



AUSTRALIAN INSTITUTE OF MARINE & POWER ENGINEERS
Western Australian Branch

Honorary Secretary: Chris Blackmore – Assistant Federal Secretary: Andrew Williamson
National Organiser: Michael Carroll

4 July 2018

Mr Stephen Palethorpe
Secretary
Standing Committee on
Education and Employment

Inquiry into the work health and safety of workers in the offshore petroleum industry

We refer to the Hansard transcript of evidence for the committee's hearing in Fremantle on 13 June 2018.

The undersigned took three questions on notice which we refer herein and provide our responses for the information of the Committee:

Page 18 and a request for what flags typically have a presence in the Australian Offshore Oil and Gas Industry for tonnage engaged in offshore oil and gas activity.

Our Response

1. Australia
2. Bahamas
3. Bermuda
4. Denmark
5. Malta
6. Norway
7. Panama
8. Singapore

Page 21 and information sought over AMSA Port State Control

Our Response

Please find attached a Report from AMSA over their PSC Activity for calendar 2017. We refer the Committee to Pages four and five and to the Report generally.

Page 21 and a question over whether the Seafarers and Other Legislation Amendment Bill 2016 might remedy what we refer to as the jurisdictional vacuum that currently exist between AMSA and NOPSEMA.

Our Response

No the Bill will not provide a remedy; please see paragraph 49 of the submissions of the ACTU.

Yours faithfully

Andrew Williamson
Assistant Federal Secretary



Australian Government

Australian Maritime Safety Authority

Port State Control 2017 Report



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

PORT STATE CONTROL 2017 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, Australia's national livelihood remains focused on ensuring maritime trade to and from the country 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 2017 calendar year.

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

AMSA's principal functions are:

- promoting maritime safety and protection of the marine environment
- preventing and combatting 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, AMSA is empowered to perform an enforcement function for maritime trade through the implementation of rigorous flag State control (FSC) and PSC regimes. Operation of professional, consistent FSC and PSC regimes is essential in ensuring vessels comply with minimum standards in a manner that promotes maritime safety, seafarer welfare and protection of Australia's 60,000-kilometre coastline (including 12,000 islands) from environmental damage.

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

Under the FSC program, AMSA is responsible for operational safety standards of Australian-registered ships wherever they may be in the world.

As information on PSC activities is used by a diverse customer base on a regular basis, AMSA supplies current information via the 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

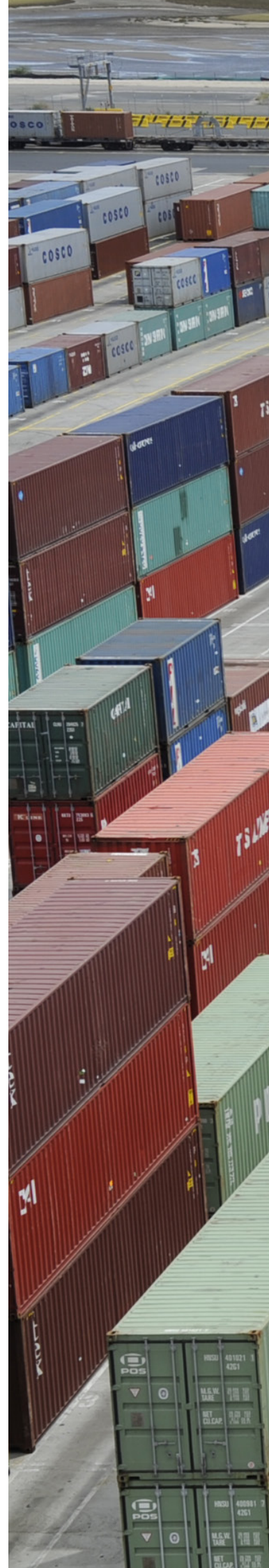
Introduction

The PSC inspection results for 2017 indicated a significant fall in the detention rate to 5.3 per cent. This result is notable as it is the lowest since 2006—detention rate of 4.5 per cent with 138 detentions from 3080 inspections. This result is also reflected in the average number of deficiencies per inspection remaining at a low of 2.3. This outcome was last recorded in 2004. The decrease in the detention rate and low number of deficiencies per inspection emphasises the benefit in maintaining a consistent, firm, but fair, PSC inspection regime.

Ships and operators who consistently perform poorly can be banned from entering or using Australian ports under section 246 of the Navigation Act¹. In 2017 AMSA banned three ships for periods of 3–12 months. Two of the bans involved significant breaches of the Maritime Labour Convention, 2006 (MLC).

The PSC processes used for the MLC are well established as this convention has been in effect since 13 August 2013. It appears that the general understanding of what is expected with respect to MLC compliance has improved. This has resulted in a reduction in the total number of MLC deficiencies and deficiencies per inspection from 2014 to 2017. AMSA continues to focus on MLC in order to protect the welfare of seafarers and improve outcomes in this area.

¹ In exercising this power it is important to note that AMSA only employs 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





2017 summary of PSC activity

- During the calendar year there were:
 - 28,502 ship arrivals by 5873 foreign-flagged ships
 - 3128 PSC inspections
 - 165 ship detentions.
- Bulk carriers accounted for 50.3 per cent of ship arrivals and 55.4 per cent of PSC inspections.
- PSC inspections were carried out in 54 Australian ports.
- The average gross tonnage per visit was 51,612 GT compared to 50,505 GT in 2016.
- The average age of vessels in 2017 was nine years, compared to nine in 2016 and 10 in 2015.
- AMSA surveyors conducted 7230 inspections of all types in 2017 compared to 8576 in 2016. This decrease was achieved through better targeting of ships to focus on higher risk vessels.

10-year summary of inspection, detentions and deficiency rate

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total inspections	2795	2994	3127	3002	3179	3342	3742	4050	3675	3128
Total detentions	225	248	222	275	210	233	269	242	246	165
Detention %	8.1	8.3	7.1	9.2	6.6	7.0	7.2	6.0	6.7	5.3
Deficiencies per inspection	3.3	3.0	2.4	2.8	2.4	2.4	2.9	2.3	2.4	2.3

Snapshot comparison to previous year

		2016	2017	When compared to 2015	
Arrivals	Total arrivals	27516	28502	3.6%	(an increase of 985)
	Individual ships which made those arrivals	5719	5873	2.7%	(an increase of 153)
	Ships eligible for PSC inspection	5502	5634	2.4%	(an increase of 132)
PSC inspections	Total PSC inspections	3675	3128	-14.9%	(a decrease of 547)
	Total PSC inspections - by individual ships	3271	2800	-14.4%	(a decrease of 470)
	Inspection rate of eligible ships %	59.5%	49.7%		
	Total deficiencies	8942	7084	-20.8%	(a decrease of 1858)
Deficiencies	Total detainable deficiencies	353	219	37.8%	(an increase of 133)
	Rate of deficiencies per inspection	2.4	2.3		
Detentions	Total detentions	246	165	-32.7%	(an increase of 80)
	Detentions as a percentage of total inspections	6.7%	5.28%		

Key points

- The number of initial inspections continued to decrease in 2017.
- In 2017, the number of foreign-flagged arrivals increased by 985 (3.6 per cent) to 28,502 arrivals by 5873 individual ships. This reflected a marked increase in the growth in foreign-flagged arrivals compared to the low growth in 2016 (0.6 per cent) and 2015 (1.5 per cent).
- The number of PSC inspections conducted during 2017 decreased by 547 (14.9 per cent) to 3128 inspections.
- Ships performed better in 2017. There was a 20.8 per cent decrease in the number of deficiencies—from 8942 deficiencies in 2016 to 7084 deficiencies in 2017. There was also a 37.8 per cent decrease in the number of detainable deficiencies from 353 detainable deficiencies in 2016 to 219 detainable deficiencies in 2017.
- The number of detained vessels was 165—81 fewer (-32.7 per cent) than the 246 detentions recorded in 2016. This is the lowest number of detentions since 2007.
- There was also a slight decrease in the average number of deficiencies per inspection from 2.4 in 2016 to 2.3 in 2017, with the detention rate decreasing from 6.7 per cent in 2016 to 5.3 per cent in 2017. This is the lowest detention rate in 12 years.

