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PORT STATE CONTROL 2015 Report Australia

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2015

Port State Control Report



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Purpose of this report

As one of the largest mixed market economies, and being the largest continental landmass in the world surrounded by water, Australia's national livelihood remains critically focused on ensuring that maritime trade to and from Australia remains safe, efficient and complies with all relevant international conventions. Australia relies on sea transport for 99 per cent of its exports being about 10% of world sea trade.

This report summarises the port State control (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 2015 calendar year.

The Australian Maritime Safety Authority (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 combating ship-sourced pollution in the marine environment
- · providing infrastructure to support safety of navigation in Australian waters
- providing a national search and rescue service to the maritime and aviation sectors.

To meet government and community expectations, AMSA is empowered to perform an enforcement function for maritime trade through the implementation of rigorous flag State and port State control regimes. The operation of professional, consistent flag State and port State control regimes are essential in ensuring vessels comply with minimum standards in a manner that promotes maritime safety, protection of seafarer welfare and protection of Australia's 60,000 kilometres of 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 Indian Ocean and Asia-Pacific area, sharing PSC information and actively participating in international policy development. Collectively, these efforts are aimed at ensuring AMSA is a transparent, trusted and consistent member of the maritime community.

Under its flag State control (FSC) program, AMSA holds responsibility for the operational safety standards of Australian-registered trading ships wherever they may be in the world.

As information on PSC activities is used by a diverse customer base on a regular basis, AMSA supplies current information via its website, including monthly ship detentions, ongoing PSC activities, current shipping trends and emerging issues. Importantly, AMSA identifies and promulgates government regulation and important marine observations through Marine Orders and Marine Notices respectively.

Year in review

Introduction

The changes to the shipping industry's safety regulatory framework by the *Navigation Act 2012* and the adoption of the Maritime Labour Convention (MLC), 2006 had their second full year in effect in 2015.

In 2015, Australia's response to ships and operators who perform poorly on a consistent basis resulted in the use of the directions power provided in section 246 of the *Navigation Act 2012* to ban 3 ships from entering or using Australian ports for periods from 3 to 12 months¹.

The PSC processes used for the MLC continued to evolve and these changes resulted in PSC inspections identifying additional deficiency types, which have had an impact on the usual annual performance measures.

2015 summary of port state control activity

- During the calendar year there were:
 - 27,344 ship arrivals by 5,644 foreign-flagged ships
 - 4050 PSC inspections
 - 242 ship detentions
- bulk carriers accounted for 51 per cent of ship arrivals and 59 per cent of PSC inspections
- · PSC inspections were carried out in 61 Australian ports
- average gross tonnage per visit was 48,011 GT compared to 46,670 GT in 2014
- AMSA Surveyors conducted 10,536 inspections of all types in 2015 compared to 8,597 in 2014.

^{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.

10-year summary of inspection, detentions and deficiency rate

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Total inspections | 3072 | 3080 | 2963 | 2795 | 2994 | 3127 | 3002 | 3179 | 3342 | 3742 | 4050 |
| Total detentions | 154 | 138 | 159 | 225 | 248 | 222 | 275 | 210 | 233 | 269 | 242 |
| Detentions % | 5.0 | 4.5 | 5.4 | 8.1 | 8.3 | 7.1 | 9.2 | 6.6 | 7.0 | 7.2 | 6.0 |
| Deficiencies per detentions | 2.6 | 2.9 | 2.5 | 3.3 | 3.0 | 2.4 | 2.8 | 2.4 | 2.4 | 2.9 | 2.3 |

Snapshot comparison to previous year

| | | 2014 | 2015 | When compared to 2014 | |
|-----------------|-------------------------|--------|--------|-----------------------|----------------------|
| | Total arrivals | 26,936 | 27,344 | 1.5% | (an increase of 408) |
| Arrivals | Individual ships | 5674 | 5644 | -0.5% | (a decrease of 30) |
| | Ship eligible for PSC | 5457 | 5418 | -0.7% | (a decrease of 39) |
| | Total PSC inspections | 3742 | 4050 | 8.2% | (an increase of 308) |
| PSC inspections | Individual ships | 3267 | 3502 | 7.2% | (an increase of 235) |
| | Inspection rate | 60% | 65% | | |
| | Total deficiencies | 10,892 | 9484 | -12.9% | (a decrease of 1408) |
| Deficiencies | Detainable deficiencies | 385 | 347 | -9.9% | (a decrease of 38) |
| | Rate per inspection | 2.9 | 2.3 | -20.7% | |
| Detentions | Total detentions | 269 | 242 | -10.0% | (a decrease of 27) |
| | % of total detentions | 7.2% | 6.0% | 1.2% | |

Key Points

The number of inspections increased in 2015.

In 2015 the number of foreign flag arrivals increased by 408 (1.5%) to 27,344 arrivals by 5644 individual ships. The number of PSC inspections conducted during 2015 rose by 308 (8.2%) to 4050 inspections. This increase was due, in part, to responding to 132 onshore MLC complaints received in 2015.

Inspections of all types carried out by AMSA surveyors also increased from 8597 in 2014 to 10536 in 2015 being an increase of 22.6%.

Ship performance improved significantly in 2015.

Despite the 8.2 per cent increase in the number of initial PSC inspections there was a:

12.9% decrease in the number of deficiencies from 10892 deficiencies in 2014 to 9484 deficiencies in 2015; and a 9.9% decrease in the number of detainable deficiencies from 385 detainable deficiencies in 2014 to 347 detainable deficiencies in 2015.

These are significant reductions reflected in the average number of deficiencies per inspection dropping from 2.9 in 2014 to 2.3 in 2015 and the detention rate dropping from 7.2% in 2014 to 6.0% in 2015.

Historically this is the lowest average number of deficiencies per inspection since 2004 and the lowest detention rate since 2007. The overall picture indicates that AMSA's PSC regime combined with improved performance by owners and operators delivered very good results in 2015.

Top 5 initial PSC inspections by flag State 2015

| There was a total of 4050 foreign- flag vessels inspected in 2015. | Flag State (Number of inspections) |
|---|--|
| The top 5 flags accounted for 66% of all inspections while the top 12 accounted for 86% of the total. | Panama (1042) – 25.8% Hong Kong (483) – 12% |
| | Singapore (426) – 10.5% |
| | Liberia (372) – 9.2% |
| | Marshall Islands (338) – 8.4% |

Top 5 detention rate by flag State 2015

| There was a total of 242 foreign- flag vessels detained in 2015. | Flag State (Number of detentions) | | |
|---|--------------------------------------|--|--|
| The average detention rate for all | Indonesia (3) – 23.7% | | |
| vessels was 6.0%. | Antigua and Barbuda (10) – 15.2% | | |
| | Gibralter (2) – 14.3% | | |
| | Italy (3) – 13.6% | | |
| | India (2) – 11.1% | | |

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

Trends for 2015

The most prevalent cause of detention for the period 2013 to 2015 relate to the safety management system required by the International Safety Management (ISM) Code. In 2015 material issues such as Fire Safety (15.9%), Pollution Prevention (11.2%), Emergency Systems (9.8%) and Lifesaving Appliances (8.6%) continue to be a significant cause of detention and this has been a consistent issue over the years 2013 to 2015.

Top 5 detainable deficiencies 2013-2015

| 2013 | 2014 | 2015 |
|-----------------------------|------------------------------|-----------------------------|
| ISM - 27.5% | ISM - 31.2% | ISM - 29.7% |
| Fire safety - 19.6% | Fire safety - 14.0% | Fire safety - 15.9% |
| Lifesaving - 14.5% | Lifesaving - 11.4% | Lifesaving - 11.2% |
| Pollution prevention - 9.2% | Pollution prevention - 10.4% | Pollution prevention - 9.8% |
| Water/weather-tight - 9.2% | Emergency systems - 8.3% | Emergency systems - 8.6% |

AMSA continues to work with flag state and ship owners to have established material requirements related to fire safety, lifesaving appliances and pollution prevention more effectively monitored in an effort to make these deficiency types less prevalent.

Summary of shipping industry activity 2015

With more than 99 percent of Australia's international trade by weight being transported by sea, and the majority of that being dry bulk cargoes, the recent moderation of demand for iron ore and coal exports, and other general cargoes, has resulted in much reduced shipping growth overall in 2015 with a consequent reduction in activity at some major general cargo ports.

