5.4%)

Table 6 shows the number of inspections by vessel type, presented over a five-year period covering 2012-16. In 2016, there was a growth in the number of oil tankers and chemical carriers calling into Australia.

Table 6 – Total ships inspected by type

Ship type	2012	2013	2014	2015	2016
Bulk carrier	1787	1850	2122	2389	2132
Chemical tanker	126	138	169	187	208
Combination carrier	0	0	3	0	0
Container ship	306	298	342	378	342
Gas carrier	45	53	53	79	74
General cargo/ multi-purpose ship	246	262	232	174	163
Heavy load carrier	56	60	55	48	25
High speed passenger craft	0	0	1	0	0
Livestock carrier	29	43	55	52	57
MODU or FPSO	4	0	1	4	0
NLS tanker	17	15	26	24	28
Offshore service vessel	9	17	24	22	10
Oil tanker	211	235	243	218	227
Other types of ship	10	20	26	27	21
Passenger ship	38	39	42	52	51
Refrigerated cargo vessel	4	4	5	5	4
Ro-ro cargo ship	12	12	6	6	6
Ro-ro passenger ship	0	1	1	0	0
Special purpose ship	8	5	8	18	14
Tugboat	40	57	88	91	40
Vehicle carrier	178	181	184	209	197
Wood-chip carrier	52	52	56	67	77
Totals	3179	3342	3742	4050	3675

Inspection by location

A total of 3675 port State control inspections were conducted in 2016.	2016 top 5	
	1. Fremantle - 449 (12.2%)	
	2. Newcastle – 401 (10.9%)	
	3. Brisbane - 304 (8.3%)	
	4. Sydney - 282 (7.7%)	
	5. Dampier - 281 (7.6%)	

It proved to be another busy year for our marine surveyors in spite of a 9.3% decrease in the number of initial inspections compared to 2015. Fremantle, Newcastle, Brisbane, Sydney and Dampier remained the five busiest ports for PSC activity and inspections.

Of the 54 ports at which inspections were conducted, the top 5 ports accounted for 47% of the 3675 initial PSC inspections undertaken in 2016. This is reflected in table 7.

Table 7 – PSC inspections by location (top 14 ports)

	2012	2013	2014	2015	2016	% of total in 2016
Fremantle, WA	354	414	437	467	449	12.2
Newcastle, NSW	392	333	355	424	401	10.9
Brisbane, QLD	268	201	350	338	304	8.3
Sydney, NSW	256	272	267	264	282	7.7
Dampier, WA	247	238	264	304	281	7.6
Hay Point, QLD	230	237	274	247	255	6.9
Gladstone, QLD	133	127	230	290	251	6.8
Port Hedland, WA	195	150	265	358	247	6.7
Port Kembla, NSW	175	195	171	164	162	4.4
Melbourne, VIC	185	176	190	204	151	4.1
Geraldton, WA	34	138	127	129	127	3.5
Townsville, QLD	133	164	136	139	115	3.1
Darwin, NT	126	143	156	124	94	2.6
Port Adelaide, SA	84	98	65	106	90	2.4

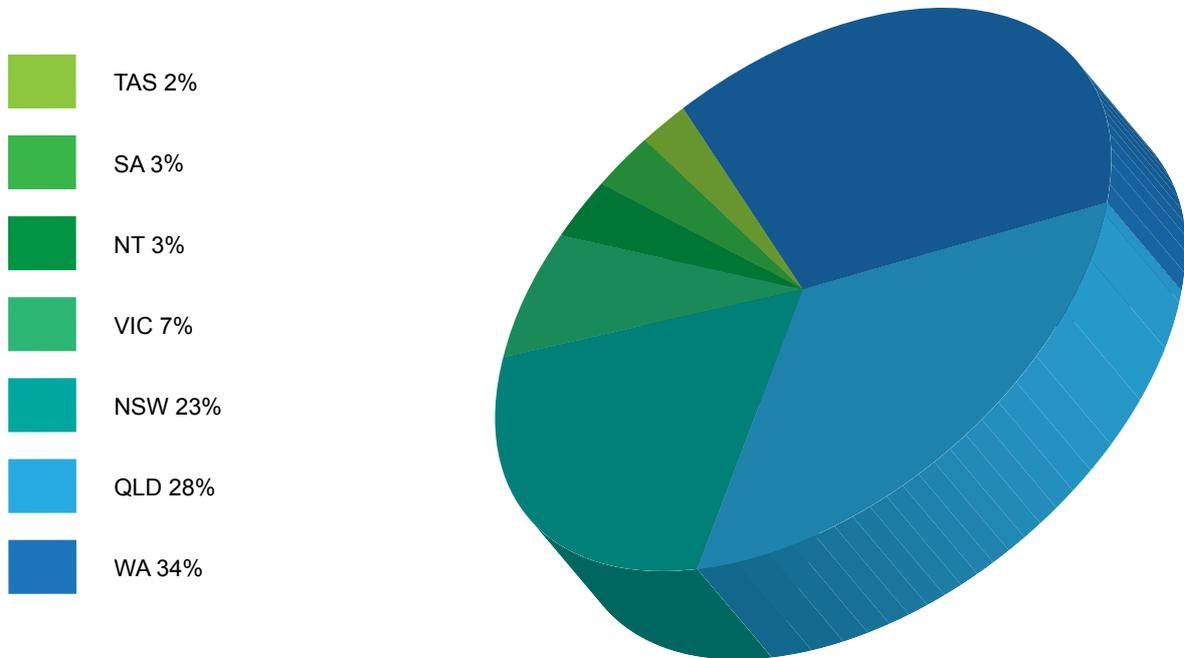
The number of PSC inspections carried out in Fremantle (+12.2%), Newcastle (+10.9%) and Dampier (7.6%) show the continued importance of the bulk goods trade.

