Australian Government

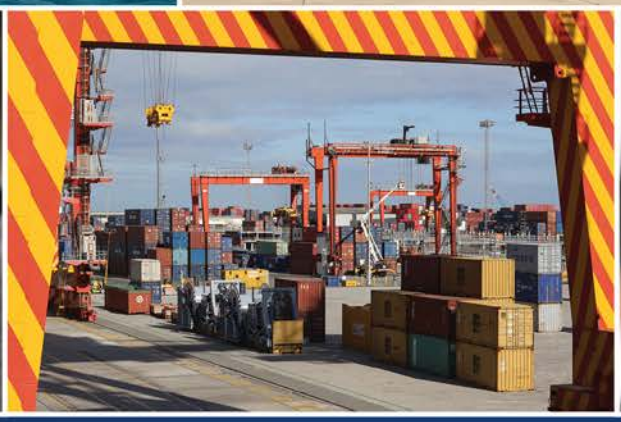
Department of Home Affairs

Time Release Study

2016








Acknowledgment

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Introduction and context

On 1 July 2015, the Australian Customs and Border Protection Service (ACBPS) and the Department of Immigration and Citizenship (DIAC) integrated to form the Department of Immigration and Border Protection (DIBP) and the Australian Border Force (ABF).

The Home Affairs Portfolio was established on 20 December 2017. Under this arrangement, the ABF is an operationally independent agency which continues to deliver compliance; detention and enforcement; investigations; operational border functions as well as Australia's customs service. The Department of Home Affairs (the Department) was established and continues to deliver customs border policy and immigration functions previously delivered by DIBP; corporate, policy and regulatory support for the ABF; and other functions such as emergency management, criminal justice and national security absorbed from agencies across the portfolio.

Since 2007, the annual Time Release Study (TRS) consistently demonstrated the integral link between early reporting of goods by industry and early clearance times by the Department. The relationship between early reporting and early clearance has been a significant theme throughout the TRS series. The Department relies upon the TRS to identify opportunities and efficiencies that ensure the timely facilitation of goods.

The *2016 TRS* demonstrates an overall improvement against most performance measures compared to the previous year. This is a solid achievement that supports the significant changes to border security over the past four years and is indicative of the Department's initiatives in minimising impediments to trade.

Increasingly sophisticated transnational criminal organisations, highly dynamic supply chains as well as evolving threats of terrorism provide a complex environment in which the Department must work. The challenges associated with significant increases in volumes of trade and travel mean that new approaches to how the Department interacts with traders are required.

Opportunities to improve early reporting is currently being explored through greater dialogue with the World Bank, World Customs Organization (WCO), World Trade Organization and industry as well as the development of initiatives such as the Australian Trusted Trader, e-commerce and international mail, Secure Trade Lane and Single Window.

The creation of the Home Affairs Portfolio will further enhance the coordination of traditional immigration and customs functions and strengthen focus on industry engagement and facilitation of legitimate trade and travel. In line with other government agencies, the Department is rapidly moving to a digital-by-default approach. As such, its support of the Australian Government's trade modernisation agenda will be one influenced by the impacts of increased automation and the harnessing of new and digital technologies.

Methodology and scope

Methodology

The TRS is a method endorsed by the WCO for assessing a country's trade facilitation performance at the border. Primarily, the TRS measures the average time between the arrival of goods at the border and the time permission is given for the goods to enter home consumption.

Following the integration of the former ACBPS and DIAC in 2015, the *2016 TRS* was refined to only focus on measuring the clearance performance for air cargo and sea cargo import consignments during the standard snapshot period of one week in September. This is because the approach was more mature for data collection purposes. Performance levels for 2016 were compared with TRS results from previous studies.

All core data was sourced from the Integrated Cargo System and data to measure gate-out performance was provided by industry.

All customs terms used in the *2016 TRS* are defined in the Glossary at Appendix B.

Scope

The *2016 TRS* continues the focus on multi-year and year-on-year trends for existing areas of interest.

Figures and percentages

Throughout the *2016 TRS*, the majority of figures and percentages were rounded for ease of reading. Due to rounding, there may be circumstances where figures or percentages within a graph or table do not equal 100 per cent. All figures are a true and correct reflection of border activity at the time of extraction.

The design

Import consignments

Cargo is considered at the lowest consignment level. For full container load (FCL) cargo, this is a container. For all other cargo types, including air cargo, it is those consignments consigned to the actual importer as opposed to an intermediary such as a freight forwarder.

The TRS sample sets consist of 49,951 sea cargo consignments and 530,502 air cargo consignments in 2016 – see Table 1.

Key events

The timing of key events in the movement and clearance cycle of cargo is extracted from data reported to the Department by express carriers, cargo handlers, traders and service providers. Key events are defined at Appendix A.

Dimensions

The data captured on all air cargo and sea cargo consignments supports further analysis by dimensions to illustrate the distinct clearance performance levels for these particular segments. In the *2016 TRS*, the following dimensions include:

- cargo type
- country of origin
- discharge port
- gate-out
- loading countries by airport and port
- service type, and
- whether cleared by Full Import Declarations (FIDs) or simplified declaration (low value cargo).

Table 1: *Air and Sea cargo sample characteristics – imports (2015 – 2016)*

	2015	2016
Dimension	**Number**	**Number**
Sea cargo		
Total consignments / unique cargo lines	**49,102**	**49,951**
Full container load (FCL) consignments	32,380	33,072
Full container multiplr suppliers (FCX) consignments	9,883	8,855
Less than container load (LCL) consignments	6,223	7,321
Break-bulk (B/B) consignments	551	616
Bulk (BLK) consignments	65	87

	2015	2016
Dimension	**Number**	**Number**
Sea cargo continued		
Import declarations	23,679	25,032
Self-assessed clearance (SAC) consignments	318	325
Importers	9,842	10,682
Customs brokers	412	409
Discharge ports	20	22
Origin countries	108	107
Vessels	113	110
Arrivals	113	111
Freight forwarders	585	603
Gate-out consignments	33,721	31,513
Air cargo		
Total consignments / unique cargo lines	**437,508**	**530,502**
Air straight-line consignments	3,025	3,102
Consolidated consignments	434,483	527,400
Import declarations	40,268	41,626
SAC consignments	397,240	488,876
Registered importers	13,751	14,136
Customs brokers	377	364
Discharge ports	8	9
Origin countries	179	176
Flights	1,138	1,200
Airlines	54	60

Overview of results – imports

Average times between the arrival of cargo and other key events

Sea cargo multi-year trend

Table 2 shows that the performance of sea cargo in 2016 was reasonably similar to the previous year, with average unimpeded times declining possibly due to increasing cargo volumes and longer inspection times.

Table 2: *Sea cargo – average times from arrival (days) (2012 – 2016)**

Key event	2012	2013	2014	2015	2016
Documents	-4.0	-4.0	-3.6	-3.7	-3.8
Customs unimpeded	-2.9	-2.9	-2.4	-2.9	-2.0
Ready to pay	-2.8	-2.8	-2.3	-2.5	-1.8
Release	-0.4	-0.6	-0.0	-0.6	-0.6
Clearance	-0.2	-0.1	0.5	0.5	0.1
Availability	2.3	1.2	1.3	1.2	1.2

***** Interval measures show the average (mean) time difference between named key events for all consignments in the sample.

Key events are defined at Appendix A.

The interval measure is days or parts of days.

Where performance has improved since the previous TRS, the change is highlighted in **green**. Where the performance has declined, the change is highlighted in **red**.

Negative figures indicate that key events occurred prior to the arrival of cargo at Australia's border.

The decrease in average Customs unimpeded and Ready to pay times did not have a significant impact on Availability times, which remained consistent across the last four years.

In 2016, industry continued its strong reporting record with documents received almost four days prior to the arrival of goods and clearance times roughly 0.1 days earlier when compared 2015. This remains consistent with 2015 and continues to highlight the important link between early reporting of goods and early clearance.

It took an average of two days prior to arrival for goods to become unimpeded. Although this was a decline from 2015, it did not affect average availability or release times.

There was an improvement in both the average release and clearance times, with clearance improving to 0.1 days in 2016 compared to 0.5 days in 2015.

Sea cargo snapshot

The snapshot provides an overview of the key results and findings in 2016. These include multi-year and year-on-year trends.

Reporting performance – industry continued its strong reporting record, with documents received almost four days prior to the arrival of goods and average clearance times roughly 0.1 days earlier when compared to the previous year.