While the growth in cargo volumes is still typically being delivered by a combination of more port visits and larger ships, the profile of the fleet of foreign flag ships visiting Australian ports has changed little, however, there has been a small increase in average ship age per port visit. The main trends in 2015 were as follows:

- Foreign Flag port visits totalled 27,344 in 2015, an increase of 1.5%, well down on the 4.8% growth in 2014. The number of individual foreign ships which made these port calls actually declined for the first time in several years, to 5,644, 30 ships less than the 5,674 in 2014.
- Bulk Carrier port arrivals showed 4.2% growth in 2015 accounting for 51% of foreign Flag port arrivals and 67% of ships. Gas Carriers and Chemical Tankers arrivals grew strongly (by 35% and 22% respectively) although numbers are relatively small. The number of arrivals reduced for General Cargo Ships and Oil Tankers.
- The growth in the foreign Flag shipping activity remains quite uneven geographically. Port Hedland remains the busiest Australian port for foreign ship visits, with a 3.7% increase in arrivals, Port Walcott arrivals grew by 21%. Gladstone experienced a 6.7% increase in arrivals, although that was due mainly to increased activity by gas carriers, with that new trade commencing early in 2015.

- The trend of visiting ships increasing in size continued with an average deadweight carrying capacity per port arrival in 2015 of 74,540 tonnes, up by 2.3% from 2014.
- The trend for fleet turnover also continued in 2015 with 30% of ships making only a single port call in the year and 38% of ships visiting in 2015 having not visited in 2014.
- Ships new to Australia were younger at an average age of 7.8 years, compared to those they
 replaced, which would have averaged 10 years in 2015. The overall average ship age of foreign
 Flag vessels increased slightly from 8.3 years in 2014 to 8.4 years for 2015. This was because
 older foreign Flag vessels tended to be liner vessels and make multiple Australian port visits each
 across a year.
- There was little change in the overall risk profile of this visiting fleet, with 2015 showing similar numbers to 2014 for both higher-risk priority one, and priority two ships, and lower risk priority three and priority four ships.

| 20 | | 13 2014 | | 2015 | | |
|-----------|--------------------|----------------|--------------------|----------------|--------------------|----------------|
| Priority* | Number of ships | Fleet share | Number of ships | Fleet share | Number of ships | Fleet share |
| P21 | 457 | 8.4% | 500 | 8.8% | 542 | 9.6% |
| P2 | 410 | 7.5% | 441 | 7.8% | 420 | 7.5% |
| P3 | 1193 | 21.9% | 1181 | 20.8% | 1469 | 26% |
| P4 | 3387 | 62.2% | 3552 | 62.6% | 3213 | 56% |
| Total | 5447 | | 5674 | | 5644 | |

Table 1 – Individual ships

Table 2 – Port visits

| | | 13 | 20 | 14 | 2015 | |
|-----------|--------------------|----------------|--------------------|----------------|--------------------|----------------|
| Priority* | Number of ships | Fleet share | Number of ships | Fleet share | Number of ships | Fleet share |
| P1 | 3660 | 14.2% | 4756 | 17.7% | 4660 | 17.1% |
| P2 | 2750 | 10.7% | 3128 | 11.6% | 2906 | 10.6% |
| P3 | 6476 | 25.2% | 6846 | 25.4% | 7468 | 27.3% |
| P4 | 12,811 | 49.8% | 12,206 | 45.3% | 12,310 | 45.0% |
| Total | 25,697 | | 26,936 | | 27,344 | |

*See page 29 for more details or priority groups

2015 Maritime Labour Convention results

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

In 2015, AMSA received 132 MLC complaints pertaining to 217 alleged breaches in the living and working conditions on board vessels. These complaints were derived from a number of sources, including the seafarers themselves, other government agencies, seafarer welfare groups, agents, 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 46 vessels and 9 vessels were detained for MLC related breaches. During this time there were a total 242 port State detentions across all deficiency types.

A percentage breakdown of the complaints received per regulation for 2015, are detailed in Table 3.

| Category of complaints received for 2015 | |
|--|----|
| Wages | 59 |
| Seafarers Employment Agreement | 21 |
| Hours of work and hours of rest | 14 |
| Food and catering | 43 |
| Accommodation and recreational facilities | 10 |
| Health and safety protection and accident prevention | 5 |
| Repatriation | 16 |
| Other | 49 |

Table 3 – Percentage breakdown of complaints received per regulation in 2015

Noting 2015 was the second full year after the implementation of the MLC it is notable that the rate of deficiencies and percentage of total deficiencies remained quite steady:

- in both 2014 and 2015 the deficiency rate per inspection related to MLC was 0.4 deficiencies per inspection.
- the number of MLC deficiencies recorded dropped from 1652 in 2014 to 1443 in 2015, however in view of the reduction in the total number of deficiencies from 10,892 in 2014 to 9484 in 2015 the relative percentage of MLC deficiencies increased marginally from 15.1% in 2014 to 15.2% in 2015.

Of the 347 detainable deficiencies issued in 2015, 26 were related to MLC requirements, accounting for 7.5 per cent of the total detainable deficiencies and making the category the sixth most prevalent cause of detention in 2015.

A comparison of the 2014 and 2015 results indicates that performance with respect to MLC remains relatively static over the two years suggesting consistency in the port State control inspections. An MLC inspection snapshot for 2015 and 2014 is provided in the following table:

| AMSA inspected 4050 | Statistics for MLC | | | |
|---|--|--|--|--|
| ships and issued 9484 deficiencies in 2015. | 2015 | 2014 | | |
| 347 of these deficiencies | 1443 deficiencies issued | 1652 deficiencies issued | | |
| were detainable | MLC, 2006 deficiencies 15.2% of the total | MLC2006 deficiencies 15.1% of the total | | |
| | 0.4 deficiencies per inspection related to MLC, 2006 | 0.4 deficiencies per inspection related to MLC, 2006 | | |
| | 26 detainable deficiencies | 23 detainable deficiencies | | |
| | 7.5% of detainable deficiencies | 6.0% of detainable deficiencies | | |

Table 4 – Comparative MLC inspection snapshot for 2015 and 2014



Analysis of 2015 inspection results

Arrivals

PSC inspections were carried out in 61 ports across Australia. The growth in traffic and ships size was distributed unevenly across the 73 ports visited by foreign ships in 2015. Most growth in arrivals occurred in Melbourne, Dampier and Port Hedland respectfully.

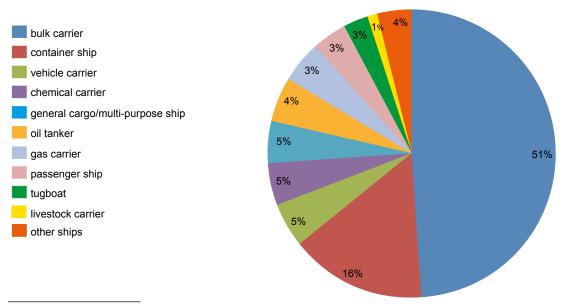
Ship arrivals in Australian ports for 2015

| A total of 27,344 ships arrived at Australian ports during 2015 | Arrivals - Top 5 Ports |
|---|------------------------------|
| | 1. Melbourne 4047 (15%) |
| | 2. Port Hedland 3137 (11.5%) |
| | 3. Dampier 3009 (11%) |
| | 4. Fremantle 2922 (10.7%) |
| | 5. Sydney 2267 (8.3%) |

Melbourne was the busiest port based on foreign flag vessel arrivals, overtaking individual Western Australia Iron Ore (Bulk) trading ports. Arrivals of foreign flag vessels at Melbourne increased by 106.0%² in 2015. Port Hedland experienced an increase in foreign flag vessel arrivals of 18.3% ³. Dampier also a large and increase in port visits of by foreign flag ships of 63.5%⁴.

Activity levels were generally static with marginal increase at the major capital city ports of Brisbane (2521 visits), Sydney (2267 visits), Port Adelaide (2078 visits), and Darwin (969 visits).





² Melbourne port arrivals increased by 2082 from 1965 ship visits in 2014 to 4047 ships visits in 2015

³ Port Hedland port arrivals increased by 487 from 2662 ship visits in 2014 to 3147 ship visits in 2015

⁴ Dampier port arrivals increased by 1169 from 1840 ship visits in 2014 to 3009 ship visits in 2015

Table 5 – Ship arrivals in 2015 compared to 2014

| Ship type | 2014 | 2015 | Change |
|--------------------------------|--------|--------|---------|
| Bulk carrier | 13275 | 13826 | 4.15% |
| Chemical tanker | 1358 | 1445 | 6.41% |
| Container ship | 4155 | 4288 | 3.20% |
| Gas carrier | 668 | 825 | 23.50% |
| General cargo/mutipurpose ship | 1705 | 1265 | -25.81% |
| Livestock carrier | 369 | 401 | 8.67% |
| Oil tanker | 1365 | 1194 | -12.53% |
| Vehicle carrier | 1417 | 1480 | 4.45% |
| Other | 2624 | 2620 | -0.15% |
| Total arrivals | 25,697 | 27,344 | 1.51% |

Inspections by ship type

In 2015, AMSA surveyors carried out 4050 initial PSC inspections and 2963 PSC follow up inspections in conformance with international conventions, associated codes, resolutions and Australian legislation.

