NATIONAL APPROACH TO MARITIME SAFETY REGULATION:

REGULATION IMPACT STATEMENT

April 2009

Australian Government
Department of Infrastructure, Transport, Regional Development and Local Government

Australian Government
Australian Maritime Safety Authority

This Regulatory Impact Statement was provided to the Council of Australian Governments to inform its consideration of national transport regulatory reform proposals in July 2009. As such, the RIS does not necessarily represent the final outcomes that will be developed and agreed as Governments progress the reform process.

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GLOSSARY

AMSA	Australian Maritime Safety Authority
ATC	Australian Transport Council
COAG	Council of Australian Governments
CRIS	Cost Recovery Impact Statement
1997 IGA	Signed by Australian Heads of Government in 1997, establishing a national marine safety regulatory regime
NMSC	National Marine Safety Committee
NPA	National Partnership Agreement (previously Inter-Governmental Agreement)
NSAMS	National Standard for the Administration of Marine Safety
NSCV	National Standard for Commercial Vessels
SOLAS	International Convention for the Safety of Life at Sea 1974
STCW	The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as amended
TERM	The Enormous Regional Model
USL Code	Universal Shipping Laws Code
RIS	Regulatory Impact Statement

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1. INTRODUCTION

In May 2008, Australia's transport ministers identified a number of national reforms to cut red tape and deliver more consistency in transport regulation, including maritime safety. These reforms responded to the Council of Australian Governments (COAG) national regulatory reform agenda that also includes road and rail safety reforms.

On 25 July 2008, Australian Transport Ministers agreed to recommend to COAG that, subject to the outcomes of a regulation impact assessment, COAG agree to the establishment of a single national system for maritime safety regulation.

This is the final Regulation Impact Statement (RIS) that examines options for national reform of maritime safety regulation. It has been prepared by the National Approach to Maritime Safety Regulation Secretariat, in close consultation with all state and territory maritime agencies and includes feedback from stakeholders from two rounds of public consultations.

This document examines the perceived problems with the current maritime safety regulatory arrangements, sets out the objectives of reform and provides options for addressing the problems consistent with the direction provided by the Australian Transport Council (ATC). The cost benefit analysis presented in this RIS identifies Option 3, which proposes a national system administered by the Australian Maritime Safety Authority achieved through the broadening of the *Navigation Act 1912*, with the highest national net benefit.

Over 1,400 stakeholders participated in 22 public meetings around Australia on the proposed reforms in September-October 2008 and in April 2009. Over 90 written submissions were also received and have been used to inform the development of this RIS.

The majority of stakeholders supported national reform of maritime safety regulation, specifically Option 3 in this RIS which proposes a national system, administered by the Australian Maritime Safety Authority achieved through the broadening of the *Navigation Act 1912*.

No decision has been made by the Commonwealth, state or Northern Territory (NT) governments on the funding arrangements to support the options presented in this RIS. If the recommended option is endorsed by COAG, further discussions on the appropriate funding arrangements will be held. A Cost Recovery Impact Statement (CRIS) will be completed and will include further opportunity for stakeholder comment. Stakeholder consultations and workshops will take place to develop the final CRIS.

1.1. MARITIME REGULATION IN AUSTRALIA

There are eight different marine safety regulatory systems (the Commonwealth government, six states and the NT) governing the operation of commercial vessels in Australian waters.

The proposed reforms discussed in this RIS are not intended to affect recreational vessels and do not propose amendments to the National Standards for Commercial Vessels (NSCV) and Uniform Shipping Laws (USL)/NSCV safety standards. The options detailed in this RIS relate only to the aspects of the legislative model (state/NT jurisdiction compared with a national jurisdiction) and its administrative structure and service delivery models supporting the regulation of commercial vessels. See also Section 7. The vessels proposed to be included in the scope of this RIS are all non-recreational vessels described as commercial vessels, which are subject to state/NT regulation.

There are over 28,000 commercial vessels (including hire and drive vessels) operating in state and territory jurisdictions in Australia, of which just over 20,000 are currently subject to safety standards

(under survey or registration)[1]. The number of vessels not in survey and not registered (also referred to in this RIS as 'exempted') is reported as approximately 8,000. This is the most recent national data provided by the state and NT maritime agencies during 2008-09. These figures do not include trading ships engaged on interstate and overseas voyages which are subject to the *Navigation Act 1912* and generally required to meet the SOLAS convention standards because this RIS does not propose changes that would affect those vessels.

Table 1: Total number of commercial vessels in all states and the NT

	NSW	VIC	Qld	SA	TAS	WA	NT	TOTAL
No. of vessels	9,556	1,380	9,620	2,336	1,309	3,657	488	28,346

Source: State/NT maritime agencies 2009

1.2. THE PROBLEM

While all commercial vessels and crew are currently subject to safety regulations in all states and the NT, they are not uniformly or consistently legislated or administered. This has developed despite agreement to national safety standards.

These jurisdictional differences in legislation and administration result in significant inconsistencies across the states and NT in safety requirements, the recognition of vessel survey, safety certification and qualifications/certificates of crew, and considerable variations in the level and nature of ongoing monitoring of compliance with safety standards. These inconsistencies cause significant problems for businesses operating across state and territory borders by increasing costs and duplicating administrative requirements.

These inconsistencies also mean that the latest nationally agreed safety standards are not fully implemented or applied across the domestic commercial vessel fleet, leading to concerns that safety outcomes are not being maximised. There also appears to be significant gains to be made from the rationalisation of eight separate maritime agencies to one national regulator.

The proposal for a single national system (under options 2 and 3) provides a focussed solution to these inconsistencies by confronting the cause of many of these problems. This was recognised at the July 2008 meeting of Australian Transport Ministers from the Commonwealth, state and the NT. Ministers agreed to support a national approach to maritime safety regulation (subject to the consideration of a RIS) administered by a national regulator (the Australian Maritime Safety Authority) and that the design of the system allow for the continued delivery of services by state and NT maritime safety agencies.

This proposal does not include occupational health and safety legislation relating to the maritime industry.

[1] Various sources 2009

1.3. OBJECTIVES OF REFORM

Reform is seeking to deliver a national maritime safety regulation system that is effective, consistent and efficient. The national system (options 2 and 3) would establish and maintain national uniformity in commercial vessel standards, regulations and administration.

The proposed reform aims to enable the operation of an efficient national maritime market through the seamless transfer of labour and vessels between the jurisdictions, and to deliver the consequent long term improvements to productivity and administrative efficiencies.

In addition, reform has the potential to deliver:

- Reduced complexity for vessel owners, operators and suppliers on the requirements applying to design, construction, equipment, operation and qualifications/certifications across Australia;
- Reduced costs in the long term by nationally consistent administration of national safety regulations; and
- A national register of domestic commercial vessels linking ownership, operator and vessel details, incident, inspection and survey history, to provide better, nationally-accessible data to support improved compliance monitoring leading to improved safety levels and reduced costs for industry.

1.4. THE OPTIONS FOR REFORM – A SINGLE NATIONAL MARITIME SAFETY SYSTEM

The options considered in this RIS to achieve a single national system are:

Option 1 - the status quo

Option 2 - an applied laws approach whereby legislation would be approved by the Australian Transport Council, passed in one jurisdiction and adopted by reference in other jurisdictions

Option 3 - the application of the Commonwealth *Navigation Act 1912* is broadened

The analysis in this RIS, including input from two rounds of consultations, indicates that **the highest national net benefit in the longer term would be achieved through the establishment of one national regulator with legislative and administrative responsibility for the regulation of safety of commercial vessels in Australia, including crew and operations (Option 3), compared with the status quo.**

Under Option 1, the 1997 Inter-Governmental Agreement between the states/NT and Commonwealth governments identifies common goals and aims to achieve uniformity and consistency. However, to date this has not been achieved and renewed efforts would need to be made to deliver a single national system within the existing framework.

While both Options 2 and 3 aim to achieve a national system, they differ in relation to the legal means to achieve this objective. The applied laws approach under Option 2 establishes a national body to oversight the development of standards given effect to in relevant legislation, but it would not have power to enforce the legislation or deliver services (service delivery would remain with state/NT maritime agencies).

Under Option 3, three service delivery models have been developed to illustrate the likely changes to service delivery under a national regulator and are discussed in detail in Section 7.5. These models

identify the proposed roles of the national regulator (AMSA), state/NT maritime agencies, and the private sector.

The models can be generally described as:

1. AMSA Delivery Model: AMSA delivers all services (option to delegate to private sector, Registered Training Organisations (RTOs)).

2. AMSA/State/NT Delivery Model: AMSA delivers standards, all other services delivered by state/NT maritime agencies.

3. Collaborative Delivery Model: AMSA delivers standards, all other services delivered under agreement with AMSA by states/NT, private sector and RTOs (some states may choose not to deliver some services).

There are minor variations in the cost benefit analysis of Option 3 when comparing the delivery models above. In general, the AMSA delivery model delivers higher long term administrative savings than the Collaborative model. The AMSA/State/NT model is closest to the status quo and delivers minimal change to net costs and benefits.

It should be noted that these models relate to the full implementation of the proposed national system under Option 3. A transition period is proposed to gradually move from the current system to the agreed national system and its delivery models. This is discussed further in Section 14.

1.5. COST BENEFIT ANALYSIS OF A SINGLE NATIONAL SYSTEM (OPTION 3)

Analysis indicates that the proposed national regulator option (Option 3) would deliver higher national net benefits compared to the status quo (Option 1), and higher net benefits with less associated risk compared with Option 2. There are relatively small variations in net benefit depending on the proposed delivery model chosen to deliver the system under Option 3. The figures for Option 3 below are presented as a Net Present Value, using a discount rate of 7 per cent over a 20 year period.

	TOTAL BENEFITS	
1.	**Consistent application of national safety standards**	**$55.51 million**
2.	**Savings to industry and state/NT by removing the requirement for interstate re-certification of survey certificate**	**$1.05 million**
3.	**Savings to industry and state/NT by removing the requirement for re-survey on interstate transfers**	**$ 3.94 million**
4.	**Savings to industry and state/NT from removing requirement for interstate survey of new vessels during construction**	**$1.59 million**
5.	**Savings to industry from the introduction of a risk-based survey and compliance monitoring system**	**$36.76 million**
6.	**Administrative efficiency savings**[2]	**$ 37.77 million to $ 60.92 million**
	TOTAL	**$136.62 million to $159.77 million**
	TOTAL COSTS	
1.	**Establishment of national regulator**	**$13.04 million**
2.	**Costs of bringing vessels into the national system**	**$ 5.88 million**
3.	**Establishment of national database**	**$15.00 million**
	TOTAL	**$ 33.92 million**
	TOTAL NET BENEFITS	**$102.7 million to $125.85 million**

[2] Includes ongoing costs. The range of values refer to Delivery Model 3 compared with Delivery Model 1.

It should be noted that while some of these benefits accrue from the start date of the proposed reform, the full benefits are likely to occur from full implementation of the national system (2014 onwards). The costs will be incurred during, or at the beginning of, the three year transition stage.

1.6. IMPACT OF PROPOSED REFORM – INITIAL ANALYSIS

The public consultations sought information from stakeholders on the potential impacts arising from the adoption of the reform as detailed in each option and also in the three delivery models. The tables below describe the possible changes and impacts of the proposed reform. A key principle is that existing vessels and businesses will be subject to minimal change, especially during transition to a national system.

Under Options 2 and 3, it is anticipated that reform would be implemented gradually from the start date of the national legislation, expected to be 1 July 2011. For the purpose of analysis in this RIS, this progression is described as two stages identified as:

Transition: 1 July 2011 – 30 June 2014

Full implementation: 1 July 2014 – onwards

It is anticipated that during transition, changes for existing vessels will be minimised while the national system is progressively implemented in accordance with agreements between governments to be negotiated later in 2009, subject to COAG approval. These agreements may include ongoing involvement of some state/NT agencies in the delivery of services during this time. The main difference between transition and full implementation is that AMSA has indicated it will develop a comprehensive risk-based survey and compliance monitoring system which will be introduced under full implementation. The anticipated benefits of the risk-based system are detailed in the cost-benefit analysis, Section 10.

If reform proceeds, the details regarding service delivery and transition will be formally agreed between the Commonwealth and the states/NT later in 2009.

1.6.1. Treatment of new, upgraded and existing vessels

The following discussion outlines the impact of the options on new, upgraded and existing vessels.

1.6.1.1 Option 1: The status quo

All vessels will continue to be subject to the requirements of the relevant state/NT jurisdiction. New safety standards will continue to be implemented by each state/NT from time to time, following national agreement and existing processes. Progress towards more consistent and uniform legislation and administration will continue as per the 1997 IGA. Concurrent processes such as mutual recognition will also continue. Services will continue to be delivered by state/NT maritime agencies, Registered Training Organisations (RTOs) and the private sector (mainly accredited surveyors in Queensland). Many maritime agencies will continue current moves towards partial or full cost recovery arrangements. Costs to industry will continue to change from time to time, in line with policies implemented by each jurisdiction.

1.6.1.2 Option 2: Applied laws approach

New and upgraded vessels

From 1 July 2011, new and upgraded vessels will be expected to comply with the national legislation (likely to be a completed NSCV), see Chart 1. Services will be delivered by states/NT, apart from standard development, which will be managed by a national agency, likely to be AMSA. Risk-based survey and compliance monitoring will be introduced in 2014.

Existing vessels

The existing domestic commercial fleet is currently subject to either the Combined USL/NSCV 2008 Code (new vessels from 1 October 2008 onwards), the pre-2008 USL Code (existing vessels as at 30 September 2008), or other regulations depending on jurisdiction and age. These vessels will continue to be subject to their existing certification and periodic survey requirements (or in Queensland, the current compliance monitoring regime). Although there will be no change to the service delivery model for survey and registration, it is likely that a short transition period will also be needed to ensure inclusion of currently exempt vessels. Risk-based survey and compliance monitoring will be introduced in 2014.

1.6.1.3 Option 3: Broadening the Navigation Act 1912

New and upgraded vessels

From 1 July 2011, new and upgraded vessels will be expected to comply with the national legislation (likely to be a completed NSCV), see Chart 1 and will be subject to risk-based survey and compliance monitoring.

Existing vessels

The existing domestic commercial fleet is currently subject to either the Combined USL/NSCV 2008 Code (new vessels from 1 October 2008 onwards), the pre-2008 USL Code (existing vessels as at 30 September 2008), or other regulations depending on jurisdiction and age. These vessels will continue to be subject to their existing certification and periodic survey requirements during transition (or in Queensland, the current compliance monitoring regime). However, periodic survey requirements for existing vessels may change after full implementation subject to the development of a national risk-based survey and compliance monitoring program. Any changes to periodic survey requirements under a risk-based system would include consultation with stakeholders and would aim to reduce overall costs to industry, especially to low risk vessels and to those vessels that would otherwise be regarded as high risk but which have a strong history of compliance.

Chart 1 Application of safety standards to commercial vessels under a national regulator (Option 3)

Vessels	**Requirements from 1 July, 2011**
New or upgraded vessels from 1 July 2011 onwards	Subject to the national legislation from beginning of transition.
Combined USL/NSCV Code Vessels (post 1 October 2008)	Remain subject to the Combined Code. If not registered, must register before end of transition or at next scheduled periodic survey.
Pre-2008 USL Code Vessels	Remain subject to USL Code. If not registered, must register

	before end of transition or at next scheduled periodic survey.
Commercial vessels, currently exempt	Required to have an initial safety assessment before end of transition and become registered. It is proposed that Hire and Drive vessels will only need to become registered.

In the longer term this option will ensure that strategies to improve safety, such as the introduction of safety management systems are applied to all the fleet. Under Option 1 these vessels would not benefit from future improvements in safety standards or operations.

In general, all vessels that are currently subject to safety regulation would continue to be subject to those same requirements under Option 3. The exceptions being new and upgraded vessels post 2011 and vessels under an exemption.

For example, there are a significant number of commercial vessels (mainly fishing vessels) that are exempted from compliance with standards (see Table 2). Given that fishing vessels are an important part of the commercial vessel sector, these 3,983 vessels would need to be registered under the national scheme, and to undertake a minimal safety assessment as a pre-requisite. While details of the safety assessment are yet to be finalised, it is envisaged that it would be equivalent to approximately half a normal periodic survey in cost and time. This is included in the cost/benefit analysis of this option. The details of the safety assessment would be developed and discussed with state maritime agencies and stakeholders prior to its implementation. To clarify some concerns raised by stakeholders, it should be noted that these vessels currently exempted from registration and/or survey are still required to meet minimal safety requirements (eg provisions regarding life saving equipment) and these would continue to be enforced under a national system.

The intent of the national system under this Option is to ensure appropriate coverage of all commercial vessels so that safety outcomes are maximised.

Table 2: Vessels not in survey, vessels not registered.

Class	WA	SA	TAS	NSW	VIC	QLD	NT	TOTAL
1 Passenger	-	20	-	-	-	-	-	20
2 Non-passenger	537	-	-	-	-	-	-	537
3 Fishing	-	150	-	-	-	3,833	-	3,983
4 Hire & Drive	-	180	-	3,217	-	-	-	3,397
TOTAL	**537**	**350**	**-**	**3,217**	**-**	**3,833**	**-**	**7,937**

Source: State and NT maritime agencies 2008

Note: As of February 2009, NSW also reported 4,052 exempted vessels (1,034 fishing, 2,281 non-passenger and 737 other vessels).

Costs of Reform

During development of the RIS, state and NT maritime agencies indicated that a key objective of reform should be minimal cost impacts on existing vessels and businesses. If COAG agrees to

progress national reform in mid 2009, a Cost Recovery Impact Statement (CRIS) will be undertaken later in 2009, and will be guided by this objective. The Cost Recovery Impact Statement will examine the possible changes in costs as they relate to service delivery such as: registration, survey and qualifications/crew certification. During consultations the majority of stakeholders indicated their interest in being involved in the CRIS consultations. The information needed to undertake the Cost Recovery Impact Statement is not currently available as governments have yet to decide on the funding arrangements.

However, the objective of minimising cost impacts on existing vessels and businesses has been a key principle in developing the options for reform. This is reflected in the maintenance of existing survey requirements for existing vessels during transition and the minimal additional requirements (minimum safety assessments for currently exempt vessels) to bring all commercial vessels under the national system (in both Options 2 and 3).

Beneficiaries of Reform

The businesses most likely to benefit from national reform are those who operate across jurisdictional borders for more than three months at a time, those who are transferring vessels between states/NT and those who are purchasing new vessels from another state/NT. Boat builders and equipment manufacturers are also expected to benefit.

Under Option 3, there will be no requirement to re-apply for certification (vessel or crew certification) in another state/NT. At most, vessel owners and crew will need to notify the national regulator of a change in address, as applicable. However, Option 2 does not deliver this benefit as the states/NT will still be issuing state/NT certificates, not Australian certificates. Clear mutual recognition requirements would be necessary to gain this benefit under Option 2.

Under Options 2 and 3, benefits are likely to flow to businesses at full implementation that are currently on an annual or biennial periodic survey system. These options will enable a risk-management approach to survey and compliance monitoring which is likely to lead to a decrease in the requirement for periodic survey, for example, once every three years for low risk vessels, or a much shorter (and therefore cheaper) periodic survey for high risk vessels that are meeting requirements. It is likely that most of the existing vessels currently subject to an annual periodic survey regime (and those under registration in QLD) will move to a three yearly periodic survey regime (subject to risk assessment), delivering significant cost savings direct to industry.

Manufacturers, suppliers and retailers of vessels and equipment will benefit as they will have one set of national regulations to adhere to when making or supplying equipment.

More detail on the impacts of each option are discussed in Section 10.

1.6.2. Summary of stakeholder submissions

In September-October 2008 and April 2009, two rounds of stakeholder consultations were held, including 22 public meetings in all states and the NT attended by around 1,400 industry representatives. Over 90 written submissions were also received.

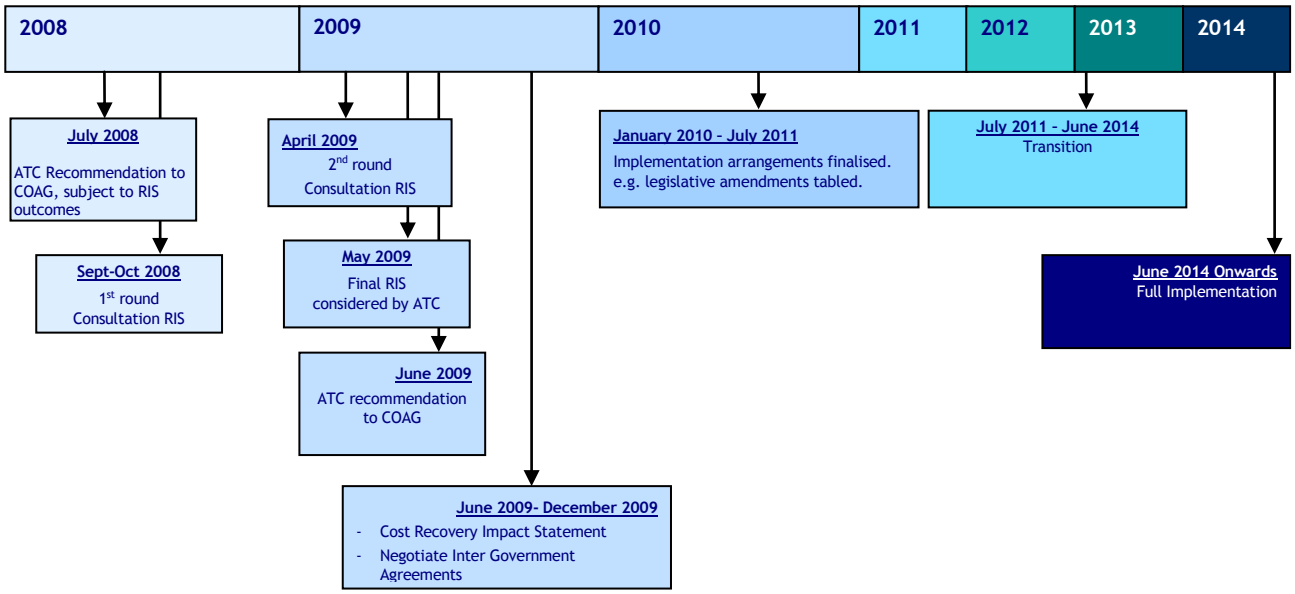
There was clear support for a national system, with the majority of written submissions supporting Option 3, largely because of the difficulties cited by industry when dealing with other jurisdictions and the inequities faced by businesses operating in different jurisdictions. Extracts from the submissions are quoted throughout this report.