Country of origin – the countries that made up Australia's top 10 trading partners accounted for about 38 per cent of all goods imported to Australia in the 2016 TRS week. Goods originating from China, United States and Thailand made up the top 3 trading partners. Average clearance times for all three countries fluctuated in 2016 compared to 2015.

Performance by cargo type – there was improvement against all six performance measures for the majority of containers. There was strong improvement for BLK cargo across five of the six performance measures. Goods were reported nearly 1.7 days earlier when compared to 2015 which led to earlier release and clearance times. Compared to 2015, there was improvement in three of the six performance measures for LCL cargo. Of note, LCL cargo reported earlier than any other year in which the TRS has been undertaken.

Port performance – for the first time in the TRS series, a new port appeared in the top five ports. In 2015, Darwin replaced Adelaide. In 2016, there was a performance decline to 0.1 days in average availability times in Melbourne compared to the national result.

Loading countries – goods arriving into Australia during the TRS week were loaded onto vessels from 97 countries in 2016. As in previous years, over 20 per cent of these goods were loaded onto vessels at ports in China. Overall, the proportion of goods loaded in each country remained consistent in 2016 compared to the previous year.

Clearance performance – on average, goods were cleared for entry into home consumption 0.1 days after their arrival at an Australian port. This represents an improvement of 0.4 days compared to 0.1 days in 2015.

Availability performance – the average availability times in 2016 remained consistent with the previous year and in touch with 2013.

Volume – container volumes increased in 2016 by around two per cent when compared to the previous year. While, this increase is marginally greater than the increase which occurred from 2014 to 2015 the trend is still showing year-on-year increases.

Gate-out performance – average gate-out times in 2016 remained consistent with 2015, which was an improvement of about 0.1 days better than average gate-out times reported in 2015. LCL cargo continued to move more quickly from the port precinct compared to FCL and FCX cargo.

Air cargo multi-year trend

The number of air cargo consignments within the TRS week increased by just under 93,000 to 530,502 consignments in 2016 – see Table 1. Noting that the TRS is based on a one sample week in September, this year-on-year volume increase is substantial.

It is anticipated that over the next four financial years, the volumes of imported air consignments will increase 26 per cent by 2020.[1] Against this forecast, the International Air Transport Association stated that:

> Although air cargo continues to carry more goods than ever before, the industry is under pressure amid falling yields. Revenues from air freight declining from a high of almost $67 billion in 2011 to $52.8 billion in 2015. The load factor has fallen because the continued expansion of the long-haul passenger fleet has increased belly-hold capacity. Additionally, the industry is witnessing a shift of some goods to ocean freight and integrators.[2]

In 2016, average availability times in air cargo significantly improved compared to 2015. Moreover, there was improvement across the majority of performance measures, with the exception of ready to pay which declined to 4.8 hours from 4.0 hours in 2015 – see Table 3.

Table 3: *Air cargo – average times from arrival (hours) (2012 – 2016)**

Key event	2012	2013	2014	2015[3]	2016
Documents	-1.4	-3.3	-3.5	-2.5	-3.1
Customs unimpeded	6.6	2.3	1.1	4.4	4.3
Ready to pay	7.7	2.7	1.6	4.0	4.8[4]
Release	8.2	3.3	2.0	6.2	2.8
Clearance	8.4	3.4	2.2	6.4	3.0
Availability	71.7	28.8	53.8	47.4	35.5

***** Interval measures show the average (mean) time difference between named key events for all consignments in the sample.

Key events are defined at Appendix A.

The interval measure is hours or part hours.

Where performance has improved since the previous study, the change is highlighted in **green**. Where the performance has declined, the change is highlighted in **red**.

Negative figures indicate that key events occurred prior to the arrival of cargo at Australia's border.

It is positive to note that, as industry reported earlier, acquittal of payment responsibilities was delayed by 0.8 hours in 2016. These two performance measures – along with early risk assessment – affected earlier release and clearance times of goods. In 2016, goods were cleared 3.4 hours earlier when compared to 2015.

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[1] Department of Home Affairs, Corporate Plan 2016-17, p 17.

[2] https://www.iata.org/about/Documents/iata-annual-review-2016.pdf, p 40, accessed 25 March 2018.

[3] In 2015, a revised TRS methodology was applied. Given that a larger number of consignments are processed in air cargo compared to sea cargo, any change to the applied methodology will have a greater effect on performance levels reported in this stream.

[4] In 2016, the reported average RTP time of 4.8 hours was artificially inflated due to the inclusion of SACs which do not have an RTP requirement.

Air cargo snapshot

The snapshot provides an overview of the key results and findings in 2016. These include multi-year and year-on-year trends.

Reporting performance – industry practices continue to be responsive to increasing volumes especially in relation to the timely reporting of cargo. Performances in 2016 were better than 2015 and returned closer to the levels reported in 2014.

Clearance performance – similar to reporting performance, the average clearance times for air cargo consignments returned closer to the levels reported in 2014. Compared to the previous year, goods were cleared 3.4 hours earlier in 2016.

Availability performance – in 2016, average availability times significantly improved on times reported in 2015. This was an overall improvement of nearly 19 hours.

Express carriers – in 2016, the proportionate share of air cargo consignments carried by express carriers decreased by three per cent compared to 2015. Express carriers reported goods consistent with reporting performances in 2015. Of note, express carriers improved their average availability times to 28 hours in 2016.

Volume – in 2016, air cargo volumes increased by over 16 per cent. Cargo volumes were stable through the middle part of the year, with rapid increases in the last two months likely due to the approach of the Christmas season.

General cargo providers – these carriers accounted for 63 per cent of air cargo consignments in 2016, a 23 per cent increase from the previous year. In 2016, the number of late cargo reports submitted by general cargo providers decreased significantly by seven per cent.

Loading countries – over 17 per cent of all air cargo discharged at Australian airports originated in the United Kingdom, with about 12 per cent originating from Hong Kong. Unlike sea cargo where over 20 per cent of goods originated from China, only two per cent of air cargo originated from China.

Sea cargo results – imports

Sea cargo volume

Since the TRS commenced, 2013 was the peak year for the total number of containers discharged at Australia ports. The TRS uses the total number of containers discharged per month as a broad indicator of activity levels.

In 2016, container volumes increased by around two per cent when compared to 2015. While this increase is marginally greater than that from 2013 to 2014[5], the trend is still showing year-on-year increases – see Figure 1.

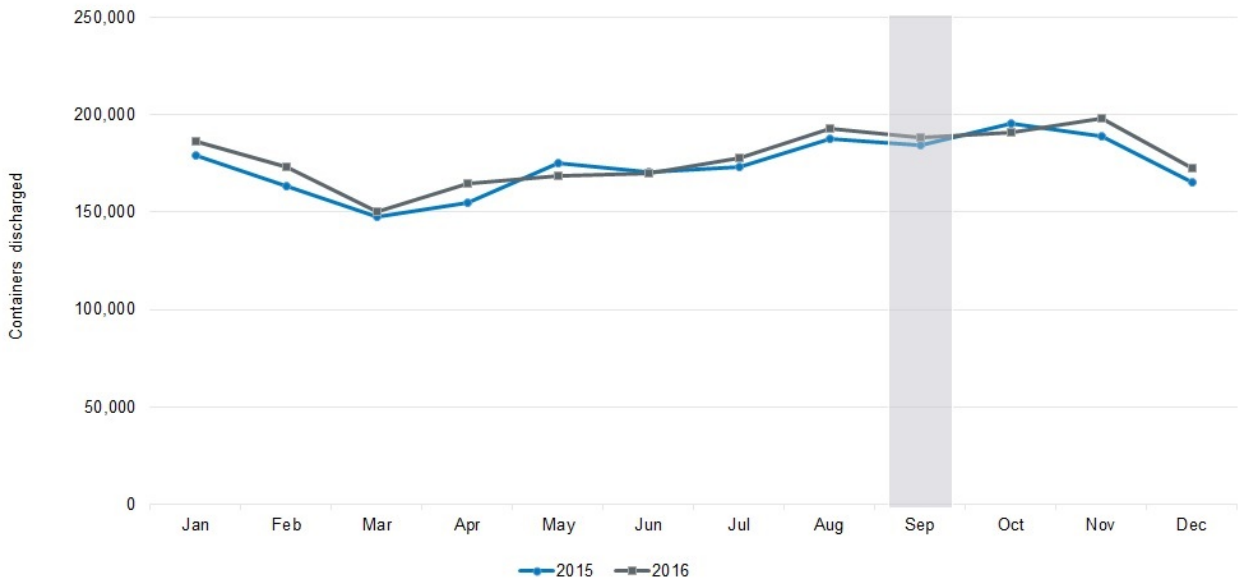

Figure 1: *Sea cargo – total containers discharged per month (2015 – 2016)*

Notes:

- Figures are based on stevedore reporting to the Department.
- Totals show numbers of containers only and do not account for different container size.
- Discharge counts include both full and empty containers.
- Bulk and other non-containerised shipments (i.e. break-bulk) are excluded from these counts.
- The TRS reference week is represented by a grey vertical bar.