PSC Inspections by ship type

| A total of 4050 port State | 2015 Top 5 |
|--|--|
| control (PSC) inspections conducted in 2015 | 1. Bulk carrier - 2389 (59%) |
| | 2. Container ships - 378 (9.5%) |
| | 3. Oil tankers - 218 (5.4%) |
| | 4. Vehicle carriers - 209 (5.2%) |
| | 5. Chemical tanker - 187 (4.6%) |



Table 6 shows the number of inspections by vessel type, presented over a 5-year period covering 2011 to 2015.

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|--------------------------------------|------|------|------|------|------|
| Bulk carrier | 1763 | 1787 | 1850 | 2122 | 2389 |
| Chemical tanker | 106 | 268 | 201 | 350 | 187 |
| Combination carrier | 1 | 206 | 248 | 272 | 0 |
| Container ship | 304 | 306 | 298 | 342 | 378 |
| Gas carrier | 47 | 45 | 53 | 53 | 79 |
| General cargo/ multi-purpose ship | 246 | 246 | 262 | 232 | 174 |
| Heavy load carrier | 22 | 56 | 60 | 55 | 48 |
| High speed passenger craft | 0 | 0 | 0 | 1 | 0 |
| Livestock carrier | 34 | 29 | 43 | 55 | 52 |
| MODU or FPSO | 3 | 4 | 0 | 1 | 4 |
| NLS tanker | 12 | 17 | 15 | 26 | 24 |
| Offshore service vessel | 12 | 9 | 17 | 24 | 22 |
| Oil tanker | 181 | 211 | 235 | 243 | 218 |
| Other types of ship | 10 | 10 | 20 | 26 | 27 |
| Passenger ship | 31 | 38 | 39 | 42 | 52 |
| Refrigerated cargo vessel | 4 | 4 | 4 | 5 | 5 |
| Ro-ro cargo ship | 12 | 12 | 12 | 6 | 6 |
| Ro-ro Passenger ship | 0 | 0 | 1 | 1 | 0 |
| Special purpose ship | 6 | 8 | 5 | 8 | 18 |
| Tugboat | 28 | 40 | 57 | 88 | 91 |
| Vehicle carrier | 121 | 178 | 181 | 184 | 209 |
| Wood-chip carrier | 59 | 52 | 52 | 56 | 67 |
| Totals | 3002 | 3179 | 3342 | 3742 | 4050 |

Table 6 – Total ships inspected by type

Inspection by location

| A total of 4050 port State | | 2015 Top 5 |
|---|----|--------------------------|
| control inspections were conducted in 2015 | 1. | Fremantle - 467 (13%) |
| | 2. | Newcastle - 424 (12%) |
| | 3. | Port Hedland - 358 (10%) |
| | 4. | Brisbane - 338 (10%) |
| | 5. | Dampier - 304 (9%) |

It proved to be another busy year for AMSA's Surveyors, with an 8.2 per cent increase in the overall number of inspections in comparison to 2014. Fremantle, Newcastle, Port Hedland, Brisbane and Dampier have remained the five busiest ports for PSC activity and inspections.

Of the 61 ports at which inspections were conducted, the top 5 ports accounted for 47% of the 4050 initial PSC inspections undertaken in 2015. This is reflected in Table 7.

| | 2011 | 2012 | 2013 | 2014 | 2015 | % of total in 2015 |
|-------------------|------|------|------|------|------|-----------------------|
| Fremantle, WA | 279 | 354 | 414 | 437 | 467 | 11.5% |
| Newcastle, NSW | 360 | 392 | 333 | 355 | 424 | 10.5% |
| Port Hedland, WA | 227 | 195 | 150 | 265 | 358 | 9.0% |
| Brisbane, QLD | 209 | 268 | 201 | 350 | 338 | 8.5% |
| Dampier, WA | 270 | 247 | 238 | 264 | 304 | 7.5% |
| Gladstone, QLD | 222 | 133 | 127 | 230 | 290 | 7.1% |
| Sydney, NSW | 259 | 256 | 272 | 267 | 264 | 6.5% |
| Hay Point, QLD | 198 | 230 | 237 | 274 | 247 | 6.0% |
| Melbourne, VIC | 194 | 185 | 176 | 190 | 204 | 5.0% |
| Port Kembla, NSW | 108 | 175 | 195 | 171 | 164 | 4.0% |
| Townsville, QLD | 104 | 133 | 164 | 136 | 139 | 3.4% |
| Geraldton, WA | 15 | 34 | 138 | 127 | 129 | 3.2% |
| Darwin, NT | 61 | 126 | 143 | 156 | 124 | 3.0% |
| Port Adelaide, SA | 104 | 84 | 98 | 65 | 106 | 2.6% |

Note: The increase in inspection numbers for Fremantle compared to 2014 is due to the fact that inspections carried out in the port of Kwinana are now included in the total for Fremantle.

The number of PSC inspection carried out in Fremantle (+11.5%), Newcastle (+10.5%), Port Hedland (+9.0%), Brisbane (+8.5%) and Dampier (+7.5%) highlights the continued emphasis on the bulk export trade, with Queensland and Western Australia again featuring as the 2 busiest export hubs. Both Sydney and Melbourne saw significant growth in arrivals at 15% and 8.3% respectively, however, a proportion of these arrivals were regular callers and not eligible for inspection. This reduced the growth in PSC inspections in these ports relative to the growth in arrivals.

Table 8 – PSC Inspections by State or territory

| State | PSC Inspections |
|-------|-----------------|
| WA | 1422 |
| QLD | 1132 |
| NSW | 834 |
| VIC | 323 |
| NT | 132 |
| SA | 141 |
| TAS | 66 |
| Total | 4050 |

State by state totals continue to emphasise the importance of bulk cargo trade from Queensland and Western Australia, with New South Wales following as a competitive third. Data indicates that Victoria, South Australia, Tasmania and the Northern Territory may potentially be described as representing a 'Coastal trading block' with regard to port usage, reflecting the dominance of the trans-shipment of manufactured goods and exports from and between the southern states.

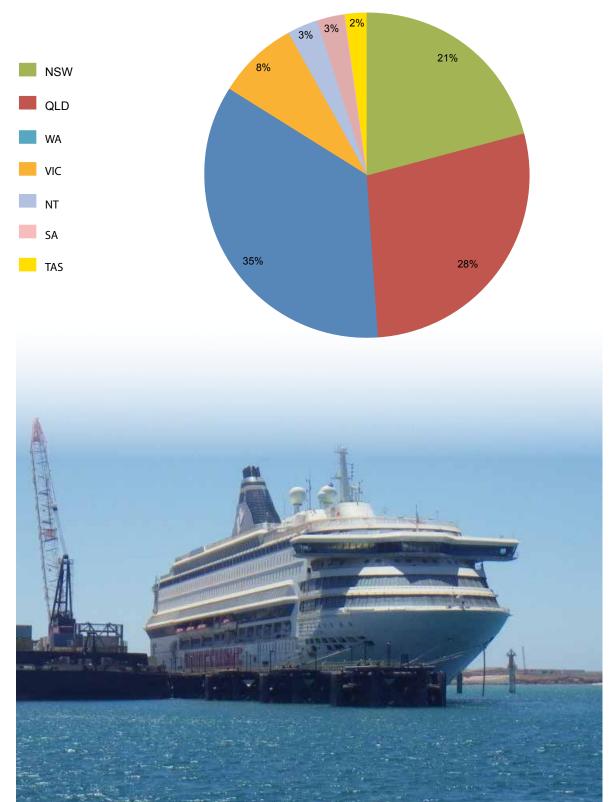


Figure 2 – PSC inspections in 2015 by state/territory

Inspections by Flag State

Table 9 provides a 5-year breakdown of the number of vessels inspected against each Flag State. The table does not identify any significant change in inspections by Flag State over the last 5 years.

The Flag State with the largest number of ships inspected by AMSA was Panama with 1042 ships inspected (26% of the total). This is consistent with the result in 2013 and 2014.

