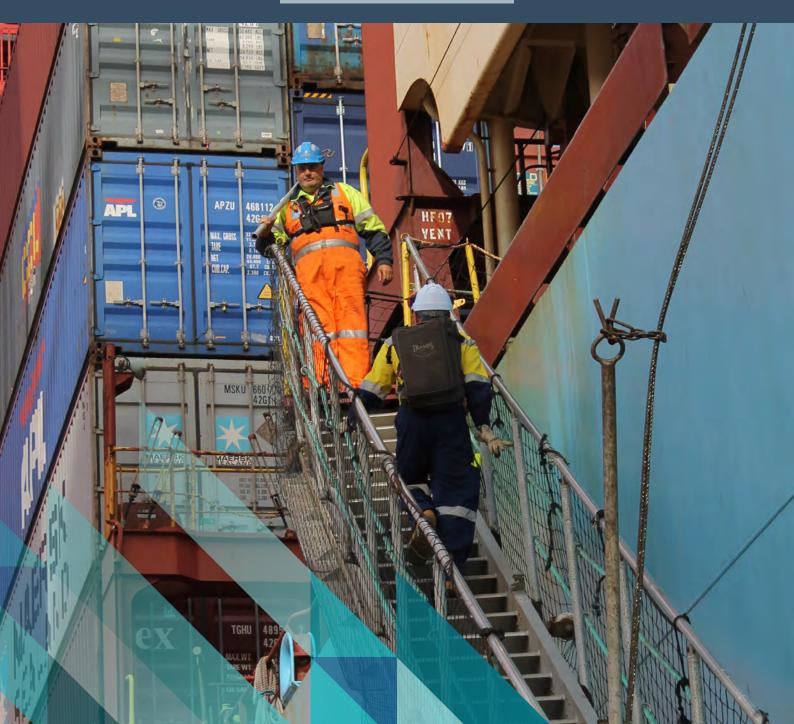


# Port State Control Australia

# 2018 Report





#### Copyright

The Australian Maritime Safety Authority encourages the dissemination and exchange of information provided in this publication.

Except as otherwise specified, all material presented in this publication is provided under Creative Commons Attribution 4.0 International licence.

This excludes:

- the Commonwealth Coat of Arms
- this department's logo
- content supplied by third parties.

The Creative Commons Attribution 4.0 International Licence is a standard form licence agreement that allows you to copy, distribute, transmit and adapt this publication provided that you attribute the work.

The details of the version 4.0 of the licence are available on the Creative Commons website, as is the full legal code for that licence.

#### Attribution

AMSA's preference is that you attribute this publication (and any material sourced from it) using the following wording:

Source: Australian Maritime Safety Authority Port State Control Australia 2018 Report

#### More information

For inquiries regarding copyright including requests to use material in a way that is beyond the scope of the terms of use that apply to it, please contact us through our website: www.amsa.gov.au

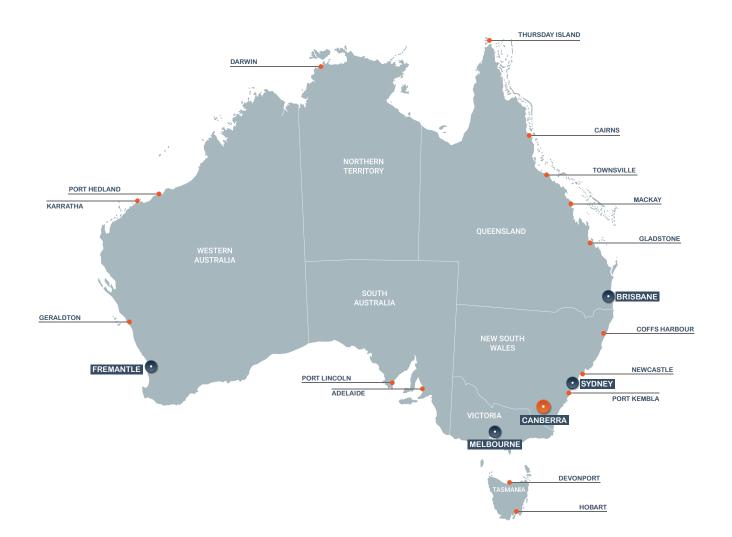
This report and AMSA detention data is available online at www.amsa.gov.au/psc



Australian Government
Australian Maritime Safety Authority

# Port State Control Australia

2018 Report



Purpose of this report	1
Year in review	2
Introduction	2
2018 summary of PSC activity	2
10-year summary of inspection, detentions and deficiency rate	3
Snapshot comparison to previous year	3
Trends for 2018	6
Summary of shipping industry activity 2018	7
2018 Maritime Labour Convention results	8
Analysis of 2018 inspection results	13
Arrivals	13
Inspections by ship type	14
Inspection by location	16
Inspections by flag State	18
Deficiencies	23
What is a deficiency?	23
Deficiencies by category and ship type	23
Detentions	29
What is a detention?	29
Detainable deficiencies by category	30
Detentions by ship type	31
Detentions by flag State	32
Detention appeals and review processes	37
Recognised Organisation performance	38
Risk rating	39
How it works	43
Flag State control (FSC)	43
Port State control – Australian-flagged ships (overseas)	43
Concentrated inspection campaign	43
Refusal of a ship's access and condition of entry	44
Appendix	45
Share of detentions compared to share of inspections	45



# Purpose of this report

Australia has one of the world's largest mixed market economies and the largest continental landmass surrounded by water. Australia's national livelihood depends on ensuring that maritime trade to and from the country remains safe, efficient and compliant with all relevant international conventions. Australia relies on sea transport for 99 per cent of its exports, equating to around 10 per cent of the world's sea trade. Port State control (PSC) is an essential element in ensuring that maritime safety is maintained.

This report summarises the PSC activities of the Australian Maritime Safety Authority (AMSA), detailing the performance of commercial shipping companies, flag States and Classification Societies for the 2018 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, regulating the maritime trade in Australia through the implementation of rigorous flag State control (FSC) and PSC regimes. Professional and consistent FSC and PSC regimes are essential in ensuring vessels comply with minimum standards of maritime safety, seafarer welfare and protection of Australia's 60,000 kilometre coastline (including approximately 12,000 islands) from environmental damage.

AMSA works in close 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 international maritime community.

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

As information on PSC activities is used by a diverse range of stakeholders on a regular basis, AMSA supplies current information via the AMSA website (www.amsa.gov.au/psc) This information includes monthly ship detentions, details of ongoing PSC activities, current shipping trends and emerging issues. We detail and promulgate government regulation and important information through marine orders and marine notices respectively.

# Year in review

## Introduction

The PSC inspection results for 2018 indicated a slight increase in the detention rate of vessels to 5.5 per cent. Despite a similar number of detentions in 2017, 2018 had a significantly lower rate of deficiencies with an average of 1.8 deficiencies per inspection. The small variance in the detention rate and decrease in deficiencies per inspection emphasises the benefit in maintaining a consistent and rigorous PSC inspection regime.

Ships and operators with a record of poor performance can be banned from entering or using Australian ports under section 246 of the *Navigation Act 2012*<sup>1</sup>. In 2018, AMSA banned three ships for periods ranging from 3 to 12 months. Two of these bans involved significant breaches of the *Maritime Labour Convention, 2006* (MLC).

This report has a section dedicated to MLC on the basis this is reported separately to the International Labour Organization (ILO) as this Convention was adopted under the auspices of that body. The PSC processes used for inspections in accordance with the MLC, and expectations with regard to compliance, are well established with the MLC having been in effect since 13 August 2013. This is demonstrated by the ongoing reduction in the total number of MLC deficiencies and deficiencies per inspection since 2014.