[5] https://www.homeaffairs.gov.au/research-and-stats/files/time-release-study-2014.pdf p 16, accessed 11 May 2018

Cargo status

Distribution of release

Figure 2 shows the distribution of release for sea cargo consignments in 2015 and 2016.

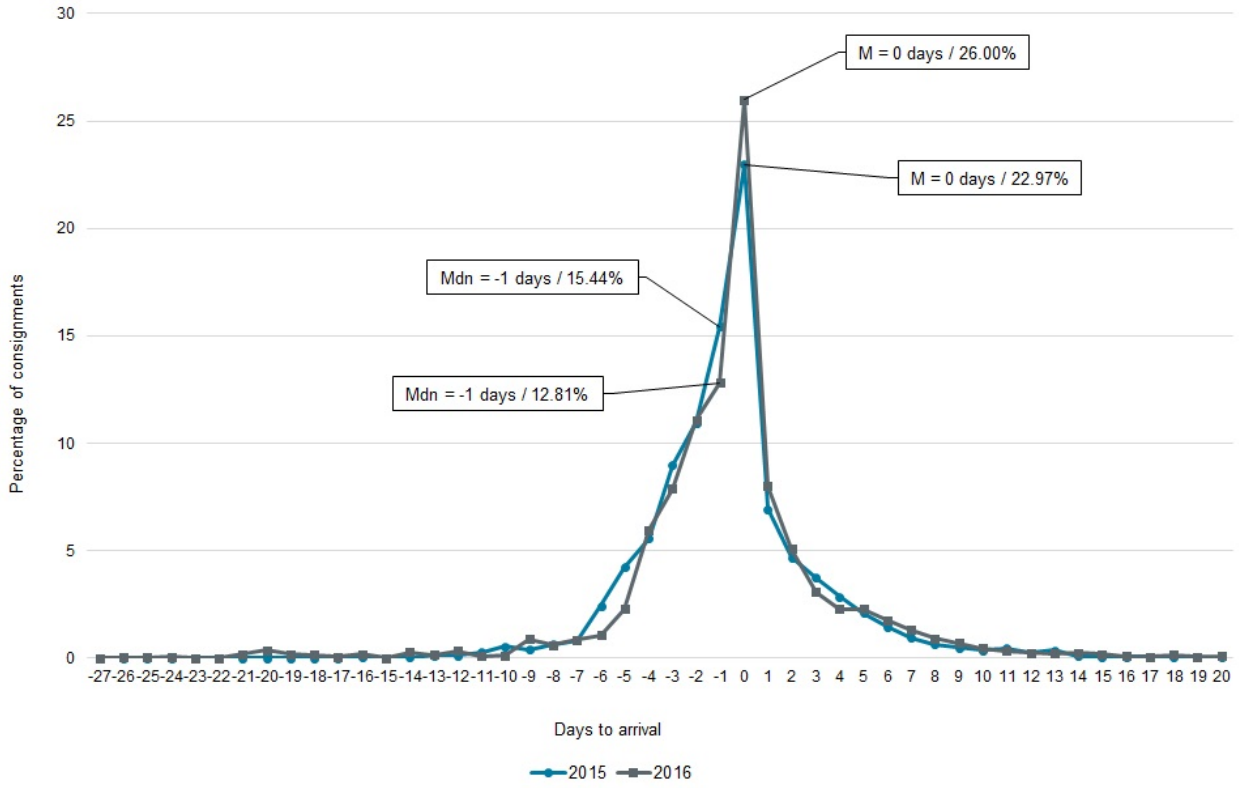

Figure 2: *Sea cargo – distribution of release (days) (2015 – 2016)*

Note:

- Figures for average distribution of release times (days) have been rounded for ease of reading. Due to rounding, this affects the preciseness of the mean and median values.
- Negative figures indicate that goods were released from customs control before they arrived at Australia's border.

The average (mean) release time was about 0.3 days prior to arrival which was about 0.1 days later when compared to 2015. The distribution's midpoint (median) release time was roughly -0.6 days in 2016, which was nearly -0.4 days later than the previous year. Earlier mean and median times confirm that early reporting and payment of goods ensures earlier release times.

Discharge ports

In terms of performance, productivity at Australian ports has increased significantly over the last 10 years. Increasing competition, the introduction of automated technologies as well as infrastructure improvements, are all helping to position ports to meet future demand for services. In addition to effective port operations, it is acknowledged that to facilitate increasing volumes, more attention needs to be focussed on improving transport links to quickly move goods out of the port precincts.

In February 2016, the Department of Infrastructure, Regional Development and Cities (Infrastructure) released the first *Australian Infrastructure Plan* (the 'plan') which emphasised the need for Australia's existing and new infrastructure to be free from 'needless constraints' and for its gateways to 'facilitate the movement of … goods to domestic and international markets quickly, safely and at least cost'.[6] In addition, Infrastructure's plan discusses the development of a *National Freight and Supply Chain Strategy* to guide the nation's investments and reform. In this regard, the Department continues to engage with Infrastructure and industry bodies to contribute towards the development of this strategy by supporting solutions that ease congestion to ports and promote the rapid movement of cleared cargo.

Port performance

For the first time in the TRS series, a new port appeared in the top five ports by percentage of cargo – see Figure 3. In 2015, Darwin replaced Adelaide.

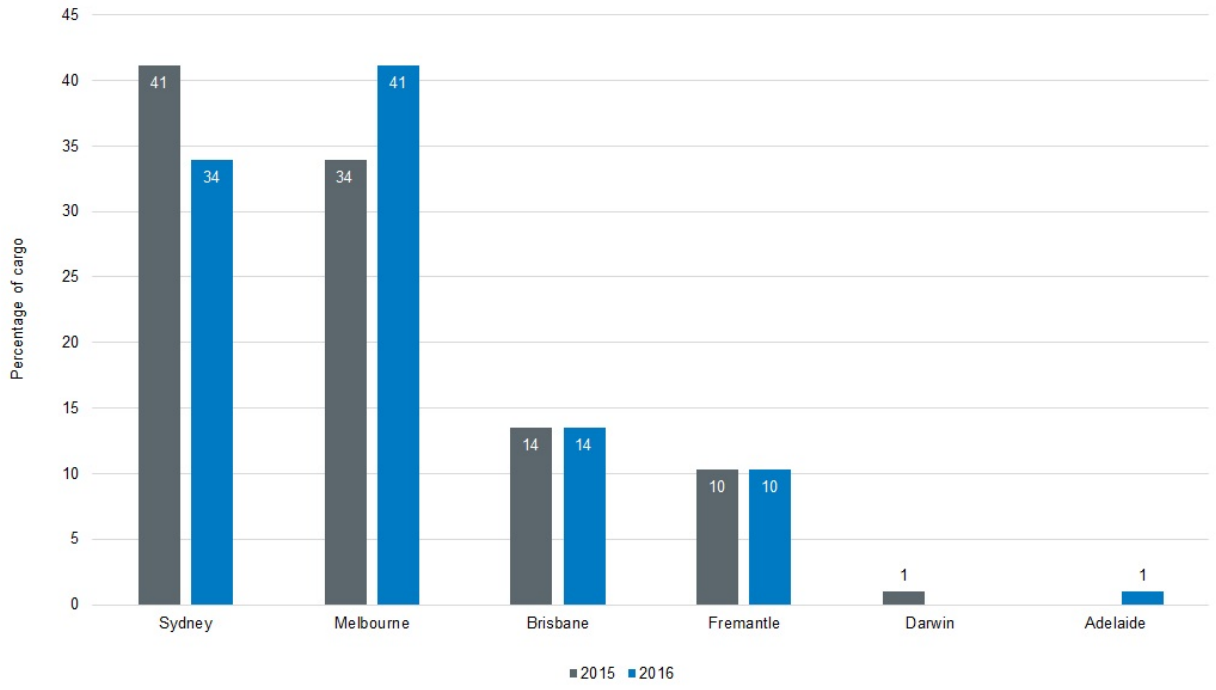

Figure 3: *Sea cargo – top five ports of discharge (2015 – 2016)*

The percentage of cargo among the top five ports remained consistent in Brisbane and Fremantle, with fluctuations noted in Sydney and Melbourne. At 41 per cent, Melbourne had the highest percentage of cargo which was seven per cent higher than Sydney.