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

| Top 12 Flag States | Number of Inspections | | | | | | |
|--|-----------------------|------|------|------|------|--|--|
| (figures in red are not in the top 12) | 2011 | 2012 | 2013 | 2014 | 2015 | | |
| Antigua and Barbuda | 88 | 85 | 85 | 74 | 66 | | |
| Bahamas | 109 | 104 | 122 | 125 | 159 | | |
| China | 59 | 89 | 95 | 103 | 92 | | |
| Cyprus | 86 | 80 | 70 | 86 | 89 | | |
| Greece | 63 | 52 | 63 | 78 | 91 | | |
| Hong Kong | 289 | 326 | 371 | 431 | 483 | | |
| Japan | 53 | 54 | 56 | 68 | 84 | | |
| Korea, Republic of | 85 | 68 | 68 | 73 | 78 | | |
| Liberia | 260 | 302 | 315 | 350 | 372 | | |
| Malta | 106 | 124 | 134 | 172 | 216 | | |
| Marshall Islands | 164 | 187 | 224 | 303 | 338 | | |
| Panama | 883 | 940 | 918 | 1002 | 1042 | | |
| Singapore | 237 | 263 | 281 | 376 | 426 | | |
| Totals (for all flags) | 3000 | 3179 | 3342 | 3745 | 4050 | | |

Table 9 – PSC Inspections by top 12 Flag States

Table 10 – Total ships inspected by Flag State

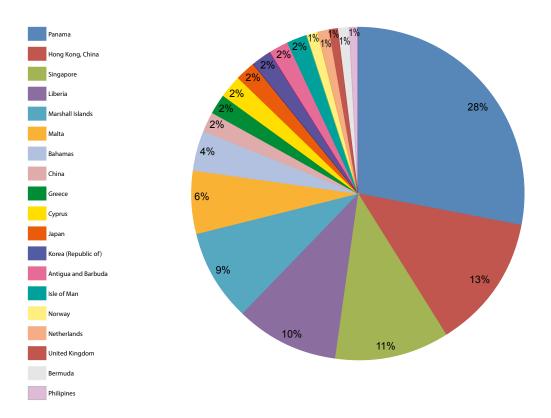
| Flag State | 2011 | 2012 | 2013 | 2014 | 2015 |
|-----------------------|------|------|------|------|------|
| Antigua and | - | | | | |
| Barbuda | 89 | 84 | 84 | 74 | 66 |
| Bahamas | 109 | 104 | 122 | 125 | 159 |
| Barbados | 4 | 2 | 3 | 3 | 2 |
| Belgium | 14 | 8 | 12 | 7 | 6 |
| Belize | 2 | 2 | 3 | 2 | 0 |
| Bermuda | 17 | 16 | 16 | 16 | 30 |
| Cayman Islands | 22 | 20 | 32 | 21 | 24 |
| China | 60 | 89 | 94 | 103 | 92 |
| Comoros | 0 | 0 | 0 | 0 | 1 |
| Cook Islands | 3 | 2 | 5 | 6 | 7 |
| Croatia | 7 | 3 | 6 | 3 | 4 |
| Curacao | 2 | 3 | 2 | 3 | 3 |
| Cyprus | 87 | 82 | 72 | 86 | 89 |
| Denmark | 9 | 12 | 9 | 22 | 22 |
| Dominica | 4 | 2 | 1 | 1 | 1 |
| Egypt | 5 | 5 | 4 | 3 | 0 |
| Estonia | 0 | 0 | 0 | 2 | 1 |
| Fiji | 1 | 0 | 0 | 0 | 0 |
| France | 5 | 4 | 2 | 3 | 4 |
| Germany | 17 | 14 | 10 | 2 | 2 |
| Gibraltar | 8 | 16 | 24 | 14 | 14 |
| Greece | 64 | 53 | 63 | 78 | 91 |
| Hong Kong | 291 | 326 | 372 | 431 | 483 |
| India | 22 | 23 | 18 | 11 | 18 |
| Indonesia | 8 | 7 | 8 | 15 | 11 |
| Ireland | 1 | 1 | 0 | 0 | 0 |
| Isle of Man | 38 | 50 | 58 | 70 | 64 |
| Italy | 41 | 35 | 28 | 15 | 22 |
| Jamaica | 0 | 0 | 0 | 1 | 0 |
| Japan | 53 | 54 | 56 | 68 | 84 |
| Kiribati | 0 | 1 | 0 | 0 | 0 |
| Korea, Republic of | 85 | 68 | 68 | 73 | 78 |
| Kuwait | 5 | 3 | 3 | 4 | 4 |
| Liberia | 260 | 303 | 313 | 350 | 372 |
| Luxembourg | 6 | 3 | 7 | 8 | 8 |
| Malaysia | 19 | 14 | 10 | 16 | 16 |

| Flag State | 2011 | 2012 | 2013 | 2014 | 2015 |
|--|------|------|------|------|------|
| Malta | 105 | 127 | 135 | 172 | 172 |
| Marshall Islands | 166 | 186 | 224 | 303 | 303 |
| Mauritius | 0 | 0 | 0 | 1 | 1 |
| Netherlands | 39 | 46 | 57 | 42 | 42 |
| New Zealand | 2 | 1 | 1 | 2 | 2 |
| Norway | 28 | 31 | 44 | 44 | 44 |
| Pakistan | 1 | 2 | 0 | 1 | 1 |
| Panama | 882 | 936 | 916 | 1002 | 1002 |
| Papua New Guinea | 10 | 14 | 14 | 8 | 8 |
| Philippines | 32 | 27 | 33 | 29 | 29 |
| Portugal | 1 | 1 | 3 | 7 | 7 |
| Qatar | 0 | 0 | 1 | 0 | 0 |
| Russian Federation | 1 | 1 | 0 | 0 | 0 |
| Saint Kitts and Nevis | 0 | 1 | 0 | 0 | 0 |
| Saint Vincent and the Grenadines | 1 | 0 | 3 | 3 | 3 |
| Samoa | 2 | 2 | 1 | 2 | 2 |
| Saudi Arabia | 0 | 0 | 1 | 1 | 1 |
| Singapore | 237 | 264 | 287 | 376 | 376 |
| Solomon Islands | 0 | 0 | 1 | 0 | 0 |
| Sri Lanka | 1 | 1 | 1 | 0 | 0 |
| Sweden | 10 | 12 | 8 | 8 | 8 |
| Switzerland | 6 | 5 | 4 | 11 | 11 |
| Taiwan (Province of China) | 16 | 20 | 13 | 13 | 13 |
| Thailand | 17 | 9 | 11 | 11 | 11 |
| Tonga | 4 | 1 | 1 | 2 | 2 |
| Turkey | 14 | 7 | 3 | 4 | 4 |
| Tuvalu | 0 | 1 | 4 | 0 | 0 |
| United Kingdom | 40 | 46 | 51 | 34 | 34 |
| United States of America | 5 | 5 | 2 | 6 | 6 |
| Vanuatu | 16 | 17 | 11 | 18 | 18 |
| Vietnam | 8 | 7 | 7 | 6 | 6 |
| Totals | 3002 | 3179 | 3342 | 3742 | 4050 |

Figure 3 represents inspections by Flag State where 25 or more vessels have been subjected to inspection during 2015. Flag States that have less than 25 inspections in a year are not considered to be statistically significant in this context.

Inspections by ship type







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. All 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 2015, there was a 13 per cent decrease in the number of deficiencies issued during the year in conjunction with an 8.2 per cent increase in the number of ship inspections. As a result, the deficiency rate per inspection dropped from 2.9 in 2014 to 2.3 in 2015. As indicated in Table 12, a marginal decrease was consistent over all categories of deficiencies with ISM and MLC recording no change since 2014.

Top 5 deficiencies per inspection by ship type 2015

| A total of 9,484 | | Ship type (deficiencies per inspection) |
|--|----|---|
| deficiencies were issued in 2015 with the | 1. | Other types of Ships - 3.44 |
| average deficiencies | 2. | Special Purpose Ships – 3.28 |
| per inspection being 2.3% | 3. | Tugboats – 3.26 |
| 2.070 | 4. | NLS tankers – 3.17 |
| | 5. | General Cargo/Multipurpose ships - 2.97 |

Deficiencies by category and ship type

For reporting purposes, deficiencies have been categorised into the following groups used to identify key areas of non-compliance: Structural/equipment, Operational, Human factors, International Safety Management (ISM) and MLC. Table 10 identifies the number of deficiencies by category along with a comparison of the deficiency rate to those of 2015.