The deficiencies per inspection and detention rate are both at record lows over the last decade. The overall picture indicates that AMSA's PSC regime exerts a positive influence on the quality of ships arriving in Australia.

Top five initial PSC inspections by flag State 2017

There was a total of 3128 foreign- flag vessels inspected in 2017. The top five flags accounted for 65% of all inspections while the top 12 accounted for 85.2% of the total.	Flag State	Number of inspections	Share of total inspections
	Panama	763	24.4%
	Marshall Islands	337	10.8%
	Singapore	326	10.4%
	Hong Kong	311	9.9%
	Liberia	304	9.7%

Top five detention rates by flag State 2017

There was a total of 165 foreign- flagged vessels detained in 2017. The average detention rate for all vessels was 5.3%.	Flag State	Number of detentions	Share of total detentions
	Panama	44	26.7%
	Liberia	19	11.5%
	Malta	18	10.9%
	Marshall Islands	16	9.7%
	Singapore	14	8.5%

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

Trends for 2017

As observed in past PSC annual reports, the most frequent cause of detention since 2010 relates to effective implementation of the safety management system required by the International Safety Management (ISM) Code. Since 2015, issues to do with passage planning and conduct of voyages have continued to contribute significantly to the number of ISM detentions and remain a major concern for AMSA. In 2017 AMSA issued two marine notices with a view to improving performance in the safety of navigation. These notices were:

- MN 2017/06 Official nautical charts
- MN 2017/07 Guidance on ECDIS for ships calling at Australian ports.

In 2017, material issues such as emergency systems (14.6 per cent), lifesaving appliances (11.9 per cent) and fire safety (11.4 per cent) continued to be regular causes of detention, as has been the case since 2012. However, water/weathertight conditions (9.1 per cent) displaced pollution prevention (6.9 per cent) and labour condition (8.7 per cent) in the top five detainable deficiencies. While the significant improvement in the reduction in the number of detainable deficiencies (a 37.8 per cent drop compared to 2016) is a positive result, the continued prevalence of operational control and ISM-related detentions continues to be a concern. Performance in these areas needs to be improved.

Top five detainable deficiencies 2015-2017

2015	2016	2017
ISM – 29.7%	ISM – 27.8%	ISM – 29.2%
Fire safety – 15.9%	Fire safety – 13.9%	Fire safety - 11.4%
Pollution prevention – 11.2%	Emergency systems – 12.5%	Emergency systems - 14.6%
Emergency systems – 9.8%	Lifesaving appliances – 12.5%	Life-saving appliances - 11.9%
Lifesaving appliances – 8.6%	Pollution prevention – 7.1%	Water/weather-tight conditions – 9.1%
	Labour conditions - 7.1%	

In 2017 AMSA continued its ongoing work with flag States and ship owners to increase awareness of areas of concern and to improve PSC performance. The significant reduction in the number of detainable deficiencies and the low detention rate appear to validate this approach.

Summary of shipping industry activity 2017

More than 99 per cent of Australia's international trade, by weight, is transported by sea—the majority of which is dry bulk cargoes. Iron ore and coal remain the largest bulk exports in Australia, with 52 per cent of global iron ore coming from Australia. Ninety-eight per cent of Australia's annual coal production is exported. Liquefied natural gas (LNG) exports have continued to grow in volume and are expected to continue increasing in the future.

As was the case in 2016, 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—remaining at nine years old in 2016 and 2017. This appears to be a result of the slowdown in new ship construction in 2015 and 2016.

The main trends in 2017 were:

- Foreign-flagged port visits totalled 28,502 in 2017, an increase of 3.6 per cent from 2016. The number of individual ships that made these port calls increased slightly to 5873, an increase of 153 (2.7 per cent) over the 5719 in 2016.
- Bulk carrier port arrivals showed 1.2 per cent growth in 2017, accounting for 50.3 per cent of foreign-flagged port arrivals. General cargo ships increased their arrivals by 20.1 per cent, and vehicle carriers increased by 9.1 per cent.
- The growth in foreign-flagged shipping activity remains geographically disparate. Port Hedland remains the busiest Australian port for foreign ship visits, accounting for 10.2 per cent of arrivals nationwide.
- The trend of visiting ships increasing in size continued with average gross tonnage increasing from 50,505 in 2016 to 51,612 in 2017.
- The average age of arriving foreign vessels remained at nine years in 2017.
- From 2013, the proportion of priority one vessels decreased and the proportion of priority four vessels increased (see table 1).

Table 1 – Port visits

Priority*	2015		2016		2017	
	Number of visits	Fleet share	Number of visits	Fleet share	Number of visits	Fleet share
P1	4660	17.1%	4282	15.6%	4676	16.4%
P2	2906	10.6%	3274	11.9%	3131	11.0%
P3	7468	27.3%	6867	25.0%	7202	25.3%
P4	12,310	45.0%	13,093	47.6%	13,494	47.3%
Total	27,344	100.0%	27,516	100.0%	28,503	100.0%

* See page 33 for more details on priority groups.

2017 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 for the world's 1.5 million seafarers.

In 2017, AMSA received a total of 177 complaints (compared to 133 in 2016) pertaining to alleged breaches of the MLC, that is living and working conditions on board vessels. These complaints originated from a number of sources, including seafarers themselves, other government agencies, seafarer welfare groups, seafarer representative bodies, 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 30 vessels and eight vessels were detained for MLC-related breaches arising from the investigation of complaints. A total of 15 vessel were detained for MLC-related issues arising from the combination of investigating complaints and programmed initial PSC inspections.

During this time, there were 219 deficiencies across all deficiency types that warranted detention of 165 ships.

A breakdown of the complaints received per regulation for 2017, is detailed in table 2.

Of the complaints received, 42 came through the International Transport Workers' Federation (ITF), 44 came directly from seafarers, 32 came from various welfare groups, 10 from government agencies and 15 were from other sources. There was an increase in the number of complaints received directly from seafarers as indicated in table 2.



Table 2 – A breakdown of the complaints received by source for 2017

Source of complaint	Year	
	2016	2017
ITF	52	42
Seafarers	38	44
Welfare groups	20	32
Government agencies	13	10
Other	10	15

A total of 52 complaints were substantiated, four were forwarded to the Fair Work Ombudsman for investigation, and five 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 3 – Percentage breakdown of complaints received per regulation in 2017

Category of complaints received for 2017	
Wages	37
Seafarers Employment Agreement	9
Hours of work and hours of rest	16
Food and catering	37
Accommodation and recreational facilities	10
Health and safety protection and accident prevention	14
Repatriation	18
Entitlement to leave	12
Manning levels	1
Medical care on board ship and ashore	10
Training and Qualifications	2
Onboard complaint procedures	1
Bullying and harassment	10
Total	177



Table 4 – 2017 MLC results

	Total deficiencies	MLC deficiencies	Total detainable deficiencies	MLC detainable deficiencies	Total detentions	MLC detentions
Bulk carrier	4650	521	140	17	106	12
Chemical tanker	123	18	5	0	3	0
Commercial yacht	3	0	0	0	0	0
Container ship	652	135	27	1	21	1
Gas carrier	40	3	0	0	0	0
General cargo/ multipurpose ship	547	88	19	1	15	1
Heavy load carrier	29	4	0	0	0	0
Livestock carrier	159	18	9	0	5	0
MODU or FPSO	1	0	0	0	0	0
NLS tanker	46	10	1	0	1	0
Offshore service vessel	6	0	0	0	0	0
Oil tanker	237	41	4	1	2	1
Passenger ship	49	4	0	0	0	0
Refrigerated cargo vessel	23	4	1	0	1	0
Ro-ro cargo ship	21	2	0	0	0	0
Special purpose ship	16	4	0	0	0	0
Tugboat	107	13	6	0	4	0
Vehicle carrier	162	22	3	0	3	0
Wood-chip carrier	154	28	2	0	2	0
Other types of ship	59	3	2	0	2	0
	70842	918	219	20	165	15

As the MLC has been in effect since August 2013, it is notable that the rate of deficiencies and percentage of total deficiencies remained quite steady.