[6] http://infrastructureaustralia.gov.au/policy-publications/publications/files/Australian_Infrastructure_Plan.pdf, p 19, accessed 20 March 2018

Compared to the previous year, Melbourne increased its percentage of cargo received by seven per cent while Sydney had seven per cent less consignments. The percentage of consignments for both Brisbane and Fremantle was unchanged.

Infrastructure's plan indicated that the northern Australia economy is rapidly growing and that their sea ports and airports are gateways to Asia, which will likely represent two-thirds of the global middle-class population and consumption by 2031.[7] Given this outlook, it is possible that the entities represented in the top five ports may change in future iterations of the TRS.

Table 4 outlines the 2016 port-by-port performance against the overall 2015 and 2016 performance. Of note, the average availability times for Fremantle in 2016 improved significantly from the previous year.

Table 4: *Sea cargo – top five ports of discharge comparison (days) (2015 – 2016)*

Discharge port comparison	All ports		2016 port-by-port performance measurement					Primary responsibility
	2015	2016	Adelaide	Brisbane	Fremantle	Melbourne	Sydney	
Arrival to Impending Arrival report	-10.5	-9.9	-13.0	-7.6	-6.5	-11.6	-9.2	Ship's agent
Arrival to Ocean Bill of Lading	-8.1	-8.1	-11.9	-6.0	-4.4	-10.1	-7.0	Shipping company
Arrival to documents	-3.7	-3.8	-4.2	-3.1	-2.2	-5.3	-2.8	All reporters
Documents to customs unimpeded	0.8	1.8	1.3	1.3	1.6	2.4	1.5	ABF
Arrival to customs unimpeded	-2.9	-2.0	-2.9	-1.7	-0.6	-2.9	-1.3	Consolidated
Arrival to ready to pay	-2.5	-1.8	-2.6	-1.5	-0.5	-2.7	-1.2	Consolidated
Documents to ready to pay	1.2	2.0	1.6	1.6	1.7	2.6	1.6	ABF and Department of Agriculture
Customs unimpeded to ready to pay	0.4	0.2	0.3	0.2	0.1	0.2	0.1	Department of Agriculture
Arrival to release	-0.6	-0.6	-1.4	-0.5	0.2	-1.1	-0.3	Consolidated

[7] Ibid, p 63

Discharge port comparison	All ports		2016 port-by-port performance measurement					Primary responsibility
	2015	2016	Adelaide	Brisbane	Fremantle	Melbourne	Sydney	
Ready to pay to release	2.0	1.2	1.1	1.0	0.7	1.6	0.9	Brokers
Arrival to clearance	0.5	0.1	-0.5	0.4	1.0	-0.3	0.3	Consolidated
Release to clearance	1.1	0.7	0.9	0.9	0.7	0.8	0.5	Department of Agriculture
Arrival to availability	1.2	1.2	1.0	0.8	1.0	1.3	1.2	Stevedores and reporters
Arrival to discharge (FCL)	0.8	0.6	0.6	0.4	0.5	0.6	0.7	Stevedores
Arrival to discharge (FCX)	0.7	0.6	0.8	0.5	0.6	0.6	0.7	Stevedores
Arrival to unpack (LCL)	3.8	3.8	5.5	2.8	4.2	3.9	3.8	Reporters
Arrival to discharge (break-bulk)	3.6	7.4	0.3	1.8	1.2	15.8[8]	N/A	Stevedores
Arrival to discharge (bulk)	2.5	3.7	3.0	2.9	5.0	3.6	1.6	Stevedores

***** Interval measures show the average (mean) time difference between named key events for all consignments in the sample.

Key events are defined at Appendix A.

Terms are defined at Appendix B.

The interval measure is days or parts of days.

Where performance has improved since the previous study, the change is highlighted in **green**. Where the performance has declined, the change is highlighted in **red**.

Negative figures indicate that key events occurred prior to the arrival of cargo at Australia's border.

In 2016, there were performance declines in average availability times in Melbourne. In comparison, average availability times across the majority of ports in 2016 bettered the national result in 2015. For example, Brisbane was within 0.8 days of arrival and Fremantle and Adelaide were within a day of arrival.

[8] Melbourne is the centre for break-bulk consignments imported into Australia. In particular, cars which generally have a slower clearance rate when compared to other consignment types.

Top 10 loading countries by port

Goods arriving into Australia during the TRS week were loaded on to vessels from 97 countries in 2016. Table 5 shows that in 2016 over 20 per cent of these goods were loaded on to vessels at ports in China. Overall the proportion of goods loaded in each country remained consistent in 2016 compared to the previous year, noting that there were some new entries. For example, the Republic of Korea.

Table 5: *Sea cargo – top 10 loading countries (2015 – 2016)*

2015		2016	
Country	**Percentage**	**Country**	**Percentage**
All	**100.00**	**All**	**100.00**
China	20.88	**China**	21.74
Malaysia	2.93	**Malaysia**	3.02
Singapore	2.79	**United States**	2.90
United States	2.21	**Singapore**	2.39
Thailand	1.88	**Thailand**	2.02
New Zealand	1.80	**Hong Kong**	1.92
Hong Kong	1.68	**New Zealand**	1.66
Taiwan	1.51	**Germany**	1.65
Germany	1.46	**Republic of Korea**	1.39
Indonesia	1.12	**Indonesia**	1.25


41T
KALMAR
DP WORLD
Brisbane
AC215
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Hapag-Lloyd
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Gate-out

Table 6 outlines consignments with a gate-out record by cargo type such as FCL, FCX and LCL in 2016.

Table 6: *Sea cargo – consignments with a gate-out record by cargo type (days) (2014 – 2016)**

Cargo type	2014	2015	2016
All	**2.2**	**1.1**	**1.0**
FCL	2.2	1.6	1.5
FCX	2.3	1.5	1.6
LCL	1.7	-1.5	-1.6

***** Interval measures show the average (mean) time difference between named key events for all consignments in the sample.

Key events are defined at Appendix A.

The interval measure is days or parts of days.

Where performance has improved since the previous study, the change is highlighted in **green**. Where the performance has declined, the change is highlighted in **red**.

Negative figures indicate that key events occurred prior to the arrival of cargo at Australia's border.

The measure for gate-out identifies the average time between containerised cargo being discharged from a vessel (progressive discharge), to the time it leaves the wharf. This provides an indication of the time it takes for cargo to move through the port precinct. Gate-out data is recorded for four ports: Brisbane, Fremantle, Melbourne and Sydney (99 per cent of the total TRS population) – see Figure 3.

Average gate-out times reflect the productivity efficiencies being achieved in port precincts that enable faster movement of goods from ports. Traders are also contributing to these efficiencies through early reporting and payment.

Generally, the results returned in 2016 remained consistent with 2015 and bettered reporting in 2014 by 1.2 days. LCL cargo continued to move more quickly from the port precinct compared to FCL and FCX cargo. However, average gate-out times for FCX in 2016 declined by 0.1 days in 2016.

Cargo type

Table 7 shows average performance times by container type in sea cargo for 2016.

Table 7: *Sea cargo – average times by container type from arrival (days) (2015 – 2016)**

Key event	All types	FCL	LCL	FCX	B/B	BLK
2015						
% of cargo lines	**100**	**66**	**20**	**13**	**1**	**<1**
Documents	-3.7	-4.2	-2.9	-2.3	-5.6	-3.9
Customs unimpeded	-2.9	-3.4	-2.5	-0.9	-5.1	-2.6
Ready to pay	-2.5	-3.1	-1.8	-0.9	-4.5	-2.6
Release	-0.6	-1.0	-0.9	2.6	-2.0	-2.4
Clearance	0.5	0.3	-0.3	2.7	-1.6	-2.2
Availability	1.2	0.8	0.7	3.8	3.6	2.5
2016						
% of cargo lines	**100**	**66**	**18**	**15**	**1**	**<1**
Documents	-3.8	-4.3	-3.1	-2.6	-5.5	-5.6
Customs unimpeded	-2.0	-2.4	-2.1	0.1	-3.7	-5.3
Ready to pay	-1.8	-2.3	-1.8	0.2	-3.1	-5.3
Release	-0.6	-1.1	-1.1	2.4	-1.7	-5.2
Clearance	0.1	-0.2	-0.6	2.6	-1.4	-4.3
Availability	1.2	0.6	0.6	3.8	7.4	3.7

* Percentages have been rounded to whole figures. As a result, these figures may not always equal 100 per cent.