Many of those supportive of Option 3 also requested more detail on the impact on individual businesses of the proposed reform and the likely changes in costs to current service fees. While

additional cost benefit information was included in the second round Consultation RIS, detail about the possible changes to individual fees for services will be included in a Cost Recovery Impact Statement, including opportunity for further stakeholder participation.

There was limited support from stakeholders for Options 1 and 2, with each being selected as the preferred option by around 10 per cent of the submissions identifying a preferred option.

1.6.3. Indicative timeline for consideration of reform (assuming relevant approvals are received)



2. BACKGROUND

In March 2008 the Council of Australian Governments (COAG) endorsed a reform agenda for reducing the costs of regulation, enhancing productivity and workforce mobility in areas of shared Commonwealth and state/territory responsibility.

Maritime safety was one of the 27 agreed areas of regulatory reform which also included: environmental assessment, rail safety, product safety, trade licensing, food regulation, mine safety, oil and gas regulation, and wine labelling.

In May 2008, Australia's transport ministers endorsed *'A New Beginning for Transport'*, designed to cut red tape in the transport and logistics sector and to deliver more consistency in transport regulation.

The principles underpinning this transport policy framework as described by transport ministers are:

National Regulation	A national perspective should be adopted where regulation is required.
National Markets	Encourage national markets where possible.
Infrastructure pricing	Sending the appropriate signals to influence supply and demand for infrastructure.
Competitive Markets	Establishing competitive markets wherever possible to minimise the need for regulation.
Private Sector	Involve the private sector, where it is efficient to do so, in delivering outcomes.
Customer	Customer–focussed and equitable access for all users.

On 3 July 2008, COAG acknowledged that Australia's overlapping and inconsistent regulations were impeding productivity growth, compromising Australia's future living standards and reducing competitiveness.

Following that meeting, on 25 July 2008, Australian Transport Ministers agreed to recommend to COAG that, subject to the outcomes of a regulation impact assessment, COAG agree to the establishment of a single national system for maritime safety regulation.

To achieve this single national system, Transport Ministers indicated they were inclined towards broadening the application of the Commonwealth *Navigation Act 1912* to apply to all commercial vessels, administered by AMSA. AMSA, as the national regulator, would be responsible for regulating vessel design, construction, and equipment, vessel operation (e.g. safety management systems) and crew certification and manning.

In considering the administration of a national system, Ministers agreed that its design allow for the delivery of regulatory services by state and NT maritime agencies operating under contractual or agency agreements with the national regulator.

In addition to the ATC preferred approach, the RIS will examine all feasible options for reform, identify the costs and benefits of all options and recommend the option with the greatest net benefit.

3. REGULATION OF MARITIME ACTIVITY IN AUSTRALIA

Responsibility for regulating maritime activity in Australia is shared between the Commonwealth government, the states and the NT and reflects the 1979 Offshore Constitutional Settlement. This division of responsibility is discussed below.

3.1. REGULATION OF MARITIME SAFETY

3.1.1. State and territory responsibilities

The states and the NT are responsible for regulating ship safety for domestic vessels (trading ships on intrastate voyages, fishing vessels, pleasure craft and vessels on inland waterways). The majority (98%) of commercial domestic vessels under state and territory jurisdiction are less than 35 metres in length and 500 gross tonnes.

The state and NT agencies are listed in Table 3.

Table 3: State and territory agencies responsible for maritime safety

Jurisdiction	Name of agency
New South Wales	New South Wales Maritime
Northern Territory	Marine Safety Branch, NT Transport Group
Queensland	Maritime Safety Queensland
South Australia	Department of Transport, Energy and Infrastructure, SA
Tasmania	Marine and Safety Tasmania
Victoria	Marine Safety Victoria
Western Australia	Marine Safety – Department for Planning and Infrastructure, WA

3.1.2. Commonwealth government responsibilities

The Commonwealth government is primarily responsible for regulation of trading ships engaging in interstate or overseas trade, fishing vessels engaged on overseas voyages and ships belonging to Commonwealth government departments and authorities, offshore industry mobile units (for example, drilling vessels) and certain offshore industry vessels (mainly supply vessels)) and ships that do not fall within the state/NT jurisdiction.

The Commonwealth government also ensures Australia meets its obligations under international maritime treaties.

AMSA is a Commonwealth statutory authority that administers the Commonwealth *Navigation Act 1912* and the *Protection of the Sea (Prevention of Pollution from Ships) Act 1983,* which are the main laws governing ship safety and environment protection standards.

AMSA is responsible for ensuring Australian flag ships meet international convention standards. AMSA also delegates ship survey functions to seven approved classification societies, which are members of the International Association of Classification Societies. Shipowners choose one of these classification societies to perform the statutory survey and certification work for their ships and pay fees to the classification societies. AMSA has entered into an agreement with each approved classification society outlining their responsibilities and AMSA regularly audits their performance.

AMSA administers the Commonwealth *Shipping Registration Act 1981*, which confers nationality on Australian flag ships in line with international convention requirements. The Act requires that a vessel falling within specified parameters and owned by an Australian entity shall be entered in the Australian Register of Ships administered by AMSA.

3.1.3. The safety standards

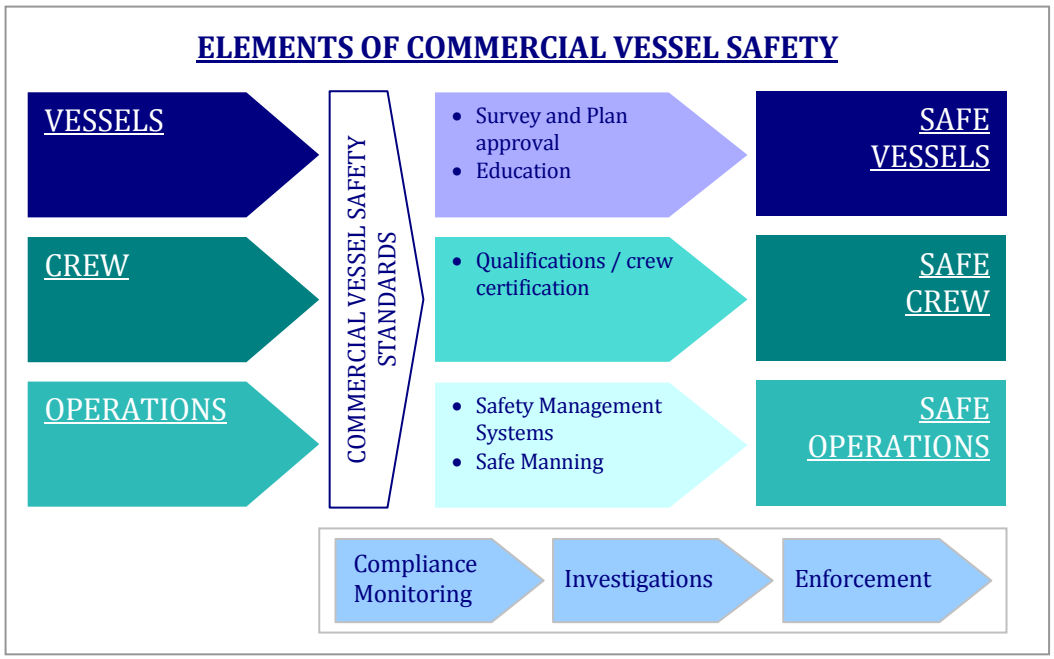
National safety standards relate to the survey, design, construction, crewing and operation of small commercial vessels in Australia as well as providing guidance in their administration (see Figure 1 below on Elements of Commercial Vessel Safety). The standards are defined under the Uniform Shipping Laws (USL) Code which was first developed and agreed in 1979. Parts of the USL Code have been revised and updated since 1997 to reflect a modern safety management approach and have been replaced by the National Standard for Commercial Vessels (NSCV).

The provisions of the national standards described in the USL Code or the NSCV do not have the force of law until they are adopted in state or territory legislation. In practice, the USL Code and NSCV have been inconsistently legislated over time by state and territory jurisdictions.

As a result, legislated safety standards for domestic commercial vessels vary across all state and territory jurisdictions. Only Tasmania has legislated to adopt the NSCV in full. Remaining states and territories have adopted a combined USL/NSCV code which came into effect on 1 October 2008. However, the key problem is that the standards are applied differently – to different vessel types - and interpreted differently in each jurisdiction. In addition, some jurisdictions have maintained legislative modifications to the national standards.

The National Marine Safety Committee (NMSC), comprising the head of each maritime safety agency, was formed in 1997 under the terms of the *National Marine Safety Regulatory Regime Inter-Governmental Agreement*. Its key task was to form a cooperative arrangement that resulted in uniform or consistent marine safety legislation and operational practices throughout Australia. While the NMSC has been relatively successful in reaching national agreement on standards, this has not been reflected in consistent or uniform jurisdictional legislation despite each jurisdiction's representation on the NMSC.

Figure 1. Elements of Commercial Vessel Safety



3.2. THE NATION'S FLEET OF COMMERCIAL VESSELS

According to data provided by the states and the NT, it is estimated that there are over 28,000 commercial vessels operating in state and territory jurisdictions in Australia, of which over 20,000 are subject to standards (enforced through either periodic survey[3] or compliance monitoring). The number of vessels exempt from standards (unregistered and unsurveyed) is reported as approximately 8,000.[4]

In Queensland, Victoria, South Australia and Tasmania the registration category containing the largest number of vessels comprises vessels undertaking offshore operations within 30 miles of sheltered waters or a safe haven. In New South Wales, registration permitting operations within declared smooth waters (including inland waters) accounts for 1,151 registrations out of a total of 2,521 registrations. Few vessels in each jurisdiction are issued with registrations allowing an unlimited area of operation. Northern Territory, New South Wales and South Australia have only one classification each.

It is difficult to obtain consistent or accurate national figures due to differences between the jurisdictions. Therefore, the total vessels accounted for in the Tables below vary. However, they are based on information provided by the maritime agencies in the states and the NT in 2008 and 2009. The national vessel numbers used in this report are derived from Tables 7, 8 and 9 based on the latest information provided.

[3] Survey inspections are carried out in the design/construction stage and initial registration of a vessel, and then in most cases, annually, to ensure compliance.

[4] State/NT Maritime Agencies 2008.

Table 4. Number of vessels under registration and in survey by area of operation

Area of operation	QLD	NSW	VIC	SA	TAS	WA	NT
A Unlimited area of operation	6	1	1	1	3	11	1
B Off shore operations <200 miles	761	89	135	251	130	1,021	247
C Restricted offshore operations within a range of 30 miles from sheltered waters or a safe haven	1,814	876	298	1,206	687	646	239
D Operations within declared partially smooth waters	964	404	323	168	248	268	300
E Operations within declared smooth waters (includes inland waters).	1,191	1,151	623	64	234	147	68
F	964						16
TOTAL	**5,700**	**2,521**	**1,380**	**1,690**	**1,302**	**2,093**	**871**

Note: There are a further 7,269 commercial vessels in NSW, consisting of 4,052 exempt vessels and 3,217 Hire and Drive vessels under licence. Note that these figures are correct as at the end of February 2009.

Over 70 per cent of registered vessels in Queensland have a length of less than 12 metres. In Victoria, the share is even higher at about 83 per cent. Western Australia has the largest number of vessels greater than 35 metres in length (Table 5).

Table 5. Number of vessels under registration and in survey by size

Size	QLD	NSW	VIC	SA	TAS	WA
0-12m	4,040	1,284	1,118	1,163	987	**516**
12-24m	1,442	838	224	706	284	**1,228**
24-35m	139	97	25	52	26	**226**
>35m	79	32	13	18	5	**123**
TOTAL	**5,700**	**2,251**	**1,380**	**1,939**	**1,302**	**2,093**

Note: information not available for Northern Territory

Note: There are a further 7,269 commercial vessels in NSW, consisting of 4,052 exempt vessels and 3,217 Hire and Drive vessels under licence. These figures are correct as at the end of February 2009.

Table 6. Number of vessels under registration by age

Age	Qld	NSW	VIC[1]	TAS
0-5 yrs	1,083	567	185	269
5-10 yrs	344	516	203	217
10-15 yrs	294	323	164	121
15-20 yrs	393	332	161	90
>20 yrs	1,166	513	667	114
unknown	2,420			348
TOTAL	**5,700**	**2,251**	**1,380**	**1,159**

Note: information not available for Northern Territory, Western Australia or South Australia.

[1] vessels under survey

Table 7. Current vessels under survey by jurisdiction, by class

	WA	NT	Qld	NSW	Vic	Tas	SA	Total
1a	0	0	0	0	0	0	0	**0**
1b	82	5	0	1	1	1	2	**92**
1c	117	12	0	124	20	18	15	**306**
1d	121	9	0	97	45	14	7	**293**
1e	89	46	0	375	66	20	27	**623**
1f	0	13	0	0	404	0	300	**717**
2a	2	0	0	1	1	1	0	**5**
2b	201	40	0	27	29	14	40	**351**
2c	374	59	0	414	131	200	199	**1377**
2d	90	94	0	139	162	83	46	**614**
2e	59	11	0	134	138	94	41	**477**
3a	9	0	0	0	0	3	1	**13**
3b	741	103	0	47	108	110	204	**1313**
3c	164	32	0	223	154	463	985	**2021**
3d	58	64	0	0	92	155	115	**484**
3e	0	0	0	0	29	49	4	**82**
4a	0	0	0	0	0	0	0	**0**
4b	0	0	0	0	0	0	0	**0**
4c	364	0	0	0	0	0	0	**364**
4d	0	0	0	0	0	4	0	**4**
4e	649	0	0	347	0	72	0	**1068**
No Class Data	0	0	183	0	0	0	0	**183**
Total	**3,120**	**488**	**183**	**1,929**	**1,380**	**1,301**	**1,986**	**10,387**

Note: For Queensland, the vessel numbers reflect the number of vessels which have elected to obtain a certificate of survey either for operating interstate or for their own commercial business purposes. Survey is not the mechanism which is used to apply safety standards in Queensland.

Figure 2. Current Vessels Under Survey, by Class

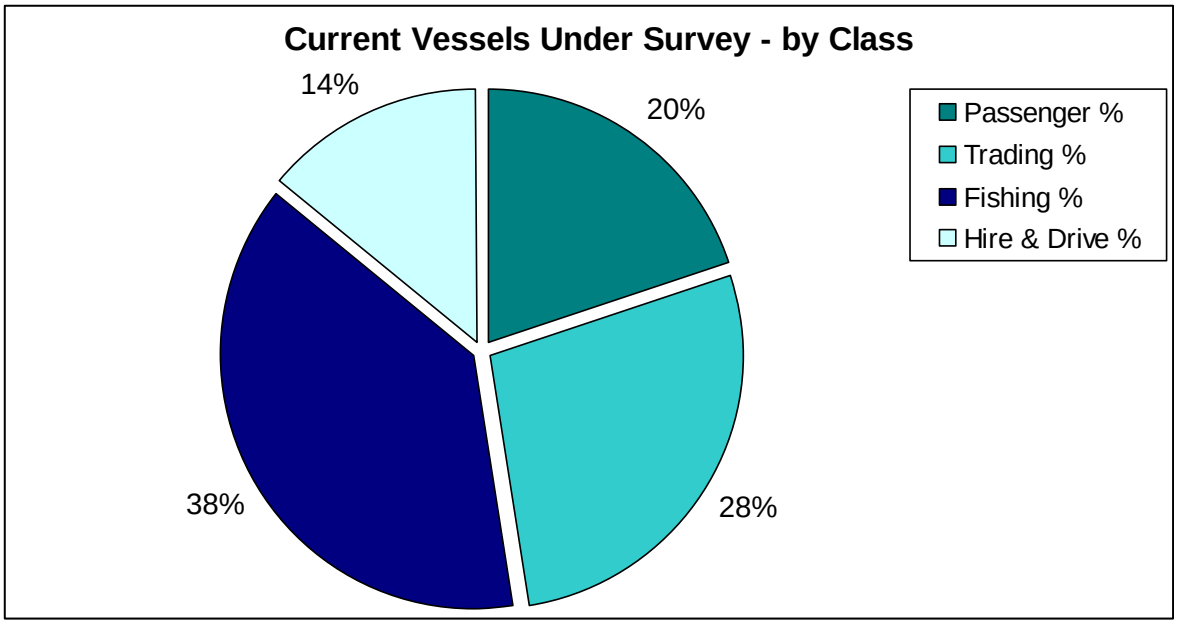


Figure 3. Current Vessels Under Survey, by Class and by Jurisdiction

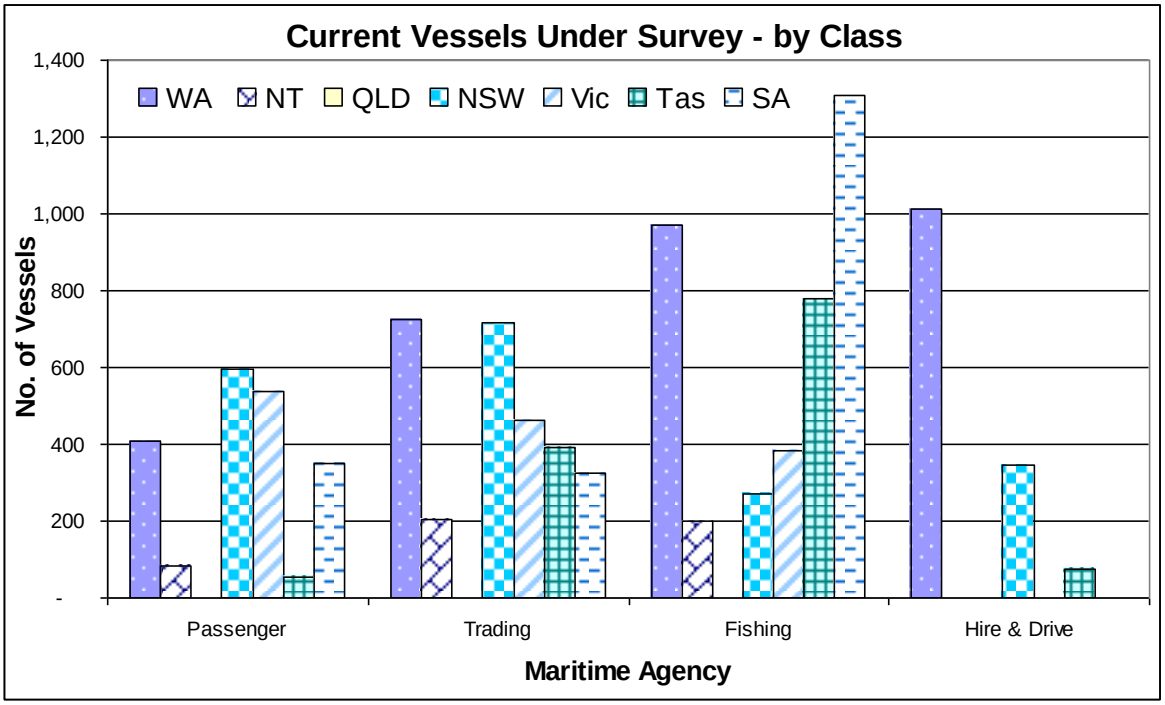


Table 8: Current vessels under registration not survey by jurisdiction, by class (including un-classed vessels)

	WA	NT	QLD	NSW	Vic	Tas	SA	Total
1a	0	0	2	0	0	0	0	**2**
1b	0	0	70	0	0	0	0	**70**
1c	0	0	188	0	0	0	0	**188**
1d	0	0	138	0	0	3	0	**141**
1e	0	0	306	0	0	0	0	**306**
1f	0	0	923	0	0	0	0	**923**
2a	0	0	4	0	0	0	0	**4**
2b	0	0	153	0	0	0	0	**153**
2c	0	0	1,483	65	0	0	0	**1,548**
2d	0	0	859	144	0	0	0	**1,003**
2e	0	0	854	2,150	0	0	0	**3,004**
3a	0	0	1	0	0	0	0	**1**
3b	0	0	499	1	0	4	0	**504**
3c	0	0	124	0	0	1	0	**125**
3d	0	0	0	23	0	0	0	**23**
3e	0	0	0	1,012	0	0	0	**1,012**
4a	0	0	0	0	0	0	0	**0**
4b	0	0	0	0	0	0	0	**0**
4c	0	0	0	0	0	0	0	**0**
4d	0	0	0	0	0	0	0	**0**
4e	0	0	0	0	0	0	0	**0**
No Class Data	0	0	0	676	0	0	0	**676**
Total	**0**	**0**	**5,604**	**4,071**	**0**	**8**	**0**	**9,683**

Note: In Queensland, these vessels are not exempt from safety standards. For these vessels, the standards are enforced through a risk-based compliance monitoring system rather than periodic survey.