Table 8 – PSC inspections by state/territory

State	PSC inspections
WA	1245
QLD	1047
NSW	846
VIC	250
NT	107
SA	102
TAS	78
Total	3675

State by state totals continue to emphasise the significance of the bulk cargo trade from Queensland and Western Australia and reflect the figures from previous years,

Figure 2 – PSC inspections in 2016 by state/territory



Inspections by flag State

Table 9 provides a five-year breakdown of the number of vessels inspected by flag State. The table does not identify any significant change in inspections by flag State over the last five years.

The flag State with the largest number of ships inspected by us was Panama with 942 ships (25% of the total). This is consistent with the 2014 and 2015 results.

Inspections of ships from the top 5 flag States—Panama, Hong Kong, Singapore, Liberia and Marshall Islands—accounted for 66 per cent of all PSC inspections. The top 12 flags with 25 or more inspections, listed in table 9, accounted for 3458 inspections, or 85.3% of all inspections.

Table 9 – PSC inspections by top 12 flag States

Top 12 Flag States	Number of Inspections				
	2012	2013	2014	2015	2016
Panama	936	918	1002	1045	942
Hong Kong, China	325	372	430	482	426
Singapore	265	287	375	427	369
Liberia	303	313	350	372	360
Marshall Islands	186	225	303	338	358
Malta	127	135	283	216	196
Bahamas	104	122	125	158	138
Cyprus	82	71	86	89	87
Greece	53	62	78	91	81
Japan	54	55	68	83	71
China	91	94	103	93	70
Isle of Man	50	58	70	63	54
Korea, (Republic of)	68	68	78	78	48

Figures in red are not in the top 12.

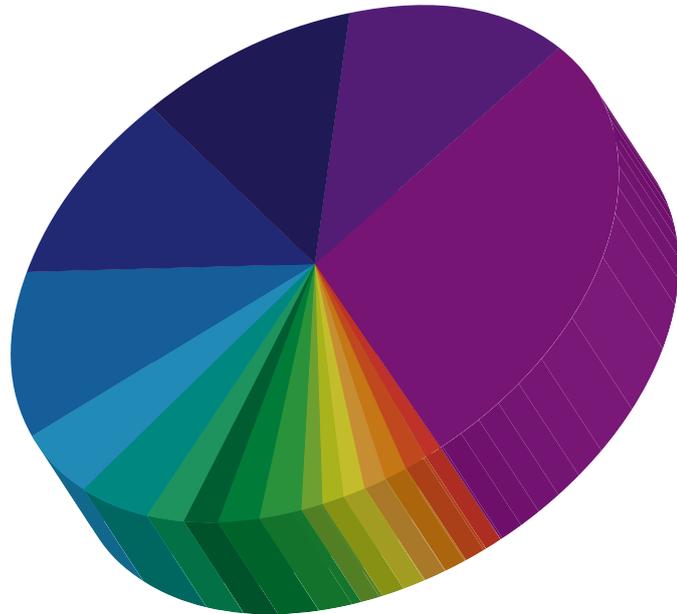
Table 10 – Total ships inspected by flag State

Flag State	2012	2013	2014	2015	2016
Antigua and Barbuda	83	84	74	66	51
Bahamas	104	122	125	158	138
Barbados	2	2	3	2	1
Belgium	8	12	7	6	6
Belize	2	3	2		
Bermuda	16	16	16	30	29
Brazil					1
Canada		1			
Cayman Islands	20	32	21	24	23
China	91	94	103	93	70
Comoros				1	1
Cook Islands	2	5	6	7	7
Croatia	3	6	3	4	5
Curacao	3	2	3	3	
Cyprus	82	71	86	89	87
Denmark	12	9	22	22	22
Dominica	2	1	1	1	
Egypt	5	4	3		
Estonia			2	1	
Faroe Islands					1
Fiji					2
France	4	2	3	4	13
Germany	14	10	2	2	7
Gibraltar	17	24	15	15	7
Greece	53	62	78	91	81
Honduras	1				
Hong Kong, China	325	372	430	482	426
India	23	18	11	18	7
Indonesia	7	8	15	11	5
Ireland	1				1
Isle of Man	50	58	70	63	54
Italy	35	28	15	22	20
Jamaica			1		1
Japan	54	55	68	83	71
Kiribati	1				
Korea (republic of)	68	68	73	76	48
Kuwait	3	3	4	4	3
Liberia	303	313	350	372	360
Libya	0	0	0	0	1
Luxembourg	3	7	8	2	11
Malaysia	14	10	17	8	8
Malta	127	135	172	216	196
Marshall Islands	186	225	303	338	358
Mauritius			1	1	
Netherlands	44	57	41	38	17
New Zealand	1	1	2	7	3
Norway	31	44	44	51	49
Pakistan	2		1	1	1
Panama	936	918	1002	1045	942
Papua New Guinea	14	14	8	8	9
Philippines	27	33	30	29	27
Portugal		3	7	8	21
Qatar		1			
Russian Federation	1				
Saint Kitts and Nevis	1			2	
Saint Vincent and the Grenadines		3	2	3	1
Samoa	2	1	2	1	
Saudi Arabia		1	1	2	2
Singapore	265	287	375	427	369
Solomon Islands		1		4	3
South Africa					1
Spain	1			2	1
Sri Lanka	1	1			1
Sweden	12	8	8	9	14
Switzerland	5	4	11	6	12
Taiwan (province of china)	20	13	13	24	18
Thailand	9	11	11	8	9
Tonga	1	1	2		
Turkey	7	3	4	6	8
Tuvalu		4		1	
United Kingdom	46	51	34	33	31
United States	5	2	6	5	2
Vanuatu	17	11	18	11	7
Viet Nam	7	7	6	4	1
Totals	3179	3342	3742	4050	3675

Figure 3 represents inspections by flag State where 25 or more vessels have been subjected to inspection during 2016. Flag States that have less than 25 inspections in a year are not considered to be statistically significant in this context.