Negative figures indicate that key events occurred prior to the arrival of cargo at Australia's border.

FCL cargo

The 2016 results for FCL cargo showed improvements across the majority of performance measures. Of note, average release times improved to 0.1 days prior to arrival when compared to 2015. There was a decline in average unimpeded and ready to pay times. However, this did not have bearing on average release and clearance times.

LCL cargo

Compared to 2015, there was improvement in three of the six performance measures for LCL cargo. Significantly, LCL cargo reported earlier than any other year in which the TRS has been undertaken. Average ready to pay times in 2016 remained consistent with 2015. However, average release and clearance times improved in 2016 to 0.2 and 0.3 days earlier respectively.

FCX cargo

After a decline in 2015, there was improvement in four of the six performance measures for FCX cargo including goods released 0.2 days earlier in 2016.

B/B cargo

Information about B/B cargo was submitted to the border agencies 5.5 days prior to arrival, which was only 0.1 days later than the previous year. Average performance times for unimpeded and ready to pay declined by 1.4 days respectively. Of concern, the average availability time experienced a decline by 3.8 days.

BLK cargo

BLK cargo refers to valuable commodities that are loose, unpacked and non-containerised. There was strong improvement for BLK cargo across five of the six performance measures. Goods were reported nearly 1.7 days earlier when compared to 2015 which led to earlier release and clearance times.

Country of origin by sea

Geographical proximity is a key element for trading partners, noting the importance of the Asia-Pacific region to Australia's trade. This is reflected in the number of Free Trade Agreements (FTAs) that Australia has with regional partners. Table 8 shows that in 2016 seven of the top 10 countries are from the Asia-Pacific region which was the same as in 2015.

Table 8: *Sea cargo – Australia's top 10 trading partners (2015 – 2016)*

2015			2016		
Country of origin	**Number of consignments**	**Percentage**	**Country of origin**	**Number of consignments**	**Percentage**
All	**49,102**	**100**	**All**	**49,95**	**100**
China	21,353	21.6	**China**	22,444	22.7
Thailand	2,233	2.3	**United States**	2,908	2.9
Malaysia	2,224	2.2	**Thailand**	2,264	2.3
United States	2,148	2.2	**Malaysia**	1,959	2.0
New Zealand	1,787	1.8	**New Zealand**	1,621	1.6
Taiwan	1,500	1.5	**Germany**	1,522	1.5
Germany	1,378	1.4	**Indonesia**	1,473	1.5
Indonesia	1,281	1.3	**Hong Kong**	1,331	1.3
India	1,237	1.2	**Republic of Korea**	1,293	1.3
Singapore	1,204	1.2	**India**	1,157	1.2

Notes:

- Australia has bilateral FTAs in place with Malaysia, New Zealand, Thailand and the United States.
- Australia is party to a regional FTA (ASEAN-Australia-New Zealand FTA) which includes Malaysia and Thailand.
- The Japan FTA came into force on 15 January 2015.
- The China FTA came into force on 20 December 2015.
- FTA negotiations with the Republic of Korea concluded in December 2013 but are not yet in force.
- The information contained here relates only to the countries referenced as Australia's top 10 trading partners during the TRS week. While other FTAs are being negotiated with several other countries they are not referenced here.
- The Department of Foreign Affairs and Trade maintains a complete list of all current agreements and status of negotiations at their website.

Table 9 on page 24 shows that the country of origin plays a significant role in determining the timeliness of document reporting for clearance. Moreover where there is a decline in the average time that goods are reported, there is a decline in the average release and clearance times of these goods.

Table 9: *Sea cargo – average times from arrival for Australia's top 10 trading partners (days) (2015 – 2016)**

Country of origin	Documents	Customs unimpeded	Ready to pay	Availability	Release	Clearance
2015						
All	**-3.7**	**-2.9**	**-2.5**	**1.2**	**-0.6**	**0.5**
China	-3.2	-2.6	-2.3	1.2	-0.5	-0.2
Thailand	-5.3	-4.7	-4.4	1.0	-1.9	-0.8
Malaysia	-3.9	-3.3	-2.6	0.9	-1.0	3.3
United States	-4.3	-3.0	-2.5	1.4	-0.2	2.3
New Zealand	-2.7	-1.7	-1.5	1.0	-0.5	-0.2
Taiwan	-3.6	-2.6	-2.5	1.3	0.0	0.5
Germany	-4.5	-3.6	-3.4	1.4	-0.7	1.9
Indonesia	-3.8	-3.1	-2.7	0.9	-0.9	-0.2
India	-3.8	-2.8	-2.1	1.1	-0.1	1.3
Singapore	-3.8	-3.0	-2.3	1.5	0.0	1.3
2016						
All	**-3.8**	**-2.0**	**-1.8**	**1.2**	**-0.6**	**0.1**
China	-3.8	-2.1	-1.9	1.1	-0.7	-0.4
United States	-3.5	-1.0	-1.0	1.6	-0.1	1.1
Thailand	-4.6	-3.1	-3.0	1.1	-2.0	-0.6
Malaysia	-3.3	-2.0	-1.9	0.7	-1.0	0.5
New Zealand	-2.2	-1.0	-1.0	1.0	-0.7	-0.1
Germany	-4.3	-2.2	-2.0	1.5	-0.5	0.2
Indonesia	-3.3	-1.9	-1.8	0.7	-1.2	-0.7
Hong Kong	-2.0	-0.3	-0.3	2.0	0.9	1.0

Country of origin	Documents	Customs unimpeded	Ready to pay	Availability	Release	Clearance
Republic of Korea	-6.7	-3.5	-3.6	1.6	-1.7	-1.4
India	-3.1	-1.1	-0.9	1.2	0.1	1.7

***** Interval measures show the average (mean) time difference between named key events for all consignments in the sample.

Key events are defined at Appendix A.

The interval measure is days or parts of days.

Where performance has improved since the previous study, the change is highlighted in **green**. Where the performance has declined, the change is highlighted in **red**.

Negative figures indicate that key events occurred prior to the arrival of cargo at Australia's border.

In 2016, Thailand continued to report strong results across the majority of permance measures. In addition, the Republic of Korea reported the best average times for unimpeded, ready to pay and clearance.

The reporting of goods imported from China occurred 0.6 days earlier in 2016 than the previous year. This had a positive flow-on effect as average release and clearance times also improved. Goods sourced from China accounted for nearly 23 per cent which was an increase of about one per cent compared to 2015 – see Table 8.

For goods sourced from the United States, there was a decrease across four of the six performance measures in 2016 compared with the previous year. In particular, average clearance times occurred 1.2 days earlier in 2016.

The reporting of goods imported from New Zealand declined to 2.2 days before the arrival of goods at the border. There was also a decrease in New Zealand's performance across three of the other performance measures in 2016 compared with the previous year. That is unimpeded, ready to pay and clearance.

Air cargo results – imports

Air cargo volume

The vast majority of air cargo is consolidated with individual consignments reported on a cargo report at the HAWB level. Therefore, the number of reported HAWBs provides a sound indicator of total activity.

In 2016, air cargo volumes continued to increase. When compared to 2015, there was an increase of more than 16 per cent. Furthermore, the trend shows year-on-year increases – see Figure 4.

The lowering of trade barriers through the implementation of agreements such as FTAs is likely contributing to increasing volumes. The continuing growth in online shopping by individual consumers – where goods are generally transported by air – is also a contributing factor.

Cargo volumes were stable through the middle part of the year, with rapid increases in the last two months likely due to the approach of the Christmas season.