- In 2017 the rate of MLC deficiencies per inspection remained at 0.3.
- The number of MLC deficiencies recorded in 2017 dropped by 15.9 per cent from 1091 in 2016 to 918 in 2017. Due to the reduction in the total number of deficiencies from 8942 in 2016 to 7084 in 2017, the relative proportion of MLC deficiencies increased marginally from 12.2 per cent in 2016 to 13 per cent in 2017.

Of the 219 detainable deficiencies issued in 2017, 20 were related to MLC requirements. This accounted for 9.1 per cent of the total detainable deficiencies—making the category the sixth most prevalent cause of detention in 2017. MLC breaches were the sixth most prevalent cause of detention from 2014 to 2016.

A comparison of the 2016 and 2017 results indicates a slight decline in the number of MLC-related deficiencies. The proportion of MLC detainable deficiencies increased from 2016 to 2017. An MLC inspection snapshot for 2016 and 2017 is provided in table 5.

Table 5 – Comparative MLC inspection snapshot for 2016 and 2017

AMSA inspected 3126 ships and issued 7084 deficiencies in 2017. 219 of these deficiencies were detainable	Statistics for MLC	
	2016	2017
	1091 deficiencies issued	918 deficiencies issued
	MLC deficiencies 12% of the total	MLC deficiencies 13% of the total
	0.3 deficiencies per inspection relate to MLC	0.3 deficiencies per inspection related to MLC
	28 detainable deficiencies	20 detainable deficiencies
	8% of detainable deficiencies	12% of detainable deficiencies



ANALYSIS OF 2017 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 2017.

Ship arrivals in Australian ports for 2017

A total of 28,502 ships arrived at Australian ports during 2017.	Arrivals – top 5 Ports
	Port Hedland 2918 (10.2%)
	Brisbane 2446 (8.6%)
	Newcastle 2323 (8.2%)
	Sydney 2152 (7.6%)
	Melbourne 2135 (7.5%)

Port Hedland was the busiest port based on foreign-flagged vessel arrivals, being predominantly bulk iron ore. For Port Hedland and Newcastle, the dry bulk market contributed to the majority of arrivals, with Brisbane, Sydney and Melbourne arrivals being predominantly engaged in the liner trade.

Figure 1 – 2017 port arrivals by ship type

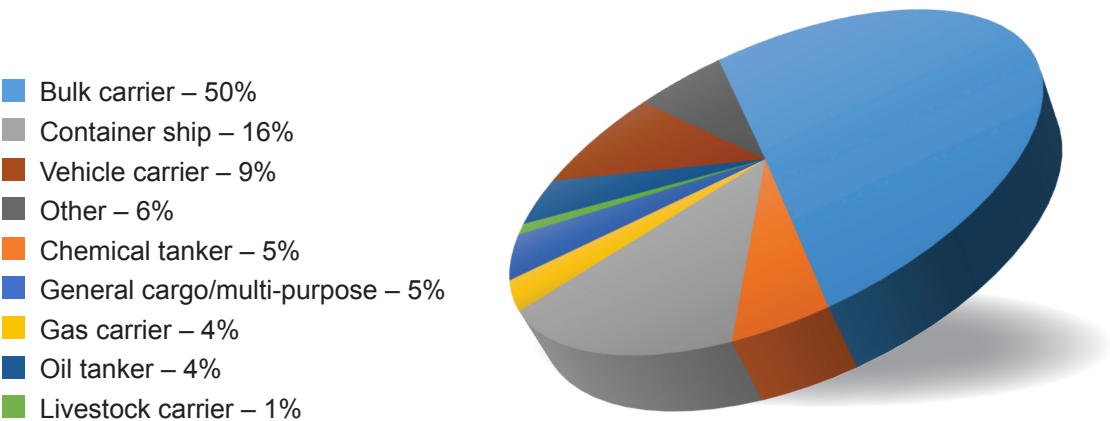




Table 5 – Ship arrivals in 2017 compared to 2016

Ship type	2016	2017	Change
Bulk carrier	14,145	14,324	1.3%
Chemical tanker	1380	1376	-0.29%
Container ship	4340	4568	5.25%
Gas carrier	1057	1080	21.8%
General cargo/Multi-purpose	1164	1398	-20.10%
Livestock carrier	366	316	-13.68%
Oil tanker	1276	1276	0.0%
Vehicle carrier	1484	2514	9.1%
Other	2304	1650	-28.39%
Total arrivals	27,516	28,502	3.58%

Inspections by ship type

In 2017, our surveyors carried out 3128 initial PSC inspections and 2040 PSC follow up inspections in compliance with international conventions, associated codes, resolutions and Australian legislation.

PSC inspections by ship type

AMSA conducted 3128 PSC inspections in 2017.	2017 top five
	1. Bulk carrier - 1732 (55.4%)
	2. Container ships - 297 (9.5%)
	3. Oil tankers - 194 (6.2%)
	4. General cargo / multi-purpose ship 184 (5.9%)
	5. Chemical tanker - 181 (5.8%)

Table 6 shows the number of inspections by vessel type from 2013 to 2017. In 2017 there was a growth in the number of inspections of general cargo / multi-purpose ships, vehicle carriers and other ship types.

Table 6 – Total ships inspected by type

Ship type	2013	2014	2015	2016	2017
Bulk carrier	1850	2122	2389	2132	1732
Chemical tanker	138	169	187	208	181
Combination carrier	0	3	0	0	1
Commercial yacht	0	0	0	0	1
Container ship	298	342	378	342	297
Gas carrier	53	53	79	74	52
General cargo/ multi-purpose ship	262	232	174	163	184
Heavy load carrier	60	55	48	25	19
High speed passenger craft	0	1	0	0	0
Livestock carrier	43	55	52	57	49
MODU or FPSO	0	1	4	0	2
NLS tanker	15	26	24	28	27
Offshore service vessel	17	24	22	10	17
Oil tanker	235	243	218	227	194
Other types of ship	20	26	27	21	29
Passenger ship	39	42	52	51	47
Refrigerated cargo vessel	4	5	5	4	2
Ro-ro cargo ship	12	6	6	6	6
Ro-ro passenger ship	1	1	0	0	0
Special purpose ship	5	8	18	14	8
Tugboat	57	88	91	40	28
Vehicle carrier	181	184	209	197	180
Wood-chip carrier	52	56	67	77	72
Totals	3342	3742	4050	3675	3128

Inspection by location

A total of 3128 port State control inspections were conducted in 2017.	2017 top five
	1. Fremantle - 416 (13.3%)
	2. Newcastle – 316 (10.1%)
	3. Port Hedland - 311 (9.9%)
	4. Brisbane - 276 (8.8%)
	5. Gladstone - 206 (6.6%)

Despite the reduction in the number of initial inspections, AMSA surveyors had another busy year. Fremantle and Newcastle remained the two busiest ports for inspections, followed by Port Hedland, Brisbane and then Gladstone.