Figure 3 – Distribution of PSC inspections by flag State

- PANAMA
- HONG KONG, CHINA
- SINGAPORE
- LIBERIA
- MARSHALL ISLANDS
- MALTA
- BAHAMAS
- CYPRUS
- GREECE
- JAPAN
- CHINA
- ISLE OF MAN
- ANTIGUA AND BARBUDA
- NORWAY
- KOREA (REPUBLIC OF)
- UNITED KINGDOM
- BERMUDA
- PHILIPPINES



Deficiencies

What is a deficiency?

The IMO defines a deficiency as ‘a condition found not to be in compliance with the requirements of the relevant convention’. Serious deficiencies contribute to the vessel being substandard or unseaworthy. Our surveyors will issue a ship with a deficiency if they determine or reasonably suspect that either the condition of a ship, its equipment, or performance of its crew is found not to comply with the requirements of relevant international conventions.

During 2016, there was a 5.7% decrease in the number of deficiencies issued and a 9% decrease in the number of ship inspections compared to 2015. The deficiency rate per inspection increased slightly from 2.3 in 2015 to 2.4 in 2016. Table 11 shows a marginal increase was observed in structural/equipment and operational deficiencies, and a marginal decrease for MLC deficiencies. Human factors and ISM have recorded no change since 2015.

Top 5 deficiencies per inspection by ship type 2016

<p>A total of 8942 deficiencies were issued in 2016 with the average deficiencies per inspection being 2.4.</p>	Ship type (deficiencies per inspection)
	Tugboat – 5.4
	Refrigerated cargo vessels – 4.50
	Ro-ro – 3.86
	General cargo/multipurpose ships – 3.19
	Heavy load carrier – 2.83

Note: Only vessel types that had 10 or more inspections are included.



Deficiencies by category and ship type

For reporting purposes, deficiencies have been categorised into the following groups used to identify key areas of non-compliance: structural/equipment, operational, human factors, International Safety Management (ISM) and MLC. Table 11 identifies the number of deficiencies by category along with a comparison of the deficiency rates to those of 2015.

If the number of deficiencies is considered in isolation, as depicted in table 11, the majority of deficiencies were issued to bulk carriers. This is not surprising given bulk carriers represented 51% of ship arrivals and 58% of all inspections. In order to assess the performance of vessel types, it is necessary to compare the deficiencies per inspection for each category. This information is provided in table 12.

Table 11 – Deficiencies by category and ship type

Ship type	Structural/ equipment	Operational	Human factor	ISM	MLC	PSC inspections
Bulk carrier	2667	1132	1151	353	615	2130
Chemical tanker	98	27	34	11	38	204
Container ship	351	129	93	31	149	342
Gas carrier	36	12	15	5	7	74
General cargo/multi-purpose ship	245	90	88	26	78	165
Heavy load carrier	28	9	9	3	19	24
Livestock carrier	93	21	17	5	15	57
MODU or FPSO						
NLS tanker	17	7	3	0	6	28
Offshore service vessel	9	6	4	1	1	10
Oil tanker	150	53	43	11	52	231
Other types of ship	15	11	8	1	1	21
Passenger ship	36	7	13	3	16	51
Refrigerated cargo vessel	9	0	3	1	5	4
Ro-ro cargo ship	17	4	0	3	3	7
Special purpose ship	15	10	3	2	1	14
Tugboat	68	89	36	8	15	40
Vehicle carrier	130	38	45	13	38	196
Wood-chip carrier	110	33	29	8	32	77
Totals for 2016	4094	1678	1594	485	1091	3675
2016 deficiency rates	1.1	0.5	0.4	0.1	0.3	2.4
Totals for 2015	4199	1734	1647	461	1443	4050
2015 deficiency rates	0.7	0.3	0.3	0.1	0.3	1.6

Table 12 – Rate of deficiencies per inspection by ship category and type

Ship Type	Structural / Equipment	Operational	Human Factor	ISM	MLC	Total Deficiencies	PSC Inspections	Overall Deficiency Rate	Number of detentions	Detention Rate
Bulk Carrier	1.25	0.53	0.54	0.29	0.17	5918	2130	2.78	157	7.4%
Chemical Tanker	0.48	0.13	0.17	0.19	0.05	208	204	1.02	8	3.9%
Container Ship	1.03	0.38	0.27	0.44	0.09	753	342	2.20	22	6.4%
Gas Carrier	0.49	0.16	0.2	0.09	0.07	75	74	1.01	4	5.4%
General Cargo/multi-prupose Ship	1.48	0.55	0.53	0.47	0.16	527	165	3.19	20	12.1%
Heavy Load Carrier	1.17	0.38	0.38	0.79	0.13	68	24	2.83	2	8.3%
Livestock Carrier	1.63	0.37	0.3	0.26	0.09	151	57	2.65	3	5.3%
NLS Tanker	0.61	0.25	0.11	0.21		33	28	1.18	3	10.7%
Offshore Service Vessel	0.9	0.6	0.4	0.1	0.1	21	10	2.10	1	10.0%
Oil Tanker	0.65	0.23	0.19	0.23	0.05	309	231	1.34	5	2.2%
Other Types of Ship	0.71	0.52	0.38	0.05	0.05	75	21	3.57	0	0.0%
Passenger Ship	0.71	0.14	0.25	0.31	0.06	18	51	0.35	1	2.0%
Refrigerated Cargo Vessel	2.25		0.75	1.25	0.25	27	4	6.75	0	0.0%
Ro-Ro Cargo Ship	2.43	0.57		0.43	0.43	31	7	4.43	1	14.3%
Special Pupose ship	1.07	0.71	0.21	0.07	0.14	216	14	15.43	2	14.3%
Tugboat	1.7	2.23	0.9	0.38	0.2	264	40	6.60	7	17.5%
Vehicle Carrier	0.66	0.19	0.23	0.19	0.07	212	196	1.08	7	3.6%
Wood Chip Carrier	1.43	0.43	0.38	0.42	0.1	36	77	0.47	3	3.9%
Total	4094	1678	1594	485	1091	8942	3675		246	6.7%
Deficiency Rate	1.1	0.5	0.4	0.1	0.3			2.43		