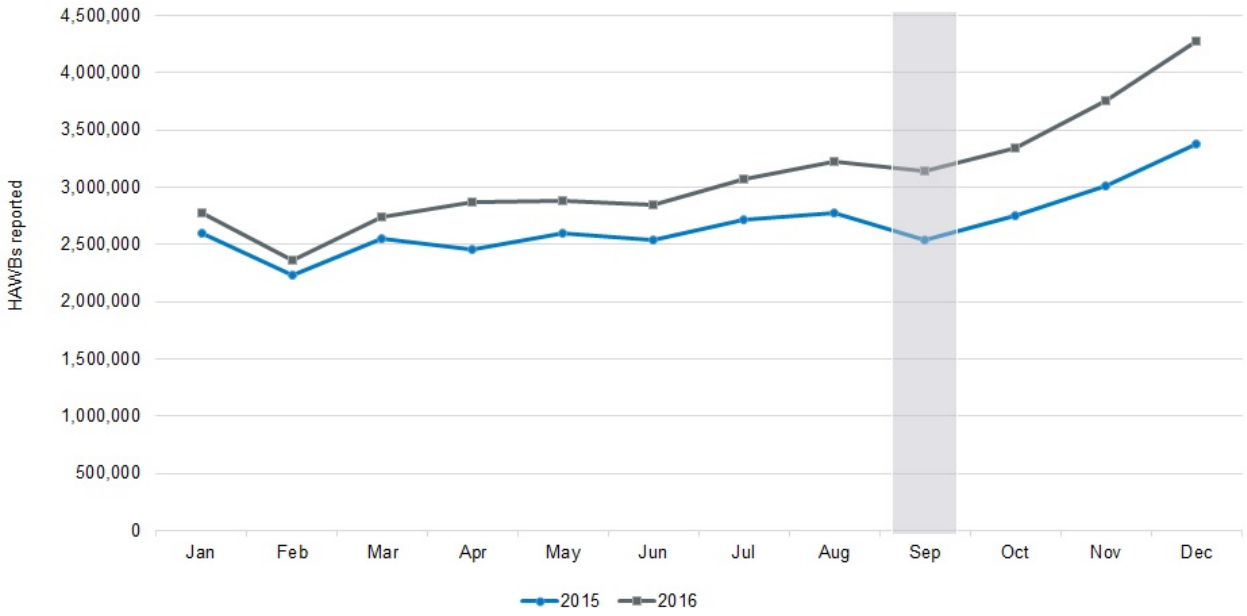

Figure 4: *Air cargo – HAWBs reported per month (2015 – 2016)*

Notes:

- Figures are based on reporting to the Department by airlines and freight forwarders.
- Master Air Waybills are not counted.
- The TRS week is represented by a grey vertical bar.

Performance by declaration type

In 2016, the proportion of SAC declarations increased by one per cent with a corresponding decrease in the proportion of FIDs – see Table 10.

Table 10: *Air cargo – average times by declaration type from arrival (hours) (2015 – 2016)*

Key event	2015			2016		
	All	SAC	FID	All	SAC	FID
% of cargo lines	**100**	**91**	**9**	**100**	**92**	**8**
Documents	-2.5	-3.9	11.1	-3.1	-4.4	12.1
Customs unimpeded	4.4	2.7	21.1	4.3	2.8	21.3
Ready to pay	4.0	2.0	23.6	4.7	3.3	21.6
Release	6.2	4.0	28.1	2.8	0.9	24.2
Clearance	6.4	4.0	29.8	3.0	1.0	26.4
Availability	47.4	47.7	44.4	35.5	36.3	26.4

***** Interval measures show the average (mean) time difference between named key events for all consignments in the sample.

Key events are defined at Appendix A.

The interval measure is days or parts of days.

Where performance has improved since the previous study, the change is highlighted in **green**. Where the performance has declined, the change is highlighted in **red**.

Negative figures indicate that key events occurred prior to the arrival of cargo at Australia's border.

Although the proportionate share of FIDs decreased, the actual number of FIDs submitted in the TRS week rose by 1,358 compared to 2015 – see Table 1.

As noted on page 11, the majority of performance measures for air cargo improved in 2016. Average reporting times for SACs improved to -4.4 hours but declined to 12.1 hours for FIDs compared to the previous year.

For goods that had an impediment, this was resolved within 4.4 hours of the arrival of goods at an airport. For both SACs and FIDs, there was a slight decline from the previous year.

Significantly, average availability times for both SACs and FIDs improved compared to the previous year (3.1 and 3.9 hours respectively).

Cargo status

Distribution of release

Figure 5 shows the distribution of release for air cargo consignments in 2015 and 2016.

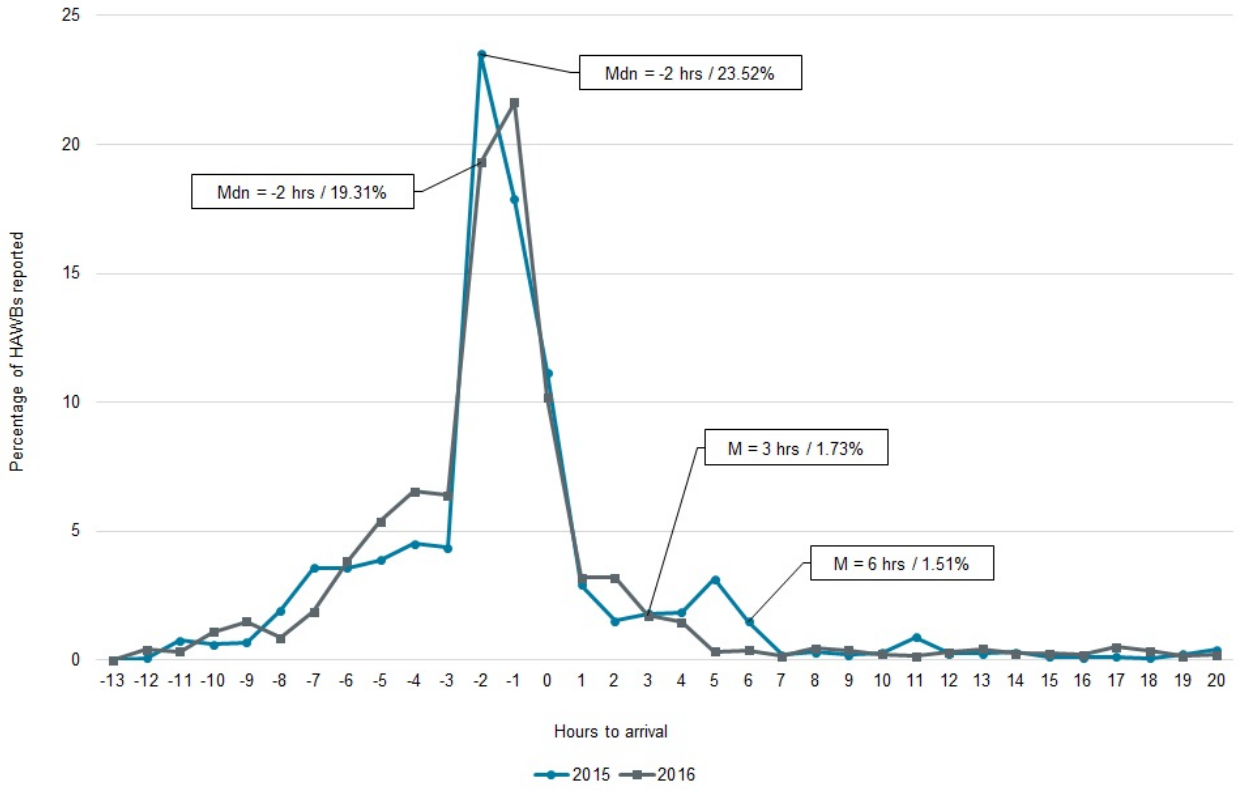

Figure 5: *Air cargo – distribution of release (hours) (2015 – 2016)*

Note:

- Figures for distribution of release times have been rounded for ease of reading. Due to rounding, this affects the preciseness of the mean and median values.
- Negative figures indicate that goods were released from customs control before they arrived at Australia's border.

The average (mean) release time was around three hours prior to arrival which was nearly three and a half hours earlier compared to 2015. The distribution's midpoint (median) release time was around two hours in 2016, which was about an hour earlier than the previous year. Earlier mean and median times confirm that early reporting and payment of goods ensures earlier release times.

Express carriers and general cargo providers

Performance by service type has been included in the TRS since 2012. This section considers the average performance times of express carriers (who provide expedited, integrated logistics for air cargo) and general cargo providers. Table 11 on page 29 shows the average times from arrival to other key events for express carrier and general cargo providers in 2016.