### 2018 summary of PSC activity

- During the calendar year there were:
  - 29,094 ship arrivals by 5900 foreign-flagged ships
  - 2922 PSC inspections
  - 161 ship detentions.
- Bulk carriers accounted for 49.3 per cent of ship arrivals and 54.3 per cent of PSC inspections.
- PSC inspections were carried out at 51 Australian ports.
- The average gross tonnage per visit was 51,808 GT compared to 51,612 GT in 2017.
- The average age of vessels in 2018 was 10 years, compared to nine in 2017 and 2016.

<sup>&</sup>lt;sup>1</sup> 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.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total inspections	2994	3127	3002	3179	3342	3742	4050	3675	3128	2922
Total detentions	248	222	275	210	233	269	242	246	165	161
Detention %	8.3	7.1	9.2	6.6	7.0	7.2	6.0	6.7	5.3	5.6
Deficiencies per inspection	3.0	2.4	2.8	2.4	2.4	2.9	2.3	2.4	2.3	1.8

10-year summary of inspection, detentions and deficiency rate

# Snapshot comparison to previous year

		2017	2018	Wher	compared to 2017
	Total arrivals	28502	29094	2.0%	(an increase of 592)
Arrivals	Individual ships which made those arrivals	5873	5900	0.5%	(an increase of 27)
	Ships eligible for PSC inspection	5634	5765	2.3%	(an increase of 131)
	Total PSC inspections	3128	2922	-6.6%	(a decrease of 206)
PSC	Total PSC inspections - by individual ships	2800	2616	-6.6%	(a decrease of 184)
inspections	Inspection rate of eligible ships %	49.7%	45.4%		
	Total deficiencies	7084	5320	-33.2%	(a decrease of 1764)
Deficiencies	Total detainable deficiencies	219	232	5.6%	(an increase of 13)
Denciencies	Rate of deficiencies per inspection	2.3	1.8		
Detentions	Total detentions	165	161	-2.4%	(a decrease of 4)
Detentions	Detentions as a percentage of total inspections	5.28%	5.51%		

## Key points

- The number of initial inspections decreased in 2018.
- In 2018, the number of foreign-flagged arrivals increased by 592 (2.0 per cent) to 29,094 arrivals by 5900 individual ships, representing continued growth in the number of ships arriving in Australia.
- The number of PSC inspections conducted during 2018 decreased by 206 (6.6 per cent) to 2922 inspections.
- There was a 33.2 per cent decrease in the number of deficiencies from 7084 deficiencies in 2017 to 5320 deficiencies in 2018. There was a slight increase in the number of detainable deficiencies by 5.6 per cent, from 219 in 2017 to 232 deficiencies in 2018.
- The number of detained vessels was 161, four fewer (2.5 per cent) than the 165 detentions recorded in 2017.
- There was a significant decrease in the average number of deficiencies per inspection from 2.3 in 2017 to 1.8 in 2018, with the detention rate increasing from 5.3 per cent in 2017 to 5.5 per cent in 2018.

The deficiencies per inspection are at record lows having steadily decreased over the last decade. The overall picture reflects the fact that AMSA seeks only to issue a deficiency where it is necessary. It is also a strong indication that AMSA's PSC regime is exerting a positive influence on the quality of ships arriving in Australia.

#### Top five initial PSC inspections by flag State 2018

	Flag State (number of inspections)
	Panama (622) 21.3%
There were 2922 foreign-flagged vessels inspected in 2018.	Marshall Islands (377) 12.9%
The top five flag States accounted for 66% of all inspections.	Liberia (340) 11.6%
	Hong Kong (306) 10.5%
	Singapore (292) 10.0%

#### Top five detention rates by flag State 2018

	Flag State (detention rate)	
There were 161 foreign-flagged vessels detained in 2018. The average detention rate for all vessels was 5.5%.	1. Panama (37) 23%	
	2. Liberia (32) 19.9%	
	3. Hong Kong (20) 12.4%	
	4. Marshall Islands (16) 9.9%	
	5. Singapore (7) 4.3%	

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

# Trends for 2018

As observed in past PSC annual reports, the most frequent cause of detention since 2010 relates to ineffective implementation of the safety management system required by the International Safety Management (ISM) Code.

Since 2015, issues concerning passage planning, conduct of voyages and the operation of vessels have contributed significantly to the number of ISM detentions and this remains a significant concern for AMSA. In one case, a vessel was banned from entering Australian ports after AMSA identified repeated issues related to the operational requirements of the relevant Conventions. In this instance, AMSA found that there were clear grounds for believing that the master and crew were not familiar with essential shipboard procedures relating to the safety of the ship over three separate inspections.

In 2018, material issues such as fire safety (16.4 per cent), emergency systems (12.5 per cent) and life-saving appliances (11.2 per cent) continued to be in the top three reasons for detention, as has been the case since 2012. However, pollution prevention (12 per cent) displaced water/ weathertight conditions (5.2 per cent) in the top five detainable deficiencies. While the low number of detainable deficiencies and significant reduction of the number of deficiencies per inspection is a positive result, the continued prevalence of ISM-related detentions is of concern. AMSA has identified this as an area where performance must be improved.

2016	2017	2018
ISM – 27.8%	ISM – 29.2%	ISM – 21.1%
Fire safety – 13.9%	Emergency systems – 14.6%	Fire safety – 16.4%
Emergency systems – 12.5%	Life-saving appliances – 11.9%	Emergency systems – 12.5%
Lifesaving appliances – 12.5%	aving appliances – 12.5% Fire safety – 11.4% Pollution Prevention – 1	
Pollution prevention – 7.1% Labour conditions – 7.1%	Water/weather-tight conditions – 9.1%	Lifesaving appliances – 11.2%

#### Top five detainable deficiencies 2016-18

In 2018, AMSA continued its work with flag States and ship owners to increase awareness of areas of particular concern to improve PSC performance.

# Summary of shipping industry activity 2018

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 the world's 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 this trend is expected to continue into the future.

As was the case in 2017, the growth in cargo volumes is from a combination of increased port visits and larger ships. The fleet profile of foreign-flagged ships visiting Australian ports has not changed and appears to be a result of the slowdown in new ship construction in 2015 and 2016.

#### The main trends in 2018 were:

- Foreign-flagged port visits totalled 29,094 in 2018, an increase of 2 per cent on the total from 2017. The number of individual ships that made these port calls increased slightly to 5900, an increase of 26 (0.4 per cent) over the 5873 in 2017.
- Bulk carrier port arrivals increased by 1.2 per cent in 2018, accounting for 50 per cent of foreign-flagged port arrivals. Arrivals of general cargo ships decreased by 5.6 per cent, whilst gas carriers increased by 22.4 per cent.
- The growth in foreign-flagged shipping activity remains geographically disparate between Australian ports. Port Hedland remains the busiest Australian port for foreign ship visits, accounting for 10.4 per cent of arrivals nationwide.
- The trend towards an increase in the size of visiting ships continued with average gross tonnage increasing from 51,612 in 2017 to 51,808 in 2018.
- The average age of foreign vessels arriving in Australian ports increased slightly to 10 years.
- The fleet share of priority one vessels has slightly decreased from 2017, with a slight increase in the share of priority four vessels.