Figures in red are the top 5

Figures in red are above average

Table 13 – Change in deficiency rate per inspection by category only

Deficiency	2015	2016	Trend
Structure/equipment	1.0	1.1	↑
Operational	0.4	0.5	↑
Human factors	0.4	0.4	-
ISM	0.1	0.1	-
MLC	0.4	0.3	↓

Detentions

What is a detention?

The IMO defines a detention as: ‘intervention action taken by the Port State when the condition of the ship or its crew does not correspond substantially with the applicable conventions to ensure that the ship will not sail until it can proceed to sea without presenting a danger to the ship or persons on board, or without presenting an unreasonable threat of harm to the marine environment, whether or not such action will affect the scheduled departure of the ship’.

Detainable deficiencies by category

Table 14 indicates the proportion of detainable deficiencies in different categories over a three-year period. As indicated in this table, the detainable deficiencies relating to the category of International Safety Management (ISM) decreased marginally while the categories of fire safety, pollution prevention, emergency systems and lifesaving appliances round out the top five detainable deficiencies. The proportion of labour condition-related (MLC) detentions remains significant and this continues to be the sixth most prevalent detainable deficiency since 2014.

The relatively high proportion of detainable deficiencies attributed to the ISM category continues to remain a major cause of concern as it indicates that the management of ships still leaves considerable room for improvement.

Table 14 – Detainable deficiencies by category

Category	2014	2014	2015	2015	2016	2016
	No. of deficiencies	share %	No. of deficiencies	share %	No. of deficiencies	share %
ISM	120	31.2%	103	29.7%	98	27.8%
Fire safety	54	14.0%	55	15.9%	49	13.9%
Emergency systems	32	8.3%	34	9.8%	44	12.5%
Lifesaving appliances	44	11.4%	30	8.6%	44	12.5%
Labour conditions	21	5.5%	26	7.5%	25	7.1%
Pollution prevention	40	10.4%	39	11.2%	25	7.1%
Certificates and documentation	12	3.1%	7	2.0%	18	5.0%
Water/weather-tight conditions	13	3.4%	24	6.9%	17	4.8%
Radio communications	18	4.7%	11	3.2%	12	3.4%
Other	6	1.6%	2	0.6%	8	2.3%
Safety of navigation	18	4.7%	5	1.4%	8	2.3%
Structural conditions	4	1.0%	7	2.0%	3	0.8%
Propulsion and auxiliary machinery	2	0.5%	3	0.9%	2	0.6%
Alarms	0	0.0%	1	0.3%	0	0.0%
Cargo operations including equipment	1	0.3%	0	0.0%	0	0.0%
Working and living conditions	0	0.0%	0	0.0%	0	0.0%
Dangerous goods	0	0.0%	0	0.0%	0	0.0%
International Ship and Port Facility Security Code (ISPS)	0	0.0%	0	0.0%	0	0.0%

Detentions by ship type

During 2016, our surveyors detained 246 ships, an average detention rate of 6.7%, compared to 242 ships at 6% in 2015.

Top 5 detention rates by ship type 2015 and 2016

We detained 246 ships in 2016, with an average detention rate of 6.7%.	2015 – 6.0% average	2016 - 6.7% average (no of detentions)
	Special purpose ship - 16.7% (3)	Tugboat – 17.5% (7)
	NLS tanker - 12.5% (3)	Special purpose ship – 14.3% (2)
	General cargo/multi-purpose ship - 10.3% (18)	General cargo/multi-purpose ship – 12.1% (20)
	Wood chip carrier – 9.0% (6)	NLS tanker – 10.7% (3)
	Container ships - 8.5% (32)	Offshore service vessel – 10% (1)

Note: Only vessel types with 10 or more inspections are included.

Table 15 indicates that bulk carriers represented the largest number of PSC detentions. This is to be expected given the relative number of these ships inspected. The bulk carrier detention rate was 7.4%, which is above the average detention rate for all ships of 6.7% for 2016. This indicates that bulk carriers performed worse in 2016 than that 2015 when the detention rate was below average.

The poorest performing ship types were tugboats, special purpose ships, general cargo ships, NLS tankers and offshore service vessels. It is pertinent that general cargo ships remain in the top five detention categories and were also in the top five poorest performing ship categories in both 2014 and 2015.