If the number of deficiencies are considered in isolation, as depicted in Table 10, the majority of deficiencies were issued to bulk carriers. This is hardly surprising given bulk carriers represented 51 per cent of ship arrivals and 59 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 11.

| Ship type | Structural/ equipment | Operational | Human factor | WSI | MLC | Total deficiency | PSC inspections | Overall deficiency per inspection | Number of detentions | Detention rate |
|--------------------------------------|--------------------------|-------------|-----------------|------|------|---------------------|--------------------|---|-------------------------|-------------------|
| Bulk carrier | 1.08 | 0.44 | 0.48 | 0.12 | 0.34 | 5866 | 2389 | 2.45 | 140 | 5.9% |
| Chemical tanker | 0.52 | 0.14 | 0.12 | 0.08 | 0.29 | 215 | 187 | 1.15 | 4 | 2.1% |
| Container ship | 1.15 | 0.39 | 0.37 | 0.14 | 0.58 | 994 | 378 | 2.63 | 32 | 8.5% |
| Gas carrier | 0.43 | 0.08 | 0.11 | 0.04 | 0.05 | 56 | 79 | 0.71 | | 1.3% |
| General cargo/multi- purpose ship | 1.21 | 0.66 | 0.50 | 0.16 | 0.44 | 516 | 174 | 2.97 | 18 | 10.3% |
| Heavy load carrier | 0.79 | 0.38 | 0.50 | 0.13 | 0.23 | 97 | 48 | 2.02 | ς | 6.3% |
| Livestock carrier | 1.30 | 0.52 | 0.30 | 0.11 | 0.40 | 140 | 53 | 2.64 | 4 | 7.7% |
| MODU or FPSO | 5.25 | 3.75 | 1.75 | 0.50 | 0.00 | 45 | 4 | 11.25 | . | 25.0% |
| NLS tanker | 1.38 | 0.79 | 0.25 | 0.21 | 0.54 | 76 | 24 | 3.17 | ç | 12.5% |
| Offshore service vessel | 0.82 | 0.55 | 0.21 | 0.08 | 0.23 | 44 | 22 | 2.00 | . | 4.5% |
| Oil tanker | 0.63 | 0.24 | 0.11 | 0.04 | 0.44 | 319 | 218 | 1.46 | ω | 3.7% |
| Other types of ship | 1.70 | 0.88 | 0.52 | 0.07 | 0.26 | 93 | 27 | 3.44 | ~ | 3.7% |
| Passenger ship | 1.02 | 0.37 | 0.15 | 0.06 | 0.08 | 87 | 52 | 1.67 | . | 1.9% |
| Refrigerated cargo vessel | 1.40 | 1.20 | 2.00 | 0.40 | 1.00 | 30 | 5 | 6.00 | 0 | 0.0% |
| Ro-ro cargo ship | 2.33 | 2.50 | 1.00 | 0.33 | 0.33 | 39 | 9 | 6.50 | . | 16.7% |
| Special purpose ship | 1.56 | 0.89 | 0.67 | 0.17 | 0.17 | 59 | 18 | 3.28 | ç | 16.7% |
| Tugboat | 1.45 | 1.11 | 0.37 | 0.12 | 0.21 | 297 | 91 | 3.26 | 9 | 6.6% |
| Vehicle carrier | 0.78 | 0.21 | 0.24 | 0.11 | 0.25 | 334 | 209 | 1.60 | 0 | 4.3% |
| Wood-chip carrier | 1.33 | 0.30 | 0.27 | 0.18 | 0.57 | 177 | 67 | 2.64 | 9 | 9.0% |
| Totals for 2015 | 4199 | 1734 | 1647 | 461 | 1443 | 9484 | 4050 | | 242 | 6.0% |
| Deficiency Rates | 1.0 | 0.4 | 0.4 | 0.1 | 0.4 | | | 2.3 | | |
| Totals for 2014 | 4717 | 2156 | 1832 | 530 | 1658 | 10892 | 3742 | | 269 | 7.2% |
| Deficiency Rates | 1.3 | 0.6 | 0.5 | 0.1 | 0.4 | | | 2.9 | | |

Table 11 – Rate of Deficiencies per inspection by ship category and Type

| Deficiency | 2014 | 2015 | Trend |
|---------------------|------|------|-------|
| Structure/equipment | 1.3 | 1.0 | V |
| Operational | 0.6 | 0.4 | V |
| Human factors | 0.5 | 0.4 | V |
| ISM | 0.1 | 0.1 | - |
| MLC | 0.4 | 0.4 | - |

Table 12 – 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 13 indicates the proportion of detainable deficiencies in different categories over a 3-year period. As indicated in this table, the detainable deficiencies relating to the category of International Safety Management (ISM) decreased marginally while the categories of Fire safety, pollution prevention, emergency systems and Lifesaving appliances round out the top five detainable deficiencies. The proportion of Labour conditions (MLC2006) detainable deficiencies has increased compared to the previous years now being the sixth most prevalent detainable deficiency.

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



| | 2013 | 6 | 2014 | 4 | 2015 | | |
|--|---------------------|--------|---------------------|--------|---------------------|--------|--|
| Category | No. of deficiencies | Share% | No. of deficiencies | Share% | No. of deficiencies | Share% | |
| ISM | 87 | 27.5 | 120 | 31.2 | 103 | 29.7 | |
| Fire safety | 62 | 19.6 | 54 | 14.0 | 55 | 15.9 | |
| Pollution prevention | 29 | 9.2 | 40 | 10.4 | 39 | 11.2 | |
| Emergency systems | 21 | 6.6 | 32 | 8.3 | 34 | 9.8 | |
| Lifesaving appliances | 46 | 14.5 | 44 | 11.4 | 30 | 8.6 | |
| Labour Conditions | 4 | 1.3 | 21 | 5.5 | 26 | 7.5 | |
| Water/weather-tight conditions | 29 | 9.2 | 13 | 3.4 | 24 | 6.9 | |
| Radio communications | 18 | 5.7 | 18 | 4.7 | 11 | 3.2 | |
| Structural conditions | 6 | 1.9 | 4 | 1.0 | 7 | 2.0 | |
| Certificates and documents | 3 | 0.9 | 12 | 3.1 | 7 | 2.0 | |
| Safety of navigation | 9 | 2.8 | 18 | 4.7 | 5 | 1.4 | |
| Propulsion and auxiliary machinery | 1 | 0 | 2 | 0.5 | 3 | 0.9 | |
| Other | 5 | 1.6 | 6 | 1.6 | 2 | 0.6 | |
| Alarms | 0 | 0 | 0 | 0.0 | 1 | 0.3 | |
| Cargo operations including equipment | 0 | 0 | 1 | 0.3 | 0 | 0.0 | |
| Working and living conditions | 0 | 0 | 21 | 5.5 | 0 | 0.0 | |
| Dangerous goods | 0 | 0 | 0 | 0.0 | 0 | 0.0 | |
| International Ship and Port Facility Security Code (ISPS) | 0 | 0 | 0 | 0.0 | 0 | 0.0 | |
| Totals | 316 | | 385 | | 347 | | |

Table 13 – Detainable deficiencies by category

Detentions by ship type

During 2015, AMSA surveyors detained 242 ships, an average detention rate of 6.0 per cent, compared to 269 ships at 7.2 per cent in 2014.

Top 5 Detention rate by ship type 2014 and 2015

| A total of 242 detentions | 2014 - 7.2% average | 2015 - 6.0% average (no of detentions) |
|-------------------------------------|-----------------------------|--|
| occurred in 2015 with an average | General cargo ships - 14.7% | Special purpose ship - 16.7% (3) |
| detention rate of | Tugboats - 13.6% | NLS tanker - 12.5% (3) |
| 6.0% | Livestock carrier - 12.7% | General cargo/multi-purpose ship - 10.3% (18) |
| | Other types of ship - 11.5% | Wood chip carrier – 9.0% (6) |
| | Container ship - 8.5% | Container ships - 8.5% (32) |

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

Table 14 indicates that bulk carriers represented the largest number of PSC detentions. This is to be expected given the relative number of these ships inspected. However, the bulk carrier detention rate is 5.9%, which is below the average of 6.0% for 2015. Further, the performance of bulk carriers improved from 2014 where the detention rate was 6.9%. The poorest performing ship types were Special Purpose ships, NLS tankers, general cargo ships, wood chip carriers and container ships. It is pertinent that the general cargo ships and container ships were also in the top 5 poorest performing ship categories in 2014.