	20	16	2017		2018	
Priority*	Number of visits	Fleet share	Number of visits	Fleet share	Number of visits	Fleet share
P1	4282	15.6%	4676	16.4%	4,362	15.0%
P2	3274	11.9%	3131	11.0%	3,220	11.1%
P3	6867	25.0%	7202	25.3%	7,226	24.9%
P4	13,093	47.6%	13,494	47.3%	14,219	49.0%
Total	27,516	100.0%	28,503	100.0%	29,027	100.0%

#### Table 1 – Port visits by priority group

\* See page 39 for more details on priority groups.

# 2018 Maritime Labour Convention results

The *Maritime Labour Convention, 2006* (MLC) is an international convention developed by the International Labour Organization. It consolidated a number of existing labour conventions and introduced modern standards relating to the living and working conditions for the world's 1.6 million seafarers.

In 2018, AMSA received a total of 177 complaints (compared to 146 in 2017) relating to alleged breaches of the MLC. 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 public with a vested interest in the welfare of seafarers. Following investigations of the complaints received, deficiencies were issued against 30 vessels and 19 vessels were detained for MLC related breaches arising from the investigation of complaints and programmed initial PSC inspections.

During this time, there were 232 detainable deficiencies issued across all deficiency types, which warranted detention of 161 ships.

A breakdown of the complaints received per regulation for 2018, is detailed in Table 3.

Of the 177 complaints received, the majority (75) came from the seafarers themselves. Of the remaining 102: 39 came through the International Transport Workers' Federation (ITF), 31 came from various welfare groups, eight from government agencies and 24 were from other sources as indicated in table 2.

Source of complaint	Year		
Source of complaint	2017	2018	
ITF	42	39	
Seafarers	44	75	
Welfare groups	32	31	
Government agencies	10	8	
Other	15	24	

#### Table 2 – Complaints by source

A total of 129 complaints were substantiated (73% of all complaints), six were referred to the Fair Work Ombudsman for investigation<sup>2</sup>, and 13 were unable to be investigated due to the vessel departing and not returning to Australian waters. There was no available evidence to substantiate the remaining complaints.

<sup>2</sup> As the complaints related to their legislation.

Category of complaints received for 2018	
Wages	67
Seafarers Employment Agreement	18
Hours of work and hours of rest	36
Food and catering	26
Accommodation and recreational facilities	20
Health and safety protection and accident prevention	13
Repatriation	26
Entitlement to leave	7
Manning levels	0
Medical care on board ship and ashore	12
Training and Qualifications	0
Onboard complaint procedures	3
Bullying and harassment	24
Total	252

#### Table 3 – Percentage breakdown of complaints received per regulation in 2018

Note: Some individual complaints related to multiple issues hence the total complaints related to categories in table 3 above is greater than the number of individual complaints

#### Table 4 – 2018 MLC results

	Total deficiencies	MLC deficiencies	Total detainable deficiencies	MLC detainable deficiencies	Total detentions	MLC detentions
Bulk carrier	3272	370	132	12	93	8
Chemical tanker	126	24	4	2	4	2
Container ship	614	105	31	4	19	4
Gas carrier	29	3	1	0	1	0
General cargo/multi- purpose ship	348	29	17	2	13	2
Heavy load carrier	66	13	5	0	5	0
Livestock carrier	107	16	8	1	4	1
NLS tanker	39	2	2	0	2	0
Offshore service vessel	21	0	0	0	0	0
Oil tanker	135	26	10	0	6	0
Passenger ship	68	5	2	0	2	0
Refrigerated cargo vessel	41	10	1	1	1	1
Ro-ro cargo / passenger ship	11	0	0	0	0	0
Special purpose ship	2	0	0	0	0	0
Tugboat	55	9	2	1	1	1
Vehicle carrier	182	23	8	0	6	0
Wood-chip carrier	163	38	9	0	4	0
Other types of ship	41	1	0	0	0	0
Totals	5320	674	232	23	161	19

The following is notable from the overall results from MLC inspections in 2018:

- In 2018, the rate of MLC deficiencies per inspection dropped to 0.2.
- The number of MLC deficiencies recorded in 2018 dropped by 36.2 per cent from 918 in 2017 to 674 in 2018.
- Due to the reduction in the total number of all deficiencies from 7084 in 2017 to 5320 in 2018, the relative proportion of MLC deficiencies decreased marginally from 13 per cent in 2017 to 12.7 per cent in 2018.

Of the 232 detainable deficiencies issued in 2018, 23 were related to MLC requirements. This accounted for 9.9 per cent of the total detainable deficiencies, making the category the fifth most prevalent cause of detention in 2018. MLC breaches were the sixth most prevalent cause of detention in the period from 2014 to 2016.

A comparison of the 2017 and 2018 results indicates a decline in the number of MLC related deficiencies. The proportion of MLC detainable deficiencies decreased marginally from 2017 to 2018. An MLC inspection snapshot for 2017 and 2018 is provided in table 5.

	MLC statistics			
	2017	2018		
Total inspections	918 deficiencies issued	674 deficiencies issued		
AMSA inspected 2922 ships and issued 5320 deficiencies in 2018.	MLC deficiencies 13% of the total	MLC deficiencies 12.7% of the total		
232 of these deficiencies were detainable.	0.3 deficiencies per inspection relate to MLC	0.2 deficiencies per inspection relate to MLC		
	20 detainable deficiencies	23 detainable deficiencies		
	12% of detainable deficiencies	9.9% of detainable deficiencies		

#### Table 5 – Comparative MLC inspection snapshot for 2017 and 2018



# Analysis of 2018 inspection results

## Arrivals

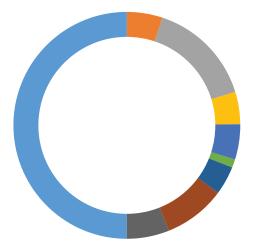
AMSA conducted PSC inspections in 51 ports across Australia, although the growth in traffic and ship size was not distributed evenly across the 70 ports visited by foreign ships in 2018.

#### Ship arrivals in Australian ports for 2018

Total of 29,094 ship arrivals at Australian ports during 2018.	Arrivals – top five ports
	1. Port Hedland 3010 (10.3%)
	2. Brisbane 2500 (8.6%)
	3. Newcastle 2312 (7.9%)
	4. Melbourne 2191 (7.5%)
	5. Sydney 2054 (7.1%)

Port Hedland remained the busiest port for foreign-flagged vessel arrivals, which were predominantly carrying bulk iron ore. For Port Hedland and Newcastle, the dry bulk market contributed to the majority of arrivals. In ports of Brisbane, Sydney and Melbourne, the arrivals were predominantly engaged in the container trade.

#### Figure 1 – 2018 Port arrivals by ship type



bulk carrier	50%
chemical tanker	5%
container ship	15%
gas carrier	5%
general cargo/multi-purpose ship	5%
livestock carrier	1%
oil tanker	4%
other ship types	9%
vehicle carrier	6%

Ship type	2017	2018	Change
Bulk carrier	14,324	14,498	1.3%
Chemical tanker	1376	1472	7.1%
Container ship	4568	4470	-1.9%
Gas carrier	1080	1321	18.4%
General cargo/ multi-purpose	1398	1316	-5.8%
Livestock carrier	316	376	19.4%
Oil tanker	1276	1163	-8.7%
Vehicle carrier	1650	1687	2.2%
Other	2514	2791	10%
Totals arrivals	28,502	29,094	2.2%

#### Table 6 – Ship arrivals by ship type in 2018 compared to 2017

# Inspections by ship type

In 2018, AMSA surveyors carried out 2922 initial PSC inspections and 1846 PSC follow up inspections in compliance with international conventions, associated codes, resolutions and Australian legislation.