Of the 53 ports at which inspections were conducted, the top five ports accounted for 48.7 per cent of the 3128 initial PSC inspections undertaken. This is reflected in table 7.

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

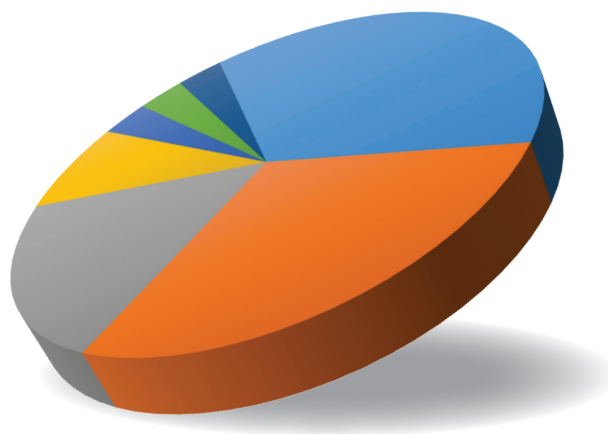
	2013	2014	2015	2016	2017	% of total in 2017
Fremantle, WA	414	437	467	449	416	13.3
Newcastle, NSW	333	355	424	401	316	10.1
Port Hedland, WA	150	265	358	247	311	9.9
Brisbane, QLD	201	350	338	304	276	8.8
Gladstone, QLD	127	230	290	251	206	6.6
Sydney, NSW	272	267	264	282	205	6.6
Dampier, WA	238	264	304	281	187	6.0
Hay Point, QLD	237	274	247	255	180	5.8
Melbourne, VIC	176	190	204	151	156	5.0
Townsville, QLD	164	136	139	115	100	3.2
Darwin, NT	143	156	124	94	96	3.1
Geraldton, WA	138	127	129	127	94	3.0
Port Adelaide, SA	98	65	106	90	88	2.8
Port Kembla, NSW	195	171	164	162	83	2.7

As in previous years, in 2017 the greatest numbers of PSC initial inspections were undertaken in Western Australia followed by Queensland and New South Wales. Inspections by state are shown in table 8 and figure 2.

Table 8 – PSC inspections by state/territory

State	PSC inspections
WA	1128
QLD	882
NSW	605
VIC	234
NT	102
SA	102
TAS	74
Total	3128

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 2017 by state/territory

Inspections by flag State

Table 10 provides a five-year breakdown of the number of vessels inspected by flag State. The table does not identify any significant change in the proportional inspections rates by flag State over the last five years.

The flag State with the largest number of ships inspected by AMSA was Panama, with 763 ships (24 per cent of the total). This is consistent with the 2015 and 2016 results.

Inspections of ships from the top five flag States—Panama, Marshall Islands, Singapore, Hong Kong and Liberia—accounted for 65 per cent of all PSC inspections. The top 12 flags with 25 or more inspections—listed in table 9—accounted for 2665 inspections, or 85.2 per cent of all inspections.

Table 9 – PSC inspections by top 12 flag States

Top 12 Flag States	Number of Inspections				
	2013	2014	2015	2016	2017
Panama	918	1002	1045	942	763
Marshall Islands	225	303	338	358	337
Singapore	287	375	427	369	328
Hong Kong, China	372	430	482	426	311
Liberia	313	350	372	360	304
Malta	135	283	216	196	210
Bahamas	122	125	158	138	121
Cyprus	71	86	89	87	73
Japan	55	68	83	71	60
Norway	44	44	51	49	55
China	94	103	93	70	53
Isle of Man	58	70	63	54	52
Greece	62	78	91	81	49
Korea, (Republic of)	68	78	78	48	47

Figures in red are not in the top 12.

Table 10 – Total ships inspected by flag State

Flag State	2013	2014	2015	2016	2017
Antigua and Barbuda	84	74	66	51	44
Bahamas	122	125	158	138	121
Barbados	2	3	2	1	3
Belgium	12	7	6	6	3
Belize	3	2			
Bermuda	16	16	30	29	15
Brazil				1	
Brunei Darussalam					1
Canada	1				
Cayman Islands	32	21	24	23	34
China	94	103	93	70	53
Comoros			1	1	1
Cook Islands	5	6	7	7	7
Croatia	6	3	4	5	5
Curacao	2	3	3		
Cyprus	71	86	89	87	73
Denmark	9	22	22	22	16
Dominica	1	1	1		
Egypt	4	3			
Estonia		2	1		
Faroe Islands				1	
Fiji				2	4
France	2	3	4	13	8
Germany	10	2	2	7	9
Gibraltar	24	15	15	7	4
Greece	62	78	91	81	49
Hong Kong, China	372	430	482	426	311
India	18	11	18	7	9
Indonesia	8	15	11	5	
Iran (Islamic Republic of)					1
Ireland				1	
Isle of Man	58	70	63	54	52
Italy	28	15	22	20	16
Jamaica		1		1	
Japan	55	68	83	71	60
Korea (republic of)	68	73	76	48	47
Kuwait	3	4	4	3	4
Liberia	313	350	372	360	304

Flag State	2013	2014	2015	2016	2017
Libya	0	0	0	1	
Luxembourg	7	8	2	11	7
Malaysia	10	17	8	8	8
Malta	135	172	216	196	210
Marshall Islands	225	303	338	358	337
Mauritius		1	1		
Netherlands	57	41	38	17	20
New Zealand	1	2	7	3	3
Norway	44	44	51	49	55
Pakistan		1	1	1	1
Panama	918	1002	1045	942	763
Papua New Guinea	14	8	8	9	7
Philippines	33	30	29	27	19
Portugal	3	7	8	21	30
Qatar	1				
Saint Kitts and Nevis			2		
Saint Vincent and the Grenadines	3	2	3	1	4
Samoa	1	2	1		
Saudi Arabia	1	1	2	2	1
Singapore	287	375	427	369	328
Solomon Islands	1		4	3	
South Africa				1	
Spain			2	1	1
Sri Lanka	1			1	1
Sweden	8	8	9	14	10
Switzerland	4	11	6	12	7
Taiwan (province of china)	13	13	24	18	7
Tanzania (United Republic of)					1
Thailand	11	11	8	9	9
Tonga	1	2			
Turkey	3	4	6	8	3
Tuvalu	4		1		1
United Kingdom	51	34	33	31	28
United States	2	6	5	2	5
Vanuatu	11	18	11	7	7
Viet Nam	7	6	4	1	1
Totals	3342	3742	4050	3675	3128

Figure 3 represents inspections by flag State where 25 or more vessels have been subjected to inspection during 2017. 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 – 26%
■	Marshall islands – 12%
■	Singapore – 11%
■	Hong Kong, China – 11%
■	Liberia – 10%
■	Malta – 7%
■	Bahamas – 4%
■	Cyprus – 3%
■	Antigua and Barbuda – 2%
■	China – 2%
■	Greece – 2%
■	Isle of Man – 2%
■	Japan – 2%
■	Korea (Republic of) – 2%
■	Norway – 2%
■	Cayman Islands – 1%
■	Denmark – 1%
■	Portugal – 1%
■	United Kingdom – 1%





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. AMSA 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 2017 there was a 20.8 per cent decrease in the number of deficiencies issued and a 14.9 per cent decrease in the number of ship inspections compared to 2016. The deficiency rate per inspection decreased slightly from 2.4 in 2016 to 2.3 in 2017. Table 12 shows a marginal decrease was observed in operational deficiencies, all other rates remained consistent with 2016.