| | | 2014 | | |
|----------------------------------|-------------|------------|----------------|----------------|
| Ship type | Inspections | Detentions | Detention Rate | Detention Rate |
| Bulk carrier | 2389 | 140 | 5.9% | 6.9% |
| Chemical tanker | 187 | 4 | 2.1% | 1.2% |
| Combination carrier | 0 | 0 | 0.0% | 0.0% |
| Container ship | 378 | 32 | 8.5% | 8.5% |
| Gas carrier | 79 | 1 | 1.3% | 1.9% |
| General cargo/multi-purpose ship | 174 | 18 | 10.3% | 14.7% |
| Heavy load carrier | 48 | 3 | 6.3% | 7.3% |
| High speed passenger craft | 0 | 0 | 0.0% | 0.0% |
| Livestock carrier | 52 | 4 | 7.7% | 12.7% |
| MODU or FPSO | 4 | 1 | 25.0% | 100.0% |
| NLS tanker | 24 | 3 | 12.0% | 3.8% |
| Offshore service vessel | 22 | 1 | 4.5% | 8.3% |
| Oil tanker | 218 | 8 | 3.7% | 4.1% |
| Other types of ship | 27 | 1 | 3.7% | 11.5% |
| Passenger ship | 52 | 1 | 1.9% | 7.1% |
| Refrigerated cargo vessel | 5 | 0 | 0.0% | 20.0% |
| Ro-ro cargo ship | 6 | 1 | 16.7% | 33.3% |
| Ro-ro passenger ship | 0 | 0 | 0% | 0.0% |
| Special purpose ship | 18 | 3 | 16.7% | 0.0% |
| Tugboat | 91 | 6 | 6.6% | 13.6% |
| Vehicle carrier | 209 | 9 | 4.3% | 4.9% |
| Wood-chip carrier | 67 | 6 | 9.0% | 3.6% |
| Totals | 4050 | 242 | 6.0% | 7.2% |

Table 14 – Detentions by ship type

- For Bulk Carriers, in 2014, 2144 were inspected, 6264 deficiencies were issued and 146 ships were detained. In 2015, 2389 Bulk carriers were inspected 5866 deficiencies issued and 140 ships were detained. This is a positive sign of improvement as it represents a drop in deficiency rate from 2.9 in 2014 to 2.3 in 2015 and a drop in detention rate from 6.9% in 2014 to 5.9% on 2015.
- Livestock carriers indicated a significant improvement overall in 2014, Livestock carriers were issued with 331 deficiencies resulting in 7 detentions and a detention rate of 12.7%. In 2015, deficiencies dropped to 140 resulting in 4 detentions and a drop in detention rate to 7.7%.

- Passenger ships also indicated a significant improvement. In 2014, Passenger ships were issued with 131 deficiencies resulting in 3 detentions and a detention rate of 7.1%. In 2015, deficiencies dropped to 87 resulting in 1 detentions and a drop in detention rate to 1.9%.
- Australia wide AMSA experienced an increase in MODU and Special purpose ship arrivals and PSC activity. In 2014 - 1 MODU was inspected, 5 deficiencies were issued and it was detained.
 In 2015 - 4 MODU were inspected, 45 deficiencies were issued and 1 MODU was detained.
- In 2014, 8 Special purpose ships were inspected, 31 deficiencies were issued and none were detained. In 2015, 18 Special purpose ships were inspected, 59 deficiencies were issued and 3 ships were detained. Deficiency rate dropped from 3.88 to 3.28; however the detention rate increased significantly from 0% to 16.7%.

Detentions by Flag State

Individual Flag State performance can be determined by comparing the percentage share of the total number of inspections against the percentage share of the total number of detentions for each Flag State. Table 15 details the number of inspections, number of detentions and the detention rate for each flag. A snap shot of flag state performance for 2015 is provided below showing the flag states that exceed the average detention rate of 6.0% for 2015.

| There was a total of 242 | Flag State (Detention Rate %) |
|--|----------------------------------|
| foreign- flag vessels detained in 2015. | Indonesia (3) – 23.7% |
| | Antigua and Barbuda (10) – 15.2% |
| The average detention rate | Gibraltar (2) – 14.3% |
| for all vessels was 6.0%. | Italy (3) – 13.6% |
| | India (2) – 11.1% |
| | Cyprus (9) – 10.0% |
| | Liberia (37) – 9.9% |
| | Malta (18) -8.3% |
| | Cayman Islands (2) - 8.3% |
| | Republic of Korea (6) – 7.7% |

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

Where the percentage share of detentions is higher than the percentage share of inspections this is an indication that the Flag State is not performing well. This representation is given in Figure 5 with full details provided in the annex to this report.

Table 15 - Detentions as a percentage

| Flag | Number of PSC Inspections | Deficiencies | Deficiencies per PSC Inspection | Detained | Detention Rate | PSC Share | Detention Share |
|---------------------|------------------------------|--------------|------------------------------------|----------|----------------|-----------|-----------------|
| Antigua and Barbuda | 66 | 276 | 4.18 | 10 | 15.2% | 1.6% | 4.1% |
| Bahamas | 159 | 316 | 1.99 | 7 | 4.4% | 3.9% | 2.9% |
| Cayman Islands | 24 | 42 | 1.75 | 2 | 8.3% | 0.6% | 0.8% |
| China | 92 | 93 | 1.01 | 2 | 2.2% | 2.3% | 0.8% |
| Cyprus | 89 | 268 | 3.01 | 9 | 10.1% | 2.2% | 3.7% |
| Gibraltar | 14 | 35 | 2.50 | 2 | 14.3% | 0.3% | 0.8% |
| Greece | 91 | 148 | 1.63 | 3 | 3.3% | 2.2% | 1.2% |
| Hong Kong, China | 483 | 1013 | 2.10 | 26 | 5.4% | 11.9% | 10.7% |
| India | 18 | 48 | 2.67 | 2 | 11.1% | 0.4% | 0.8% |
| Indonesia | 11 | 74 | 6.73 | 3 | 27.3% | 0.3% | 1.2% |
| Isle of Man | 64 | 58 | 0.91 | 2 | 3.1% | 1.6% | 0.8% |
| Italy | 22 | 77 | 3.50 | 3 | 13.6% | 0.5% | 1.2% |
| Japan | 84 | 112 | 1.33 | 2 | 2.4% | 2.1% | 0.8% |
| Korea, Republic of | 78 | 220 | 2.82 | 6 | 7.7% | 1.9% | 2.5% |
| Liberia | 372 | 958 | 2.58 | 37 | 9.9% | 9.2% | 15.3% |
| Malta | 216 | 528 | 2.44 | 18 | 8.3% | 5.3% | 7.4% |
| Marshall Islands | 338 | 765 | 2.26 | 18 | 5.3% | 8.3% | 7.4% |
| Panama | 1042 | 2755 | 2.64 | 59 | 5.7% | 25.7% | 24.4% |
| Philippines | 28 | 62 | 2.21 | 1 | 3.6% | 0.7% | 0.4% |
| Singapore | 426 | 884 | 2.08 | 19 | 4.5% | 10.5% | 7.9% |
| | 33 | 57 | 1.73 | 1 | 3.0% | 0.8% | 0.4% |

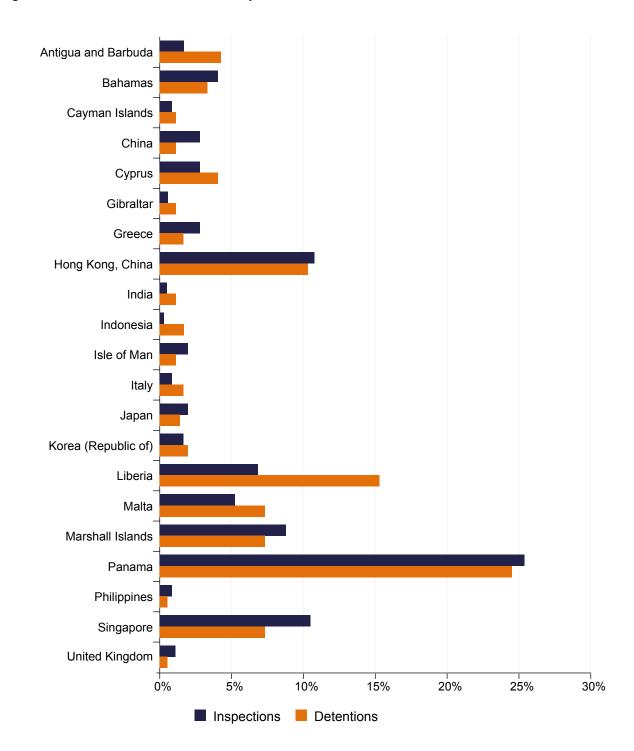


Figure 5 – Share of detentions vs share of inspections

For the large flags, where their vessel have been subject to more than 50 inspections, figure 5 and Table 15 show that Antigua and Barbuda, Liberia, Malta and Cyprus are not performing as well as Singapore, Marshall Islands, China and Greece by comparison.