#### PSC inspections by ship type

	2018 top five PSC inspections
	1. Bulk carrier - 1585 (54.3%)
AMSA conducted 2922 PSC	2. Container ships - 311 (10.7%)
inspections in 2018.	3. Vehicle carrier - 181 (6.2%)
	4. Chemical tanker - 178 (6.1%)
	5. Oil tankers 155 (5.3%)

Ship type	2014	2015	2016	2017	2018
Bulk carrier	2122	2389	2132	1732	1585
Chemical tanker	169	187	208	181	179
Combination carrier	3	0	0	1	0
Commercial yacht	0	0	0	1	0
Container ship	342	378	342	297	311
Gas carrier	53	79	74	52	53
General cargo/ multi-purpose ship	232	174	163	184	154
Heavy load carrier	55	48	25	19	30
High speed passenger craft	1	0	0	0	0
Livestock carrier	55	52	57	49	52
MODU or FPSO	1	4	0	2	0
NLS tanker	26	24	28	27	25
Offshore service vessel	24	22	10	17	19
Oil tanker	243	218	227	194	155
Other types of ship	26	27	21	29	14
Passenger ship	42	52	51	47	55
Refrigerated cargo vessel	5	5	4	2	3
Ro-ro cargo ship	6	6	6	6	2
Ro-ro passenger ship	1	0	0	0	1
Special purpose ship	8	18	14	8	7
Tugboat	88	91	40	28	30
Vehicle carrier	184	209	197	180	181
Wood-chip carrier	56	67	77	72	66
Totals	3742	4050	3675	3128	2922

#### Table 7 – Total ships inspected by ship type

Table 7 shows the number of inspections by ship type from 2014 to 2018.

# Inspection by location

Fremantle and Port Hedland were the busiest ports for initial PSC inspections, with Sydney replacing Gladstone in the top five initial PSC Inspection ports in 2018.

#### **PSC** inspections by location

	2018 top five locations
	1. Port Hedland - 441 (15.1%)
A total of 2922 PSC inspections	2. Fremantle - 410 (14.0%)
were conducted in 2018.	3. Brisbane - 238 (8.2%)
	4. Newcastle - 212 (7.3%)
	5. Sydney - 190 (6.5%)

Of the 51 ports at which inspections were conducted, the top five ports accounted for 51.1 per cent of the 2922 initial PSC inspections undertaken as shown in table 8.

	2014	2015	2016	2017	2018	% of total in 2018
Port Hedland, WA	265	358	247	311	441	15.10%
Fremantle, WA	165	284	448	416	410	14.00%
Brisbane, QLD	350	338	304	278	238	8.20%
Newcastle, NSW	355	424	401	316	212	7.30%
Sydney, NSW	55	152	282	205	190	6.50%
Gladstone, QLD	230	290	251	206	181	6.20%
Dampier, WA	264	304	281	187	156	5.30%
Melbourne, VIC	190	204	151	156	156	5.30%
Hay Point, QLD	274	247	255	180	155	5.30%
Darwin, NT	156	124	94	96	109	3.70%
Port Adelaide, SA	65	106	90	88	99	3.40%
Geraldton, WA	127	129	127	94	83	2.80%
Townsville, QLD	136	139	115	100	81	2.80%
Port Kembla, NSW	171	146	162	83	49	1.70%
Port Walcott, WA	40	55	60	48	45	1.50%

#### Table 8 - PSC inspections by location

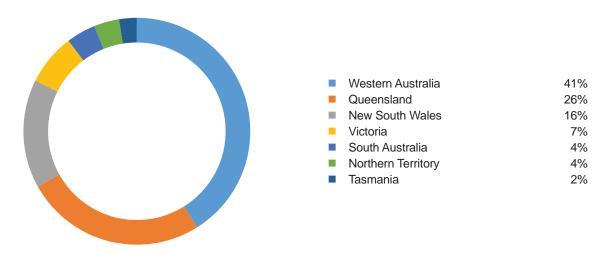
As in previous years, in 2018 the greatest numbers of PSC initial inspections were undertaken in Western Australia followed by Queensland and New South Wales. Inspections by state are shown in table 9 and figure 2.

State/territory	PSC inspections
Western Australia	1202
Queensland	750
New South Wales	453
Victoria	216
South Australia	121
Northern Territory	111
Tasmania	69
Total	2922

Table 9 – PSC inspections by state/territory

State by state totals continue to emphasise the significance of the bulk cargo trade from Queensland and Western Australia.





# Inspections by flag State

A five-year breakdown of the number of vessels inspected by flag State is provided in Table 11. The table does not show any significant change in the proportional inspection rates by flag State over the last five years.

In 2018, Panama remained the flag State with the largest number of ships inspected by AMSA, with a total of 622 Panamanian ships (21.3 per cent of the total) being subject to an initial PSC inspections.

The top five flag States remains unchanged since 2014 and inspections of ships from 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, as listed in table 10, accounted for 2443 inspections, or 83.7 per cent of all inspections.

Top 12 flag States	2014	2015	2016	2017	2018
PANAMA	1002	1045	942	763	622
MARSHALL ISLANDS	303	338	358	337	377
LIBERIA	350	372	360	304	340
HONG KONG, CHINA	430	482	426	311	306
SINGAPORE	375	427	368	326	292
MALTA	172	216	196	210	186
BAHAMAS	125	158	138	121	97
CYPRUS	86	89	87	73	63
GREECE	78	91	81	49	60
ISLE OF MAN	70	63	54	52	54
JAPAN	68	83	71	60	54
NORWAY	44	51	49	55	53

#### Table 10 – PSC inspections by top 12 flag States in 2018

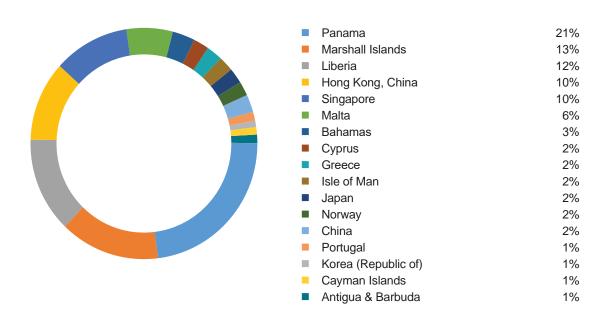
Note: figures in red are not in the top 12 in those years.