Table 9: Current vessels not in survey or registration by class

Class	WA	SA	TAS	NSW	VIC	QLD	NT	TOTAL
1a	-	-	-	-	-	-	-	**-**
1b	-	-	-	-	-	-	-	**-**
1c	-	-	-	-	-	-	-	**-**
1d	-	-	-	-	-	-	-	**-**
1e	-	20	-	-	-	-	-	**20**
1f	-	-	-	-	-	-	-	**-**
2a	-	-	-	-	-	-	-	**-**
2b	-	-	-	-	-	-	-	**-**
2c	200	-	-	-	-	-	-	**200**
2d	-	-	-	-	-	-	-	**-**
2e	337	-	-	-	-	-	-	**337**
2l	-	-	-	-	-	-	-	**-**
3a	-	-	-	-	-	-	-	**-**
3b	-	-	-	-	-	541	-	**541**
3c	-	60	-	-	-	3,082	-	**3,142**
3d	-	30	-	-	-	169	-	**199**
3e	-	60	-	-	-	41	-	**101**
4c	-	30	-	-	-	-	-	**30**
4d	-	150	-	-	-	-	-	**150**
4e	-	-	-	3,217	-	-	-	**3,217**
4	-	-	-	-	-	-	-	**-**
TOTAL	**537**	**350**	**-**	**3,217**	**-**	**3,833**	**-**	**7,937**

4. VALUE OF ECONOMIC ACTIVITY – MARINE INDUSTRIES

The Australian Institute of Marine Science (AIMS) (2008) estimated that economic activity in the marine industries in Australia in 2006-07 was approximately $20.7 billion (see table 10). This amount excludes offshore oil and gas exploration and extraction (oil exploration, oil production, liquefied petroleum gas, and natural gas) from the total figure presented in the AIMS report ($38 billion).

Table 10: Value of economic activity in marine industries 2006-07 ($ million)

Fishing	
Marine based aquaculture	666.2
Commercial fishing (wild capture fisheries)	1,429.3
Boat building, repair & maintenance services and infrastructure	
Boatbuilding & repair (incl recreational vessels)	1,458.0
Shipbuilding & repair (civil and defence)	1,826.0
Marine equipment retailing	1,841.7
Marine tourism and recreational activities	
Domestic consumption of tourism goods and services	11,611.2
International consumption of tourism goods and services	1,882.3
TOTAL	**20,714.7**

A notable absence from table 10 is the water transport sector[5] and services to the water transport sector[6]. The exclusion of these industries means that the value of economic activity in the Australian marine sector is greater than what is presented in the table. However, in the table the categories of 'boatbuilding and repairs' includes recreational vessels and with some of the 'marine equipment retailing' likely to be to the recreational vessel sector it is difficult to determine how much activity in these two sectors relates only to the commercial maritime sector. In addition, shipbuilding includes ships weighing more than 50 tonnes and submarines - of this category, commercial vessels up to 500 tonnes are relevant, excluding submarines. It is not possible to disaggregate these figures. On balance it is difficult to determine whether the $20.7 billion is an over or under estimate of the value of maritime industries in Australia.

There are a number of difficulties in preparing data of this kind. The main barrier to collecting the consistent and comparable data which would make it possible to estimate the economic value of Australia's marine industry is that there is no single definition of which activities constitute this sector – that is, there is no agreed 'marine industry' grouping. In addition, there is no turnover data available for intrastate versus interstate trade.

Additionally, while a number of studies have estimated the value of marine-related activities at a local level (in particular work relating to the Great Barrier Reef Marine Park), this has not been done at a national level.

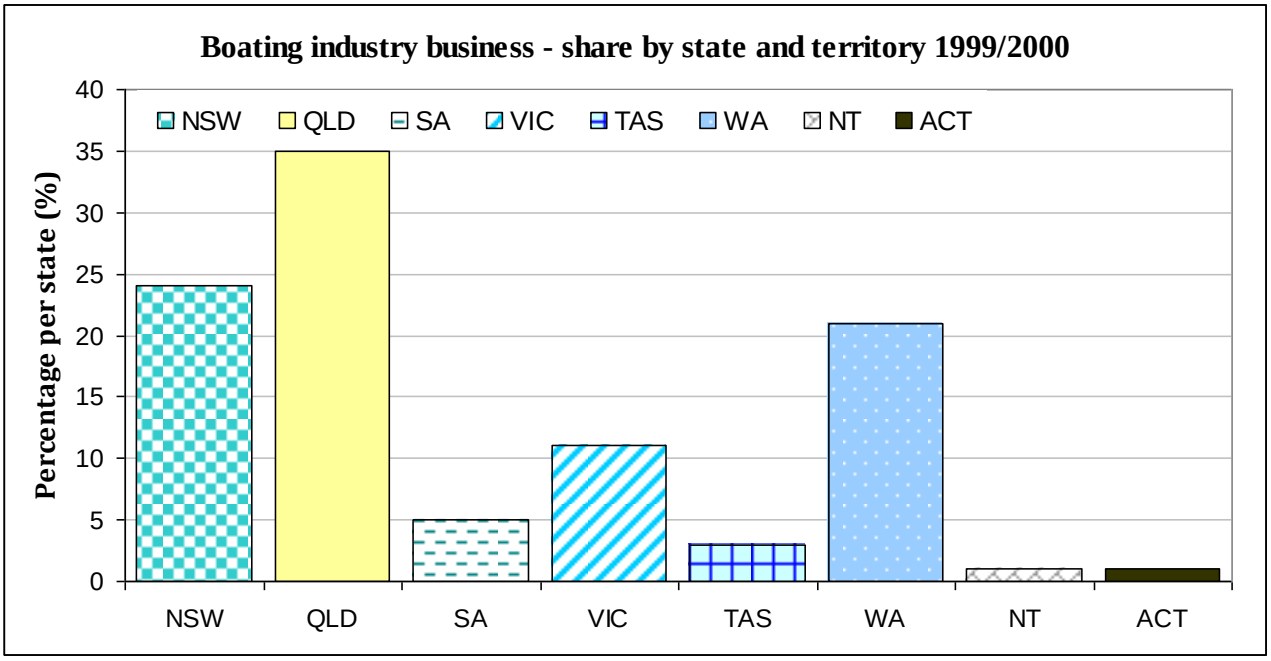
Beyond the value of economic activity of maritime industries in Australia, other measures of the industry include the number of business servicing the various sectors and the jurisdictional spread of these industries.

[5] As defined by ABS Census data

[6] As defined by ABS Census data

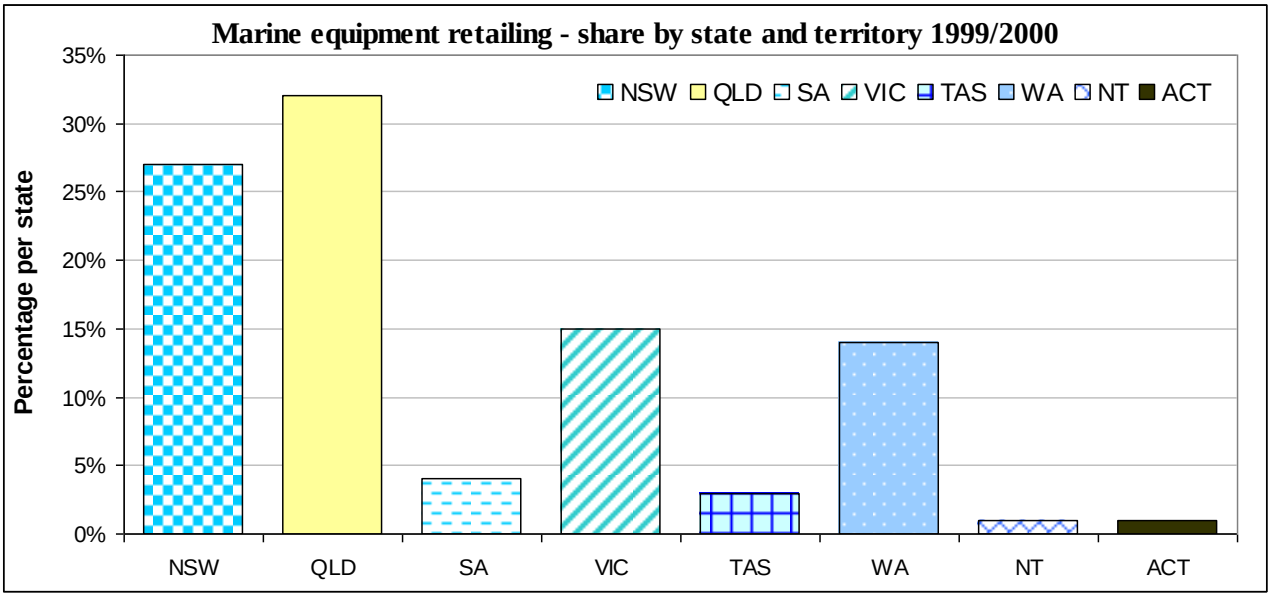
In 2002-03 there were 495 businesses in the boatbuilding industry in Australia – including commercial and recreational vessel boat builders[7]. A jurisdictional breakdown of the businesses in 1999/2000 is contained in Figure 4.

Figure 4: Boating industry business – share by state and territory 1999/2000



In 2002/03 there were 4,258 businesses in the marine equipment retailing sector – servicing both commercial and recreational vessel owners. A jurisdictional breakdown of the businesses in 1999/2000 is contained in Figure 5.

Figure 5: Marine equipment retailing – share by state and territory 1999/200



[7] AcilTasman 2004

5. NATURE OF THE PROBLEM

5.1. INCONSISTENT APPLICATION OF NATIONAL SAFETY STANDARDS

There are eight different maritime safety regulatory systems governing the operation of commercial vessels in Australian waters (the Commonwealth government, six states and the NT). These systems are enacted in law by more than 50 Acts and subordinate legislative instruments and administered by eight separate maritime safety administrations.

The 1997 IGA has not achieved uniform or consistent safety regulation standards and administration across Australia. Causal factors include: the requirement for each jurisdiction to progress separate legislative drafting instruments, obtain separate executive and cabinet approvals, negotiate legislative schedules in the context of other state/NT priorities, and the tendency for each jurisdiction to introduce amendments to take account of 'local' issues. State/NT databases are not compatible (for sharing of incident notifications), administration procedures are inconsistent and there is no nationally consistent risk profiling of the fleet to determine periodic survey regimes or compliance monitoring.

These inconsistencies cause problems in the mutual recognition of vessel survey; recognition of safety certification and certification of crew; and cause considerable variations in the level, nature and efficiency of monitoring of compliance. All these problems have associated costs for industry. The information presented in the tables at Appendix C, describes the variations in design and construction; registration and survey; and crew qualification and vessel crewing standards between state and territory jurisdictions.

The states and the NT have recognised that a more consistent approach is needed and are addressing some of these issues, for example, mutual recognition of qualifications/crew certification. These concurrent processes demonstrate state and NT recognition of the need for national action. Options 2 and 3 would address the causal problems rather than continue these piecemeal solutions.

There are 440 vessels that transfer interstate each year[8]. These vessels and crew must apply for mutual recognition of their certificates, which may involve a range of additional requirements. This ranges from re-survey of the vessel, equipment inspections, and in some cases, additional training for crew. This is a relatively small percentage of the total number of vessels operating in Australia.

Despite mutual recognition processes existing between states/NT, of the 440 vessels that transfer interstate each year on average, 96% of these vessels were still required to present their certificate, 92% of vessels were re-issued with a certificate, 62% required a review of their existing restrictions, 35% required a review of crewing, 20% required a survey of equipment, 14% required a survey of condition, 14% required a review of stability and 29% required other reviews[9]. These are additional reviews and inspections on vessels previously operating legally in another jurisdiction.

A concerning issue is also the inconsistencies in the number of vessels relocating interstate and the number of vessels seeking approval from AMSA for the interstate (or international) voyage. It appears that in 2007, of the 440 vessels relocating interstate, only 16 vessels were issued with s194 (6) Determinations or s421 exemptions, by AMSA, under the *Navigation Act 1912*, for the voyage. Even though there was likely to be several exemptions issued by AMSA for these voyages, the large disparity in number causes significant concern about the apparent gap in the system, currently split between state/NT and the Commonwealth. Comments on the problems caused by this split jurisdiction were submitted by business operators below.

[8] NMSC November 2007

[9] NMSC November 2007

I have recently felt the full brunt of the inconsistency between marine administrations in Australia with a prolonged court action initiated against me by a state maritime agency regarding an international voyage. The case was resolved after 13 months with the agency dropping five of the six charges and the judge declining to convict on the remaining charge. The agency was under the false understanding that it had jurisdiction over international voyages and applied its state requirements for survey and manning, while in fact, it was in the jurisdiction of AMSA who have a provision for the vessel as a 'pleasure craft' and exempt it from survey and manning requirements. All those involved believed that there was a consistent system across Australia that was compatible between administrative bodies, when in fact there was not. I am left with the legal costs and am still in an uncertain regulatory environment.

National consistency can only be achieved by having one organisation from top to bottom. If the old state bodies are still applying the regulations there will be old interpretations and we will continue to see discrepancies across the country.

David Pryce, Blizzard Expeditions

Notwithstanding the effort that has and continues to be expended in developing the NSCV, there is a fundamental issue with the current regime where six states and a territory are administrating the application of the standard. So no matter haw good the standard and how closely the individual states and territory have participated in the process of formulating the standards, when it comes to application they all do their own thing. This was always the case with the USL code and is being repeated with the NSCV where states and territory are selectively applying parts of the NSCV or modifying its application, as is noted in the 2nd RIS.

Graham Taylor, Taylortech, NSW

5.1.1. Variations in design and construction standards

The application of design and construction standards is usually linked to the initial inspection (survey) of a new or upgraded vessel or state/NT registration requirements. These survey and registration requirements vary between jurisdictions (See also Appendix C). This results in different technical requirements applying to the same type of vessel in different jurisdictions. At a minimum, it creates a confusing state of affairs which makes it difficult and costly for commercial vessel owners, operators and manufacturers to understand their obligations, particularly where vessels operate across jurisdictions.

It is often not a straightforward process to have certifications issued in one jurisdiction recognised in another. A vessel built in a particular state or territory for use elsewhere may need to be certified during construction by a surveyor from the receiving jurisdiction, with corresponding costs for the surveyor's time and travel expenses.

5.1.2. Variations in registration and survey standards

Registration

There is no consistency in state and NT requirements for registering all commercial vessels operating in their jurisdiction. Generally, vessels must be registered in New South Wales, Queensland, South Australia and Tasmania, but are not required to be registered in the Northern Territory, Victoria or

Western Australia because they are considered to be under state/NT survey. This inconsistency is exacerbated by different exemptions applied by each jurisdiction for particular vessels.

Marine safety should involve learning from our mistakes and making the system better, streamlining where possible and strengthening requirements where appropriate. As it is at present, not all states and territory classify or require all vessels to be registered. In such circumstances it is impossible to gather accurate statistics and data. I suggest not all states and territory properly record or detail incidents that occur so the magnitude of some problems do not receive proper attention.

A comprehensive database and incident reporting methodology is essential. I am aware that NMSC have experienced continuing problems with obtaining data and statistics from the states and territory on which to base the development of the NSCV. The obvious solution to this predicament is to centralise this responsibility with AMSA or the ATSB.

Graham Taylor, Taylortech, NSW

Survey

There are disparities in the requirements for survey, particularly periodic survey, across all jurisdictions. Survey inspections are carried out in the design/construction stage and initial registration of a vessel, and then in most cases, periodically, to ensure compliance.

There are many exemptions from survey across the different jurisdictions. Exemptions from initial survey are based on length or power, type (fishing boats depending on length, tenders, training ships, ferries etc) and operational area.

These inconsistencies cause problems and additional costs when a vessel transfers between states/NT. The vessel must meet Commonwealth regulatory requirements to undertake the initial interstate voyage and the survey and registration requirements of the destination state or territory for recognition of their safety certification. Both the Commonwealth and the destination state or NT may have different technical requirements to the originating state.

There are also other problems caused by inconsistencies in survey. For example, surveyors in WA spend time in other states conducting surveys on WA vessels that are temporarily working out of the state, in order to keep them in WA survey. This extra cost to owners is due to the inconsistencies between surveys across jurisdictions.

Table 2 in Appendix C describes the variations in requirements across jurisdictions for registration and survey regimes.

Comments on these inconsistencies were provided in submissions.

In Queensland we run a couple of vessels in AMSA/Class survey for Emergency/Salvage operations, and the majority of vessels in MSQ/Class for harbour work. Our problems occur only when we want to go over the border or overseas. Svitzer were considering changing back to AMSA/Class as although its to a higher standard it saves the hassles when re-locating.

Currently we can steam our vessels from Weipa to Brisbane safely under MSQ registration but can't go 100k south to over the border, without getting an exemption and upgrading our radio equipment.

Eddie Price, Svitzer, Brisbane

At present I am encountering extreme difficulty working between state systems. A vessel recently purchased in Queensland and lying in Darwin will take many months to transfer to Western

Australian Jurisdiction. In an ideal world the transfer of a vessel working under the same USL Classification should be seamless.

John Ainsworth, Torquay, Victoria

To have all jurisdictions under the control of one Administration (AMSA) is essential in order to unify the design and surveying of vessels nationally.

Russ Larkin and Associates, Consulting Marine Engineers and Ship Surveyors, Cairns, Queensland

Owners of a heritage vessel noted that while they weren't yet currently operating:

…we anticipate potential problems in satisfying all jurisdictions with our boat layout and equipment.

Present system is too fragmented, does not recognise different operating environments and special needs for heritage vessels. Jurisdictions do not treat similar boats the same and the whole survey process takes too long and is too expensive.

PS Ruby Wentworth, Wentworth, NSW

5.1.3. Variations in crew certification standards and vessel crewing requirements

Crew Certification

Each state and the NT operates separate crew certification systems based on crew competency standards specified in the USL Code sections 2 and 3, or Part D of the NSCV. However, the complexity of the legislative arrangements and the methods by which states have attempted to enact standards results in significant disparities between the jurisdictions. For example, New South Wales applies the 1984 version of Sections 2 and 3 of the USL Code with modifications and exemptions allowing the 1991 USL Code to operate. Queensland applies parts of sections 2 and 3 of the USL Code with modifications. Similarly, South Australia applies parts of those sections (but not the same sections as Queensland), the Northern Territory and Victoria apply sections 2 and 3 without modification, and Tasmania applies NSCV Part D, the most recent standards agreed to by all states and the NT. State or NT crew certification may also include conditions or limitations on their use that restrict the holder to be engaged on certain vessels that only operate in a specific area.

States/NT generally require Certificates of Recognition to be held by those whose certificate was issued by another state/NT. (Queensland does not require mariners to obtain a certificate of recognition if they hold 'open certificates'). This has many impacts, including:

- a financial impact on the individual, who may be required to hold multiple certificates if they work in more than one state;
- a financial impact on individual states/NT administration as a qualification system has to include certificates of recognition;
- a loss of employment or employment opportunities if the person is unable to obtain a certificate of recognition at short notice; and
- operating difficulties for ship owners if they wish to trade their ships interstate as they must ensure ship's officers have the required state/NT certificate or certificate of recognition.

At the national level, AMSA administers the qualification system for seafarers serving on international commercial vessels, which meets the standards established by the international convention on Standards of Training Certification and Watchkeeping 1978, as amended (STCW).

State or NT certificates do not generally satisfy the full range of competencies required to comply with the STCW. Due to the variance in educational standards set by state/NT administrations, AMSA will only accept certificates held by candidates that comply fully with the USL Code or NSCV part D as meeting the entry requirements for the STCW course. Hence candidates who have made the decision to obtain a restricted 'boutique' certificate (approximately 140 such certificates are issued across the states and NT), will find that they have difficulties progressing into the AMSA system.

To serve on an international commercial vessel (one that meets the Safety of Life at Sea (SOLAS) requirements) the minimum qualification is the STCW *Certificate of Safety Training* (CoST). The states/NT require a lesser standard and issue an *Elements of Shipboard Safety certificate* which is not STCW compliant. If a person holding a state/NT safety course wishes to serve on a SOLAS vessel they will have to complete the STCW CoST course. This again has a financial impact on the individual or company.

Difficulties in transferring certifications between the states/NT, or between states/NT and the Commonwealth, is problematic in light of the deteriorating trend in maritime skills availability[10].

As a class 4 skipper and a MED1 marine engineer with 22 years experience my personal agenda is for a career path for myself and all state ticket holders to cross over to AMSA tickets and for all AMSA tonnage tickets to be recognised overseas. I recently had my sea-time assessed by AMSA and for all my experience I will receive 21 months towards a mate >500 tonne certificate. I have since taken up a job as operations manager for a diving company while I wait for some form of inspiration and direction from the outcome of the proposed national system.