Top 5 deficiencies per inspection by ship type 2017

A total of 7084 deficiencies were issued in 2017 with the average deficiencies per inspection being 2.3.	Ship type (deficiencies per inspection)
	Tugboat – 3.4
	Livestock carrier – 3.31
	General cargo/multipurpose ships – 3.01
	Bulk carrier – 2.72
	Container ship - 2.20

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 that 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 2016.

If the number of deficiencies is considered in isolation, as depicted in table 11, the majority of deficiencies were issued to bulk carriers. However, this is not surprising given bulk carriers represented 51 per cent of ship arrivals and 55 per cent 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	2073	941	868	242	521	1732
Chemical tanker	59	21	21	4	18	181
Commercial yacht	1	2				1
Container ship	288	117	76	30	135	297
Gas carrier	22	4	8	3	3	52
General cargo/multi-purpose ship	224	108	96	28	88	184
Heavy load carrier	15	6	3		4	19
Livestock carrier	87	26	21	7	18	49
MODU or FPSO			1			2
NLS tanker	24	2	10		10	27
Offshore service vessel	4	2				17
Oil tanker	121	39	27	8	41	194
Other types of ship	24	20	10	2	3	29
Passenger ship	29	7	8	1	4	47
Refrigerated cargo vessel	9	3	6	1	4	2
Ro-ro cargo ship	11	5	3		2	6
Special purpose ship	5	6	1		4	8
Tugboat	55	27	9	3	13	28
Vehicle carrier	80	23	25	11	22	180
Wood-chip carrier	82	19	16	8	28	72
Totals for 2017	3213	1378	1209	348	918	3128
2017 deficiency rates	1.0	0.4	0.4	0.1	0.3	2.3
Totals for 2016	4094	1678	1594	485	1091	3675
2016 deficiency rates	1.1	0.5	0.4	0.1	0.3	2.4

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%
Combination carrier						1				
Commercial yacht	1	2				1	3	3		
Container ship	0.99	0.39	0.26	0.45	0.1	297	647	2.2	21	7.10%
Gas carrier	0.42	0.08	0.15	0.06	0.06	52	40	0.77	0	
General cargo/multi-purpose ship	1.27	0.59	0.52	0.48	0.15	184	543	3.01	15	8.20%
Heavy Load carrier	0.79	0.32	0.16	0.21		19	29	1.47		
Livestock carrier	1.84	0.53	0.43	0.37	0.14	49	164	3.31	5	10.20%
MODU or FPSO			0.5			2	1	0.5	0	
NLS Tanker	0.89	0.07	0.37	0.37		27	47	1.7	1	3.70%
Offshore service vessel	0.24	0.12				17	15	0.35	0	
Oil tanker	0.65	0.2	0.14	0.21	0.04	194	235	1.24	2	1.00%
Other types of ship	0.83	0.69	0.34	0.1	0.07	29	62	2.03	2	6.90%
Passenger ship	0.62	0.15	0.17	0.09	0.02	47	49	1.04	0	
Refrigerated cargo vessel	4.5	1.5	3	2	0.5	2	23	11.5	1	50.0%
Ro-Ro cargo ship	1.83	0.83	0.5	0.33		6	21	3.5	0	
Special purpose ship	0.63	0.75	0.13	0.5		8	16	2	0	
Tugboat	1.96	0.96	0.32	0.46	0.11	28	98	3.82	4	14.30%
Vehicle carrier	0.45	0.13	0.14	0.12	0.06	180	162	0.9	3	1.70%
Wood chip carrier	1.15	0.26	0.22	0.39	0.11	72	154	2.14	2	2.80%
Total	3213	1378	1209	918	348	3128	7084		165	5.30%
Deficiency Rate	1.1	0.4	0.4	0.3	0.1			2.3		

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	2016	2017	Trend
Structure/equipment	1.1	1.1	-
Operational	0.5	0.4	↓
Human factors	0.4	0.4	-
ISM	0.1	0.1	-
MLC	0.3	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 shows 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 emergency systems, lifesaving appliances, fire safety and water/weather-tight conditions 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 room for improvement. Issues relating to safety of navigation were high among the ISM detentions once again.

Table 14 – Detainable deficiencies by category

Category	2015	2015	2016	2016	2017	2017
	No. of deficiencies	share %	No. of deficiencies	share %	No. of deficiencies	share %
ISM	103	29.7%	98	27.8%	64	29.2%
Emergency systems	34	9.8%	44	12.5%	32	14.6%
Lifesaving appliances	30	8.6%	44	12.5%	26	11.9%
Fire safety	55	15.9%	49	13.9%	25	11.4%
Water/weather-tight conditions	24	6.9%	17	4.8%	20	9.1%
Labour conditions	26	7.5%	25	7.1%	19	8.7%
Pollution prevention	39	11.2%	25	7.1%	15	6.9%
Certificates and documentation	7	2.0%	18	5.0%	4	1.9%
Radio communications	11	3.2%	12	3.4%	7	3.2%
Other	2	0.6%	8	2.3%	1	0.5%
Safety of navigation	5	1.4%	8	2.3%	1	0.5%
Structural conditions	7	2.0%	3	0.8%	4	1.8%
Propulsion and auxiliary machinery	3	0.9%	2	0.6%	1	0.5%
Alarms	1	0.3%	0	0.0%	0	0.0%
Cargo operations including equipment	0	0.0%	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 2017, our surveyors detained 165 ships, an average detention rate of 5.3%, compared to 246 ships at 6.7 per cent in 2016.

Top 5 detention rates by ship type 2016 and 2017

AMSA detained 165 ships in 2017, with an average detention rate of 5.3%.	2016 - 6.7% average (number of detentions)	2017 - 5.3% average (number of detentions)
	Tugboat – 17.5% (7)	Tugboat – 14.3% (4)
	Special purpose ship – 14.3% (2)	Livestock carrier – 10.2% (5)
	General cargo/multi-purpose ship – 12.1% (20)	General cargo/multi-purpose ship – 8.2% (15)
	NLS tanker – 10.7% (3)	Container ship – 7.1% (21)
	Offshore service vessel – 10% (1)	Other types of ships – 6.9% (2)

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

Table 15 shows that bulk carriers represented the largest number of PSC detentions. This is to be expected given the relative number of arrivals of these ships and number of ships eligible to be inspected. The bulk carrier detention rate was 6.1 per cent, which is above the 5.3 per cent average for all ships in 2017. While not the worst performing type of vessel, bulk carriers have performed worse than average in 2016 and 2017.

For the second year in a row, the poorest performing ships were tugboats, followed by livestock carriers, general cargo ships, container ships and other ship types. It is pertinent that general cargo ships remain in the top five for detention rate by ship type and have been in the top five poorest performing ship types since 2014.