Table 16 (on page 26) compares flag states that exceeded the average in both 2015 and 2014. In considering table 16, 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. In such cases comparison to detention rates in previous years provides an indication of performance.

| 2014 (avera | ge 7.2%) | 2015 (average 6.0%) | | |
|---------------------|----------------------------|---------------------|----------------------------|--|
| Flag State | Detention rate (number) | Flag State | Detention rate (number) | |
| Indonesia | 66.7% (10) | Indonesia | 27.3% (3) | |
| Antigua and Barbuda | 20.3% (15) | Antigua and Barbuda | 15.2% (10) | |
| Greece | 14.1% (11) | Gibraltar | 14.3% (2) | |
| Malaysia | 12.5% (2) | Italy | 13.6% (3) | |
| Cyprus | 11.6% (10) | India | 11.1% (2) | |
| Vanuatu | 11.1% (2) | Cyprus | 10.1% (9) | |
| Philippines | 10.3% (3) | Liberia | 9.9% (37) | |
| India | 9.1% (1) | Malta | 8.3% (18) | |
| Switzerland | 9.1% (1) | Cayman Islands | 8.3% (2) | |
| Liberia | 8.9% (31) | Republic of Korea | 7.7% (6) | |
| Bahamas | 8.8% (11) | | | |
| United Kingdom | 8.8% (3) | | | |
| Malta | 8.7% (15) | | | |

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



Detention appeals and review processes

Vessel owners, Operators, Registered Organisations (RO)⁵ and Flag States all have the right to appeal against inspection outcomes. This can be achieved through a number of different means, with the Master of a vessel advised of these rights upon completion of each PSC inspection.

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

During 2015, owners, operators, ROs and Flag States appealed a number of PSC deficiencies and detentions directly to AMSA, all of which were investigated and responded to accordingly. In total, 12 appeals against vessel detention were received, each underwent a full review of all relevant information, with 2 detentions subsequently rescinded. In the remainder of cases, the original decisions of the AMSA surveyors were found to be appropriate and the appeals rejected. Four appeals were received from ROs challenging the assignment of RO responsibility during the inspection process. AMSA accepted 2 of these challenges upon review 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 Australian Administrative Appeals Tribunal however this was withdrawn by the applicant before the matter could proceed to hearing and the AMSA inspectors decision stood.

A full listing of ships detained by AMSA can be found on the Ship Safety section of the AMSA website. http://www.amsa.gov.au/vessels/ship-safety/port-state-control/ship-detention/index.asp

Recognised Organisation Performance

Table 17 reports the 2015 performance of Recognised Organisations including inspections, deficiency rates, detention rates and the percentage of the detainable items that were allocated RO responsibility for detention. The table indicates that there is a relatively small proportion of detainable deficiencies for which RO responsibility was assigned, the average experienced a slight decrease form 4.4 per cent in 2014 to 4.3 per cent in 2015.

Table 17 – Performance of Recognised Organisations: Alphabetical Order

| Recognised Organisation | PSC | Deficiencies | Detentions | Detention Rates | Detainable Deficiencies | RO Resp Detainable Deficiencies | RO Resp as share of all Detainable Defs |
|---|------|--------------|------------|-----------------|----------------------------|------------------------------------|--|
| American Bureau of Shipping (ABS) | 477 | 1153 | 22 | 4.6% | 35 | 3 | 8.6% |
| Bureau Veritas (BV) | 353 | 889 | 22 | 6.2% | 32 | 2 | 6.3% |
| China Classification Society (CCS) | 249 | 434 | 7 | 2.8% | 8 | 0 | 0.0% |
| CR Classification Society (CRCS) | 6 | 18 | 0 | 0.0% | 0 | 0 | 0.0% |
| Croatian Register of Shipping (CRS) | 5 | 10 | 0 | 0.0% | 0 | 0 | 0.0% |
| Det Norske Veritas (DNV) | 21 | 51 | 1 | 4.8% | 1 | 0 | 0.0% |
| DNV GLAS (DNVGL) | 661 | 1664 | 56 | 8.5% | 78 | 5 | 6.4% |
| Germanischer Lloyd (GL) | 18 | 73 | 1 | 5.6% | 1 | 0 | 0.0% |
| Indian Register of Shipping (IRS) | 11 | 27 | 1 | 9.1% | 1 | 0 | 0.0% |
| Indonesian Classification Bureau (BKI) | 1 | 3 | 0 | 0.0% | 0 | 0 | 0.0% |
| Korean Register of Shipping (KRS) | 267 | 590 | 10 | 3.7% | 12 | 1 | 8.3% |
| Lloyd's Register (LR) | 541 | 1000 | 26 | 4.8% | 38 | 0 | 0.0% |
| Nippon Kaiji Kyokai (NKK) | 1379 | 3333 | 86 | 6.2% | 122 | 3 | 2.5% |
| no class | 14 | 90 | 5 | 35.7% | 10 | 1 | 10.0% |
| Registro Italiano Navale (RINA) | 47 | 149 | 5 | 10.6% | 9 | 0 | 0.0% |
| Totals | 4050 | 9484 | 242 | 6.0% | 347 | 15 | 4.3% |

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 18 – Target inspection rate

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

The risk profile of ships trading in Australian ports continues to show that over 80% of the individual ship arrivals fall into the lower priority group P3 or P4 in both 2014 (83.4%) and 2015 (82.9%). However, as indicated by table 19 the proportion of P1 vessels was higher in 2015 compared to 2014.

Table 19 – inspection resources

| | 20 | 14 | 2015 | | |
|----------------|----------------------------|------------------------------|----------------------------|------------------------------|--|
| Priority Group | Number of ship arrivals | Percentage of total arrivals | Number of ship arrivals | Percentage of total arrivals | |
| Priority 1 | 500 | 8.8 | 542 | 9.6 | |
| Priority 2 | 441 | 7.8 | 420 | 7.4 | |
| Priority 3 | 1181 | 20.8 | 1469 | 26.0 | |
| Priority 4 | 3552 | 62.6 | 3213 | 56.9 | |
| Totals | 5674 | | 5644 | | |

This data, along with required target inspection rates as shown in Table 18, shows how AMSA allocates its inspection resources against the targeted inspection rates. The purpose of the target inspection rates is to focus resources in the most effective manner. In 2015 AMSA achieved the required target rates in all priority groups with an overall high inspection rate of 65%.

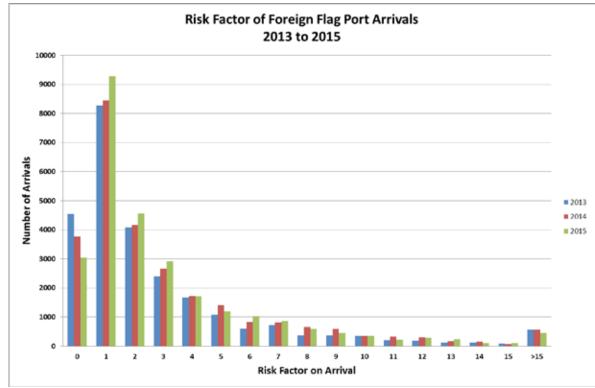
Table 20 – Unique foreign-flag ships - by priority group

| Inspection Priority | Ship Arrivals | | Eligible Ships | | Ships Inspected | | Inspection Rate | |
|---------------------|---------------|------|----------------|------|-----------------|------|-----------------|------|
| | 2014 | 2015 | 2014 | 2015 | 2014 | 2015 | 2014 | 2015 |
| Priority 1 | 500 | 542 | 460 | 487 | 440 | 459 | 96% | 94% |
| Priority 2 | 441 | 420 | 416 | 385 | 352 | 343 | 85% | 89% |
| Priority 3 | 1181 | 1469 | 1117 | 1403 | 768 | 1074 | 69% | 77% |
| Priority 4 | 3552 | 3213 | 3464 | 3143 | 1705 | 1623 | 49% | 52% |
| Totals | 5674 | 5644 | 5457 | 5418 | 3265 | 3499 | 60% | 65% |

| | 20 | 14 | 2015 | | |
|----------------|--------------|--------------------------------|------|--------------------------------|--|
| Priority Group | Deficiencies | Deficiencies per Inspection | | Deficiencies per Inspection | |
| Priority 1 | 2991 | 4.4 | 1707 | 3.5 | |
| Priority 2 | 1476 | 3.2 | 724 | 2.2 | |
| Priority 3 | 3102 | 2.9 | 2363 | 2.2 | |
| Priority 4 | 3323 | 2.2 | 4690 | 2.2 | |
| Totals | 10,892 | 2.9 | 9484 | 2.3 | |

Table 21 – Number of deficiencies according to vessels risk factor

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



From Figure 6 it is evident that the number of vessels of all risk factors arriving in 2015 was lower than in 2014. This trend has been consistent in the period 2013 to 2015 and confirms table 19 that the majority of ships fall into the lower priority groups and is indicative that the standard of ships visiting Australia is being maintained.