I hear numerous stories each year of skippers leaving the industry and earning big money in the mining industry driving trucks and such like occupations. This is an understandable move as the alternative marine career involves several months of unpaid study to progress from the MC4 level to either a MC3 or AMSA certificate. Most skippers looking to progress their qualifications are also reaching the age group of having a mortgage and/or a family to support.

Peter Lacey, Cairns

The Transport and Logistics Industry Skills Council (TLISC) identified problems with implementing a nationally consistent training program across jurisdictions.

TLISC has in consultation with industry parties – employers, unions and regulators, developed the Maritime Training Package. This package comprises detailed descriptions of the skills, knowledge and qualifications which are required within the Australian maritime industry. The package addresses both AMSA and State/Territory occupational regulations for seafarers. Accordingly, nationally consistent training is available throughout Australia.

Nationally consistent seafarer certification standards for near coastal operations are available via the USL Code and NSCV Part D. However, it has been demonstrated elsewhere (COAG Maritime Action Group 2008) that the manner in which these standards are interpreted and/or implemented varies considerably between jurisdictions. Whilst nationally consistent training is available at all levels and for all regulated maritime occupations, there are inconsistencies across jurisdictions in the certification issued to mariners. The integrity of a nationally consistent training system will best be maintained via a single maritime regulatory system.

Transport and Logistics Industry Skills Council, Victoria

[10] House of Representatives Standing Committee on Infrastructure, Transport, Regional Development and Local Government: *Inquiry into Coastal shipping policy and regulation, 2008*

TLISC also noted duplication in compliance monitoring processes when delivering training across jurisdictions.

A provider of maritime training for certification purposes must be a Registered Training Organisation (RTO) within the Vocational Education and Training (VET) system, ie. registered with a State/Territory training authority, and registered with a maritime authority. Under mutual recognition VET system registration in several or all jurisdictions is available through a single application, and is subject to a single compliance monitoring process. Maritime training providers which operate in more than one State must seek separate registration with each Maritime regulatory authority, and also with AMSA where training for AMSA regulated occupations is to be provided.

Maritime RTOs are subject to multiple compliance monitoring: VET system compliance under the Australian Quality Training Framework (AQTF); and compliance with each Maritime regulator with which the RTO is registered. The compliance monitoring standards and systems vary between Maritime jurisdictions and are different from and to some extent duplicate AQTF requirements.

It is acknowledged that AMSA is in the process of establishing arrangements with State training authorities for cooperative compliance monitoring. However, audit procedures and instruments which consistently address both AQTF and maritime regulatory standards are yet to be established.

Transport and Logistics Industry Skills Council, Victoria

A concurrent process is underway (Review of Marine Orders Part 3) to streamline the state/NT and Commonwealth certificates so that all are consistent with the STCW convention and there is a more streamlined career path for seafarers from 'tinny to tanker'. Option 3 will significantly simplify this process by shifting administration for all maritime crew qualifications and certification under one administrator and rationalising state/NT certificates into one national stream.

The Tinny to Tanker approach was supported by the Commercial Vessel Association of NSW, although they noted disappointment with the timing of its implementation and encouraged its introduction as soon as possible.

The CVA agrees with the comments in the RIS in relation to crew certification. The CVA heartily endorses AMSA's proposed 'Tinny to Tanker' simplification and unification of the crewing standards.

Commercial Vessel Association of NSW

A single national system for qualification and certification was also supported by the large ship industry.

It is important with the demand for suitably qualified officers and seafarers increasing globally, for those engaged in smaller commercial vessels to have STCW Certification to meet the Safety of Life at Sea (SOLAS) requirements or for such qualification to be available via Registered Training Organisations. Difficulties in transferring an Australian qualification to an international one should be easily resolved by shifting the administration for all maritime crew qualifications to AMSA and having a national licensing system.

Shipping Australia Limited, Sydney

Other stakeholders commented on the complexity of the current system.

The tables in section 3 show that by far the great majority of Australian commercial vessels regulated by the States are operated within sheltered waters or very close to the coast. The competency standards required to operate these vessels need to be flexible enough to cover this range. The current USL/NSCV vessel length and area cut offs and the competency standards do not provide this flexibility and are the primary cause for the plethora of restricted or boutique qualifications. There are too many 'steps' Coxswain-Master for the small vessel mariner to graduate through, particularly if the aim is to graduate to STCW standards.

Mike Traynor, Maritime Trayning, Bellambi, NSW

We believe that crew qualifications are not complex at all – the failure of the jurisdictions to remove overlap and double dipping in relation to recognition of qualifications and licences may have made it confusing, costly and inefficient, but the qualifications themselves are not complex.

Maritime Union of Australia

Vessel Crewing Requirements

In relation to minimum vessel crewing requirements, New South Wales, Tasmania, Western Australia, the Northern Territory and Victoria generally base their requirements on sections 2 and 3 of the USL Code or Part D of the NSCV. However, the Northern Territory and Victoria assess each vessel's requirements and provide a determination of minimum crew for the vessel while the other states apply a 'deemed to satisfy' minimum crewing requirement. South Australia assesses each trading vessel's minimum crew and provides a determination for the vessel with a 'deemed to satisfy' crewing requirement applying to fishing vessels. Queensland does not do either of the above, but obliges Masters and owners to assess the crew members required to operate the vessel, comply with emergency safety procedures, fulfil OH&S obligations and comply with the vessel's safety management plan. The differences in minimum crewing standards has the potential to cause ship owners concern as the minimum crewing considered acceptable and safe in one state may not be acceptable in another state. Similar ships operating in two different states may have different minimum crewing requirements. When commercial ships undertake inter-state voyages they come under the jurisdiction of AMSA. AMSA requires smaller vessels of less than 500GT to comply with NSCV, Part D, Chapter 2 and vessels of 500 GT or greater to propose an adequate manning for consideration in line with IMO Resolution 890(21) as amended.

Table 3 in Appendix C describes the state and NT variations.

A classic example of the negative impact of the inconsistencies between jurisdictions in relation to crewing and certification can be found on Sydney Harbour. The tourism cruise vessel, Sydney 2000, requires a Class 2 engineer under NSW maritime guidelines. However, AMSA will not recognise the sea-time that an engineer accrues on this vessel against their ticket.

Commercial Vessel Association of NSW

5.1.4. Variations in compliance monitoring, investigation of offences and enforcement

Vessels are currently subject to random and risk-based inspections with the extent and frequency varying between the jurisdictions. The random inspections are carried out by a range of state and NT government agencies, for example, Water Police. The nature, level and extent of work undertaken by each jurisdiction in regards to random sampling of compliance appear to vary significantly. Even

where the regulatory requirements are the same (or essentially similar), there are considerable differences in the interpretation and application of those requirements.

The random inspection compliance monitoring regimes utilised in some jurisdictions burden vessels in low-risk groups and/or with good compliance histories. If the probability of being randomly inspected is the same for all vessels – regardless of history it does not create incentive for vessels to improve compliance and reduce inspection burden. Nor does it target the high risk vessels. Resources are not targeted towards those vessels which have the highest probability of being below standard. A risk-based compliance monitoring system that devotes more resources to random inspections of vessels that fall under a high risk, and fewer random inspections of vessels in low risk categories, will improve incentives for vessel owners and safety outcomes for all. The exception is Queensland's compliance monitoring system which is based on a more modern approach to risk-based management than other jurisdictions, which rely more on annual periodic survey for compliance.

These differences result in an inefficient compliance monitoring program across Australia which is not based on a sophisticated risk system drawing on all available national data.

5.2. ECONOMIC IMPLICATIONS

One of the main objectives identified by COAG in pursuing national reform is to foster productivity growth. The state/NT inconsistencies do not meet best regulatory practice which means that vessels operating between jurisdictions are likely to be incurring higher costs than they would under a national system under Options 2 and 3.. Further, they also place a cost burden on those who wish to supply a national market for labour, equipment or vessels.

"We (Tasmanian Seafoods) operate in five different jurisdictions and have to know and refer to several different Marine Acts for each of these areas. It is a waste of resources for our business administratively. A more consistent approach needs to be taken."

Grant Leeworthy, Tasmanian Seafoods Pty Ltd, VIC

This section discusses the economic implications of the inconsistencies. The discussion is qualitative, but where possible the costs of the inconsistencies are estimated in the cost-benefit analysis contained in Section 10.

5.2.1. Markets for labour

A change in the maritime workforce demographic and increased global demand for seafarers is resulting in a maritime skills shortage in Australia[11]. The number of younger deck officers presently holding Chief Mates' Certificates of Competency will be insufficient to replace the current holders of Masters' Certificates of Competency when they eventually retire. The majority of Engineer Officers holding superior certification are also close to retirement age.

Australian seagoing personnel are also required to fill shore-based occupations such as fleet management, marine surveying, government service, ship building, pilotage, port management and education and training. The supply, education and training of all crew, coupled with the necessary seagoing experience, is an important aspect of maintaining an adequate pool of knowledge to be drawn on in future years for the prosperity of Australia's maritime industry.

An important factor in improving the availability of maritime skills to industry is to enhance the ability of seafarers to progress from entry-level state/NT issued certificates for domestic vessel operations to the highest certificates provided under the STCW Convention for international vessel operations.

The current division of responsibilities, and the consequent two tier system that has developed in regard to crew certificates between the Commonwealth and the states and NT, is impeding the flow of qualified personnel from moving between vessels under state jurisdiction and those under Commonwealth jurisdiction.

The Transport and Logistics Industry Skills Council (TLISC) agreed this problem was causing inefficiencies in the industry.

The RIS does acknowledge that the requirement for seafarers to obtain occupational certification across multiple maritime jurisdictions is a significant barrier to industry efficiency and to freedom of trade on a national basis. Each registration/recognition application requires additional fees to be paid.

Transport and Logistics Industry Skills Council, Victoria

[11] House of Representatives Standing Committee on Infrastructure, Transport, Regional Development and Local Government: *Inquiry into Coastal shipping policy and regulation, 2008*

The TLISC also noted:

> *The proposed regulatory changes can remove the requirement for seafarers to obtain separate occupational certification to operate when moving between jurisdictions. The parallel development of the 'T2T' training and certification system for seafarers can support the full implementation of the single jurisdiction proposal.*
>
> Transport and Logistics Industry Skills Council, Victoria

> *"Having moved back from overseas last year, it quickly became obvious and very frustrating that Australia's system (not to mention each state) was operating on a different system to the rest of the world. Australians who want to work overseas and one day return to work in Australia in this industry, proves difficult as far as transferring tickets. This is restricting employment and skills within the local marine industry."*
>
> Development corporation representative, QLD

There is also evidence that operators who seek to operate within one jurisdiction for part of a year and then move to another jurisdiction on a seasonal basis may be hindered from doing so by the fact that their certificates may not be recognised by the new jurisdiction (which may require recertification) or are recognised, but only at a cost. Overall, a mobile workforce is more likely to be able to meet demand for labour in remote locations and for seasonal employment.

As mentioned above, the Commonwealth, states and NT are working together to streamline career progression as a concurrent process. Progress made in this area would support a single national system under Options 2 and 3.

It should be noted that during public consultations, particularly the second round, the area of qualifications and crew certification was the most frequently mentioned and discussed issue.

5.2.2. Markets for vessels and equipment

Vessel manufacturers must comply with a range of jurisdictional regulations, and in many cases this prevents them from marketing the same product to customers for use in different jurisdictions. There is also duplication in that a manufacturer may have to prove compliance more than once to operate within more than one jurisdiction. Quantifying the benefits of increased competitiveness is difficult, but some examples illustrate the benefits it is likely to deliver. For example, a single national system under Options 2 and 3 is likely to make it easier for a manufacturer based in one state to sell the same product in all states and the NT without having to modify the product or carry multiple lines of the same product to meet various requirements.

Inconsistencies can also influence the size of boatbuilding and shipbuilding industries in different jurisdictions reflecting the relative strictness or leniency of regulatory requirements rather than efficiency considerations. Overall, a single set of safety regulations would support a national market and encourage the provision of more competitive services to Australia's commercial vessels.

As mentioned, a vessel built in a particular jurisdiction for use elsewhere may need to be certified during construction by a surveyor from the receiving jurisdiction, with corresponding costs for the surveyor's time and travel expenses.

These inconsistencies also affect the second-hand market for commercial vessels by restricting the possible buyers to those within the jurisdiction because of difficulties in registering older vessels from other jurisdictions.

"Seawind believes that there would be huge savings in administration if a national approach were taken. On numerous occasions our production team have had to work through the sometimes slow process of having an exemption granted in NSW only to have to go through the same justification of exemption on arrival in the destination state. We have even had them rejected in the destination state which can cause huge costs for the builders in having to engage contractors to carry out fixes on our behalf.

However, the real savings to be had here is in the information. So often builders see boats on the water in survey which they believe do not comply with regulation and are left asking the question how did that get into survey? The current lack of transparency means that there is often a huge amount of work that goes into research, justification and approval/rejection of exemptions done by both the builder and importantly by the regulator. Much of this work has already been carried out by other builders & regulatory bodies but the information is simply not available for others to use and hence the work load is duplicated."

Mike Rees, Seawind Catamarans, NSW

Private industry involved in survey and design services noted in a written submission:

To have the flexibility of being able to move boats around the country without needing to deal with each individual state each with their own requirements would be a huge advantage.

Oceanic Yacht Design, Queensland

Data on the specific economic impact of these inconsistencies is difficult to obtain and in most cases, does not exist. However, anecdotally, a number of stakeholders during public meetings noted that the inconsistencies are a significant barrier to trade.

Many of our members wish to operate in Sydney or NSW during one part of the year and Qld during another part of the year. Most have simply given up due to the extraordinary amount of time they have had to spend with each jurisdiction (predominantly NSW although this really isn't the fault of NSW but more the fault of the inconsistencies in the system) to gain recognition for survey and crewing. As a result most operators do not even contemplate this kind of inter-operability. For this reason we believe that the RIS may understate the number of vessels which could potentially move between states should the system be simplified.

Commercial Vessel Association of NSW

However one stakeholder noted that in regard to the size of boat and ship building industries, these inconsistencies are not the main determinant.

It may be written that inconsistencies 'can' affect local shipbuilding but simple observation shows this is not the case – Tasmania and Western Australia both have relative strict Authorities and, per capita, active shipbuilding industries.

'The determining factor, in my experience, is the accessibility of the Authority officers with decision-making power and the ability of the Authority to respond in a commercially time-efficient matter. Certainly, owners and consultants can help the approval process by giving time for decisions to be

made but there must also be a preparedness to action on the other side of the desk and that does not always appear to be in force, particularly in the case of 'difficult' or 'innovative' proposals.'

'I am concerned that a single national Authority may be more difficult to access, slower to respond and less familiar with the specific requirements and vessel arrangements of local operators such as aquaculturalists.'

Murray Isles, Isles Design, Tasmania

5.3. CONSISTENCY WITH NATIONAL SAFETY STANDARDS

A single national system under Options 2 and 3 has the potential to deliver consistency in national safety standards and improve safety outcomes over time if some crew are currently exposed to greater risks than they would be under a single national system. The national regulator would continue to adopt and implement the most recent updated standards (this is likely to occur in a more timely manner under Option 3 than Option 2). It is assumed that these offer a greater level of safety to operators, crew and the public, compared with the level of safety provided in some jurisdictions which have not implemented the most recent standards – such that new vessels are not being built to modern (and improved) standards.

As a general observation, the most recent standards have been designed to apply safety levels similar to current levels in a more effective and efficient manner by clarifying requirements and eliminating the need to apply surveyor discretion and exemptions to provide practical solutions. However, there are also parts of the NSCV that incorporate increased community expectations reflected by changes in the relevant international standards to address specific safety issues (for example, fast craft, the increasing mass of persons, dangerous goods, damage stability of roll-on/roll-off and other passenger vessels). Delays in implementing the new standards will delay gaining the efficiency benefits of the new standards as well as the protections afforded by the new standards in those parts where safety standards have risen.

In addition, it is expected that consistency and safety would be improved through the development of a more comprehensive risk-based survey and compliance monitoring management system, based on national data and incident reporting. In addition, the inclusion of vessels currently exempt from standards is also expected to improve safety in the long-term.

I believe there is a general regulatory failure among the state based systems at the moment, the strongest evidence of this is the death and injury rate in the maritime and fishing industries, and that Option 3 offers the best chance of rectifying this.

Jeff Watts, Australian Maritime College, TAS

5.3.1. Lack of a national database of commercial vessels

A comprehensive national database of domestic commercial vessels operating in Australian waters does not exist. The databases currently in place in the jurisdictions are generally very old with many in need of replacement or upgrade. At least three jurisdictions are reportedly putting upgrades of their systems on hold, pending final decisions on national reform. One jurisdiction still has a paper based database. The lack of a national database of commercial vessels means that the history of vessels and operators is not incorporated into compliance monitoring or available to other jurisdictions when vessels and crews move. This means that safety levels may be less than intended by existing legislation.

Separate jurisdictional data records (itself an unnecessary administrative duplication) have safety implications when essential information, such as vessel modifications, is not shared as a matter of course between jurisdictions. Inability to readily access the details of a vessel's history and the background such as operating conditions and the acceptance of alternative arrangements is inconsistent with a quality managed system of marine administration.

5.3.2. Commercial maritime fatalities since 1989

The annual number of fatalities in state and territory commercial maritime activities has fallen over the last two decades, while for Australian flagged international commercial vessels there has not been a fatality since 1995. It is not clear from the information available what drives the difference between the rates of fatalities between the two sectors, although it is likely to be a combination of population size (50 compared to 23,000 vessels), activity, boat size, and safety regimes in the industries.

Over the period 1989 to 1992, there were 91 fatalities to persons involved in, or bystanders to, work-related fishing and maritime activities. The National Occupational Health and Safety Commission (NOHSC) (1999) reports that 55 people involved in the fishing industry died in work-related incidents over the four-year period. The figures translate to averages over the period of 23 fatalities per year for all commercial maritime activities and about 14 fatalities per year for commercial fishers (Figure 6).

From 1992 to 1998, there were 421 boating accidents registered and 15 per cent of fatalities involved people working for income. The average annual fatality rate of those engaged in paid employment in the maritime industry over the period was nine (NMSC 2004). This is less than 40 per cent of the average number of fatalities over the period 1989 to 1992.

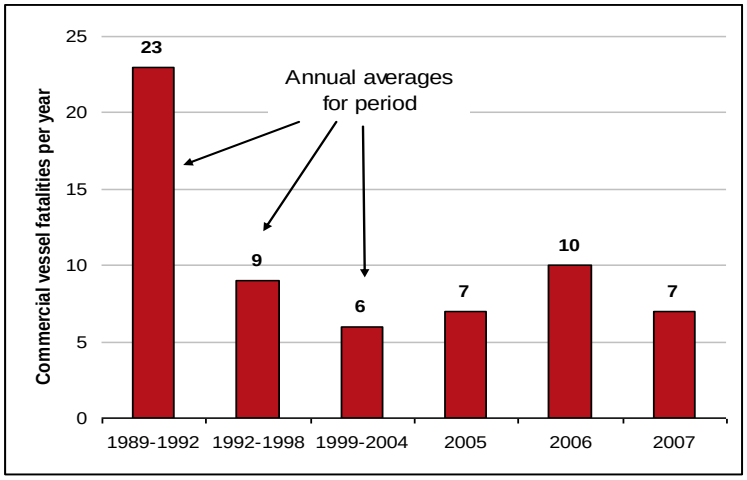
When looking at the relative magnitude of recreational versus commercial vessel incidents, it should be remembered that recreational boating is largely considered a voluntary risk, while the commercial section is largely an involuntary risk. Tolerable levels of voluntary risk may be significantly higher than for involuntary risk.

For the above reasons, the commercial vessel sector is much more regulated than the recreational vessel sector. The commercial vessel sector comprises people for which the vessel is a place of work, plus large numbers of persons who enter a commercial transaction with the operator with the expectation that there are appropriate protections for their safety that are consistent with their perceptions of involuntary risk.

Over the period 1999 to 2004, 23 fatal incidents pertained to class 3 vessels, three incidents to class 1 vessels and three incidents to class 2 vessels. Remaining incidents pertained to hire and drive vessels or were of unknown class (NMSC 2008a). All those who died were not wearing a personal flotation device.

Fatalities in commercial maritime activities over the years 2005, 2006 and 2007 were 7, 10 and 7 respectively (NMSC 2008). There were 34 serious injuries to commercial mariners in 2007.