Table 15 – Detentions by ship type

Ship type	2016			2015
	Inspections	Detentions	Detention rate	Detention rate
Bulk carrier	2130	157	7.4%	5.9%
Chemical tanker	208	8	3.9%	2.1%
Combination carrier	0	0	0%	0.0%
Container ship	342	22	6.4%	8.5%
Gas carrier	74	4	5.4%	1.3%
General cargo/multi-purpose ship	163	20	12.1%	10.3%
Heavy load carrier	25	2	8.3%	6.3%
High speed passenger craft	0	0	0%	0.0%
Livestock carrier	57	3	5.3%	7.7%
MODU or FPSO	0	0	0%	25.0%
NLS tanker	28	3	10.7%	12.0%
Offshore service vessel	10	1	10.0%	4.5%
Oil tanker	227	5	2.2%	3.7%
Other types of ship	21	0	0.0%	3.7%
Passenger ship	51	1	2.0%	1.9%
Refrigerated cargo vessel	4	0	0.0%	0.0%
Ro-ro cargo ship	7	1	14.3%	16.7%
Ro-ro passenger ship	0	0	0.0%	0%
Special purpose ship	14	2	14.3%	16.7%
Tugboat	40	7	17.5%	6.6%
Vehicle carrier	197	7	3.6%	4.3%
Wood-chip carrier	77	3	3.9%	9.0%
Totals	3675	246	6.7%	6.0%

- For bulk carriers, in 2015, 2389 were inspected, 5866 deficiencies were issued and 140 ships were detained. In 2016, 2131 bulk carriers were inspected, 5920 deficiencies issued and 158 ships were detained. This is an unfortunate sign as it represents a marked increase in detention rate from 5.9% in 2015 to 7.4% in 2016.
- Livestock carriers continued to show improvement. In 2016, livestock carriers were issued with 140 deficiencies resulting in four detentions and a detention rate of 7.7%. In 2015, deficiencies increased to 151 resulting in three detentions and a drop in detention rate to 5.3% which is well below the average.
- Passenger ships continued to perform well. In 2015, Passenger ships were issued with 87 deficiencies resulting in one detention and a detention rate of 1.9%. In 2016, deficiencies remained at 87 resulting in one detention and a very slight increase in detention rate to 2.0%.
- In 2016, 14 special purpose ships were inspected, 31 deficiencies were issued and two were detained. In 2015, 18 special purpose ships were inspected, 55 deficiencies were issued and three ships were detained. This means that the deficiency rate dropped from 3.24% to 2.21% and the detention rate decreased from 16.7% to 14.3%.

Detentions by flag State

Individual flag State performance can be determined by comparing the percentage share of the total number of inspections against the percentage share of the total number of detentions for each flag State. Where the percentage share of detentions is higher than the percentage share of inspections this is an indication that the flag State is not performing well. This representation is given in figure 5.

<p>There was a total of 246 foreign- flag vessels detained in 2016.</p> <p>The average detention rate for all vessels was 6.7%.</p>	Flag State (Detention Rate %)
	Taiwan (Province of China) 22.2%
	Netherlands – 11.8%
	Italy – 10%
	Antigua and Barbuda – 9.8%
	Marshall Islands – 8.1%
	Cyprus – 8.0%
	Panama – 7.9%
	France – 7.7%
	Malta - 7.7%
	Greece – 7.4%

Note: This table only covers vessel types with 10 or more inspections.

In considering tables 16 and 17, where a flag is subject to a small number of inspections a single detention can result in the flag State exceeding the average detention rate and this may not be an accurate measure of performance.

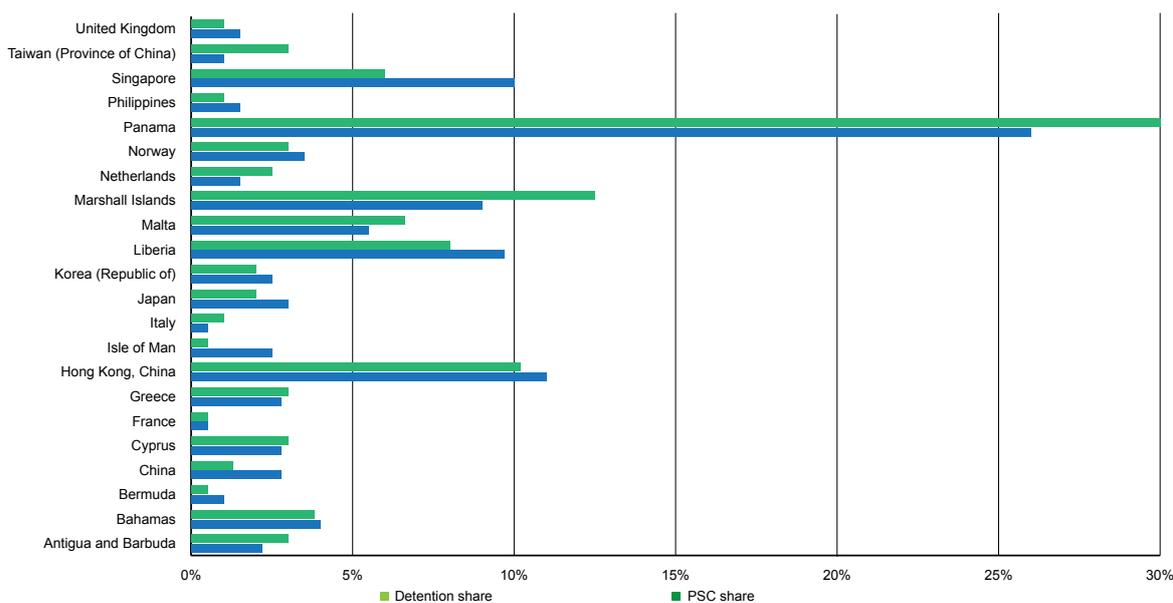
Table 16 – Flag states that exceeded the average in 2014, 2015 and 2016