Table 11: *Air cargo – average times by service type from arrival (hours) (2015 – 2016)**

2015									
Service type	**All**	**FID**	**SAC**	**Express**	**FID**	**SAC**	**General**	**FID**	**SAC**
% of cargo lines	**100**	9	91	**40**	15	85	**60**	5	95
Documents	-3	11	-4	-3	9	9	-2	16	-3
Customs unimpeded	4	21	3	2	16	16	6	31	4
Ready to pay	4	24	2	2	18	18	5	34	4
Release	6	28	4	4	20	20	8	43	43
Clearance	6	30	4	4	21	21	8	49	49
Availability	47	44	48	35	29	29	56	75	75
2016									
% of cargo lines	**100**	8	92	**37**	14	86	**63**	4	96
Documents	-3	12	-4	-3	10	-5	-3	17	-4
Customs unimpeded	4	22	3	1	18	-1	6	29	5
Ready to pay	5	22	3	2	18	-1	6	29	5
Release	3	25	1	2	20	-1	3	33	2
Clearance	3	27	1	2	21	-1	3	39	2
Availability	36	26	36	28	27	28	40	26	41

***** Percentages have been rounded to whole figures. As a result, these figures may not always equal 100 per cent.

Negative figures indicate that goods were released from customs control before they arrived at Australia's border.

The performance of both express carriers and general cargo providers significantly improved in 2016, reflecting the overall improvements noted in air cargo. The ready to pay performances for general cargo providers remained consistent in 2016. However there was a slight performance decline in ready to pay compared to the previous year, though goods were available 16 hours earlier in 2016.

Express carriers reported goods consistent with reporting performances in 2015. However, against the rest of the performance measures, there were significant improvements in 2016. Of note, express carriers improved their average availability times from 35 hours in 2015 to 28 hours in 2016.

While the volume of goods reported by express carriers moderately increased over the past few years, the number of goods carried by general cargo providers rapidly increased over the last two years – see Figure 6 on the following page.

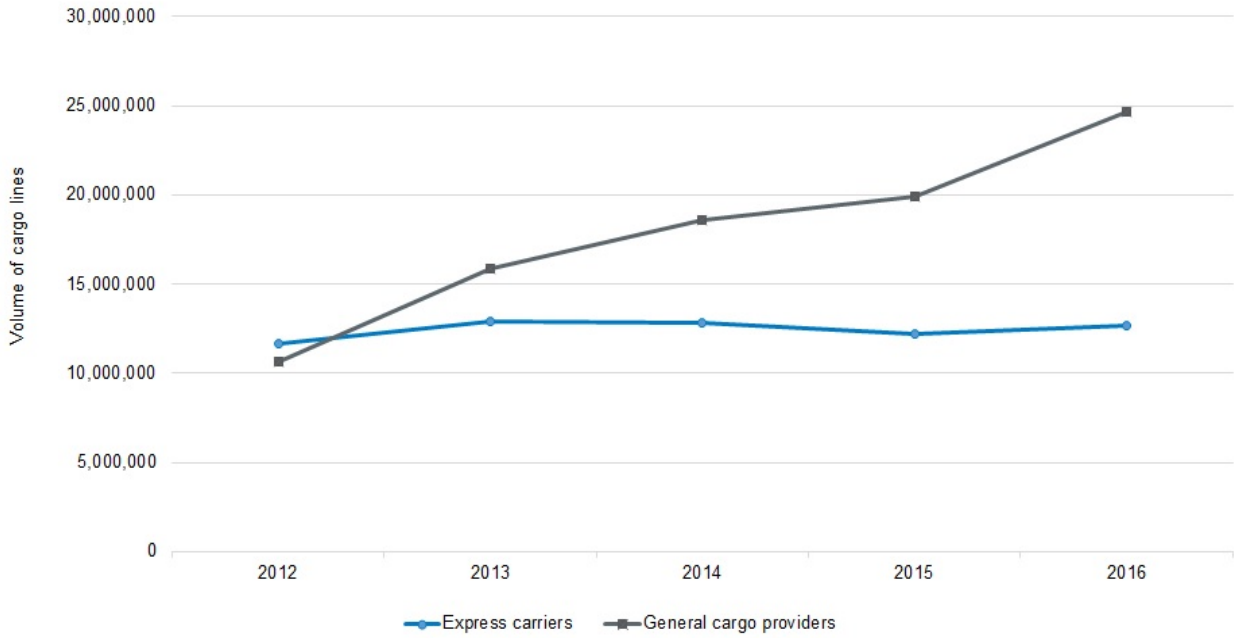

Figure 6: *Air cargo – volume of cargo lines by service type (2012 – 2016)*

As a result, there was a significant shift in the percentage of goods reported by express carriers as opposed to general cargo providers since 2012 – see Figure 7.

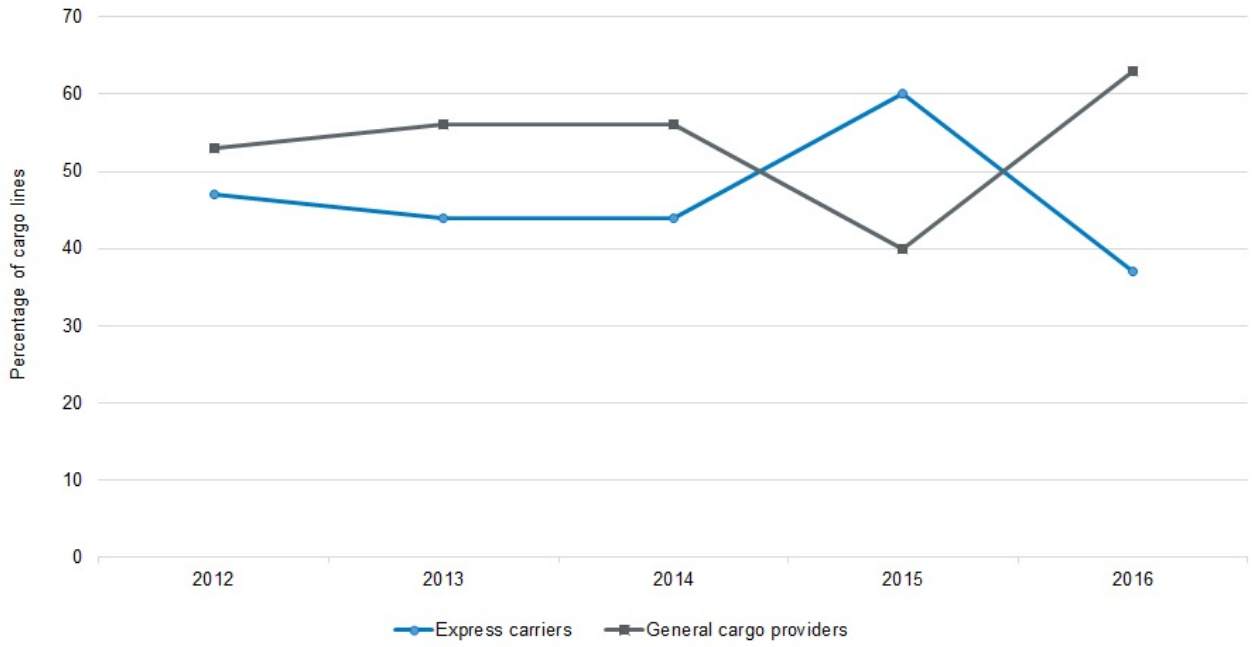

Figure 7: *Air cargo – percentage of cargo lines by service type (2012 – 2016)*

Historically, air cargo arriving into Australia was dominated by express carriers that typically carried high volume low value cargo entered on SAC declarations. In 2012, express carriers accounted for less than

50 per cent of air cargo consignments. Within four years, their proportionate share decreased further to 37 per cent in 2016. General cargo providers increased from 53 per cent to 63 per cent in 2016, noting that there was a significant increase of 27 per cent compared to the previous year.

Compliance with legislative reporting timeframes by service type

In 2015, there was a significant increase in the number of late cargo reports submitted across the board compared to the previous year. However, in 2016, the number of late cargo reports submitted by general cargo providers decreased significantly by seven per cent – see Table 12.

Table 12: *Air cargo – compliance with legislative reporting timeframes (hours) (2014 – 2016)**

Type of report	2014 Late %	2015 Late %[9]	2016 Late %
Cargo report	**4**	**15**	**8**
Express carrier	2	8	9
General cargo provider	5	20	16
Import declaration	**2**	**11**	**11**
Express carrier	1	9	9
General cargo provider	2	14	16

***** Interval measures show the average (mean) time difference between named key events for all consignments in the sample.

Key events are defined at Appendix A.

The interval measure is hours or part hours.

Where performance has improved since the previous study, the change is highlighted in **green**. Where the performance has declined, the change is highlighted in **red**.