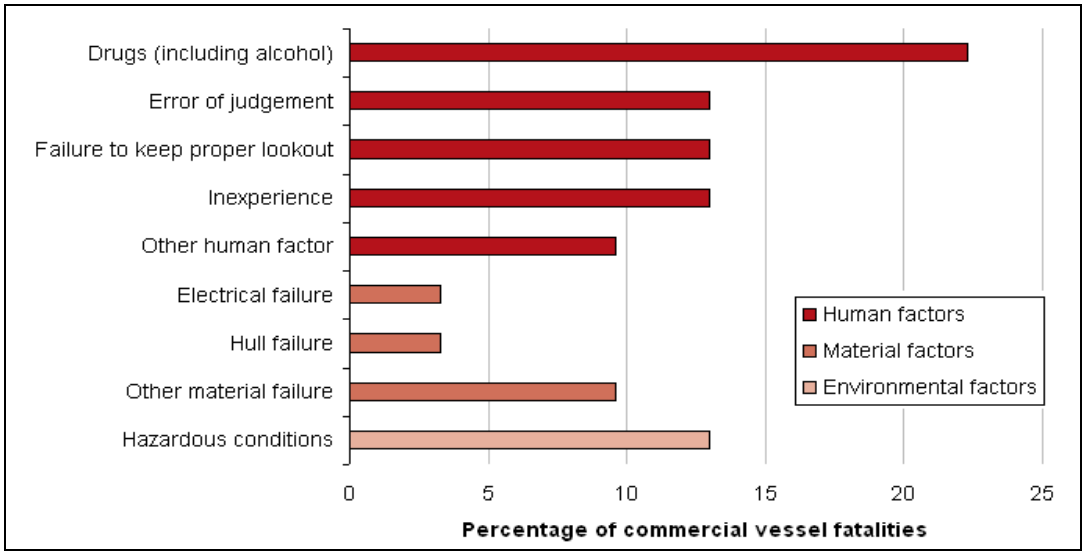
Figure 6. Annual commercial vessel fatalities



Initial contributing factors

Alcohol and other drugs were the initial contributing factor in just over 20 per cent of all fatal incidents involving commercial vessel fatalities over the period 1999 to 2004 (Figure 7). Errors of judgement, failures to keep a proper lookout and inexperience were the initial contributing factor for another 39 per cent of fatalities. Overall, human factors were the initial contributing factor in about 71 per cent of all fatal incidents. Hazardous weather conditions were responsible for a further 13 per cent. Problems with the vessel itself were the initial contributing factor in about 16 per cent of all fatal incidents.

Figure 7. Initial contributing factor to commercial vessel fatalities, 1999-2004

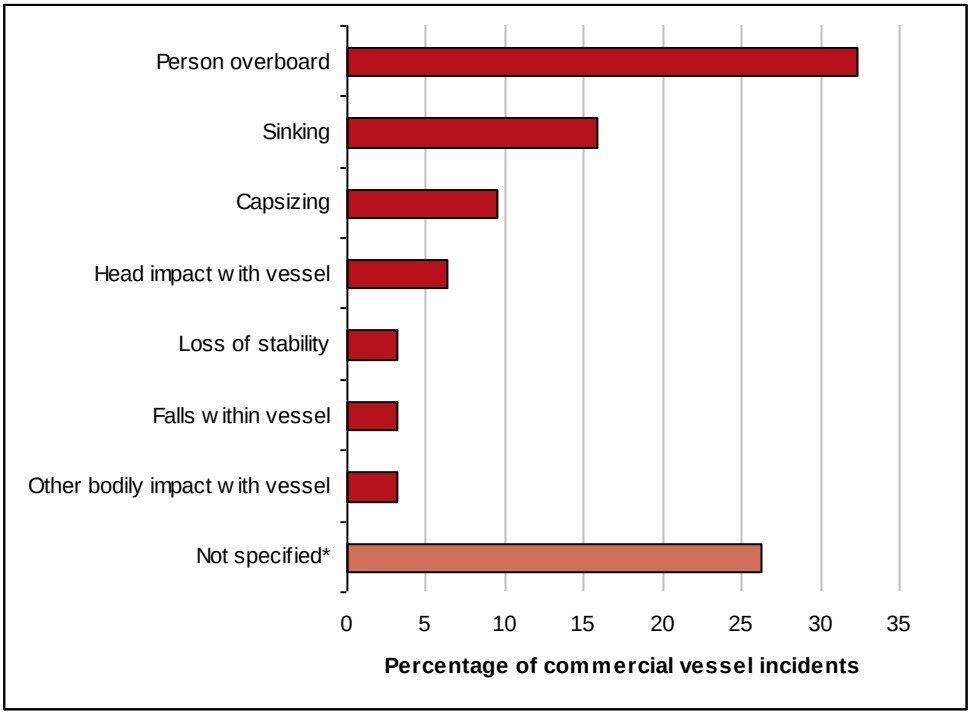


Source: NSMC 2008a

5.3.2.1 Initial incident events

Losing a person overboard was the initial incident event leading to fatalities on commercial vessels in almost one-third of cases over the period 1999 to 2004. Sinking and capsizing of the vessel was the initial incident in a further 25 per cent of fatalities. Falls and impacts of parts of the body with the vessel made up 13 per cent.

Figure 8. Initial incident event leading to fatalities on commercial vessels, 1999-2004



* Not specified in NMSC (2008a)

Source: NSMC 2008a.

6. THE OBJECTIVES OF MARITIME REGULATION REFORM

The proposed reforms to maritime safety regulation respond to COAG's March 2008 reform agenda which aims to reduce the costs of regulation and enhance productivity and workforce mobility in areas of Commonwealth and state/territory responsibility. Maritime safety was one of 27 areas identified for reform. In July 2008, COAG acknowledged that Australia's overlapping and inconsistent regulations impede productivity growth and that, without change, Australia's future living standards would be compromised, the competitiveness of the economy reduced, and Australia's ability to meet the challenges posed by an ageing population diminished and ability to respond to business and social opportunities hampered. The reforms are aimed at reducing the costs for businesses and workers of operating across state and territory borders.

In regard to the maritime sector, reform aims to enable the operation of an efficient national market through the seamless transfer of labour and vessels between the jurisdictions. The ability of a national regulator to swiftly implement updated or new safety standards, and enable their application to Australia's entire commercial vessel fleet in a consistent and fair manner would deliver significant safety improvements and decreased risk to the public, vessel owners, operators and crew.

In addition reform has the potential to deliver:

- Reduced complexity for vessel owners, operators and suppliers on the requirements applying to design, construction, equipment, operation and qualifications/crew certification across Australia;
- Reduced costs in the long term by nationally consistent administration of national safety regulation; and
- A national register of domestic commercial vessels linking ownership, vessel details, inspection and survey history, incidents and operators to provide better data as a basis for improved survey and compliance monitoring leading to improved safety levels with more efficient use of resources.

A national administration model is being assessed under Option 3 as part of this RIS to address concerns that if the states continue to implement and administer the NSCV separately, inconsistencies will become more distortive. This is partly based on the history of the implementation and administration of the USL from the late 1970s.

I agree with the conclusions in the last para of Section 6. Even at this relatively early stage in the introduction of the NSCV, the states are creating inconsistencies in their piecemeal adoption and application of sections of the NSCV. Unless this is stopped by the introduction of a single administrative authority all the efforts being put into developing the NSCV will be wasted. The 1997 IGA has not delivered and any further effort and expense other than on the introduction of a single administrative authority is a further waste.

Graham Taylor, Taylortech, NSW

The objective of a national system is admirable and must be explored to the max.

Mike Traynor, Maritime Training, Bellambi, NSW

6.1. EXISTING CONCURRENT PROCESSES

While COAG's 2008 reform agenda was the catalyst for this current exploration of options to achieve national reform of maritime safety regulation, the Commonwealth, states and the NT governments have been attempting to achieve national consistency in safety legislation and administration since signing the 1997 Inter-Governmental Agreement (IGA). The slow progress under this IGA was a key reason for the Australian Transport Council's endorsement of a single national approach to maritime legislation and its request to examine options to achieve reform.

Concurrent processes are attempting to address some of the inconsistencies between the jurisdictions, and to achieve what the 1997 IGA has not yet delivered. These separate processes are evidence of the Commonwealth, states and NT recognition that more needs to be done to create a nationally consistent system.

The inconsistencies discussed in Section 5 have been recognised for some time. A single national system (under Options 2 and 3) would negate the need for these independent processes by resolving the cause of the problem. Furthermore, it would ensure that policy and operational decisions were being made based on a holistic view of the needs of the Australian domestic maritime industry.

6.1.1. Crew certification

A COAG skills recognition steering committee is currently developing a mutual recognition determination under the *Mutual Recognition Act 1992* that will allow certain certificates, restricted and unrestricted, to be used freely throughout Australia. (This will not cover all certificates as some were seen as too difficult to include at this time.) This process will result in the mutual recognition by each jurisdiction of each other's marine certificates. Marine certificates have been mapped, and equivalences agreed, enabling movement between jurisdictions. It is expected that this mutual recognition determination will be endorsed by COAG in 2009.

However, to ensure the long term success of skills recognition across jurisdictions, as new certificates are introduced into the various jurisdictions they will also need to be incorporated

National Licensing System

At the 3 July 2008 meeting COAG agreed to develop a national licensing system to remove inconsistencies across state and territory borders and allow for a more mobile workforce, including maritime occupations. The idea behind the system is that once a licence is issued the licence holder will be able to use the licence to work anywhere in Australia without additional paperwork or cost.

The system was endorsed by COAG under a National Partnership Agreement (NPA) between jurisdictions in 2008. The NPA takes into consideration a range of licensing issues, including finance, revenue and jurisdiction-specific aspects of licensing. Extensive additional work on the implementation of the national licensing system for each occupation will be conducted. This process would be redundant for maritime occupations if Option 2 or 3 is implemented.

Career progression between the domestic and international fleet

The Commonwealth, states and the NT are participating in a process to explore options to streamline the state/NT and Commonwealth seafarer certificate structure so that all are consistent with the STCW Convention. This would enable an easier transition for seafarers from the domestic fleet to international trading vessels. Currently, there is not an incremental progression. This process is

known as the 'tinny to tanker' approach. Options 2 and 3 are likely to significantly simplify and facilitate this process.

6.1.2. Mutual recognition of certificates of survey

Some jurisdictions recognise certificates of survey issued in other jurisdictions, and have their own certificates recognised in return, although they do have to go through an administrative procedure to apply for recognition. The process of mutual recognition means that many vessels do not need to be resurveyed at the time they are transferred.

However, there remain instances where a certificate or survey will not be recognised by the receiving jurisdiction and requires assessment or re-survey. This most often occurs when there is an exemption or restriction that has no equivalent provision in the receiving jurisdiction. Many jurisdictions reported problems with receiving Queensland vessels given that periodic survey is not required by that state. Queensland now has a provision to require full survey when vessels leave the state.

In relation to crew certification and vessel survey registration and safety standards, all mutual recognition processes must be removed to be replaced with one system which will permit inter-operability between states and indeed in relation to crew employment overseas.

Commercial Vessel Association of NSW

Other, stakeholders also were concerned with the effectiveness of concurrent processes.

It is painfully slow, given the work that has already been achieved by the National Marine Safety Committee. The 'Tinny to Tanker' model has not been put up for public discussion and needs to be if the reforms that the RIS suggests are to be debated adequately.

Mike Traynor, Maritime Trayning, Bellambi, NSW

The Tinny to Tanker model (Review of Marine Orders Part 3) by AMSA was presented and discussed at all the second round public consultations on the Consultation RIS. Further stakeholder consultations will be held as part of the Marine Orders review process. Any submissions received in response to this RIS which are also related to the Review will be referred to that Review and stakeholders advised accordingly.

7. PROPOSED OPTIONS TO ACHIEVE A SINGLE NATIONAL SYSTEM

In summary, the three options to be considered are:

1. status quo
2. an applied laws approach whereby legislation would be approved by the Australian Transport Council, passed in one jurisdiction and adopted by reference in other jurisdictions
3. the application of the Commonwealth *Navigation Act 1912* is broadened.

These options relate only to the aspects of the legislative model (state/NT jurisdiction compared with a national jurisdiction) and its administrative structure and delivery. It does not affect the agreed national standards (USL or NSCV).

Option 1, Status Quo, is to maintain the current responsibilities of states and territories with respect to commercial maritime activities that currently fall outside the purview of the Commonwealth. The processes of mutual recognition and incremental progress on a single issues basis would continue.

Option 2 is for states and territories to refer their own legislation to the model legislation of another state or territory. This would have the effect of ensuring that all states and territories were using the same legislation, and – if standards are referred to in the referenced legislation – that all states and territories adopt the same standards. The states/NT would continue to administer and enforce the legislation, and to continue delivery of services. A new national agency would be responsible for developing standards and oversighting national consistency.

Option 3 is to broaden the *Navigation Act 1912* whereby the Commonwealth assumes responsibility for safety regulation of all commercial vessels, as well as the development of national standards. AMSA would be the national regulator. Three possible models for service delivery are set out in Section 7.5.

Further discussion on the options is below. Table 14 at the end of this section summarises and compares their key elements.

7.1. COMMON ELEMENTS

7.1.1. Transition

Under Options 2 and 3, transition to a national system will be gradual, from 1 July 2011. It is likely that reform will be progressively introduced with the transition stage estimated to be from July 2011 to June 2014 (Years 1-3). However, it is expected that full implementation will be achievable by the beginning of year 4 (July 2014) of the national system (possibly earlier under Option 2). Under both options, the timetable for transition, including the possible short-term involvement of the state/NT maritime agencies (under Option 3) will be described in a National Partnership Agreement (NPA) to be developed by the end of 2009.

This transition period was supported by industry, but also encouraged to be shorter if possible.

> *We note that transition to a national system will be gradual, from 1 July 2011 and that it is likely that full implementation will be achievable by July 2014. We would urge all parties to fast-track the process so that the benefits of the system can be enjoyed by the industry much sooner.*
>
> Shipping Australia Limited, Sydney, NSW

Industry supported national reform but also noted that the transition and implementation needed to be handled carefully.

A national licensing and survey system will simplify operations and reduce the costs for operators who regularly work interstate between numerous jurisdictions. The implementation will have to be handled carefully to ensure that current qualifications and industry exemptions are maintained so that seafarers and operators are able to continue their current occupations/operations.

Travis Clarke, Quicksilver Connections, Port Douglas, Queensland

7.1.2. Minimal impact on existing commercial vessels

While all commercial vessels will be subject to the national legislation from the proposed start date of 1 July 2011, the NSCV and USL/NSCV standards and requirements which currently apply to existing commercial vessels will continue to apply following the introduction of the national system under Options 2 or 3. This includes their existing periodic survey schedule. However, minimal safety assessments may need to be conducted on vessels previously exempted from survey (excluding registered vessels in QLD) to enable national registration. In the longer term, these would also be subject to risk-based survey and compliance monitoring, consistent with the system to be developed and implemented in Year 4.

New or upgraded vessels from 1 July 2011 will be subject to the latest version of nationally agreed safety systems, expected to be a completed NSCV, under the national legislation.

There was support from stakeholders to include exempted vessels in the national scheme.

Our members are of the firm belief that commercial vessels that are currently exempted from compliance with standards should need to be registered under the national scheme, and those vessels must be mandated to undertake a minimal safety assessment to ensure compliance with safety standards. There is little doubt that this will lead to beneficial safety outcomes. Navigational safety is of special concern to our members.

Shipping Australia Limited, Sydney, NSW

However some stakeholders were also concerned about the individual costs to businesses.

Moreton Bay Seafood Industry Association supports, in principle, a framework which requires all commercial vessels to be registered as a means to better monitor and support the sector as a whole. The anticipated costs to establish and maintain commercial vessel registration are relatively low, however, there is concern that a registration and survey scheme will be too costly and impact financial viability of local industry who are currently exempt.

Moreton Bay Seafood Industry Association, Hamilton, Queensland

Specifically in relation to charges we note that the anticipated set up costs for the expanded/new regulator are in the order of $31.75 million dollars. It is unclear as to whether the set up costs will be recovered from industry? If they are to be recovered from industry, and as anticipated the proposed system is phased in between 2011 and 2014 will industry still be paying for surveys etc. as per current payment schedules during the transition period?

Tasmanian Seafood Industry Council

These costs will be further detailed in the Cost Recovery Impact Statement to be completed by early 2010 and will include opportunity for further stakeholder comment. The issue of the funding of establishment costs for the regulator is still to be finalised.

7.1.3. Compliance monitoring

Survey and compliance monitoring under Options 2 and 3 will ensure that existing vessels meet their existing safety requirements, and that administration of these requirements will be consistently applied across all jurisdictions. It is anticipated that a national risk-based survey and compliance monitoring system would be in place for all vessels by full implementation. The aim of this system would be to ensure that low risk vessels are subject to a less frequent survey schedule (for example, once every three years) and that high risk vessels would be subject to a relatively more regular survey schedule (for example, an annual survey, although compliant high-risk vessels may be subject to shorter, and therefore cheaper, surveys). The difference between Options 2 and 3 in this instance, is that under 2, compliance monitoring would be delivered only by the state/NT agencies, and under 3, it would be delivered by AMSA and possibly state/NT agencies.

A fishing industry representative indicated concern regarding additional compliance costs on currently exempt vessels.

> *Queensland currently operates under a risk-based scheme which sees many local industry vessels exempt from registration and national standards. There is concern that these vessels would be ranked as 'low risk' under a national scheme yet required to undergo regular periodic surveys anyway, placing additional financial stress to their businesses.*
>
> Moreton Bay Seafood Industry Association, Hamilton, Queensland

It is likely that these currently exempt vessels would be categorised after an initial safety assessment. However, this would be determined on a case-by-case basis. These vessels would also be part of the risk-based compliance monitoring scheme, planned to be introduced in 2014. The detail of the requirements under this risk-based system would be developed during the transition period (2011-2014) and would include stakeholder consultation.

A submission was received that highlighted the challenges from an enforcement perspective of vessels that undertake commercial vessel operations predominantly but have infrequent or occasional use for recreational purposes. The management or treatment of this infrequent vessel usage will need to be considered when addressing the definition of "commercial vessel" recognising the problems presented by vessels that change their character from voyage to voyage. The definition will be a matter for negotiation between the Commonwealth and States/NT as part of the IGA process due to its impact on the division of jurisdictional responsibilities.

7.1.4. Funding

Funding options are not directly addressed in this Consultation RIS. Commonwealth, state and NT governments have yet to decide on the funding arrangements for the proposed reforms.

Should COAG approve the recommendation of the final RIS, a Cost Recovery Impact Statement will be completed for the consideration of governments and this will include details of proposed funding

to support the preferred option and the impacts on industry of different funding options. The Cost Recovery Impact Statement will also allow stakeholder input and comment.

Industry indicated interest in being involved in the CRIS process.

We would like to have the opportunity to comment on the Cost Recovery Impact Statement (CRIS) when it is made available. SAL is of the firm view that funding and levies for the two sectors (the current vessels and the new entrants) must be kept totally separate. Costs for both sectors must be transparent.

Shipping Australia Limited, Sydney, NSW

Under a national system (Option 3), AMSA has indicated that funding and operating costs for delivery of services to the large international shipping sector and the small vessel sector will be separate and transparent.

7.2. OPTION 1: STATUS QUO

Under this option the states and the NT continue to develop and review national standards under the terms of the 1997 IGA. The states and the NT remain responsible for implementing, administering and enforcing nationally agreed standards through existing state/NT based legislation and associated instruments. The Commonwealth would continue to regulate vessels subject to the *Navigation Act 1912*. The various concurrent processes aimed at expanding mutual recognition of crew certificates would continue. These were discussed in Chapter 0.

The current activities under the status quo option as described in the 1997 IGA aim to result in uniform or consistent marine safety legislation and operational practices throughout Australia, by ensuring that:

- standards are established, adopted and implemented in a timely and consistent or uniform manner;
- legislation is made in a timely and consistent or uniform manner;
- legislation is administered consistently to achieve an agreed standard of safety;
- amendments are promptly and consistently made;
- there is a minimum of procedural differences in administration throughout Australia;
- there is mutual recognition of each other's administration of marine safety; and
- charging and cost recovery regimes maximise efficiency in administration and minimise the total cost burden on the community.

However, the evolution of significant differences between state, NT and Commonwealth legislative and administrative frameworks make the achievement of these goals extremely difficult and slow at best, and likely to be implemented at different times and in a non-uniform manner based on previous history and current record.

National implementation of the most recently agreed national standards has to date been achieved only through amendments to the USL Code (to create the combined USL/NSCV Code). Only one jurisdiction has adopted the NSCV in full (Tasmania). While the combined USL/NSCV is successful in that it has resulted in the implementation of the NSCV in lieu of the USL Code, it has not resulted in the consistent application of the NSCV. Like the USL Code, the NSCV has been applied to different vessel types in different jurisdictions.

As discussed in Section 5, there is a concern that if the states continue to implement and administer the NSCV separately, inconsistencies will remain and grow in the same way as occurred with the USL Code.

During public consultations, some stakeholders supported this option, and suggested that a more consistent approach could be achieved through reinvigorating this existing agreement.

"….while our regulatory regime is not perfect its problems are being attended to and that wherever this exercise may lead, on what basis might be expected to produce a better or even just an equivalent outcome in a more timely manner? I put it very firmly that while I agree that there are niggling issues that arise when having to work between states and that the USL Code was never perfect I have never had any serious problem in getting a reasonable outcome. On a percentage scale the shortcomings of the USL Code and the present jurisdictional arrangements are in the low units, not

even into the tens. On what basis is there a proper and reasonable belief that interrupting the current arrangements including those to address interstate inconsistencies will produce a better outcome and in a more timely fashion than the present systems with its own inbuilt mechanisms?"

Mike Seward, Chief Naval Architect, Seward Maritime, Tasmania

Approximately eleven years has been spent in the development of a new standard – the NSCV. Surely all we need is for the current state regulators – in Victoria's case, MSV, to administer the new standard. As this Standard is much more current than the outdated USL code, and more innovative than the old code it should be possible for all states to adhere to this standard without making their own interpretations and variations which has happened with the USL code…

. ACE fishing

I think a sufficient approach would be for the existing state and territory Authorities to be reminded of their commitment, through their participation in the NMSC, to the NSCV as a single and uniform standard for Australian commercial small vessels.