Table 15 – Detentions by ship type

Ship type	2017			2016
	Inspections	Detentions	Detention rate	Detention rate
Bulk carrier	1732	106	6.1%	7.4%
Chemical tanker	181	3	1.7%	3.9%
Combination carrier	1	0	0%	0%
Commercial yacht	1	0	0%	0%
Container ship	297	21	7.1%	6.4%
Gas carrier	52	0	0%	5.4%
General cargo/multi-purpose ship	184	15	8.2%	12.1%
Heavy load carrier	19	0	0%	8.3%
High speed passenger craft	0	0	0%	0%
Livestock carrier	49	5	10.2%	5.3%
MODU or FPSO	2	0	0%	0%
NLS tanker	27	1	3.7%	10.7%
Offshore service vessel	17	0	0%	10.0%
Oil tanker	194	2	1.0%	2.2%
Other types of ship	29	2	6.9%	0.0%
Passenger ship	47	0	0%	2.0%
Refrigerated cargo vessel	2	1	50%	0.0%
Ro-ro cargo ship	6	0	0%	14.3%
Ro-ro passenger ship	6	0	0%	0.0%
Special purpose ship	8	0	0%	14.3%
Tugboat	28	4	14.3%	17.5%
Vehicle carrier	180	3	1.7%	3.6%
Wood-chip carrier	72	2	2.8%	3.9%
Totals	3128	165	5.3%	6.7%

- In 2017, 1732 bulk carriers were inspected, 4707 deficiencies were issued and 106 ships were detained. In 2016, 2131 bulk carriers were inspected, 5920 deficiencies issued and 158 ships were detained. The 2017 detention rate of 6.1 per cent is an improvement from 2016 when the detention rate was 7.4 per cent, but still compares poorly to 2015 where the detention rate was 5.9 per cent.
- Livestock carriers performed poorer in 2017 with 164 deficiencies resulting in five detentions and a detention rate of 10.2 per cent. In 2016, 151 deficiencies were issued, resulting in three detentions and a detention rate of 5.3 per cent.
- Passenger ships continued to perform well. In 2016, passenger ships were issued with 87 deficiencies resulting in one detention and a detention rate of 2 per cent. In 2017 deficiencies dropped to 49, and no detentions.
- In 2017 eight special purpose ships were inspected, 16 deficiencies were issued and no ships were detained. This compares favourably with 2016 where 14 special purpose ships were inspected, 31 deficiencies were issued and two ships were detained.

Detentions by flag State

Individual flag State performance can be determined by comparing the percentage share of the number of inspections against the percentage share of the 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 vessels of that flag State are not performing well. This is represented in figure 4.

There was a total of 165 foreign- flag vessels detained in 2017. The average detention rate for all vessels was 5.3%.	Flag State (Detention Rate %)
	Denmark – 25%
	Philippines – 10.5%
	Malta – 18%
	Cyprus – 6.8%
	Bahamas – 6.6%
	Italy – 6.3%
	Liberia – 6.3
	Panama – 5.8%

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

In considering table 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. A more accurate assessment of performance of flag States is provided by comparing detention rates over three years, as shown in table 16. This table indicates that Italy, Cyprus and Malta have exceeded the overall average detention rate over the three years from 2014 to 2017.

It is notable the Antigua and Barbuda previously exceeded the average detention rate over three consecutive years but have shown a marked improvement in 2017 with a detention rate of just 2.3 per cent.

Table 16 – Flag states that exceeded the average in 2015, 2016 and 2017

2015 (average 6.0%)		2016 (average 6.7%)		2017 (average 5.3%)	
Flag State	Detention rate (number)	Flag State	Detention rate (number)	Flag State	Detention rate (number)
Indonesia	27.3% (3)	Taiwan (China)	22.2% (4)	Denmark	25% (4)
Antigua and Barbuda	15.2% (10)	Netherlands	11.8% (2)	Philippines	10.5% (2)
Gibraltar	14.3% (2)	Italy	10.0% (2)	Malta	8.6% (18)
Italy	13.6% (3)	Antigua and Barbuda	9.8% (5)	Cyprus	6.8% (5)
India	11.1% (2)	Cyprus	8.0% (7)	Bahamas	6.6% (8)
Cyprus	10.1% (9)	Panama	7.9% (74)	Italy	6.3% (1)
Liberia	9.9% (37)	France	7.7% (1)	Liberia	6.3% (19)
Malta	8.3% (18)	Malta	7.7% (15)	Panama	5.8% (44)
Cayman Islands	8.3% (2)	Greece	7.4% (6)		
Republic of Korea	7.7% (6)				

■ Exceeded the average detention rate in two years out of three

■ Exceeded the average detention rate in three years out of three

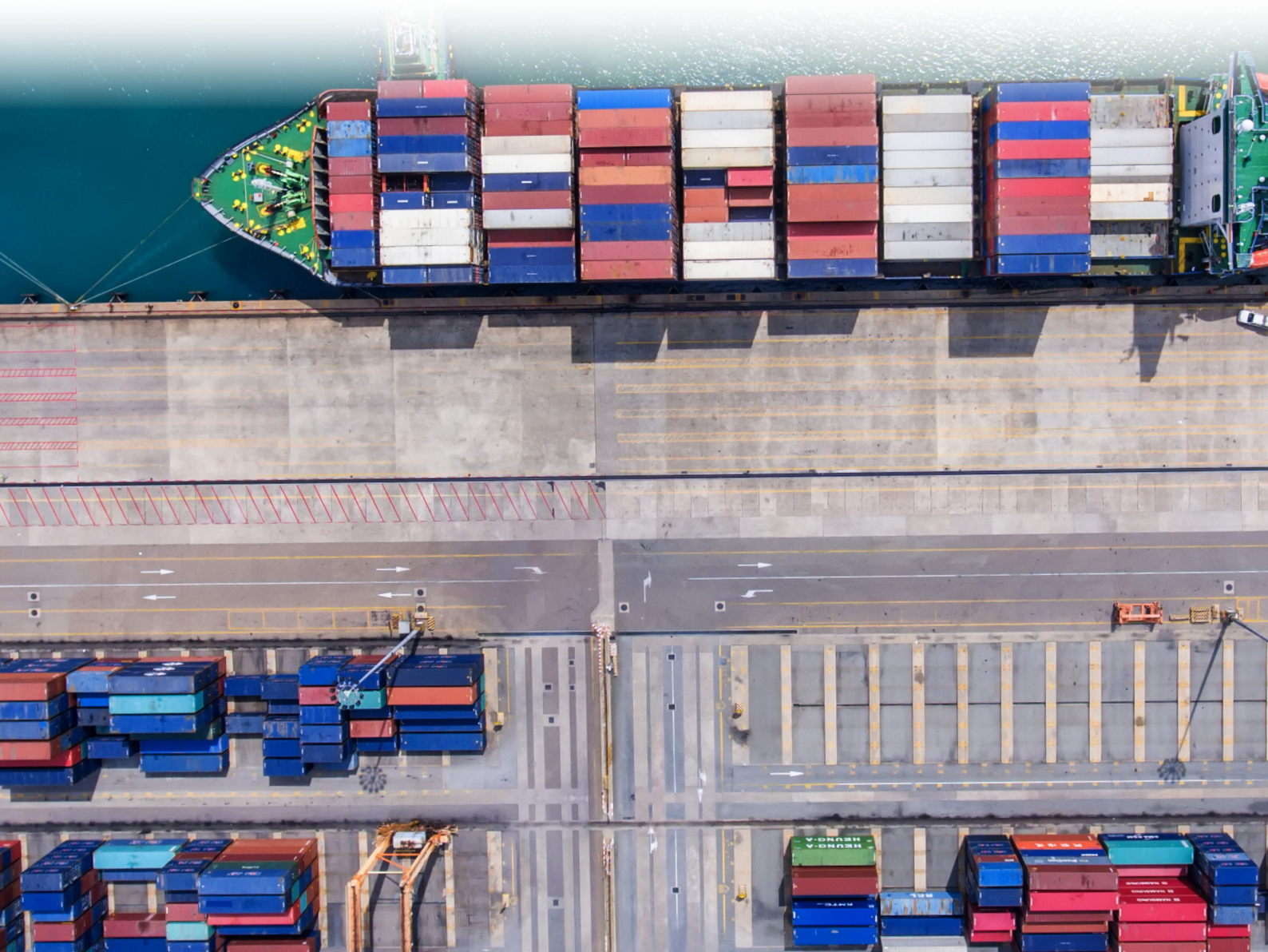
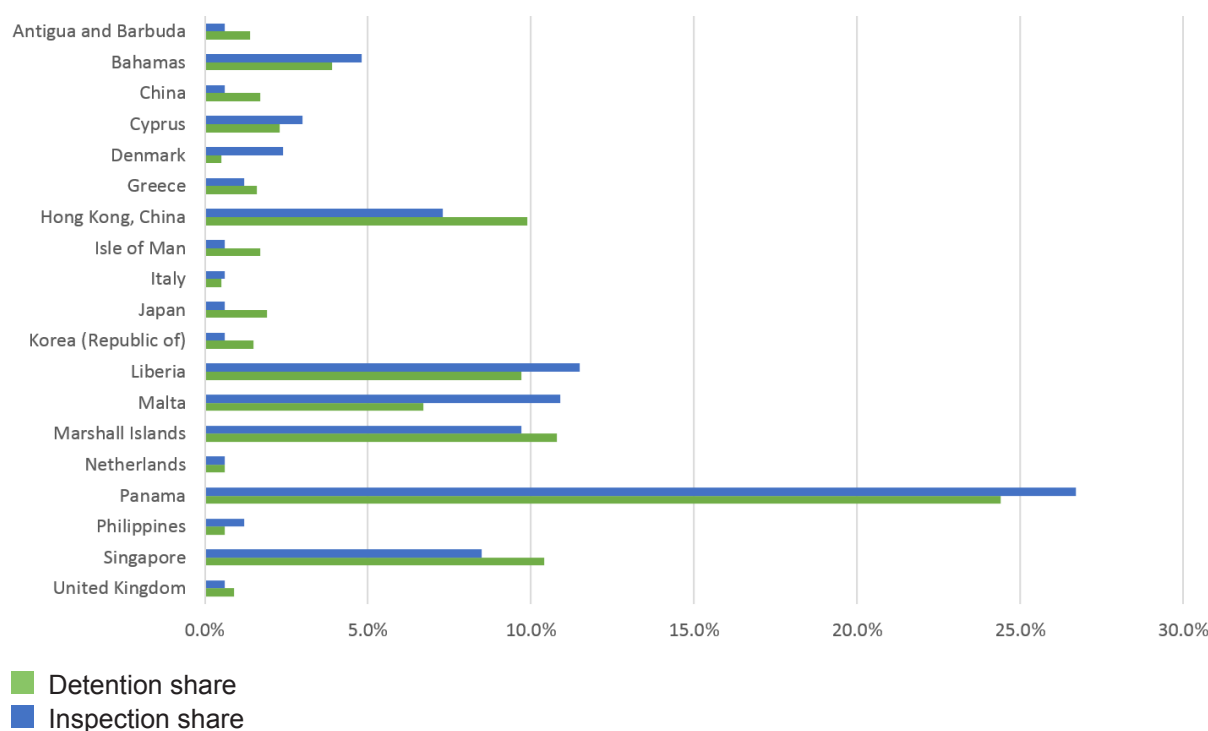