## Table 11 – Total ships inspected by flag State

Flag State	2014	2015	2016	2017	2018	Flag State	2014	2015	2016	2017	2
ANTIGUA AND	74	66	51	44	31	LIBYA			1		
BARBUDA BAHAMAS	125	158	138	121	97	LUXEMBOURG	8	2	11	7	
BARBADOS	3	2	130	3	5	MALAYSIA	17	8	8	8	
BELGIUM	7	6	6	3	8	MALTA	172	216	196	210	
BELIZE	2	0	0	5	1	MARSHALL ISLANDS	303	338	358	337	
BERMUDA	16	30	29	15	11	MAURITIUS	1	1			
BRAZIL	10		1	15		NETHERLANDS	41	38	17	20	
BRUNEI DARUSSALAM			1	1	1	NEW ZEALAND	2	7	3	3	
CAYMAN ISLANDS	21	24	23	34	32	NORWAY	44	51	49	55	
CHINA	103	93	70	53	46	PAKISTAN	1	1	1	1	
	103				40	PANAMA	1002	1045	942	763	
COMOROS	6	1	1	1	F	PAPUA NEW GUINEA	8	8	9	7	
COOK ISLANDS	6	7	7	7	5	PHILIPPINES	30	29	27	19	
CROATIA	3	4	5	5	3	PORTUGAL	7	8	21	30	
CURACAO	3	3	07	70	00	QATAR					
CYPRUS	86	89	87	73	63	SAINT KITTS & NEVIS		2			
DENMARK	22	22	22	16	12	SAINT VINCENT &	2	3	1	4	
DOMINICA	1	1				THE GRENADINES	2	1			
EGYPT	3				1	SAUDI ARABIA	1	2	2	1	
ESTONIA	2	1				SINGAPORE	375	427	368	326	
FAROE ISLANDS			1				375			320	
FIJI			2	4	2	SOLOMON ISLANDS		4	3		
FRANCE	3	4	12	8	3	SOUTH AFRICA			1		
GERMANY	2	2	7	9	6	SPAIN		2	5	1	
GIBRALTAR	15	15	7	4	7	SRI LANKA			1	1	
GREECE	78	91	81	49	60	SWEDEN	8	9	14	10	
HONG KONG, CHINA	430	482	426	311	306	SWITZERLAND	11	6	12	7	
INDIA	11	18	7	9	11	TAIWAN (PROVINCE OF CHINA)	13	24	18	7	
INDONESIA	15	11	6		2	TANZANIA (UNITED REPUBLIC OF)				1	
IRAN (ISLAMIC REPUBLIC OF)				1		THAILAND	11	8	9	9	-
IRELAND			1			TONGA	2		<u> </u>		
ISLE OF MAN	70	63	54	52	54	TURKEY	4	6	8	3	
ITALY	15	22	20	16	21	TUVALU		1		1	
JAMAICA	1		1			UNITED KINGDOM	34	33	31	28	
JAPAN	68	83	71	60	54	UNITED STATES	6	5	2	5	
KOREA (REPUBLIC OF)	73	76	48	47	36	VANUATU	18	11	7	7	
KUWAIT	4	4	3	4	4	VIETNAM	6	4	1	1	
LIBERIA	350	372	360	304	340	Total:	3742	4050	3675	3128	2

lag State	2014	2013	2010	2017	2010
IBYA			1		1
UXEMBOURG	8	2	11	7	5
IALAYSIA	17	8	8	8	10
IALTA	172	216	196	210	186
IARSHALL ISLANDS	303	338	358	337	377
IAURITIUS	1	1			
IETHERLANDS	41	38	17	20	18
IEW ZEALAND	2	7	3	3	3
IORWAY	44	51	49	55	53
PAKISTAN	1	1	1	1	
ANAMA	1002	1045	942	763	622
APUA NEW GUINEA	8	8	9	7	4
HILIPPINES	30	29	27	19	23
ORTUGAL	7	8	21	30	41
ATAR					2
AINT KITTS & NEVIS		2			
AINT VINCENT & HE GRENADINES	2	3	1	4	2
AMOA	2	1			
AUDI ARABIA	1	2	2	1	
INGAPORE	375	427	368	326	292
OLOMON ISLANDS		4	3		
OUTH AFRICA			1		
PAIN		2	5	1	3
RI LANKA			1	1	
WEDEN	8	9	14	10	7
WITZERLAND	11	6	12	7	5
AIWAN (PROVINCE OF CHINA)	13	24	18	7	4
ANZANIA (UNITED REPUBLIC OF)				1	
HAILAND	11	8	9	9	9
ONGA	2				
URKEY	4	6	8	3	1
UVALU		1		1	
INITED KINGDOM	34	33	31	28	23
INITED STATES	6	5	2	5	2
ANUATU	18	11	7	7	5
IETNAM	6	4	1	1	2
otal:	3742	4050	3675	3128	2922

Figure 3 represents inspections by flag State where 25 or more vessels have been subjected to inspection during 2018. 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

Distribution of inspections by flag State (with more than 25 inspections)





# 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 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 2018, there was a 33.2 per cent decrease in the number of deficiencies issued and a 7.0 per cent decrease in the number of ships inspected compared to 2017. The deficiency rate per inspection decreased markedly from 2.3 in 2017 to 1.8 in 2018. Table 14 shows a marginal decrease in structure/equipment, human factor and MLC related deficiencies.

#### Top five deficiencies per inspection by ship type 2018

	Ship type (deficiencies per inspection)			
	1. Other types of ship – 2.93			
A total of 5320 deficiencies were issued in 2018 with the average	2. Wood-chip carrier – 2.44			
deficiencies per inspection being 1.8.	3. General cargo/multi-purpose ships – 2.28			
	4. Heavy load carrier – 2.2			
	5. Livestock carrier – 2.12			

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 groups that identify key areas of non-compliance, being structural/equipment, operational, human factors, International Safety Management (ISM) and MLC. Table 12 identifies the number of deficiencies by category along with a comparison of the deficiency rates to those in 2017.

If the number of deficiencies is considered in isolation, as depicted in Table 12, the majority of deficiencies were issued to bulk carriers. However, this is not surprising given bulk carriers represented 50 per cent of ship arrivals and 54.2 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 13.

Ship type	Structural/ equipment	Operational	Human factor	ISM	MLC	PSC inspections
Bulk carrier	1576	625	548	148	370	1585
Chemical tanker	60	18	18	5	24	179
Container ship	288	127	70	22	105	311
Gas carrier	11	6	6	3	3	53
General cargo/multi-purpose ship	154	78	62	25	29	154
Heavy load carrier	30	5	15	3	13	30
Livestock carrier	55	22	10	4	16	52
NLS tanker	24	5	4	4	2	25
Offshore service vessel	3	13	4	1		19
Oil tanker	70	18	13	8	26	155
Other types of ship	13	20	5	2	1	14
Passenger ship	47	5	7	4	5	55
Refrigerated cargo vessel	14	8	7	2	10	3
Ro-ro cargo ship	1					2
Ro-Ro passenger ship	6	3	1			1
Special purpose ship	1	1				7
Tugboat	22	17	7		9	30
Vehicle carrier	94	39	20	6	23	181
Wood-chip carrier	79	17	22	5	38	66
Totals for 2018	2548	1027	819	242	674	2922
2018 deficiency rates	0.9	0.4	0.3	0.1	0.2	1.8
Totals for 2017	3213	1378	1209	348	918	3128
2017 deficiency rates	1.0	0.4	0.4	0.1	0.3	2.3