Murray Isles, Isles Design, Tasmania

Another stakeholder also queried whether a consistent set of rules would achieve a national system noting that surveyors would interpret them differently. They supported working within the current structure to get a better outcome.

Several stakeholders indicated they did not believe uniformity and consistency could, or had been, achieved under the status quo.

We do not believe such can be achieved with the existing systems.

PS Ruby Wentworth, Wentworth, NSW

The efforts of the National Marine Safety Committee (NMSC) in obtaining agreement on national standards despite NMSC's best efforts have not in our view resulted in consistent legislation in each State, with the result that the industry has not been the beneficiary of any reduced costs, in complying with varying State legislation of over 50 Acts and legislative instruments.

Shipping Australia Limited, Sydney, NSW

National consistency of seafarer certification could be obtained through the current system, subject to agreement by all jurisdictions with regard to training and certification standards and compliance monitoring. AMSA is pursuing the former via the 'T2T' approach however the risk is in the interim proposal to allow the current state/territory system to operate in parallel.

It is feasible that each jurisdiction could manage certification and compliance against a single national system. However recent evidence (COAG maritime Action Group 2008) is that this is unlikely to be achieved in practice.

Transport and Logistics Industry Skills Council, Victoria

This option does not work. It might be appropriate to use it as a baseline on which to assess other options but clearly it is not an option going forward. The USL was developed in 1979 to overcome an even worse situation where states and territory were writing their own rules. The states and territory by their individual approach have compromised what was the goal of the USL Code - uniformity.

They have continued to hamper the efforts being made to develop a new NSCV. After 30 years it is time to fix the fundamental problem, namely the administration of marine safety by 7 states and territory. I accept that there maybe some existing companies and individuals who are prepared to tolerate the shortcomings of the existing regime to avoid change. But such attitudes must not be allowed to stand in the way of this reform.

Graham Taylor, Taylortech, NSW

No, uniformity cannot be achieved through the current system. It is too easy for states to opt out. AMSA must solely control standards.

Commercial Vessel Association of NSW

7.3. OPTION 2: AN APPLIED LAWS APPROACH - LEGISLATION PASSED IN ONE JURISDICTION AND ADOPTED BY REFERENCE IN OTHER JURISDICTIONS

In the first round Consultation RIS (September 2008), this option included the possibility of establishing a new national body to oversight the national legislation. It noted it would be empowered to determine the national standards for vessels currently subject to state/NT legislation, and responsibility for operational delivery would rest with the states and the NT. A new national body would develop standards for adoption in template legislation enacted by one jurisdiction that could be picked up and implemented by other jurisdictions using an applied laws approach. The national body would not necessarily deliver services or enforce the legislation.

The advantages of this option over the status quo are that:

- duplication of effort in each jurisdiction to enact legislation is avoided;
- delays with enactment of new amendments in each jurisdiction is lessened as amendments to matters covered by the applied laws are automatically adopted; and
- national consistency is preserved longer as states/NT have less flexibility to legislate for particular local requirements.

The disadvantages with this option are:

- the scope of the standards and requirements applied in the template legislation is unlikely to capture all relevant commercial vessels due to the legislative complexity involved in such a task. This legislative complexity arises from the state/NT differences in implementation of vessel standards, ie the USL Code, Combined USL/NSCV Code or NSCV. An applied laws approach would work most effectively concerning vessel registration as well as construction, certification/survey requirements for new and upgraded vessels which could be subject to the one specified standard, ie NSCV, but such an approach would need to supplement the current co-operative model established under the 1997 IGA for pre-existing vessels;
- one state will carry of the burden of introducing and amending the template legislation;
- the states/NT are not bound and are open to misapply the applied laws in order to suit local interests; and
- the body vested with oversight of the national standards will be empowered to perform an advisory type role as opposed to a regulatory role.

The element of this option to establish a new oversighting body (ie a new body separate from AMSA) has not been supported by Australian Transport Ministers because it would maintain separate Commonwealth and state systems, would be complex and did not deliver clear advantages over the status quo.

I strongly support the work being done by the team working on the proposed single national system for maritime safety regulation. Option 2 is my choice.

John Ainsworth, Victoria

This option did not receive support from other stakeholders.

From the RIS, we understand Option 2 is effectively mirroring what we currently have, with the sole exception that AMSA would oversee and regulate the processes. By October 2009, the NMSC amendment list 7 will have been adopted nationwide by all jurisdictions, which effects full NSCV compliance. Under Option 2, it appears this will be the same outcome, but protracted until 2011 with AMSA controlling compliance. No interstate discrepancies will be resolved (easily), the states/Territory still have the mechanisms open to them to enact inconsistencies and we see no substantial benefit in the implementation of this option and quite possibly a negative benefit by the introduction of yet another tier of administrational bureaucracy.

Marine Surveyors Association

It should be noted that the completion of the final parts of the NSCV will not be delayed as a result of the introduction of a single national system under Options 2 or 3. Those processes will continue, with the aim of finalising the NSCV prior to the introduction of a national system in 2011.

This option offers no real improvement on the existing regime. It still relies on the states and territory to implement legislation once one state has prepared model legislation. Yet the reality is that the states and territory have failed for whatever reasons to achieve this goal in the past and are unlikely to achieve a satisfactory outcome this time round.

Graham Taylor, Taylortech, NSW

7.4. OPTION 3: BROADEN THE APPLICATION OF THE *NAVIGATION ACT 1912*

As it currently applies, the *Navigation Act 1912* essentially regulates larger seagoing trading vessels undertaking interstate and overseas voyages and which are generally subject to international convention standards such as the Safety of Life at Sea Convention, Loadline Convention and Tonnage Measurement Convention. The broadened application of the *Navigation Act 1912*, providing a national regulator with jurisdiction over all commercial vessels in Australia, could be achieved by two methods (i) an applied laws legislation scheme; or (ii) the states referring power to the Commonwealth under section 51(xxxvii) of the Constitution (see discussion below).

This option would involve the states and NT removing from their respective legislation reference to specific requirements regarding the construction, certification and operation of domestic commercial vessels as well as crew certification and registration thus leaving the Commonwealth laws to cover the field. New certificates of registration, certificates of survey, and certificates of competency would be certificates issued by, or on behalf of, the national regulator under the framework of the *Navigation Act 1912,* with appropriate transitional provisions in place for pre-existing vessels or certificate holders. As the national regulator for commercial vessels, the Commonwealth through AMSA would administer and enforce all laws in respect of these vessels. However, delegations or appointment of state officials may occur to assist in administration and enforcement.

The proposed National Partnership Agreement between the Commonwealth and states/NT would clearly specify the roles of the respective governments under the national legislation, and the assistance to be provided to the national regulator.

The advantages of this option over the status quo are that:

- standards, and subsequent amendments, are adopted into legislation in a timely and consistent manner;
- there are no differences in the application or interpretation of legislation throughout Australia;
- procedural aspects supporting the regime are uniform;
- national consistency of standards is achieved; and
- duplication of effort to enact and maintain legislation by each jurisdiction is avoided.

The disadvantages are discussed in (i) applied laws approach, see below.

The legal methods for giving effect to this option are:

(i) Applied laws legislation

While the *Navigation Act 1912* could be expanded to cover the regulation of most commercial vessels, the applied laws approach could be used to remove any actual or potential gap in Commonwealth's Constitutional powers concerning a residual category of commercial vessel, likely to be small in number, that:

- operates exclusively upon 'waters within the limits of a state'; and
- is not engaged in or incidental to international or interstate trade; and
- is not owned by, operated by, or incidental to a trading/financial/foreign corporation;
- is not subject to any international convention governing safety.

In the current context, as the Constitutional gap is likely to affect a small number of vessels, if any, relevant requirements could be embodied in template legislation under the *Navigation Act 1912.* State/NT legislation would pick up the Commonwealth template legislation by reference and would not need to replicate all the relevant provisions of the template law, but would simply provide that those provisions as they appear from time to time, are applied as state/NT law to the identified residual category of vessel. Therefore amendments to the template legislation would be automatically adopted in State/NT jurisdictions. It would be necessary to determine whether administration of the applying law would be by both Commonwealth and State officials (or by Commonwealth only with power to appoint state officials) and also other relevant mechanisms needed to facilitate this administration (eg laws relating to the investigation and prosecution of offenses, laws relating to review of decisions, etc).

Examples of the applied laws approach used in implementing uniform national frameworks to residual matters outside the Constitutional reach of the Commonwealth include the Gene Technology Regulation Scheme, *Therapeutic Goods Act*, Part IV of the *Trade Practices Act*, the *Agricultural and Veterinary Chemicals Act*.

The main disadvantage with the applied law approach is that certain States have taken a policy decision that they will not generally adopt the legislation of other jurisdictions as in force from time to time for national uniform legislation projects preferring to keep up to date with subsequent amending legislation when the template legislation is itself amended. Therefore duplication of effort and delays which are problems with the current 1997 IGA co-operative model system will not be completely avoided.

(ii) Referral of power

The Constitutional gap described above could also be overcome by a referral of power by the States to the Commonwealth made pursuant to section 51(xxxvii).The State legislation referring power to the Commonwealth would set out the basis or describe the limit of the referral. This approach is considered the most simple in giving effect to Option 3.

7.4.1. Proposed service delivery models for the evaluations of options

Three delivery models have been developed by state and NT maritime agencies for use in this RIS. These administrative models were compared to the status quo to determine the various benefits and costs.

The delivery models are described in Section 7.5 and are consistent with the endorsement of the Australian Transport Ministers in July 2008 that a national system should be administered by the Australian Maritime Safety Authority (AMSA). The models vary in the extent to which services are provided directly by the national regulator or via state/NT agencies. All models involve the private sector in delivery of some services, but to varying degrees.

"Such adoption would deliver significant cost and efficiency benefit to industry, particularly in favour of our boat manufacturing, boat import, and hire & drive sectors, where such adoption would result in harmonized standards of construction and equipment, and simplified registration and operational compliance across all states and territories."

Boating Industry Association (BIA) of New South Wales

However, the Boating Industry Association, as well as other submissions, also noted that the benefit of reform would be significantly diminished if the scope of the national system included vessels currently not required to meet NSW commercial survey requirements, ie recreational vessels.

The Maritime Union of Australia advocated the benefits that a national regulator would provide for crewing and certification issues, but also noted that if state maritime agencies remain involved in service delivery then efficiencies would not be maximised.

"The MUA strongly favours Option 3, which is the only realistic and feasible option to achieve the objectives as proposed in the RIS.

Maritime Union of Australia.

There was also support for this option, emphasising the importance of delivering an effective national system.

Option 3 is the only option that offers the promise of a real and effective national approach to safety reform. It is therefore pleasing to note that this option appears to have the support of the Australian Transport Ministers and the maritime industry. Having said that I consider the legal method of using "Applied laws legislation" appears to reintroduce a concept that relies on the states and territory to legislate in a consistent way. It has been shown in the past that reliance cannot be placed upon the states and territory to introduce uniform legislation. The adoption of this approach will simply constrain the outcomes being sought by Option 3.

The involvement of the states is the weak link in any attempt to introduce a national approach to safety reform. It is therefore essential that their ongoing role be minimised.

In my view, the only way forward is for the states to refer power to the Commonwealth. It is simpler and more straigtforward and places less burden on the states, which hopefully in itself will be enough reason for the states and territory to support this approach.

Graham Taylor, Taylortech, NSW

Of the delivery models presented, Option 3 Model 3 appears to be the best provided the private sector is definitely a part of the survey and design approval process.

Oceanic Yacht Design, Qld

Yes, CVA supports this option provided that a 'smart model' of service delivery is developed which avoids AMSA duplicating the services already offered by state or private bodies. The best model is for AMSA to impose the standards required and then to delegate the responsibility for implementation to the various state or private bodies.

Commercial Vessel Association of NSW

A diver with a certificate of training from Victoria, can dive any where in Australia or in fact the world. An instructor or a dive master with a certificate can work any where in this country.

We have achieved this level and it has been in place for many years, Many diving certificates have been around for 40 years. All of this without any involvement of government. Yet our dive boats, their drivers and their constructors are buried in government red tape different from state to state. Please stop worrying about each states individual fifedoms and just get one national system going.

It would appear to us that option 3 is the one to support.

NSW Dive Charter Vessels Association

This support was also conditional on maintaining certification of currently certified surveyors.

Our company would be the largest company accredited by MSQ; 80% of our business is reliant on survey and design approval works. If there is any risk to us losing our accreditation we would not support NAMSR.

Oceanic Yacht Design, Qld

All delivery models under Option 3 allow for the involvement and accreditation of private surveyors in the delivery of services under a national system.

Other stakeholders also supported this Option, also noting their particular issues.

We favour the option to have one system administered by AMSA, and emphasise the need for a section of regulations dealing just with heritage vessels.

P.S. Ruby Wentworth, Wentworth, NSW

Option 3 Model 1 is best provided AMSA can free itself from some of its bureaucratic thinking on what constitutes qualifying sea-service and what is competency based training.

Mike Traynor, Maritime Trayning, Bellambi, NSW

Transport and Logistics Industry Skills Council view is that Option 3 is the only viable option for seafarer certification and training delivery compliance monitoring.

Transport and Logistics Industry Skills Council, Victoria

It is our opinion as previously stated, that Option 3 is the most efficient and cost effective way to achieve a truly national approach to maritime safety.

Russ Larkin & Associates, Consulting Marine Engineers and Ship Surveyors, Cairns, Queensland

When asked to comment on the proposed options, a stakeholder identified their preference as:

One set of rules by AMSA, with the states or others providing monitoring or surveys.

Eddie Price, Svitzer, Brisbane

7.5. SERVICE DELIVERY MODELS

Three possible service delivery models have been developed for Option 3. These were developed during a national workshop of all state maritime agencies in February 2009. Delivery Model 2 also closely represents service delivery under the status quo (Option 1) and the applied laws approach (Option 2).

7.5.1. Delivery Models

Services	Option 1 Status Quo	Model 1 AMSA	Model 2 AMSA with State/NT	Model 3 AMSA, State/NT, Private Sector & RTO
Standards	△	◆	◆	◆
Registration	■	◆	■ ◆	◆ ■
Survey & Plan Approval	■ ●	◆ ●	■ ●	■ ●
Compliance Monitoring	■	◆	■	◆ ■
Investigations & Enforcement	■	◆	■	◆ ■
Qualifications/Crew certification	■ ▲	◆ ▲	■ ▲	◆ ■ ▲
Safety Management & Safe Manning	■	◆ ●	■ ●	■ ●

◆	AMSA – Australian Maritime Safety Authority
■	State/NT – State and Northern Territory Maritime Agencies
●	Private Sector –Accredited surveyors
▲	RTO – Registered Training Organisations
△	NMSC – National Marine Safety Committee

These three models differ in the extent to which AMSA has agreements with the states/NT and private providers to deliver specific services on AMSA's behalf. The services are described in Table 12 below.

Delivery Model 1 AMSA will deliver all services and will also use private sector surveyors and Registered Training Organisations (RTOs) to support work on survey, qualifications/crew certification and operating systems. AMSA will be responsible for developing and implementing national standards, including managing consultation with stakeholders.

Delivery Model 2 This delivery model is closest to the status quo. While AMSA has the legislative responsibility, it would delegate delivery of services to the states/NT maritime agencies under agreement. All states/NT would continue to deliver services. AMSA would remain responsible for standards development.

Delivery Model 3 AMSA is responsible for standards development. AMSA will delegate delivery of services to the states/NT maritime agencies and private providers and deliver some services directly. States/NT may decide the extent to which they remain engaged in service delivery.

Table 12. Explanatory note on services

Standards	Overarching policy on; registration, survey and plan approval, compliance monitoring, qualifications/crew certification, safe management and safe manning and investigations and enforcement.
Registration	All commercial vessels will require registration, for the purpose of: Vessel and owner identification; Providing a control mechanism for ensuring vessels comply with their ongoing obligations; Providing a means of preventing an unsafe or non-compliant vessel from operating.
Survey & Plan Approval	Provide uniform minimum requirements for safety on commercial vessels.
Compliance Monitoring	Identify vessels that are unseaworthy and non-compliant with applicable legislation and standards. Provide assurance that a vessel complies with applicable legislation.
Qualifications/ Crew certification	Provide a national regime for maritime qualifications and crew certification, i.e. licences/certificates.
Safety Management & Safe Manning	Provide uniform minimum requirements for vessels to demonstrate their ability to operate in a safe manner.
Investigations & Enforcement	Investigate marine incidents and notifications of non-compliance against legislation involving vessels within the legislation. Provide a mechanism for enforcing compliance with relevant legislation and standards.

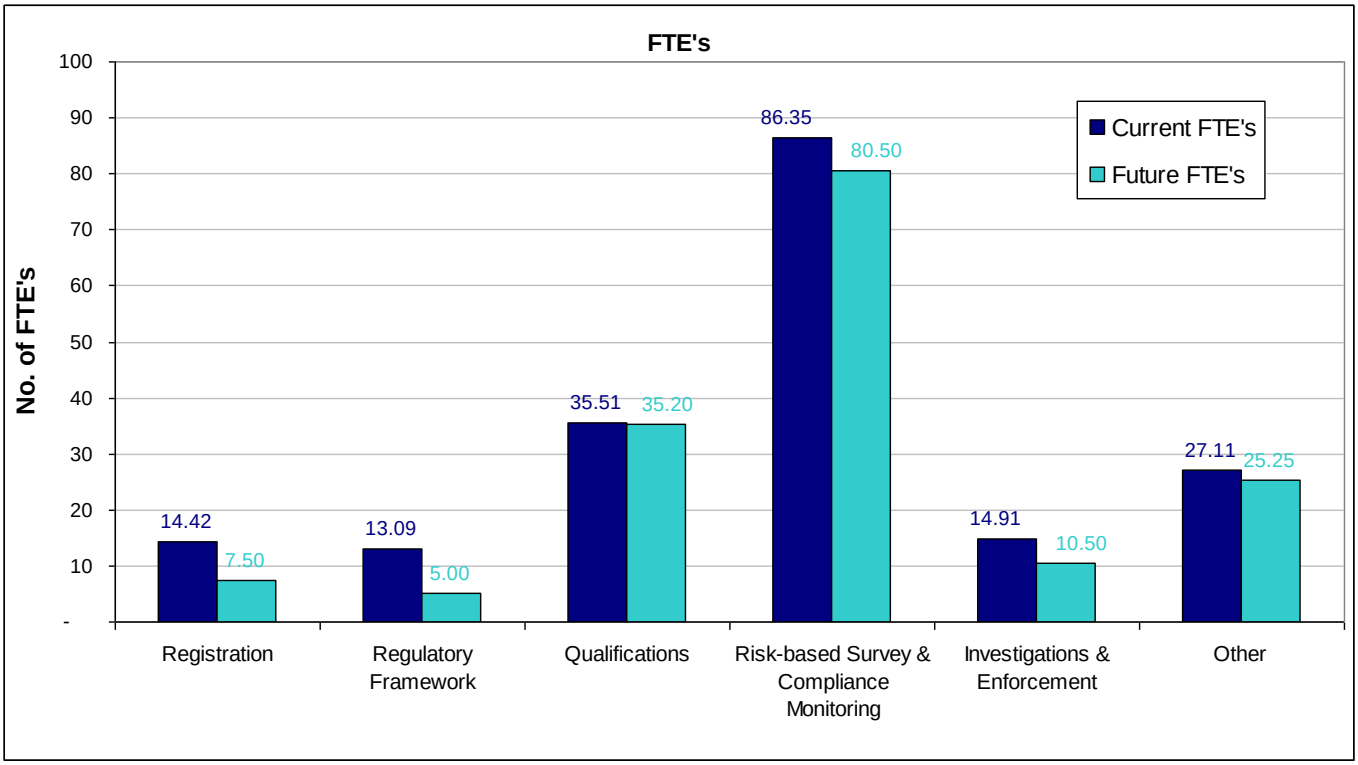
All delivery models operate under a single national system (Option 3) with AMSA as the national regulator. These models represent possible service delivery at full implementation. Possible transitional arrangements are expected to include the involvement of some states/NT in service delivery. These arrangements are subject to further discussion with the states/NT.

In analysing the costs and benefits of these alternative models, an analysis of the Full-Time Equivalents (FTEs) needs of each was undertaken, based on information provided by the state/NT about current staff effort and by Ernst & Young on the likely FTEs needed at full implementation of the national system under Option 3. The following table estimates the FTE effort needed under each model, assuming that FTEs in Model 2 are closest to the status quo. The changes in FTE in the other models are used to estimate the savings in the cost-benefit analysis.

Table 13: Current FTEs and Future FTEs estimated for Delivery Model 3.

	Current FTE's	Future FTE's
Registration	14.42	7.50
Regulatory Framework	13.09	5.00
Qualifications	35.51	35.20
Risk-based Survey & Compliance Monitoring	86.35	80.50

Investigations & Enforcement	14.91	10.50
Other	27.11	25.25
	191.40	**163.95**



More information on the service delivery models was requested by one stakeholder.

There is insufficient detail in Delivery model 3 for Crew Qualification services (Section 7.5.1). The column indicates that AMSA, State Regulator & RTO are all involved. This 3 tiered approach seems to complicate the administrative processes – State involvement needs to be eliminated altogether otherwise true reform will not be realised.