2014 (average 7.2%)		2015 (average 6.0%)		2016 (average 6.7%)	
Flag State	Detention rate (number)	Flag State	Detention rate (number)	Flag State	Detention rate (number)
Indonesia	66.7% (10)	Indonesia	27.3% (3)	Taiwan (China)	22.2% (4)
Antigua and Barbuda	20.3% (15)	Antigua and Barbuda	15.2% (10)	Netherlands	11.8% (2)
Greece	14.1% (11)	Gibraltar	14.3% (2)	Italy	10.0% (2)
Malaysia	12.5% (2)	Italy	13.6% (3)	Antigua and Barbuda	9.8% (5)
Cyprus	11.6% (10)	India	11.1% (2)	Marshall Islands	8.1% (29)
Vanuatu	11.1% (2)	Cyprus	10.1% (9)	Cyprus	8.0% (7)
Philippines	10.3% (3)	Liberia	9.9% (37)	Panama	7.9% (74)
India	9.1% (1)	Malta	8.3% (18)	France	7.7% (1)
Switzerland	9.1% (1)	Cayman Islands	8.3% (2)	Malta	7.7% (15)
Liberia	8.9% (31)	Republic of Korea	7.7% (6)	Greece	7.4% (6)
Bahamas	9.8% (11)				
United Kingdom	8.8% (3)				
Malta	8.7% (15)				

Table 17 – Inspections and detentions by flag State

Flag State	Inspections	Detentions	Detention rate	Flag State	Inspections	Detentions	Detention rate
Antigua and Barbuda	51	5	9.8%	Libya	1	0	0.0%
Bahamas	138	8	5.8%	Luxembourg	11	0	0.0%
Barbados	3	0	0.0%	Malaysia	8	0	0.0%
Belgium	9	0	0.0%	Malta	196	15	7.7%
Bermuda	29	1	3.4%	Marshall islands	358	29	8.1%
Brazil	1	0	0.0%	Netherlands	17	2	11.8%
Cayman Islands	23	0	0%	New Zealand	3	0	0.0%
China	70	2	2.9%	Norway	49	3	6.1%
Comoros	1	1	100.0%	Pakistan	1	0	0.0%
Cook Islands	7	2	28.6%	Panama	942	74	7.9%
Croatia	5	3	60%	Papua New Guinea	9	5	55.6%
Cyprus	87	7	8%	Philippines	27	1	3.7%
Denmark	22	0	0.0%	Portugal	21	0	0.0%
Faroe Islands	1	0	0.0%	Saint Vincent and the Grenadines	1	0	0.0%
Fiji	2	0	0.0%	Saudi Arabia	2	0	0.0%
France	13	1	7.7%	Singapore	369	14	3.8%
Germany	7	0	0.0%	Solomon Islands	3	0	0.0%
Gibraltar	7	0	0.0%	South Africa	1	0	0.0%
Greece	81	6	7.4%	Spain	1	0	0.0%
Hong Kong, China	426	25	5.9%	Sri Lanka	1	0	0.0%
India	7	0	0.0%	Sweden	14	0	0.0%
Indonesia	5	1	20.0%	Switzerland	12	0	0.0%
Ireland	1	0	0.0%	Taiwan (province of China)	18	4	22.2%
Isle of Man	54	1	1.9%	Thailand	9	3	33.3%
Italy	20	2	10%	Turkey	8	1	12.5%
Jamaica	1	0	0.0%	United Kingdom	31	1	3.2%
Japan	71	3	4.2%	United States	2	0	0.0%
Korea (republic of)	48	3	6.3%	Vanuatu	7	1	14.3%
Kuwait	3	0	0.0%	Viet Nam	1	0	0.0%
Liberia	360	22	6.1%	Total	3675	246	6.7%

Note: Flag states above the average detention rate are highlighted in red.

Figure 5 – Share of detentions compared to share of inspections

Note: A detailed breakdown of this graph can be found at Appendix A.

Detention appeals and review processes

Vessel owners, operators, Registered Organisations (RO)² and flag States all have the right to appeal against inspection outcomes. This can be achieved through a number of different means, with the master of a vessel advised of these rights upon completion of each PSC inspection.

Masters are instructed that the initial avenue for review is through a direct approach to our Manager, Ship Inspection and Registration. This involves a full examination of all information provided by the appellant and feedback from the attending AMSA marine surveyor to determine the merits of the case being put forward. If an appellant is unsuccessful with this initial AMSA review, further appeal processes are available either by the flag State to the detention review panel of the Tokyo or Indian Ocean Memorandum of Understanding (MOU), or to the Australian Administrative Appeals Tribunal.

During 2016, owners, operators, ROs and flag States requested we review a number of PSC deficiencies and detentions, all of which were investigated and responded to accordingly. In total, we received 26 appeals against vessel detention, with each undergoing a full review of all relevant information. Three detentions were subsequently rescinded. In the remainder of cases, the original decisions of our surveyors were found to be appropriate and the appeals rejected. We received eight appeals from ROs challenging the assignment of RO responsibility during the inspection process. We accepted five of these challenges upon review and rejected the others.

There were no appeals lodged against our inspections to the Detention Review Panel of either the Tokyo or the Indian Ocean MOUs during the reporting period. One appeal was lodged with the Australian Administrative Appeals Tribunal. The tribunal affirmed our decision to detain as the correct and preferable decision in the circumstances.

A full listing of ships we have detained can be found on the ship safety section of our website (amsa.gov.au).

² RO can appeal assignment of RO Responsibility for a detention deficiency but not the detention itself.