The 2015 data demonstrates the number of recorded deficiencies in Priority group 1, 2 and 3 decreased. For Priority group 4 the rate of deficiencies per inspection remained unchanged at 2.2 per inspection. This data indicates that the AMSA Risk Rating and Inspection Prioritisation System does ensure resources are applied where they will have the best effect, however, data continues to be evaluated to determine if the rating process can be refined. AMSA continues to contribute valuable time and resources towards regulatory coverage of the *Navigation Act 2012* and the *Maritime Labour Convention, 2006*.

How it works

Flag State Control (FSC)

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

A total of 84 FSC inspections were conducted on 67 Australian-flagged vessels during 2015, resulting in 247 deficiencies being recorded, of which 1 was serious enough to warrant the detention of vessel. This represents a slight decrease from 4.0 in 2014 to 2.9 deficiencies per inspection in 2015. This is above the average for foreign-flag vessels (2.3%).

The number of FSC detentions decreased from 3 in 2014 to 1 in 2015. This equated to a detention rate of 1.2 per cent which is below the average recorded for foreign-flagged shipping.

Port State Control – Australian flagged ships (overseas)

Australian-flagged ships calling at foreign ports were subject to a total of 5 PSC inspections by foreign maritime authorities in Papua New Guinea and Japan resulting in 1 deficiency and no detentions.

Concentrated Inspection Campaign (CIC)

From 1 September 2015 to 30 November 2015, AMSA participated in a Concentrated Inspection Campaign (CIC)on Crew Familiarisation for Enclosed Space Entry. This was aimed at verifying compliance with SOLAS and the ISM code and to ensure effective procedures and measures are in place to safeguard seafarers serving on board these ships. The CIC questions relate to SOLAS and International Safety Management Code (ISM). Over this 3-month period, AMSA conducted a total of 787 inspections covering CIC verification, No detainable deficiencies were recorded on the basis of Crew Familiarisation for Enclosed Space Entry CIC identified deficiencies.

Significant Development 2014-2015

Refusal of a ships access and condition of entry

Australia is a signatory to various International Maritime Organisation (IMO) and International Labour Organisation (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 so that AMSA may consider issuing a direction refusing access to Australian ports where a vessel is a repeated offender, has a poor Port State Control (PSC) record or there are concerns about the performance of the related vessel operator.

With PSC performance for individual vessels the general principles that will be applied in making a decision to issue a direction not to enter or use an Australian port, or ports, are as follows:

• Refusal of access for 3 months, 12 months or 24 months.

Note: When considering vessel performance AMSA will also look at the performance of the company as a whole. Where this is deemed unacceptable the periods detailed in these general principles may be extended.

A direction resulting from a new detention in Australia will generally have effect as soon as the vessel leaves the Australian port or anchorage following the rectification of the latest detainable deficiency.

Table 22 below lists the vessels subject to directions not to enter or use an Australian port given by AMSA in the year 2015.

| Vessel name (IMO number) | Flag | Direction | Issue Date | Expire Date |
|--------------------------------------|-----------|------------------------------|------------|----------------|
| <i>Meratus Sangatta</i> (9116797) | Indonesia | Refused access for 3 months | 9/1/2015 | 6/4/2015 |
| <i>Red Rover</i> (9481673) | Indonesia | Refused access for 12 months | 31/1/15 | 31/1/16 |
| <i>Noah Satu</i> (9313620) | Indonesia | Refused access for 3 months | 15/9/2015 | 16/12/15 |

Table 22 - vessels subject to directions not to enter

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Appendix A

Inspections and Detentions by Flag State

Note: For the year 2015 Detentions as a percentage of total inspections is 6.0 per cent and rate of deficiencies per inspection is 2.3 per cent.

Table 23 – Detentions as a percentage of total inspections

| Flag State | Inspections | Detentions | Detention rates | Flag State | Inspections | Detentions | Detention rates |
|------------------------|-------------|------------|--------------------|---|-------------|------------|--------------------|
| Antigua and Barbuda | 66 | 10 | 15.2% | Marshall Islands | 338 | 18 | 5.3% |
| Bahamas | 159 | 7 | 4.4% | Mauritius | 1 | 0 | 0.0% |
| Barbados | 2 | 0 | 0.0% | Netherlands | 39 | 0 | 0.0% |
| Belgium | 6 | 0 | 0.0% | New Zealand | 7 | 1 | 14.3% |
| Bermuda | 30 | 0 | 0.0% | Norway | 51 | 0 | 0.0% |
| Cayman Islands | 24 | 2 | 8.3% | Pakistan | 1 1042 | 1 59 | 100.0% |
| China | 92 | 2 | 2.2% | Panama | 1042 | 59 | 5.7% |
| Comoros | 1 | 1 | 100.0% | Papua New Guinea | 8 | 1 | 12.5% |
| Cook Islands | 7 | 2 | 28.6% | Philippines | 28 | 1 | 3.6% |
| Croatia | 4 | 0 | 0.0% | Portugal | 10 | 0 | 0.0% |
| Curacao | 3 | 0 | 0.0% | Saint Kitts and Nevis | 2 | 0 | 0.0% |
| Cyprus | 89 | 9 | 10.1% | Nevis Saint Vincent and the Grenadines | 4 | 0 | 0.0% |
| Denmark | 22 | 0 | 0.0% | | | | |
| Dominica | 1 | 0 | 0.0% | | | | |
| Estonia | 1 | 0 | 0.0% | Samoa | 1 | 1 | 100.0% |
| France | 4 | 0 | 0.0% | Saudi Arabia | 1 | 1 | 100.0% |
| Germany | 2 | 0 | 0.0% | Singapore | 426 | 19 | 4.5% |
| Gibraltar | 14 | 2 | 14.3% | Solomon Islands | 4 | 1 | 25.0% |
| Greece | 91 | 3 | 3.3% | Sweden | 9 | 0 | 0.0% |
| Hong Kong | 483 | 26 | 5.4% | Switzerland | 6 | 0 | 0.0% |
| India | 18 | 2 | 11.1% | Taiwan | 0 | U | 0.0% |
| Indonesia | 11 | 3 | 27.3% | (Province of | 24 | 0 | 0.0% |
| Isle of Man | 64 | 2 | 3.1% | China) | | | |
| Italy | 22 | 3 | 13.6% | Thailand | 8 | 1 | 12.5% |
| Japan | 84 | 2 | 2.4% | Turkey | 6 | 0 | 0.0% |
| Korea, Republic of | 78 | 6 | 7.7% | Tuvalu United | 1 | 0 | 0.0% |
| Kuwait | 4 | 0 | 0.0% | Kingdom | 33 | 1 | 3.0% |
| Liberia | 372 | 37 | 9.9% | United States of America | 5 | 0 | 0.0% |
| Luxembourg | 2 | 0 | 0.0% | Vanuatu | 11 | 0 | 0.0% |
| Malaysia | 8 | 0 | 0.0% | Vietnam | 4 | 0 | 0.0% |
| Malta | 216 | 18 | 8.3% | Totals | 4050 | 242 | 6.0% |



Defective Fire dampers





Poor quality of provisions on board





Emergency fire pump – poor performance



CIC -Concentrated inspection campaign on Confined Space Entry



Freefall life boat - Poor condition of high vis paint and windows opaqueSpace Entry



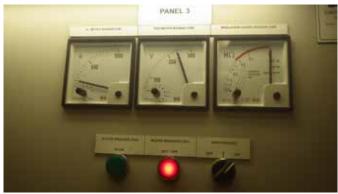
Overloading of Electrical sockets



Engine control room furniture



Insulation meter by passed



220 Volts Main Switch Board low insulation



Defective Navigation light panel in wheel house



Poor condition of hatch cover chains



Fire doors wedged in open position



Unsafe working at height procedure on board



Engineroom skylight , seized in open position on main deck.