Mike Traynor, Maritime Training, Bellambi, NSW

The details regarding each element of service delivery will discussed with the state and NT maritime agencies during negotiation of National Partnership Agreements later in 2009.

Others supported delivery model 3.

Option 3 Model 3 can work subject to careful planning and full engagement of all relevant parties. TLISC would seek involvement in its development, in an advisory capacity and in the interests of maintaining the integrity of the Maritime Training Package.

Transport and Logistics Industry Skills Council, Victoria

Under model 3, AMSA would consult with training providers on the details of services to be delivered and the respective roles of service providers.

JAS-ANZ is of the view that conformity assessment activities such as surveying, certification and inspection, are best undertaken by appropriately accredited bodies, be they existing maritime

authorities (2nd party), or independent conformity assessment bodies (3rd party). In this regard, Option 3 incorporating delivery model 3 would seem to be the best solution.

Joint Accreditation System of Australia and New Zealand

In developing the final details of the delivery model, AMSA would determine the standards for accreditation of parties delivering services on AMSA's behalf. As part of this process it would consult with qualified bodies such as JAS-ANZ.

Another stakeholder noted support for delivery model 3.

AMSA to set the rules and audit the state regulators.

Eddie Price, Svitzer, Brisbane

The Commercial Vessel Association of NSW supported delivery models 2 and 3, provided there were no cost changes to operators.

Model 1: AMSA solely responsible: As the federal Government seeks full cost recovery, we do not believe this option will result in maintenance of current costs to operators. If this model causes an increase in registration or survey costs to commercial vessels then we strongly oppose this model.
Model 2: CVA supports this model, provided the costs of services are maintained ie survey and registration. Central control of standards will simplify operators understanding of the regulation and controls and lower costs to management within businesses.
Model 3: CVA also supports this model, provided th costs of services are maintained at their current levels ie survey and registration. The addition of the private sector within service delivery model is sensible and will create a more efficient market. Central control of standards will simplify operators understanding of the regulation and controls and lower the costs to management within businesses.

Commercial Vessel Association of NSW

The Marine Surveyors Association supported models 1 and 3 under Option 3, noting that it was important that the private sector be involved in service delivery and that state/territory monopolies over services be removed. In supporting Option 3, they also noted the high levels of safety currently being delivered by the status quo and that any change must not negatively impact current levels of vessel safety.

We firmly submit there should not be State and Territory monopoly of services. Whenever service delivery monopolies exist, the public and industry suffer.

Marine Surveyors Association

In contrast, other stakeholders criticised the involvement of the state maritime agencies and/or the private sector in the delivery of services.

Where I have a concern is with the proposal under Model 3 that AMSA might delegate the provision of certain services to state and territory agencies or worse, to private sector accredited surveyors.

The state and territory agencies have failed to deliver a consistent and uniform standard of safety throughout Australia, notwithstanding the availability of, firstly, the USL Code, and later the NSCV. As long as these state and territory agencies exist and deliver services under delegation from AMSA there is the risk that the desired level of consistency and uniformity will not be achieved, unless the

current agency staff are subject to very close monitoring and scrutiny by AMSA. Far better that these personnel are seconded to AMSA, or alternatively are transferred to AMSA.

AMSA already has 14 offices throughout Australia with surveyors who handle roles associated with seagoing vessels, so why not expand these offices to include former state and territory agency staff to perform the roles associated with smaller commercial vessels. This approach would allow surveyors from each seagoing and smaller commercial vessels to assist one another and provide opportunities for surveyors to advance into another area not previously available to them.

The other and greater concern I have is that private sector accredited surveyor are utilised, particularly in the area of survey and plan approval. To me this concept appears similar to the method adopted in Queensland. I believe the situation where a private sector surveyor in Queensland is accredited and at the same time may undertake approval of their own work is fundamentally wrong. There must be separation and preferably by ensuring that monitoring and approval roles remain the responsibility of the central marine authority, in this proposal AMSA.

Graham Taylor, Taylortech, NSW

In the circumstances we hope you will understand why we question the wisdom of leaving the States with a role in service delivery under the new single nationally regulated model. Over the 10 years of the NMSC process the States were not genuinely committed to reform and we have seen little evidence that they are yet fully committed.

Maritime Union of Australia

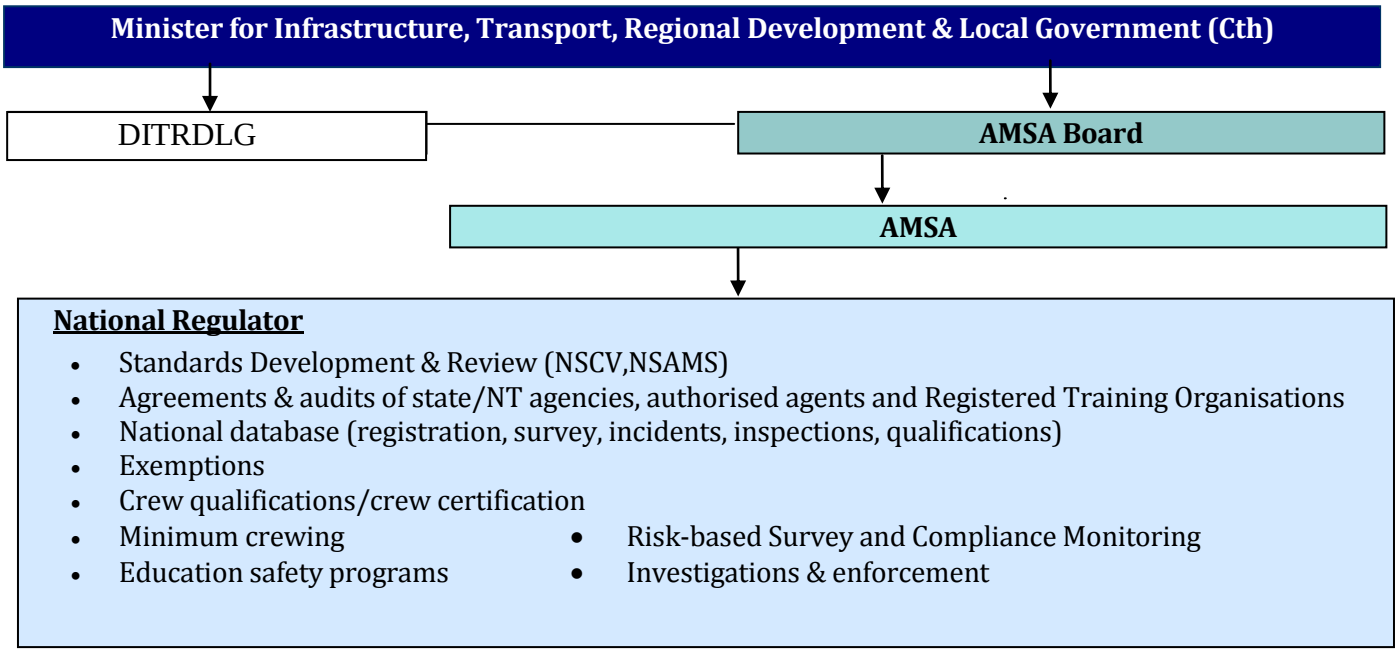
Under all delivery models, AMSA would have comprehensive agreements in place with either state/NT maritime agencies or private sector service providers. These would be audited and include appropriate mechanisms to ensure the integrity and safety of vessels within the national system. This issue will be comprehensively dealt with in discussions with the States/NT if Option 3 is endorsed, as well as being considered in planning the administrative and operational details of the national regulator.

The Maritime Union of Australia noted that the RIS did not contain an indication from state/NT maritime agencies on their likely participation as service providers under these delivery models. The details of the involvement of the state/NT agencies will be discussed in the context of National Partnership Agreements if a national system is endorsed by COAG.

Given the time that has elapsed since the Round 1 consultations concluded, we are also disappointed that the RIS does not more fully address the preferences of the States/NT in terms of their possible ongoing role in service delivery. The States have now had more than a year to consider and settle this issue and in our view there should have been a settled position for inclusion in this RIS. Once again, the lack of settlement on this issue shows that the States continue to be an impediment to genuine national reform.

Maritime Union of Australia

7.5.2. Characteristics of the national regulator under Option 3



The **national standards** would be developed, implemented and administered by the national regulator in accord with agreed consultative arrangements. This work would continue the development of the NSCV. Standards would be specified for:

- Vessel design, construction and equipment;
- Vessel operations, such as safety management systems;
- Certification of crew competency and manning requirements;
- Administration of registration or survey; and
- Compliance monitoring, investigations, auditing and other ancillary powers.

The current development of the National Standards for the Administration of Maritime Safety is expected to continue.

Where relevant under the above delivery models, the national regulator would have **agreements** with government agencies (including maritime agencies), authorised agents and registered training organisations to deliver services in accordance with national standards. The regulator would audit these service providers. Authorised agents for survey and crew qualifications would set the fees for their services.

The regulator would conduct **regular audits of surveyors and surveys** to ensure services were being delivered consistently and also introduce a dispute resolution process where industry could seek a review of a decision made by an authorised agent.

Risk-based survey and compliance monitoring - focusing on higher risk vessels - will be introduced. Risk-based compliance monitoring is current undertaken only in Queensland. AMSA has shown the benefits of adopting a sophisticated targeting system that allocates risk ratings to each arriving eligible foreign ship visiting an Australian port based on factors such as type of ship, its age and inspection history. This allows AMSA to allocate its resources more effectively to detect

unseaworthy and substandard vessels. A similar model will be applied taking into account the differences between the international and domestic industry.

Compliance monitoring of vessels and crews may be carried out by state and territory maritime agencies or other government agencies, where appropriate. The aim is to provide assurance that vessels remain compliant with applicable legislation and standards for safe vessels. A National Compliance Strategy will be agreed between the Commonwealth and state and territory governments. AMSA would conduct auditing of service providers.

States would continue to regulate waterways including, for example, allowed areas of operation in harbours and ports.

The national regulator may **issue exemptions and certify equivalent solutions** where appropriate. Authorised agents would submit requests to the regulator.

The national regulator, state maritime agencies and other government agencies (according to agreements) would be responsible for **coordinating the investigation of marine incidents** and for notifying relevant parties. The proposed expansion of the *Navigation Act 1912* will not affect the jurisdiction of the national (e.g. ATSB) and state/NT safety investigation agencies, which will continue to exercise their independent jurisdiction regardless of the proposed changes to regulatory arrangements for domestic commercial vessels. Administrative protocols will be necessary to ensure that concurrent investigation of marine incidents by the various safety investigation agencies and also by the various regulatory agencies, including AMSA, is done appropriately.

The national regulator would be responsible for **enforcement** under the national law; however other government agencies could take enforcement actions under legislative arrangements developed by the Commonwealth. Enforcement actions would include:

- administrative actions in regards to licences, registration and certificates of survey;
- issuing infringement notices;
- issuing direction and improvement notices; and
- prosecution of criminal and regulatory offences.

All incidents and enforcements would be recorded on the national database.

Registered training organisations (RTOs) may be public or private. Certificates of completion will be issued by the RTOs. Crew competency certificates will be issued by the national regulator. RTOs would take on a greater role and responsibility for sea time assessment, recognition of prior learning and competency assessment; particularly for coastal certificates. Oral examinations would be conducted by RTOs below Master Class IV and Marine Engine Driver 3 or equivalent.

The national regulator would maintain a **national database**. The database would include registrations of vessels, incidents and inspections. History of incidents and inspections, together with other characteristics, such as activity, area of operation and vessel length, would be included in a risk-based criterion for determining the regularity of survey.

Stakeholder comments

In commenting on the proposed roles and responsibilities of the national regulator, stakeholders sought assurances on further and ongoing consultation:

With regard to crew competency certification, TLISC supports enhanced integration between formal off-job training and on-job training during sea service. This is imperative for the implementation of fully competency based training and assessment for the maritime sector. The involvement of TLISC in the development of assessment protocols and instruments is essential in order that the intent of a nationally consistent competency based training system is addressed.

Transport and Logistics Industry Skills Council, Victoria

Under Option 3 and under all service delivery models, AMSA would engage in consultation with industry and training representative to finalise the details of a national training and certification system.

Should AMSA gain central control and authority, then a consultative mechanism must be developed which will embrace industry and enable the regulator to keep pace with and in touch with local, regional and state issues. Relying on feedback loops only from state compliance and regulatory agencies will not work as they have their own coloured view of the work. If we want a strong dynamic and world class maritime industry in Australia it is imperative for the new AMSA to be responsive, consultative and collusive. The simplest means of ensuring this happens is through industry bodies which meet to review with AMSA and the states the state of play.

Commercial Vessel Association of NSW

As noted in Section 14, formal industry advisory processes will be implemented by AMSA to inform the ongoing development and administration of a national system.

Some stakeholders required more details about the risk-based survey and compliance monitoring system. The details of the system will be developed during the transition period and will include further consultation with stakeholders.

Risk based approach will be good in the long term once the national database is established. However it must recognise potential one-off lapses due to human error (which will never be eradicated) or outside influences and not plunge a Company / Vessel to the bottom of the 'Good Guys' list. Maybe a three strikes approach?

Austral Fisheries, Western Australia

As stated above, I fully support the adoption of a risk based approach to the smaller commercial vessels. And in line with the approach adopted by AMSA to allocate manpower where the greatest level of seagoing vessel movements occur, a similar approach would be needed for the fleet of smaller commercial vessels. Again as suggested above, I believe this can best be done by AMSA, not the states, but utilising personnel from the existing satate and territory agencies.

Graham Taylor, Taylortech, NSW

Industry also supported the regular auditing of private surveyors.

There should be regular audits of surveyors and surveying practices and we are in complete agreement with this practice.

Russ Larkin & Associates, Consulting marine Engineers & Ship Surveyors, Cairns, Queensland

Industry also supported establishment of a national database.

> *The establishment of a central data base was mentioned during the briefing. I believe this to be an important aspect of the proposed change.*
>
> John Ainsworth, Torquay, Victoria

The continued development of the NSCV standards was also noted by a stakeholder as critical.

> *Against this background, the development of the NSCV (National Standard for Commercial Vessel) by the NMSC has been a long overdue. The NSCV while not yet complete, is a refreshing and rigorous effort to formulate a new set of regulations that is focused on a performance based approach to maritime safety that offers both prescriptive baseline standards and scope for alternative equivalent solutions that allow for innovation and future new developments. The NSCV has also been developed with close involvement by state and territory jusridictions, the maritime industry the issue of draft standards for public comment and the subsequent peer review of all public comment when formulating the final version of each standard.*
>
> *It is therefore essential in my view that NMSC be afforded the support and resources to complete the NSCV as the basis for future maritime regulation in Australia. Beyond that it is essential that these standards are subject to thorough and continuos review by AMSA or whoever is responsible for the task of administering marine safety in the future. One of the fundamental issues in the past was the absence of commitment and resources to maintain and update the USL Code.*
>
> Graham Taylor, Taylortech, NSW

If a national system was endorsed, the relevant parts of the NSCV would be finalised, according to its current timeline, and adopted either by the states (if before the introduction of a national system) or as part of the legislation supporting a national system. AMSA would undertake ongoing review and development of national standards.

The national regulator's proposed role in incident investigation was supported.

> *Apart from continuing new developments in safety, materials, equipment and marine design, there are, regrettably, still major maritime incidents in Australia and overseas that result in loss of life and property. Many of the incidents are subject to exhaustive investigation and reporting, from which we can learn, and where appropriate modify our marine regulations. This monitoring and analysis should rightly be done by a central administration that has the necessary resources available.*
>
> Graham Taylor, Taylortech, NSW

A submission was received that raised:

- the need for surveyors to possess appropriate small vessel expertise and competence and that there be in place a mechanism for monitoring their performance;
- problems with the imposition of commercial vessel standards on government boats and volunteer agency vessels that maybe smaller in nature and do not fall within survey classifications such as for fishing vessels or passenger vessels;
- possible problems with the large volume of investigation and enforcement activity being undertaken by one regulator under a national system and the need for appropriate training of investigators and the utilisation of local enforcement agencies on a subcontract basis.

In order to ensure that surveyors implement national standards in a consistent and appropriate manner, an audit framework will be imposed by the regulator to ensure that accredited surveyors

perform to set benchmarks and within required parameters and also provide appropriate customer service. An appropriate dispute resolution process will be introduced for review of decisions.

The development of the National Standards for the Administration of Maritime Safety is expected to continue under a national system. This process includes a review and replacement of section 14 'Survey' of the USL Code to ensure survey requirements can accommodate a broad range of vessel design and practices with 'equivalent' and 'deemed to satisfy' solutions. This approach will provide a level of flexibility suitable for specialist vessels such as those referred to in the submission.

While a national regulator will be responsible for investigation and enforcement of commercial vessel activity, other government agencies are expected to be engaged to assist with this process. This approach will ensure that adequate and appropriately trained resources are available to undertake this function. The precise nature of the relationship between the national regulator and mechanisms for delegation of authority to other bodies will be negotiated as part of the proposed National Partnership Agreement between the Commonwealth and States/NT.

7.5.3. Cost recovery, competitive neutrality and fees

No decision has been made by the Commonwealth, state or NT governments on funding arrangements. If the recommended option is agreed by COAG, further discussions on the appropriate funding arrangements will be held. A CRIS will also be completed and include opportunity for stakeholder comment. Currently states and NT governments subsidise the cost of survey and other services.

A number of stakeholders raised the issue of costs and fees in their submissions.

"Option 3 of the review in part allows for competition in the delivery of services including surveys and the Seafood industry believes that this is an essential element of the review"

Katherine Sarneckis, Northern Territory Seafood Council, NT

"The process of developing a National system needs to be undertaken carefully, mindful of the effects to all stakeholders. Rushing reform through before frameworks have been agreed upon would be a mistake. If this is done properly however, then I believe that there are many positives that would come out of it. ***If we assume a privatised 'accredited persons' National system based on a system similar to the current QLD system,*** *a less segmented centrally focussed public Authority would allow the private sector to deliver both cost savings to owners and operators and greatly approve efficiency. Assuming that the new system will be effectively and efficiently monitored and enforced, I see no reason why it can't also deliver, in addition to cost savings and increased efficiency, the most important thing - increased safety standards."*

Naval Architect, QLD

At the Commonwealth level, funds collected from a particular sector of the industry would not be used to meet the costs of overseeing another sector.

"However, the NBCG's support for Option 3 is conditional on the small vessel sector funding the cost of introducing and maintaining this sector with no funding seepage from revenue collected from other commercial shipping sectors – both Australian and Foreign flagged. "

Dale Cole, National Bulk Commodities Group Inc, NSW

Submissions also supported the independent setting of fees by individual service providers (whether public or private).

> *"If the new body wished to recover some of the costs of implementing the new system including audits and monitoring, this should be done through a set fee per design approval, depending on the size of the vessel. This would allow free and equal competition between accredited bodies in the market place and avoid market domination by the larger classification societies."*
>
> Naval Architect, QLD

7.6. SUMMARY OF OPTIONS AND THEIR CHARACTERISTICS.

Table 14 – Summary of Options

OPTIONS	**Service Delivery Model**	**Legal mechanisms**	**Transition**	**Impact on Existing Vessels**
1. Status Quo	Existing services delivered by states/NT, RTOs and some use of private providers (surveyors).	1997 Inter-Governmental Agreement, individual state/NT legislation.	Not applicable	None
2. An applied laws approach whereby legislation would be approved by the Australian Transport Council, passed in one jurisdiction and adopted by reference in other jurisdiction	Oversight by AMSA (standards), states/NT continue to deliver services. Similar to Delivery Model 2.	Applied laws.	Transition: 2011-14 Full Implementation: 2014 onwards. (Transition may be shorter)	Minimal (vessels not in survey and not registered may need to undertake safety assessment audit). Risk-based survey and compliance monitoring introduced in 2014.
3. The application of the Commonwealth *Navigation Act 1912* is broadened	Either Delivery Model 1, 2 or 3.	Referral or applied laws.	Transition: 2011-14 Full Implementation: 2014 onwards.	Minimal (vessels not in survey and not registered may need to undertake safety assessment audit). Risk-based survey and compliance monitoring introduced in 2014.

8. RISK-BASED COMPLIANCE MONITORING

The risk-based survey and compliance monitoring scheme which is discussed in this RIS would be developed by the national regulator and would be modelled on AMSA's current risk-based inspection regime for trading ships visiting Australian ports. This inspection regime has received national awards for its development and implementation and is seen internationally as best-practice. The methodology and profiling can be applied to smaller commercial vessels.

Case Study of the AMSA Risk-Based Ship Inspection Regime

Since 1995 AMSA has been gathering information on ships visiting Australian ports of both foreign and national registration to develop a risk-based ship inspection regime. This regime allows efficient and effective use of limited marine surveyor resources. Currently AMSA has 42 marine surveyors in 14 offices throughout Australia typically having to manage 4,000 ships with 23,000 port calls at about 75 different ports or locations, some of which are difficult to access. With many duties other than ship inspections it is evident that a strategic approach was necessary to effectively manage finite marine surveyor resources.