#### Table 12 – Deficiencies by category and ship type

	Structural / Equipment	Operational	Human Factor	MLC	ISM	Total inspections	Total Deficiencies	Deficiency rate	Number of Detentions	Detention Rate
bulk carrier	1	0.39	0.35	0.23	0.09	1,585	3,272	2.06	93	5.90%
chemical tanker	0.34	0.1	0.1	0.13	0.03	179	126	0.7	4	2.20%
container ship	0.93	0.41	0.23	0.34	0.07	311	614	1.97	19	6.10%
gas carrier	0.21	0.11	0.11	0.06	0.06	53	29	0.55	1	1.90%
general cargo/ multi-purpose ship	1	0.51	0.4	0.19	0.16	154	348	2.26	13	8.40%
heavy load carrier	1	0.17	0.5	0.43	0.1	30	66	2.2	5	16.70%
livestock carrier	1.06	0.42	0.19	0.31	0.08	52	107	2.06	4	7.70%
NLS tanker	0.96	0.2	0.16	0.08	0.16	25	39	1.56	2	8.00%
offshore service vessel	0.16	0.68	0.21		0.05	19	21	1.11		
oil tanker	0.45	0.12	0.08	0.17	0.05	155	135	0.87	6	3.90%
passenger ship	0.85	0.09	0.13	0.09	0.07	55	68	1.24	2	3.60%
refrigerated cargo vessel	4.67	2.67	2.33	3.33	0.67	3	41	13.67	1	33.30%
ro-ro cargo ship	0.5					2	1	0.5		
ro-ro passenger ship	6	3	1			1	10	10		
special purpose ship	0.14	0.14				7	2	0.29		
tugboat	0.73	0.57	0.23	0.3		30	55	1.83	1	3.30%
vehicle carrier	0.52	0.22	0.11	0.13	0.03	181	182	1.01	6	3.30%
wood-chip carrier	1.23	0.26	0.33	0.58	0.08	66	163	2.47	4	6.10%
other types of ship	0.93	1.43	0.36	0.07	0.14	14	41	2.93		
Total	2558	1027	819	674	242	2,922	5,320		161	5.5
Deficiency Rate	0.9	0.4	0.3	0.2	0.1			1.8		

#### Table 13 – Rate of deficiencies per inspection by ship category and type

Figures in red are the top 5; Figures in blue are above average.

Deficiency	2017	2018	Trend	
Structure/equipment	1.1	0.9	Ļ	
Operational	0.4	0.4	-	
Human factors	0.4	0.3	Ļ	
ISM	0.1	0.1	-	
MLC	0.3	0.2	Ļ	

#### Table 14 – Change in deficiency rate per inspection by category only





# 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 15 shows the proportion of detainable deficiencies in different categories over a three-year period. As indicated in the table, the detainable deficiencies relating to the category of International Safety Management (ISM) decreased while the categories of emergency systems, lifesaving appliances, fire safety and pollution prevention 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 there is still room for improvement in the management of ships. Issues relating to safety of navigation remain high among the ISM detentions once again in 2018.

Category	2016 No. of deficiencies	2016 Share %	2017 No. of deficiencies	2017 Share %	2018 No. of deficiencies	2018 Share %
ISM	98	27.8%	64	29.2%	49	21.1%
Fire safety	49	13.9%	25	11.4%	38	16.4%
Emergency systems	44	12.5%	32	14.6%	29	12.5%
Pollution prevention	25	7.1%	15	6.9%	28	12%
Lifesaving appliances	44	12.5%	26	11.9%	26	11.2%
Labour conditions	25	7.1%	19	8.7%	21	9.1%
Water/weather-tight conditions	17	4.8%	20	9.1%	12	5.2%
Other	8	2.3%	1	0.5%	12	5.2%
Propulsion and auxiliary machinery	2	0.6%	1	0.5%	5	2.2%
Certificates and documentation	18	5.0%	4	1.9%	3	1.3%
Safety of navigation	8	2.3%	1	0.5%	3	1.3%
Radio communications	12	3.4%	7	3.2%	2	0.9%
Structural conditions	3	0.8%	4	1.8%	2	0.9%
Alarms	0	0%	0	0%	1	0.4%
Cargo operations including equipment	0	0%	0	0%	0	0%
Working and living conditions	0	0%	0	0%	0	0%
Dangerous goods	0	0%	0	0%	0	0%
International Ship and Port Facility Security Code (ISPS)	0	0%	0	0%	0	0%

## Table 15 – Detainable deficiencies by category

### Detentions by ship type

During 2018, AMSA detained 161 ships with an average detention rate of 5.5 per cent compared to 165 ships at 5.3 per cent in 2017.

	2017 – 5.3% average (number of detentions)	2018 – 5.5% average (number of detentions)
	Tugboat – 14.3% (4)	Heavy Load – 16.7% (5)
AMSA detained 161 ships in 2018,	Livestock carrier – 10.2% (5)	General cargo/multi-purpose ship – 8.4% (13)
with an average detention rate of 5.5%.	General cargo/multi-purpose ship – 8.2% (15)	NLS Tanker – 8% (2)
	Container ship – 7.1% (21)	Livestock carrier – 7.7% (4)
	Other types of ship – 6.9% (2)	Container – 6.1% (19) Wood-chip carrier – 6.1% (4)

#### Table 16 – Top five detention rates by ship type in 2017 and 2018

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

Bulk carriers represented the largest number of PSC detentions, as shown in Table 17. This is expected given the relatively high number of arrivals of this ship type and the number of ships eligible to be inspected. The bulk carrier detention rate was 5.9 per cent, which is above the 5.5 per cent average for all ships in 2018. While this is an improvement compared to 2017, bulk carriers have exceeded the average detention rate for the last three years.

The poorest performing ship type were heavy load carriers, followed by general cargo ships, Noxious Liquid Substance tankers and livestock carriers. Container ships and wood chip carriers were the equal 5th poorest performers. It is noteworthy that general cargo ships remain in the top five for detentions by ship type and have been in the top five poorest performing ship types for the past five years.

Category		2018					
Ship type	Inspections	Detentions	Detention rate	Detention rate			
Bulk carrier	1585	93	5.9%	6.1%			
Chemical tanker	179	4	2.2%	1.7%			
Container ship	311	19	6.1%	7.1%			
Gas carrier	53	1	1.9%	0%			
General cargo/multi-purpose ship	154	13	8.4%	8.2%			
Heavy load carrier	30	5	16.7%	0%			
Livestock carrier	52	4	7.7%	10.2%			
NLS tanker	25	2	8.0%	3.7%			
Offshore service vessel	19	0	0%	0%			
Oil tanker	155	6	3.9%	1.0%			
Other types of ship	14	0	0%	6.9%			
Passenger ship	55	2	3.6%	0%			
Refrigerated cargo vessel	3	1	33.3%	50%			
Ro-ro cargo ship	2	0	0%	0%			
Ro-ro passenger ship	1	0	0%	0%			
Special purpose ship	7	0	0%	0%			
Tugboat	30	1	3.3%	14.3%			
Vehicle carrier	181	6	3.3%	1.7%			
Wood-chip carrier	66	4	6.1%	2.8%			
Totals	2922	161	5.5%	5.3%			

#### Table 17 – Detentions by ship type

The following is notable with regard to detention by ship type in 2018:

- In 2018, 1585 bulk carriers were inspected, 3272 deficiencies were issued and 93 ships were detained. In 2017, 1732 bulk carriers were inspected, 4707 deficiencies issued and 106 ships were detained. The 2018 detention rate of 5.9 per cent is an improvement on the 2017 result when the detention rate was at 6.1 per cent.
- Livestock carriers improved their performance in 2018 with 107 deficiencies resulting in four detentions and a detention rate of 7.7 per cent, compared with the result in 2017 where 164 deficiencies were issued, resulting in five detentions and a detention rate of 10.2 per cent.
- Passenger ships performed more poorly in 2018 than the previous year. Passenger ships were issued with 68 deficiencies resulting in two detentions and a detention rate of 3.6 per cent. In 2017, 49 deficiencies were issued and there were no detentions.
- In 2018, seven special purpose ships were inspected, two deficiencies were issued and no ships were detained. This compares favourably with the results from 2017, where eight special purpose ships were inspected, 16 deficiencies were issued and there were no detentions.