Table 17 – Inspections and detentions by flag State

Flag State	Inspections	Detentions	Detention rate	Flag State	Inspections	Detentions	Detention rate
Antigua and Barbuda	44	1	2.30%	Malaysia	8	0	0.0%
Bahamas	121	8	6.60%	Malta	210	18	8.60%
Barbados	3	0	0.0%	Marshall islands	337	16	4.70%
Belgium	3	0	0.0%	Netherlands	20	1	5.00%
Bermuda	15	1	3.4%	New zealand	3	0	0.0%
Brunei Darussalam	1	0	0.0%	Norway	55	0	0.0%
Cayman Islands	34	0	0%	Pakistan	1	1	100.0%
China	53	1	1.90%	Panama	763	44	5.80%
Comoros	1	0	0.0%	Papua New Guinea	7	1	14.30%
Cook Islands	7	0	0.0%	Philippines	19	2	10.50%
Croatia	5	0	0.0%	Portugal	30	0	0.0%
Cyprus	73	5	6.80%	Saint Vincent and the Grenadines	4	0	0.0%
Denmark	16	4	25.00%	Saudi Arabia	1	1	100.0%
Fiji	4	3	75.00%	Singapore	326	14	4.30%
France	8	0	0.0%	Spain	1	1	100.0%
Germany	9	1	11.10%	Sri Lanka	1	1	100.0%
Gibraltar	4	0	0.0%	Sweden	10	0	0.0%
Greece	49	2	4.10%	Switzerland	7	1	14.30%
Hong Kong, China	311	12	3.90%	Taiwan (province of China)	7	1	14.30%
India	9	0	0.0%	Tanzania (United Republic of)	1	0	0.0%
Iran (Islamic Republic of)	1	0	0.0%	Thailand	9	2	22.20%
Isle of Man	52	1	1.9%	Turkey	3	0	0.0%
Italy	16	1	6.30%	Tuvalu	1	0	0.0%
Japan	60	1	1.70%	United Kingdom	28	1	3.60%
Korea (republic of)	47	1	2.10%	United States	5	0	0.0%
Kuwait	4	0	0.0%	Vanuatu	7	0	0.0%
Liberia	304	19	6.30%	Viet Nam	1	0	0.0%
Luxembourg	7	0	0.0%	Total	3126	165	5.3%

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

Figure 4 – 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, Recognised Organisations (RO) and flag States all have the right to appeal against inspection outcomes and AMSA actively encourages these parties to appeal should they think it is warranted. Appeals can be made through a number of different means, with the master of a vessel advised of these rights upon completion of each PSC inspection.

Masters are advised that the initial avenue for review is through a direct approach to the 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 (AAT).

During 2017 owners, operators, ROs and flag States requested AMSA review a number of PSC deficiencies and detentions, all of which were investigated and responded to accordingly. AMSA received 23 appeals against vessel detention, with each undergoing a full review of all relevant information. In all 23 cases, the original decision of the surveyor was found to be appropriate and the appeal was rejected. AMSA received eight appeals from ROs challenging the assignment of RO responsibility during the inspection process. AMSA accepted five of these challenges upon review and amended the inspection record and rejected the others.

There were no appeals lodged against AMSA 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 AAT, which was withdrawn by the applicant prior to consideration by the AAT.

A full list of ships AMSA detained can be found on the AMSA website (amsa.gov.au).

Recognised Organisation performance

Table 18 reports the 2017 performance of Recognised Organisations (RO) including inspections, deficiency rates, detention rates and the percentage of the detainable deficiencies that were allocated RO responsibility. The table indicates a relatively small proportion of detainable deficiencies for which RO responsibility was assigned. However, the average increased from 1.7 per cent in 2016 to 5.9 per cent in 2017. This is the highest since 2010.

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)	351	746	17	4.8%	22	0	0.0%
Bureau Veritas (BV)	296	889	26	8.8%	32	1	3.1%
China Classification Society (CCS)	173	392	5	2.9%	7	0	0.0%
CR Classification Society (CR)	2	2	0	0.0%	0	0	0.0%
Croatian Register of Shipping (CRS)	3	18	1	33.3%	2	0	3.0%
DNV GL AS (DNVGL)	519	1020	24	4.6%	33	1	0.0%
Indian Register of Shipping (IRS)	6	7	0	0.0%	0	0	0.0%
International Naval Surveys Bureau (INSB)	1	3	0	0.0%	0	0	0.0%
Korean Register of Shipping (KRS)	181	403	6	3.3%	8	1	12.5%
Lloyd's Register (LR)	392	733	22	5.6%	28	2	7.1%
Nippon Kaiji Kyokai (NKK)	1118	2629	56	5.0%	76	8	10.5%
Polski Rejestr Statkow (PRS)	2	2	0	0.0%	0	0	0.0%
RINA Services SpA (RINA)	65	177	5	7.7%	6	0	0.0%
No class	18	63	3	16.7%	5	0	0.0%
Total	3128	7084	165	5.3%	219	6	5.9%

Note: The results for DNV and GL have been merged into DNV GL.