Negative figures indicate that goods were released from customs control before they arrived at Australia's border.

Under paragraph 64AB (8)(b) of the *Customs Act 1901*, air cargo reports must be lodged at least two hours prior to the estimated time of arrival for the aircraft specified in the impending arrival report. As such, 'late' would be defined as any electronic reporting that falls outside of this prescribed timeframe.

The *2016 TRS* continues to highlight the important link between early reporting of goods and subsequent early clearance. Industry acknowledges the benefits to be realised by early submission of information. As such, it remains important for the Department to continually make industry aware of the legislated reporting timeframes[10] and comply with those requirements.

[9] In 2015, a revised TRS methodology was applied. Given that a larger number of consignments are processed in air cargo compared to sea cargo, any change to the applied methodology will have a greater effect on performance levels reported in this stream.

[10] Australian Customs and Border Protection Service (ACBPS) Annual Report 2014-15, p 74.

Discharge airports

Top 10 loading countries by airport

In 2016, over 17 per cent of all air cargo discharged at Australian airports originated in the United Kingdom, with about 12 per cent originating from Hong Kong – see Table 13. Unlike sea cargo where over 20 per cent of goods originated from China, only two per cent of air cargo originated from China.

Table 13: *Air cargo – top 10 loading countries (2015 – 2016)*

2015		2016	
Country	**Percentage**	**Country**	**Percentage**
All	**100.00**	**All**	**100.00**
United Kingdom	13.81	**United Kingdom**	17.33
United States	10.78	**Hong Kong**	12.28
Hong Kong	8.58	**United States**	11.15
Singapore	5.48	**Singapore**	6.60
China	1.86	**China**	2.14
New Zealand	1.77	**New Zealand**	2.07
Germany	0.62	**Germany**	0.80
United Arab Emirates	0.44	**United Arab Emirates**	0.39
Malaysia	0.28	**Netherlands**	0.31
Indonesia	0.20	**Malaysia**	0.31

Appendix A – Key event definitions

Key event	Definition
Arrival	The time at which a ship or aircraft arrives and is secured at the discharge port. This is when imported goods enter customs control.
Documents	The time at which a consignment is fully reported and declared to the Department. This is when all required reports and declarations have been received by the Department.
Customs unimpeded	Indicates that risk assessment, evaluation and processing have been completed by the Department. Payment of duties, taxes and charges is still required and the goods may remain subject to biosecurity impediments prior to release.
Ready to pay	The time at which a consignment becomes free of impediments from either border agency except for the need to pay duties, taxes and charges.
Release	The time at which permission is given for goods to be removed from customs control. Duties, taxes and charges must have been paid but goods may be subject to compliance beyond border with biosecurity directions and conditions.
Clearance	The time at which all border agency requirements have been met and permission is given for the goods to be entered into home consumption.
Availability	The time a consignment becomes physically available for delivery. This is when a consignment has completed discharge or, if shipped as consolidated cargo, when it is unpacked.

Appendix B – Glossary

Term	Definition
Air cargo report	A report to the Department that provides information about a consignment carried aboard an aircraft arriving in Australia. This equates to an Air Waybill.
Air Waybill	Refer to House Air Waybill or Master Air Waybill.
Air Waybill Outturn	A report to customs that provides information on the date and time air cargo is received at a customs place: • on discharge from an aircraft • on being moved to that place underbond • once deconsolidated (unpacked) It is also a report that identifies any surpluses or shortages in the cargo received.
Australian Border Force	The Australian Government's lead border agency and an operationally independent agency under the Home Affairs Portfolio.
Department of Agriculture and Water Resources	An Australian Government agency who administrates biosecurity controls at the border to minimize the risk of exotic pests and diseases entering the country.
Break-bulk cargo	Non-containerised cargo shipped as units such as bundles, pallets, vehicles and drums.
Carriers	Owners of shipping and airlines responsible for the carriage of goods.
Consignment	A specific shipment of goods presented by a consignor to a carrier for delivery to a consignee.
Consolidation	A number of smaller consignments combined for shipment into a larger consignment or container load to avail better freight rates. It must be deconsolidated at a place subject to customs control prior to release into home consumption.
Container Terminal Operator	A person or organisation operating at a port to load and unload cargo. In air, this is referred to as a Cargo Terminal Operator.
Customs broker	A person authorised in accordance with the *Customs Act 1901* to act on behalf of an owner of goods to undertake activities such as arranging for the clearance of goods into home consumption by making an import declaration.
Discharge	The unloading of cargo from an aircraft or vessel.

Term	Definition
Express	Integrated logistics suppliers of expedited door-to-door transport and delivery of time-critical air cargo shipments including documents, parcels and merchandise goods.
Flight	A particular aircraft arrival.
Freight forwarder	A service provider that arranges the carriage of goods for importers and exporters. A forwarder prepares documents, contracts and arranges transport and insurance.
Full Container Load	A container loaded with goods for one consignee only and for one consignor only, whether transported directly to the consignee or through a freight forwarder or an agent.
Full Import Declaration	A detailed fiscal and statistical declaration required for the clearance of consignments valued above $1,000 or more.
Gate-out	When imported cargo exits the wharf or terminal where it was imported.
Home consumption	When goods enter into the commerce of Australia.
House Air Waybill	An Air Waybill issued by a freight forwarder, provides details of the goods to be shipped. It includes terms and conditions of carriage.
House Bill of Lading	A Bill of Lading issued by a freight forwarder, provides details of the goods to be shipped. It includes terms and conditions of carriage.
Impending Arrival Report	A report to the ABF that provides information about the expected arrival of a ship or aircraft on a voyage or flight to Australia. The report provides advance notification of the ship or aircraft's estimated time of arrival and the intended ports to call.
Integrated Cargo System	An integrated software application that allows for the movement of vessels, aircraft and cargo to be electronically recorded and declared to border agencies by traders and service providers. It enables these agencies to risk assess cargo and craft; collect trade statistics; assess and collect revenue; and determine and advise owners of the release status of their cargo.
Manifest (main)	A document issued by a shipper covering all cargo stated to be in a ship or aircraft for delivery at a particular port or airport.
Master Air Waybill	An Air Waybill issued by an airline or a code share partner. If the master bill has been issued to a freight forwarder then the freight forwarder will issue the House Air Waybill for the goods they have contracted to freight.

Term	Definition
Ocean Bill of Lading	An Ocean Bill of Lading is issued by a shipping company or slot-charterer. If the ocean bill has been issued to a freight forwarder, then house bills will be issued for the goods they have contracted to freight.
Outturn	A report on the discharge and receipt or unpacking of cargo.
Sea cargo report	A report to the Department that provides information about a consignment carried aboard a ship arriving in Australia. This equates to a Bill of Lading.
Self-assessed Clearance (SAC) Declaration	A simplified declaration for consignments valued at less than $1,000. There are two types of SAC declarations: 1. SAC Declaration (full format) which is used if: o an exemption or other concession applies, and / or o a permit or approval is required, and / or o duties and taxes are payable because the goods include alcoholic beverages or tobacco products; or the goods are part of a larger consignment or commercial reasons. 2. SAC Declaration (short form) is used: o if only minimal information is required o to pay duties and taxes for imported goods that include alcoholic beverages and / or tobacco products.
Service type	Service types in air cargo are broken down by express service carriers or general cargo.
Stevedore	Entities responsible for loading and unloading ships on behalf of shipping companies.
Time Release Study	A method designed and endorsed by the World Customs Organization for measuring border agency performance in trade facilitation.
Unpack	The process of unpacking cargo from a container.

Appendix C – Acronyms

Acronym	Definition
AANZFTA	ASEAN-Australia-New Zealand Free Trade Agreement
ASEAN	Association of Southeast Asian Nations
B/B	Break Bulk
B/L	Bill of Lading
BLK	Bulk
FCL	Full Container Load
FCX	FCX cargo refers to containers with consignments on multiple bills of lading for one consignee
GFC	Global Financial Crisis
FTA	Free Trade Agreement
HAWB	House Air Waybill
HBL	House Bill of Lading
HVLU	High volume, Low value cargo
IAR	Impending Arrival Report
ICS	Intergrated Cargo System
LCL	Less than Container Load
MAWB	Master Air Waybill
OBL	Ocean Bill of Lading
RTP	Ready to Pay
SAC	Self-Assessed Clearance declaration
TRS	Time Release Study
UCL	Unique Cargo Line
WCO	World Customs Organization