Recognised Organisation performance

Table 18 reports the 2016 performance of Recognised Organisations (RO) including inspections, deficiency rates, detention rates and the percentage of the detainable items that were allocated RO responsibility for detention. The table indicates a relatively small proportion of detainable deficiencies for which RO responsibility was assigned. The average decreased from 4.3% in 2015 to 1.7% in 2016.

Table 18 – Performance of Recognised Organisations: Alphabetical order

Recognised Organisation	PSC inspection	Deficiencies	Detentions	Detention Rate	Detainable deficiencies	RO resp detainable deficiencies	RO resp as share of all detainable defs
American Bureau of Shipping (ABS)	440	1062	31	7.0%	51	0	0.0%
Bureau Veritas (BV)	358	934	24	6.7%	28	1	3.6%
China Classification Society (CCS)	192	468	7	3.6%	8	0	0.0%
CR Classification Society (CR)	6	41	1	16.7%	5	0	0.0%
Croatian Register of Shipping (CRS)	2	23	2	100.0%	4	1	25.0%
DNV GL AS (DNVGL)	587	1306	39	6.6%	63	2	3.5%
Indian Register of Shipping (IRS)	2	3	0	0.0%	0	0	
Korea Classification Society (KCS)	1	1	0	0.0%	0	0	
Korean Register of Shipping (KRS)	220	463	9	4.1%	12	0	0.0%
Lloyd's Register (LR)	504	1050	22	4.4%	38	1	2.6%
Nippon Kaiji Kyokai (NKK)	1310	3406	106	8.1%	136	1	0.7%
No class	5	21	1	20.0%	1	0	0.0%
Other:	1	0	0	0.0%	0	0	
Polski Rejestr Statkow (PRS)	1	7	0	0.0%	0	0	
RINA Services SpA (RINA)	44	124	3	6.8%	5	0	0.0%
Shipping Register of Ukraine (SRU)	1	15	1	100.0%	2	0	0.0%
Viet Nam Register (VR)	1	18	0	0.0%	0	0	
Total	3675	8942	246	6.7%	353	6	1.7%

Risk rating

We continue to use a risk profiling system to assist in allocating inspection resources in the most effective manner. Our risk calculation uses multiple criteria to categorise vessels into four priority groups relative to a risk factor signifying a 'probability of detention'. Each group has a specific target inspection rate as shown below.

Table 19 – Target inspection rate

Priority group	Risk factor (probability of detention)	Target inspection rate
Priority 1	6 or higher	80%
Priority 2	4 or 5	60%
Priority 3	2 or 3	40%
Priority 4	0 or 1	20%

The risk profile of ships trading in Australian ports continues to show a drop in high risk ships and an increase in medium to lower risk ships arriving at Australian ports. This data, along with targeted inspection rates, as shown in table 20, indicates our surveyors are being used in the most effective manner and are achieving target inspection rates in all priority groups with an overall inspection rate of 57%.



Table 20 – Unique foreign-flagged ships – by priority group

Inspection priority	Ship arrivals		Eligible ships		Ships inspected		Inspection rate	
	2015	2016	2015	2016	2015	2016	2015	2016
Priority 1	692	610	487	349	459	334	94%	95.7%
Priority 2	727	696	385	416	343	338	89%	81.3%
Priority 3	1,956	1,859	1403	1,332	1074	868	77%	65.2%
Priority 4	3,807	3,958	3143	3,864	1623	1,880	52%	48.7%
Totals	7,182	7,123	5418	5,961	3499	3420	65%	57.4%

Ship numbers may not match if a vessel arrives multiple times over the year and the priority changes

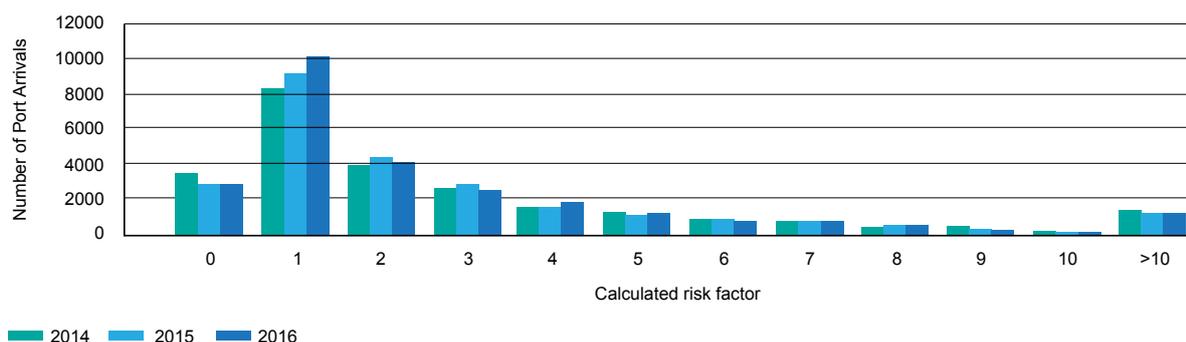
Table 21 – Number of deficiencies according to vessels risk factor

Priority group	2015		2016	
	Deficiencies	Deficiencies per inspection	Deficiencies	Deficiencies per inspection
Priority 1	1729	3.5	1373	3.3
Priority 2	1131	2.7	858	2.3
Priority 3	2900	2.5	2364	2.5
Priority 4	3724	1.9	4340	2.2
Totals	9484	2.3	8940	2.4

Note: data analysis using the risk factor for each arrival has altered figures for 2015.

Table 20 differs from table 21 in the 2015 report as improved data analysis and reporting systems allow figures to be calculated for each arrival of a ship based on the priority figure for that visit. The priority group can change between port visits.