Risk rating

AMSA continues to use a risk profiling system to assist in allocating inspection resources in the most effective manner. AMSA's 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 to Australian ports continues to show a drop in high risk ships and an increase in medium to lower risk ships. This data, along with targeted inspection rates—shown in table 20—indicates AMSA 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 47 per cent.

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

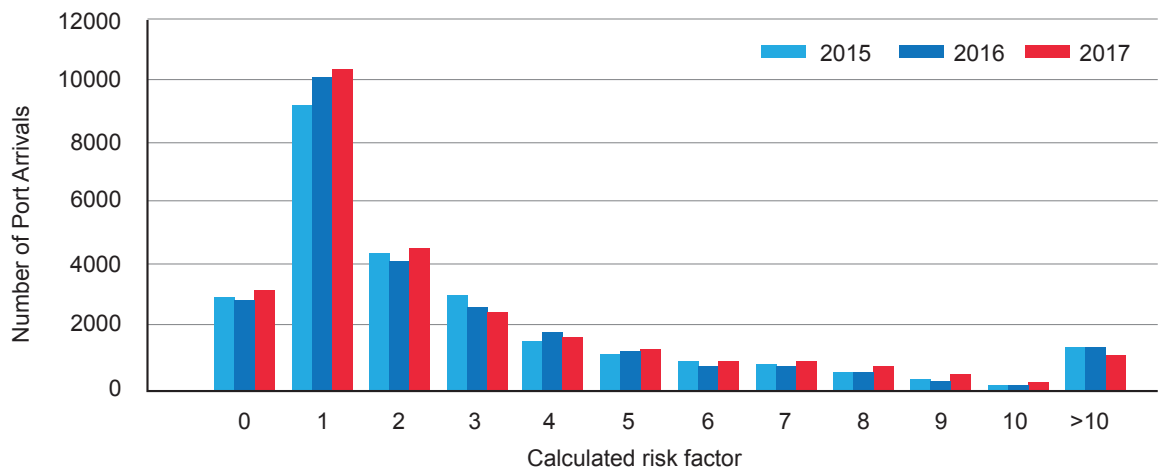
Inspection priority	Ship arrivals		Eligible ships		Ships inspected		Inspection rate	
	2016	2017	2016	2017	2016	2017	2016	2017
Priority 1	610	640	349	413	334	376	95.7%	91%
Priority 2	696	659	416	404	338	317	81.3%	78.5%
Priority 3	1,859	1,965	1,332	1,559	868	823	65.2%	52.8%
Priority 4	3,958	3,915	3,864	3,815	1,880	1,394	48.7%	36.5%
Totals	7,123	7,179	5,961	6,191	3420	2910	57.4%	47%

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	2016		2017	
	Deficiencies	Deficiencies per inspection	Deficiencies	Deficiencies per inspection
Priority 1	1373	3.3	1298	2.7
Priority 2	858	2.3	745	2.2
Priority 3	2364	2.5	2001	2.3
Priority 4	4340	2.2	3040	2.1
Totals	8940	2.4	7084	2.3

Figure 5 – Risk factor of arrivals – foreign-flagged ships



From figure 5, it is evident that the number of vessels of all risk factors remained fairly consistent in 2017 compared to 2016 but with a proportional increase in RF0 to RF2 from 2015 to 2016.

The 2017 data demonstrates that the number of deficiencies issued to priority 1 and 2 vessels has decreased and the deficiencies per inspection has also decreased. Priority 4 vessels had a small decrease in deficiencies per inspection.



HOW IT WORKS

Flag State control (FSC)

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

AMSA conducted 72 FSC inspections on 59 Australian-flagged vessels during 2017, resulting in 294 deficiencies being recorded, of which four were serious enough to warrant detention of the vessel. This represents a marked increase in the average number of deficiencies per inspection from 2.7 in 2016 to 4.08 in 2017. While this is above the average for foreign-flagged vessels (2.3), a significant proportion of these deficiencies were assigned to a single vessel which was subject to its first FSC inspection.

The number of FSC detentions increased to four—from one in 2016. This equated to a detention rate of 5.6 per cent which is slightly above the average recorded for foreign-flagged ships.

Port State control – Australian-flagged ships (overseas)

Australian-flagged ships calling at foreign ports were subject to a total of 12 PSC inspections by foreign maritime authorities including the Russian Federation, Vietnam and Japan, resulting in four deficiencies and no detentions.

Concentrated inspection campaign (CIC)

From 1 September 2017 to 30 November 2017, AMSA participated in a concentrated inspection campaign (CIC) on safety of navigation. This was aimed at verifying compliance with Chapter V of the International Convention for the Safety of Life at Sea (SOLAS). Over this three-month period, AMSA conducted a total of 470 inspections covering CIC verification. Two ships were detained on the basis of a lack of current and up-to-date charts for the previous voyage and an incomplete passage plan.

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 AMSA 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.

AMSA can issue a vessel with a direction not to enter or use an Australian port (or ports) for 3, 12 or 24 months. When considering vessel performance, AMSA also looks 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.

Table 22 below lists the vessels subject to directions not to enter or use an Australian port in 2017.

Table 22 – Restricted Vessels

Vessel name (IMO number)	Flag	Direction	Issue date	Expiry date
<i>Kiunga Chief</i> (9195119)	Papua New Guinea	Refused access for 3 months	30/5/2017	30/8/2017
<i>Rena</i> (9464780)	Bahamas	Refused access for 6 months	03/08/2017	03/02/2018
<i>DL Carnation</i> (9618680)	Panama	Refused access for 12 months	14/09/2017	14/09/2018

APPENDIX A

Share of detentions compared to share of inspections

Note: In 2017 detentions occurred in 5.3% of all inspections, and the rate of deficiencies per inspection was 2.3.

Flag	Number of PSC inspections	Deficiencies	Deficiencies per PSC inspection	Detained	Detention Rate	PSC share	Detention share
Antigua and Barbuda	44	113	2.57	1	2.3%	1.4%	0.6%
Bahamas	121	263	2.17	8	6.6%	3.9%	4.8%
China	53	77	1.45	1	1.9%	1.7%	0.6%
Cyprus	73	181	2.48	5	6.8%	2.3%	3.0%
Denmark	16	31	1.94	4	25.0%	0.5%	2.4%
Greece	49	132	2.69	2	4.1%	1.6%	1.2%
Hong Kong, China	311	593	1.91	12	3.9%	9.9%	7.3%
Isle of Man	52	62	1.19	1	1.9%	1.7%	0.6%
Italy	16	54	3.38	1	6.3%	0.5%	0.6%
Japan	60	113	1.88	1	1.7%	1.9%	0.6%
Korea (republic of)	47	110	2.34	1	2.1%	1.5%	0.6%
Liberia	304	725	2.38	19	6.3%	9.7%	11.5%
Malta	210	539	2.57	18	8.6%	6.7%	10.9%
Marshall Islands	337	686	2.04	16	4.7%	10.8%	9.7%
Netherlands	20	21	1.05	1	5.0%	0.6%	0.6%
Panama	763	2089	2.74	44	5.8%	24.4%	26.7%
Philippines	19	61	3.21	2	10.5%	0.6%	1.2%
Singapore	326	607	1.86	14	4.3%	10.4%	8.5%
United Kingdom	28	35	1.25	1	3.6%	0.9%	0.6%
Total	2849	6492		152			



Australian Government

Australian Maritime Safety Authority

2017 Port State Control

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