## 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.

#### Flag State detention rate

	Flag State (Detention Rate %)
here were a total of 161 fereign	India – 18.2%
There were a total of 161 foreign- flag vessels detained in 2018.	Antigua and Barbuda – 16.1%
The average detention rate for all vessels was 5.5%.	Italy – 14.3%
vessels was 0.0 %.	Philippines – 13%
	Portugal – 9.8%

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

Where a flag State is subject to a small number of inspections, a single detention can result in the flag State exceeding the average detention rate, as shown in Table 19. This may not be an accurate measure of performance. A more accurate assessment of performance of individual flag States can be drawn by comparing detention rates over three years, as shown in Table 18. This table shows that Italy, Cyprus and Panama have all exceeded the overall average detention rate over the three years from 2016 to 2018.

2016 (ave	2016 (average 6.7%)		rage 5.3%)	2018 (ave	rage 5.5%)
Flag State	Detention rate (number)	Flag State	Detention rate (number)	Flag State	Detention rate (number)
Taiwan (China)	22.2% (4)	Denmark	25% (4)	India	18.2% (2)
Netherlands	11.8% (2)	Philippines	10.5% (2)	Antigua and Barbuda	16.1% (5)
Italy	10.0% (2)	Malta	8.6% (18)	Italy	14.3% (3)
Antigua and Barbuda	9.8% (5)	Cyprus	6.8% (5)	Philippines	13.0% (3)
Cyprus	8.0% (7)	Bahamas	6.6% (8)	Portugal	9.8% (4)
Panama	7.9% (74)	Italy	6.3% (1)	Liberia	9.4% (32)
France	7.7% (1)	Liberia	6.3% (19)	Cyprus	7.9% (5)
Malta	7.7% (15)	Panama	5.8% (44)	Japan	7.4% (4)
Greece	7.4% (6)			Hong Kong, China	6.5% (20)
Republic of Korea	7.7% (6)			Panama	5.9% (37)
				Netherlands	5.6% (1)
				Republic of Korea	5.6% (2)

#### Table 18 - Flag States that exceeded the average in 2016, 2017 and 2018

Exceeded the average detention rate in two years out of three

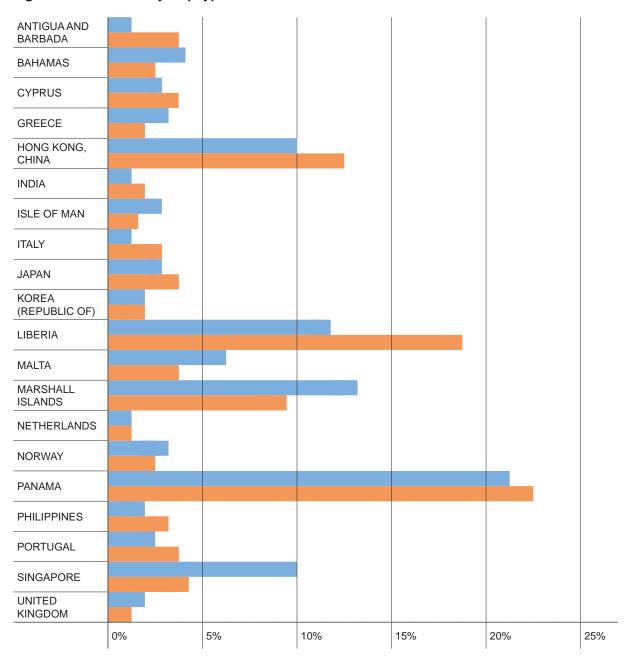
Exceeded the average detention rate in three years out of three

Flag State	Inspections	Detentions	Detention rate
ANTIGUA AND BARBUDA	31	5	16.1%
BAHAMAS	97	3	3.1%
BARBADOS	5	1	20%
BELGIUM	8	0	0%
BELIZE	1	0	0%
BERMUDA	11	0	0%
BRUNEI DARUSSALAM	1	0	0%
CAYMAN ISLANDS	32	0	0%
CHINA	46	0	0%
COOK ISLANDS	5	1	20%
CROATIA	3	1	33.3%
CYPRUS	63	5	7.9%
DENMARK	12	0	0%
EGYPT	1	1	100%
FIJI	2	0	0%
FRANCE	3	0	0%
GERMANY	6	0	0%
GIBRALTAR	7	0	0%
GREECE	60	2	3.3%
HONG KONG, CHINA	306	20	6.5%
INDIA	11	2	18.2%
INDONESIA	2	0	0%
ISLE OF MAN	54	3	3.7%
ITALY	21	3	14.3%
JAPAN	54	4	7.4%
KOREA (REPUBLIC OF)	36	2	5.6%
KUWAIT	4	0	0%

#### Table 19 – Inspections and detentions by flag State

Flag State	Inspections	Detentions	Detention rate
LIBERIA	340	32	9.4%
LIBYA	1	0	0%
LUXEMBOURG	5	0	0%
MALAYSIA	10	0	0%
MALTA	186	5	2.7%
MARSHALL ISLANDS	377	16	4.2%
NETHERLANDS	18	1	5.6%
NEW ZEALAND	3	0	0%
NORWAY	53	2	3.8%
PANAMA	622	37	5.9%
PAPUA NEW GUINEA	4	0	0%
PHILIPPINES	23	3	13%
PORTUGAL	41	4	9.8%
QATAR	2	0	0%
SAINT VINCENT & THE GRENADINES	2	1	50%
SINGAPORE	292	7	2.4%
SPAIN	3	0	0%
SWEDEN	7	0	0%
SWITZERLAND	5	0	0%
TAIWAN (PROVINCE OF CHINA)	4	0	0%
THAILAND	9	0	0%
TURKEY	1	0	0%
UNITED KINGDOM	23	1	4.3%
UNITED STATES	2	0	0%
VANUATU	5	0	0%
VIETNAM	2	0	0%
Total:	2922	161	5.5%

Note: Flag States above the average detention rate with more than 10 inspections are provided in red.



#### Figure 4 – Detentions by ship type

Inspection Share

Detention Share

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

### Detention appeals and review processes

Vessel owners, operators, Recognised Organisations (RO)<sup>3</sup> and flag States all have the right to appeal against inspection outcomes and AMSA actively encourages these parties to appeal if they believe it is warranted. Appeals can be made through a number of different mechanisms and the master of a vessel is advised of these rights at the 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 an examination of all information provided by the applicant and feedback from the attending AMSA marine surveyor to determine the merits of the case 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 2018, AMSA received 20 appeals against vessel detention, with each undergoing a full review of all information provided. In one instance, there was insufficient evidence to support the detention upon review and the inspection was amended to remove the detainable deficiency. AMSA received four appeals from ROs challenging the assignment of RO responsibility during the inspection process. AMSA accepted one of these challenges upon review and amended the inspection record accordingly. The remainder were rejected.

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 or the AAT.

A full list of ships AMSA detained in 2018, can be found on the AMSA website (amsa.gov.au).

<sup>3</sup> RO can appeal assignment of RO Responsibility for a detention deficiency but not the detention itself.

## Recognised Organisation performance

The performance of Recognised Organisations (RO) in 2018, including inspections, deficiency rates, detention rates and the percentage of the detainable deficiencies that were allocated RO responsibility are recorded in Table 20. The table shows a relatively small proportion of detainable deficiencies assigned to ROs, however, the average in RO responsible detainable deficiencies decreased from 5.9 per cent in 2017 to 4.3 per cent in 2018.