Figure 6 – Risk factor of arrivals – foreign-flagged ships



From figure 6 it is evident that the number of vessels of all risk factors remained fairly consistent in 2016 compared to 2015.

The 2016 data demonstrates that the number of deficiencies for priority 1 and 2 vessels has decreased. Priority 4 vessels had a small increase in deficiencies per inspection rate. This trend further reinforces confidence in our risk rating and inspection prioritisation systems, ensuring resources are applied where they will have the most effect. We continue to contribute valuable time and resources towards regulatory coverage of the *Navigation Act 2012* and the *Maritime Labour Convention, 2006*, as well as all other inspection-related conventions.

HOW IT WORKS

Flag State control (FSC)

Our surveyors conduct inspections on Australian-flagged vessels subject to the *Navigation Act 2012* using the same targeting arrangements applied to foreign-flagged shipping.

We conducted 82 FSC inspections on 66 Australian-flagged vessels during 2016, resulting in 222 deficiencies being recorded, of which one was serious enough to warrant detention of the vessel. This represents a slight decrease from 2.9 in 2015 to 2.7 deficiencies per inspection in 2016. This is above the average for foreign-flagged vessels (2.3%).

The number of FSC detentions remained steady from one in 2015 and 2016. This equated to a detention rate of 1.22% which is below the average recorded for foreign-flagged shipping.

Port State control – Australian-flagged ships (overseas)

Australian-flagged ships calling at foreign ports were subject to a total of 16 PSC inspections by foreign maritime authorities including New Zealand, the Russian Federation, Singapore, Papua New Guinea and Japan, resulting in 14 deficiencies and no detentions.

Concentrated inspection campaign (CIC)

From 1 September 2015 to 30 November 2015, we participated in a Concentrated Inspection Campaign (CIC) on crew familiarisation for enclosed space entry. This was aimed at verifying compliance with the *International Convention for the Safety of Life at Sea (SOLAS)* and the ISM code and to ensure effective procedures and measures are in place to safeguard seafarers serving on board these ships. The CIC questions relate to SOLAS and the International Safety Management Code (ISM). Over this three-month period, we conducted a total of 787 inspections covering CIC verification, No detainable deficiencies were recorded on the basis of crew familiarisation for enclosed space entry CIC identified deficiencies.

Refusal of a ship's access and condition of entry

Australia is a signatory to various International Maritime Organization (IMO) and International Labour Organization (ILO) Conventions which aim to ensure ships are safe.

Vessels that are not operated and managed to meet applicable minimum standards and relevant Australian laws pose an increased risk to seafarers, vessels and the environment. The Navigation Act 2012 provides additional powers that allow us to consider issuing a direction refusing access to Australian ports where a vessel is a repeated offender, has a poor PSC record, or there are concerns about the performance of the vessel operator.

We can issue a vessel with a direction not to enter or use an Australian port (or ports) for three, 12 or 24 months. Note: When considering vessel performance, we will also look at the performance of the company as a whole. Where this is deemed unacceptable the periods detailed in these general principles may be extended. A direction resulting from a new detention in Australia will generally take effect as soon as the vessel leaves the Australian port or anchorage following rectification of the latest detainable deficiency.

The table below lists the vessels subject to our directions not to enter or use an Australian port in 2016.

Table 22 – Restricted Vessels

Vessel name (IMO number)	Flag	Direction	Issue date	Expiry date
<i>Noah Satu</i> (9313620)	Indonesia	Refused access for 12 months	29/1/2016	29/1/2017
<i>Five Stars Fujian</i> (9402287)	Hong Kong	Refused access for 12 months	01/9/16	01/09/17



APPENDIX A

Share of detentions compared to share of inspections

Note: In 2016 detentions occurred in 6.7% of all inspections, and the rate of deficiencies per inspection was 2.4.

Flag	Number of PSC inspections	Deficiencies	Deficiencies per PSC inspection	Detained	Detention Rate	PSC share	Detention share
Antigua and Barbuda	51	159	3.12	5	9.8%	1.4%	2.0%
Bahamas	138	213	1.54	8	5.8%	3.8%	3.3%
Bermuda	29	48	1.66	1	3.4%	0.8%	0.4%
China	70	123	1.76	2	2.9%	1.9%	0.8%
Cyprus	87	258	2.97	7	8.0%	2.4%	2.8%
France	13	12	0.92	1	7.7%	0.4%	0.4%
Greece	81	205	2.53	6	7.4%	2.2%	2.4%
Hong Kong, China	426	932	2.19	25	5.9%	11.6%	10.2%
Isle of Man	54	57	1.06	1	1.9%	1.5%	0.4%
Italy	20	58	2.90	2	10.0%	0.5%	0.8%
Japan	71	107	1.51	3	4.2%	1.9%	1.2%
Korea (republic of)	48	108	2.25	3	6.3%	1.3%	1.2%
Liberia	360	855	2.38	22	6.1%	9.8%	8.9%
Malta	196	528	2.69	15	7.7%	5.3%	6.1%
Marshall Islands	358	828	2.31	29	8.1%	9.7%	11.8%
Netherlands	17	36	2.12	2	11.8%	0.5%	0.8%
Norway	49	111	2.27	3	6.1%	1.3%	1.2%
Panama	942	2610	2.77	74	7.9%	25.6%	30.1%
Philippines	27	106	3.93	1	3.7%	0.7%	0.4%
Singapore	369	781	2.12	14	3.8%	10.0%	5.7%
Taiwan (Province of China)	18	98	5.44	4	22.2%	0.5%	1.6%
United Kingdom	31	61	1.97	1	3.2%	0.8%	0.4%
Total	3455	8294		229			