Recognised Organisation	PSC inspection	Deficiencies	Detentions	Detention rate	Detainable deficiencies	RO responsible detainable deficiencies	RO responsible as share of all detainable deficiences
American Bureau of Shipping (ABS)	362	615	18	5.0%	27	0	
Bureau Veritas (BV)	266	642	21	7.9%	33	0	
China Classification Society (CCS)	171	194	4	2.3%	6	0	
Croatian Register of Shipping (CRS)	1	1	0	0%	0	0	
DNV GLAS (DNVGL)	535	870	30	5.7%	43	2	4.7%
Indian Register of Shipping (IRS)	2	0	0	0%		0	
Korean Register of Shipping (KRS)	163	319	9	5.5%	9	0	
Lloyd's Register (LR)	406	750	18	4.4%	27	1	3.7%
Nippon Kaiji Kyokai (NKK)	934	1719	53	5.7%	76	7	9.2%
Polski Rejestr Statkow (PRS)	1	4	0	0%	0	0	
RINA Services SpA (RINA)	74	178	8	10.8%	11	0	
no class	7	25	0	0%	0	0	
Totals:	2922	5320	161	5.5%	232	10	4.3%

#### Table 20 – Performance of Recognised Organisations

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 to calculate a risk factor for the 'probability of detention'. Each group has a specific target inspection rate as shown below.

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

#### Table 21 – Target inspection rate

The risk profile of ships visiting Australian ports shows a decrease in arrivals of priority one, two and three ships and an increase in the arrival of priority four ships. This data, along with targeted inspection rates, as shown in table 22, indicates that AMSA resources are being used in an effective manner and are achieving target inspection rates in all priority groups with an overall inspection rate of 42.6 per cent.

Table 22 – Unique	e foreign-flagged	ships – by	priority group
-------------------	-------------------	------------	----------------

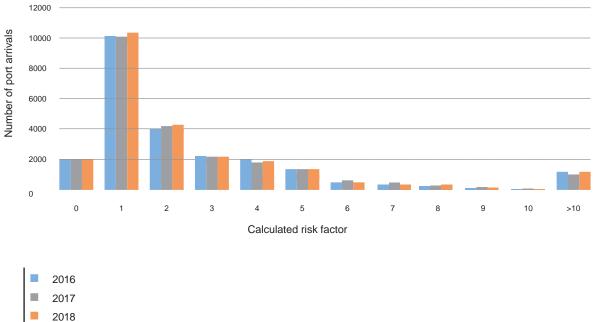
	Ship a	rrivals	Eligible	e ships	ips Ships inspected		Inspection rate	
Inspection priority	2017	2018	2017	2018	2017	2018	2017	2018
Priority 1	640	599	413	448	376	420	91%	93.8%
Priority 2	659	619	404	443	317	311	78.5%	70.2%
Priority 3	1965	1860	1559	1582	823	747	52.8%	47.2%
Priority 4	3915	4004	3815	3931	1394	1245	36.5%	31.7%
Totals:	7179	7082	6191	6404	2910	2727	47%	42.6%

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

	20	17	20	18
Priority group	Deficiencies per inspection		Deficiencies	Deficiencies per inspection
Priority 1	1298	2.7	1186	2.3
Priority 2	745	2.2	675	2.0
Priority 3	2001	2.3	1397	1.8
Priority 4	3040	2.1	2040	1.6
Totals	7084	2.3	5320	1.8

#### Table 23 – Number of deficiencies by vessel Priority Group





It is evident that the number of vessels, of all risk factors, remained relatively consistent in 2018, compared with the results in 2017. There was however, a proportional increase in RF0 to RF2 from 2016 to 2018.





## 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 ships.

AMSA conducted 71 FSC inspections on 62 Australian-flagged vessels during 2018, resulting in 130 deficiencies being recorded, of which one was serious enough to warrant detention of the vessel. This represents a marked decrease in the average number of deficiencies per inspection from 4.08 in 2017 to 1.83 in 2018. This corresponds with the average decrease for foreign-flagged vessels (1.8 deficiencies per inspection).

The number of FSC detentions decreased to one in 2018, from four in 2017. This equated to a detention rate of 1.4 per cent which is significantly below the average recorded for foreign-flagged ships during the same period.

## Port State control - Australian-flagged ships (overseas)

Australian-flagged ships calling at foreign ports were subject to a total of two PSC inspections by foreign maritime authorities, resulting in no deficiencies and no detentions.

## Concentrated inspection campaign

From 1 September 2018 to 30 November 2018, AMSA participated in a concentrated inspection campaign (CIC) on safety of navigation. This was aimed at verifying compliance with Annex VI of The International Convention for the Prevention of Pollution from Ships (MARPOL). Over this three-month period, AMSA conducted a total of 481 inspections covering CIC verification. No detentions were recorded as a result of the CIC.

## 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 a set period of time, as deemed necessary. When considering vessel performance, AMSA also looks at the performance of the entire company responsible for the operations of the vessel. Where the company's performance is deemed to be unacceptable, the periods for which the vessel is not permitted to enter an Australian port 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 24 lists the vessels issued with directions not to enter or use an Australian port in 2018.

Vessel name (IMO number)	Flag	Direction	Issue date	Expiry
MSC Kia Ora (9364344)	Liberia	Refused access for 3 months	25/03/2018	25/06/2018
Thorco Luna (9699957)	Philippines	Refused access for 3 months	08/06/2018	08/09/2018
Shandong Hai Wang (9591557)	Hong Kong	Refused access for 12 months	12/07/2018	12/07/2019

#### Table 24 – Vessels issued with directions

# Appendix

## Share of detentions compared to share of inspections

Note: In 2018, detentions occurred in 5.5 per cent of all inspections, and the rate of deficiencies per inspection was 1.8.

Flag State	Number of PSC inspections	Deficiencies	Deficiencies per PSC inspection	Detained	Detention rate	PSC share	Detention share
ANTIGUA AND BARBUDA	31	98	3.16	5	16.10%	1.10%	3.10%
BAHAMAS	97	144	1.48	3	3.10%	3.30%	1.90%
CYPRUS	63	136	2.16	5	7.90%	2.20%	3.10%
GREECE	60	70	1.17	2	3.30%	2.10%	1.20%
HONG KONG, CHINA	306	543	1.77	20	6.50%	10.50%	12.40%
INDIA	11	36	3.27	2	18.20%	0.40%	1.20%
ISLE OF MAN	54	45	0.83	2	3.70%	1.80%	1.20%
ITALY	21	56	2.67	3	14.30%	0.70%	1.90%
JAPAN	54	51	0.94	4	7.40%	1.80%	2.50%
KOREA (REPUBLIC OF)	36	86	2.39	2	5.60%	1.20%	1.20%
LIBERIA	340	713	2.1	32	9.40%	11.60%	19.90%
MALTA	186	279	1.5	5	2.70%	6.40%	3.10%
MARSHALL ISLANDS	377	607	1.61	16	4.20%	12.90%	9.90%
NETHERLANDS	18	52	2.89	1	5.60%	0.60%	0.60%
NORWAY	53	40	0.75	2	3.80%	1.80%	1.20%
PANAMA	622	1319	2.12	37	5.90%	21.30%	23.00%
PHILIPPINES	23	81	3.52	3	13.00%	0.80%	1.90%
PORTUGAL	41	110	2.68	4	9.80%	1.40%	2.50%
SINGAPORE	292	495	1.7	7	2.40%	10.00%	4.30%
UNITED KINGDOM	23	33	1.43	1	4.30%	0.80%	0.60%
Total	2708	4994		156			



Australian Government Australian Maritime Safety Authority

# 2018 Port State Control

AMSA13 (3/19)