By introducing a risk-based approach to ship inspections it was possible to focus limited resources and direct them to high risk vessels, operators or owners and reward the 'good' operators and owners by less frequent inspection. This regime is now highly developed and has won significant praise and awards both within Australia and internationally. As an example, nearly half of the 4,000 foreign flag ships visiting Australia in a year fall into the lowest risk category used by AMSA and these are subject to a compliance inspection rate target of 20% whereas only 16% of this fleet fall into the highest risk group and these are subject to a compliance inspection rate target of 80%. The higher risk ships are also prioritised for inspection as soon as they arrive in the country, whereas the lowest risk ships may not be inspected immediately. This clear focus on, and prioritisation of, higher risk ships has been very successful in encouraging the industry to maintain high safety standards, in that the overall risk profile of these ships has steadily improved since AMSA's adoption of this risk management strategy.

Although the system is highly developed, continuous improvement is a key characteristic of the system gained by analysing the information which is being constantly gathered. Updating the database and applying the results of the analysis to revise and review the inspection regime process has maintained the contemporary nature of the inspection process. One of the significant outcomes of the risk-based approach is the improved standard of ships visiting Australian ports. Of particular significance are the efficiency gains and improved safety regulator effectiveness achieved by locating more marine surveyors at some of the more remote ports in the north west of Western Australia and northern Queensland in recognition of the greater proportion of high risk ships at those ports.

A sample of the priority assigned to ships is outlined below.

AMSA's Risk Based Approach to Port State Control Inspections

AMSA has, since late 2001, used a mathematical formula to identify the "risk factor" associated with a ship that is eligible for Port State Control inspection. The latest version of this formula is the result of extensive statistical analysis of over 18,000 Port State Control inspections since 1995 and identifies the statistical probability of a ship being found to be unseaworthy and thus detained. The statistical analysis technique applied was logistic regression, also known as generalized linear modelling with binomial errors and logistic link (Dobson, 1990; McCullagh & Nelder, 1989). This is represented as:

logit (p) = loge(p / (1-p)) where p, in this case, is the probability of a ship being found to be unseaworthy.

Once various factors had been identified by this method as being statistically significant indicators of ship seaworthiness, they were ranked according to relative importance by using a statistical modelling technique called generalized additive modelling, that allowed each of the individual factors to be given a ranking of 1 = critical to the probability of detention, through to 4 =only marginally influencing detention.

The levels and target rates are:

Priority 1, risk factor greater than 5, 80% inspection rate

Priority 2, risk factor 4 or 5, 60% inspection rate

Priority 3, risk factor 2 or 3, 40% inspection rate

Priority 4, risk factor 0 or 1, 20% inspection rate

This statistical analysis also found that there had been a genuine and consistent improvement in the standard of ships coming to Australia since 1995. The principles of a risk based approach to ship inspection can equally be applied to the periodic survey of all vessels, large or small as the main elements of the information required for the database is identical.

Vessels currently under survey in state/NT

It is estimated that there are 28,346 commercial vessels operating in state and territory jurisdictions in Australia, of which 10,387 are currently under survey. The number of vessels not in survey and not registered is reported as 7,937. The majority of the 10,387 vessels currently under survey could reasonably be considered to be in the 'Priority 3' or 'Priority 4' category, based on the fact that the vessels are issued with certificates of survey or compliance with the relevant safety standards, and that this is an annual requirement for the large majority of vessels in this category. This would then equate to a risk factor of between 3 and 0 for these vessels, with an implication that a survey rate of 30% could reasonably be expected to apply according to the statistical analysis.

If the risk factor parameters of 3 to 0 identified in the proven AMSA model were applied to the survey inspection rate of these vessels then it could reasonably be expected that a rate of 30% could be applied. This equates to surveying each of these 10,387 vessels, once every three years.

The proposed national database could utilise the registration process to similarly capture the information required to develop a risk-based survey and compliance monitoring regime, thus providing significant reduction in survey with the consequential savings in costs to stakeholders. Conversely, in a risk-based regime vessels identified as high risk may require more frequent inspections until the risk factor is reduced.

9. CONSULTATION

Consultation with stakeholders was important in developing this RIS. In all states and the Northern Territory, a total of 22 public meetings were attended by over 1,400 stakeholders. A total of 97 written submissions were received. A list of stakeholders who provided submissions is at Appendix E. These submissions, along with the final RIS, will be made public following COAG's decision.

In addition, a dedicated website was created to provide updates to stakeholders about consultation opportunities and key milestones (www.amsa.gov.au/namsr). Stakeholders have also been included on an email alert list being used to provide information about consultations that links to this site.

State and NT maritime agencies also provided information to their stakeholders advertising the public meetings. Newspaper advertisements were placed in all the major national, state and NT newspapers.

9.1. SUMMARY OF SUBMISSIONS FROM ROUND 1, SEPTEMBER –OCTOBER 2008

In round 1 of consultations 57 written submissions were received. Generally submissions were supportive of Option 3 with the remainder supporting Option 1. There was no support for Option 2. Most of the support for Option 3 was provisional on a more detailed cost benefit analysis allowing people to more thoroughly assess what it would mean to them.

Common to many of the submissions was the view that their own state or territory had the highest standards and that all other states should 'come up to their level'.

Of the respondents, 26% where from the fishing industry and the majority (two-thirds) of this group supported national reform (Option 3), in particular the potential national efficiency gains. Of the remainder of the respondents, 14% were from the Tourism industry, with most (75%) of these comments supportive of Option 3. Boat builders, vessel operators and educators equally made up 30% of respondents. Over 80% of each of these sectors supported Option 3.

A number of specific concerns were raised in the submissions. They include:

- Concern that exemptions would be lost, which would jeopardise the viability of certain businesses;
- That the flexibility to issue restrictions for local conditions would be lost leading to higher costs through the requirement for higher standards;
- That AMSA would have trouble ensuring the consistency of survey and other standards given the number of vessels that would come under survey;
- That boats currently not in survey would be 'unnecessarily' brought into survey;
- The costs to industry of: (a) Registrations, (b) Survey, (c) Licences.

"The SANZRLFA believes there should be efficiencies gained through such a system being administered at the national level i.e. in the areas of regulation, information gathering e.g. national vessel database etc and general administration.

In order for this proposal to maintain relevance to industry, and not just regulators, these efficiencies / synergies should translate into cost savings over time."

South Australian Northern Rock Lobster Fisherman's Association (SANZLFA), SA

Justin Philips, South Eastern Professional Fishermen's Association (SEPFA), SA

- Whether development of a single national jurisdiction would resolve the difficulty in transferring an Australian qualification internationally;
- That inland waters should be included in the single national jurisdiction to prevent vessels being 'left-out' of legislation or having to meet both state and Commonwealth legislation if the vessel moves between the two jurisdictions; and
- The treatment of heritage vessels and other vessels, given that they would be unable to meet the NSCV without degrading the special attributes of the vessels.

Excerpts from the submissions are contained throughout this RIS.

9.2. SUMMARY OF SUBMISSIONS FROM ROUND 2 – APRIL 2009

In round 2 of the public consultations, 40 submissions were received.

Comments made in round 2 consultations were similar to first round submissions and were generally supportive of Option 3. Of the respondents, 14% were from the fishing industry, 8% from the tourism industry and 78% from boat builders, vessel operators and educators.

However 27% of submissions were in relation to AMSA's tinny to tanker initiative (review of Marine Orders Part 3), and did not indicate a preference for any option. These submissions will also be used to inform the Marine Orders Part 3 review.

Submissions which identified a clear preference for the proposed options (54%) resulted in; 15% in support of Option 1, 10% in support of Option 2, and 75% in support of Option 3.

Submissions received also reinforced the benefits of a national system such as; the timely implementation of AMSA's 'tinny to tanker' initiative for marine certification and efficiencies to industry in having a national system to comply with rather than seven jurisdictions, as well as support for a national database on Australian commercial vessels.

During the stakeholder meetings there was particular interest in the detail of how specific functions would operate. This also included specific costs to individuals. Stakeholders indicated strong interest in being involved in future consultations regarding the proposed Cost Recovery Impact Statement.

Several submissions were received from the yachting industry regarding existing problems regarding recognition of qualifications. In addition, owners of heritage vessels also noted concerns specific to their sector. Under the national system further consultation would be held with these stakeholder groups to determine how their issues might be addressed. However, these groups were generally supportive of a national system as they observe that reform would provide opportunities to resolve their ongoing problems.

Extracts from submissions are below and are also included in Section 7.

The current fragmented jurisdiction of maritime safety by six states and one territory is a significant impediment to the development of the industry in Australia. This is amply illustrated in the RIS and is acknowledged those in the industry.

Australia must have a single uniform set of safety regulations, just as it has for larger vessels trading interstate and overseas.

This problem is never going to be resolved until marine safety is administered by a single authority, and AMSA is the obvious choice to undertake this role.

The states and territory have demonstrated time and again that notwithstanding the efforts made to develop uniform regulations, first the USL Code and now the NSCV, in which the states and territory were active particpants, that they are unable for whatever reasons to legislate and administer at a state level a uniform set of regulations. The RIS contains ample examples of this failure by the states, most recently in the piecemeal adoption of the NSCV.

Graham Taylor, Taylortech, NSW

The proposal to implement a single maritime regulatory jurisdiction is logical and will remove the current duplication and inconsistent application of regulatory requirements across jurisdictions. The benefits to the industry as a whole have been clearly defined by the RIS.

Transport and Logistics Industry Skills Council, Melbourne, Vic

COAG should go for option 3 and implement as soon as possible.

NSW Dive Charter Vessels Association

It is very clear to us that the analysis simply confirms what the ATC agreed in principle in May 2008 and what the vast majority of stakeholders want and that is a move to a single national regulator where AMSA is the regulator. This model will deliver administrative efficiencies and in our experience of AMSA's professionalism and the generally high quality of Commonwealth legislation, will result in a reduction in deaths and injuries, as well costs associated with poor safety standards.

Maritime Union of Australia

While there was significant support for a national system, concerns with possible cost impacts on individual operators remained.

Moreton Bay Seafood Industry Association provided feedback during the Consulattion RIS Round 1 and is pleased that a number of concerns raised have been addressed in this round. The foremost feedback from local industry is:

- *Support for national maritime safety reform, with either option 2 or 3 as model*
- *Support for registration of all commercial vessels*
- *Concern over financial costs associated with national safety compliance*
- *Concern for loss of regionally specific best practice models.*

Moreton Bay Seafood Industry Association, Hamilton, Queensland

As stated previously the Commercial Vessel Association (CVA) supports the objectives of the reform: reduced complexity, reduced costs and central registry of data. However, if the reforms lead to any increase in costs for operators then the CVA would strongly oppose the changes.

The CVA does not believe any of these options will result in a poorer safety outcome.

We have not had time to adequately review these numbers. We do not believe however that the model adequately reflects the true savings and benefits to industry of a truly unified system.

We are of the undoubted view that a single national system of control will provide considerable safety and efficiency gains across the industry provided the right service delivery model is developed.

Commercial Vessel Association of New South Wales

In summary, SEPFA understands the concept of a national system for maritime safety regulation has potential to increase efficiencies at the administrative, regulatory and information gathering level. However specific practices at the State level need to be considered if such a program is to be practically implemented and supported by industry. There are some operating practices in South Australia that must not change, the DTEI vessel survey program being the obvious example.

South Eastern Professional Fishermans Association, South Australia

Stakeholders also supported the consultation process.

TLISC has had ample opportunity to follow and be engaged in the consultation process, as have all relevant stakeholders.

Transport and Logistics Industry Skills Council, Victoria

Firstly I would like to say thank you to AMSA for travelling to Cairns and taking the time to meet with industry to further inform us of the various proposed methods out for consideration. It would appear since the initial round of consultation a significant amount of work has been completed and the clarification of each options detail has been effectively communicated to all stakeholders.

Travis Clarke, Quicksilver Connections, Port Douglas

I have no problem with the time line determined by the minister. The faster this matter is resolved the better.

John Ainsworth, Torquay, Victoria

Contrary to others we do not feel that AMSA has been poor in its consultation. We thank you for the opportunity and our only criticism is that the crewing changes will not be implemented much faster.

Commercial Vessel Association of NSW

A smaller number of stakeholders felt that the time available for consultation was too limited.

Firstly I am concerned that the time given for this consultation process is woefully inadequate.

Andy Warner, Victoria

In regards to the consultation process the 2nd consultation RIS was only released two weeks before the information session in Hobart and comments in response to the RIS are required within a week of the meeting. It is unrealistic to expect the people most likely to be affected by the proposed changes industry and by extension their representatives will be able to respond in a comprehensive manner in such a tight time frame.

Tasmanian Seafood Industry Council

The second round consultation RIS was distributed to stakeholders directly and via state agencies on 2 April and submissions closed on 23 April 2009. The RIS was also publicly available on the NAMSR website and advertised in all state and national newspapers. Nine public meetings were held.

An industry representative from Tasmania noted that the problems of inconsistencies are not caused by them, yet they expect to incur significant additional costs if a national system proceeds. This was a common view noted at public meetings in Tasmania.

For TSIC the crux of the problem remains that Tasmania is the only jurisdiction to have regulated the adoption of the National Standard for Commercial Vessels (NSCV) developed by the NMSC and ratified by the Australian Transport Council while other jurisdictions have been tardy in formally adopting the standards in full.

In conclusion, from a Tasmanian perspective we see little if any benefit from the proposed implementation of a national system. The costs of complying with the required safety regulations for the operators of commercial vessels in Tasmania is already substantially lower than in other jurisdictions and we have adopted in an expeditious manner all the national standards. Therefore the purported benefits for Tasmanian industry will be proportionally less than for other jurisdictions.

Tasmanian Seafood Industry Council

10. COST BENEFIT ANALYSIS

The three options to achieve a single national system are:

1. status quo
2. an applied laws approach whereby legislation would be approved by the Australian Transport Council, passed in one jurisdiction and adopted by reference in other jurisdictions
3. the application of the Commonwealth *Navigation Act 1912* is broadened.

As previously noted in this RIS, given the common feature of a national regulator in both Options 2 and 3, these options are considered together for the purposes of the cost-benefit analysis. The legal aspects of achieving a single national system in either Option 2 or Option 3 have been discussed in Section 7.

10.1. MEASURING COSTS AND BENEFITS

Cost benefit analysis is used to measure the economic impact of government action by reference to the 'net social benefits' that action might produce. Benefits and costs are 'social' rather than private or individual, in the sense that they are measured irrespective of the people to whom they accrue and are not necessarily confined to transactions that are captured in formal markets. The effectiveness of cost benefit analysis relies on two main features:

- benefits and costs are, where possible and appropriate, expressed in money terms so that the options are directly comparable with one another; and
- benefits and costs are valued in terms of the economy and society as a whole, so the perspective is 'Australian'. This contrasts with, for example, a financial evaluation, which is conducted only from the vantage point of an individual, a firm, an organisation or group.

It is difficult to assign dollar values to some benefits and costs, such as when the benefit or cost is not known or is 'intangible'. For example, during the consultation process it was noted that many of the people that had experienced difficulties transferring a vessel between jurisdictions indicated they would not be willing to do so again. If no transfer procedures were necessary then more vessels may operate between jurisdictions while avoiding the cost and effort of gaining compliance recognition. However, whether this would happen, or to what extent, is not possible to determine, nor could the value of benefits be estimated with reasonable certainty.

Additionally, the benefits are likely to be small for each individual and not fall evenly across marine industries.

Many of the benefits from moving to nationally consistent regulation of maritime safety standards are in terms of avoided costs—that is, the costs that would be incurred under the current arrangements that can be avoided under a single national jurisdiction. For example, a new vessel that is built and put into survey in one jurisdiction and then transferred to another jurisdiction, in most cases, must have the survey re-examined and in some cases, must be re-surveyed. The benefits are largely the removal of costs due to the removal of geographic barriers to trade or movement of labour and vessels.

10.2. IMPACTS ON STAKEHOLDERS

The main impacts on stakeholders of reform are:

(i) changes in requirements,

(ii) changes in the costs of meeting those requirements, and

(iii) changes in the agencies that deliver services (this is discussed in Section 7.5, delivery model options).

This RIS reflects the principles agreed by state, NT and Commonwealth maritime agencies that:

- the regulatory burden will not increase overall as a result of reform;
- legal and administrative costs of regulatory compliance will be minimised;
- reform will be initially implemented based on the status quo of current survey and certification regimes.

10.2.1. Changes in requirements (Options 2 and 3)

For existing industry participants, existing vessels will continue to be subject to their existing requirements during transition (2011-2014) under Options 2 and 3. Existing vessels will be required to become registered under the national system before June 2014. Vessels that are currently under survey, but not registered, will be required to be registered before full implementation. This registration is likely to be administratively managed by the state/NT during this stage, and will likely occur at a scheduled survey.

However, vessels that are currently exempt from survey and registration will be required to become registered under options 2 & 3 and may be required to undertake a minimal safety audit. The intent in regard to these vessels is to include them under a national scheme and on the national database, but not to subject them to significantly increased requirements or retrospective application of standards. They will be subject to any future strategies to improve safety or its administration as any other vessels under options 2 & 3. Any significant changes to standards would continue to require separate impact assessments.

After implementation (July 2014 onward), it is proposed that a national risk-based compliance monitoring scheme be introduced. The consequent change is likely to be an overall reduction in requirements for industry. Under this scheme, vessels assessed as low risk (estimated to be the majority of the existing fleet under survey) are likely to move from an annual periodic survey to a triennial periodic survey schedule. Similarly, high risk vessels with a positive compliance history may remain on an annual periodic survey schedule, but may have shorter (and therefore, cheaper) periodic surveys.

Overall, the aim is to introduce a national maritime safety system that has the capacity to develop, implement and administer uniform and consistent safety standards and regulations across Australia, over time noting that for existing vessels any changes in regulatory requirements in the short-term should be minimised as much as possible.

10.2.2. Changes in costs

All vessels operating across Australia currently face significantly different cost structures for safety regulation. See table 15 for an example of the different survey fees in the jurisdictions. These fees have different structures as well as different levels and are not directly comparable. These services are also subject to widely differing levels of cost recovery by the various agencies.

Table 15: Survey Fee Basis

Maritime Agency	Fee Basis	Minimum Fee	Average Fee	Maximum Fee
WA	Set fee per length	$236.00	$1,633.00	$3,730.00
NT	Set cost per metre	$20 per metre	$20 per metre	$20 per metre
QLD	*Fees determined by private survey providers.*			
NSW	Per metre cost determined by length	$47 per metre	$67 per metre	$84 per metre
VIC	Set fee per length and vessel class	$66.00	$280.00	$647.00
TAS	Length and service provided	$120.00	$349.00	$560.00
SA	Set fee per length and vessel class	$311.00	$1,867.00	$3,674.00

In considering introduction of a national system under Options 2 and 3, state, NT and Commonwealth governments have not yet decided whether stakeholders will: continue to be subsidised by their own jurisdiction; if the Commonwealth government will make a financial contribution to the cost of service provision; or if stakeholders will be charged a levy (and on what basis the levy would be calculated: flat fee, vessel length etc. and how much this levy would be, and whether full cost recovery, if applied, may be phased in). It is therefore, difficult to determine the specific cost impact on specific groups of stakeholders under options 2 and 3. These options would be explored in the Cost Recovery Impact Statement to be undertaken by the end of 2009, with further opportunity for stakeholder consultation.

While specific cost changes to individuals are not yet able to be identified, there are a number of industry participants that will incur less or more costs under options 2 and 3. The table below identifies activities and describes the expected changes in costs (including savings) to industry under options 2 and 3 (Table 16).

Table 16: Impact under a National Maritime Safety System

Likely impact under a national maritime safety system cf status quo		
Current Activity	**Status Quo – Benefits / Costs**	**Options 2 & 3 - Benefits / Costs**
Registration	Required in NSW, Qld, SA and Tas. Fees vary.	Required in all states/NT. Fees will be applied in accordance with the same scale across all states/NT.
Periodic survey	Most states (except Qld) have annual surveys (with biennial surveys for some vessels). Qld has a risk-based compliance monitoring regime.	Existing vessels remain on same survey schedule for the transition period. (Qld vessels remain on existing compliance monitoring regime during transition) Move to risk-based compliance monitoring schedule in full implementation– likely to significantly reduce costs to industry.
Vessels transferring temporarily or permanently between the states/NT	Costs to transfer certificates of survey, possible costs for re-survey or additional inspections eg equipment inspections. Costs to owners to obtain AMSA certification for interstate voyage.	No requirement to re-apply for survey or other certification when operating across state/NT borders either permanently or temporarily. No requirement to apply for AMSA certification for interstate voyages. Requirement to notify change of address if relevant.
New vessels being constructed in one state/NT for buyers in another state/NT.	Costs to obtain certification from the receiving state – usually involving physical inspections by the receiving state (surveyor and travel costs).	An initial survey and certification will be valid in any state/NT regardless of where designed, built, bought or sold.
Crew certification	Need for crew to obtain state-specific certificates and seek mutual recognition of certificates interstate, permanently or temporarily. Need to undertake separate training and examination with	Nationally consistent certification system that will enhance safety within Australian near coastal waters. The development of a seamless career path allowing near coastal certificate holders to gain an unlimited operational

	AMSA to work on larger ships.	certificate. Standardisation of maritime training courses throughout Australia. All maritime RTO's audited to a consistent standard. Standardisation of certificates throughout Australia with a centralised data base. This will lead to the detection of fraudulent certificates.

In regards to possible changes in costs for qualifications and crew certification:

The costs of obtaining the qualification required for each seafarer classification, and for endorsement short courses is not likely to change significantly.

Transport and Logistics Industry Skills Council, Victoria

Stakeholders were also concerned about the transition arrangements.

It is imperative for AMSA to include satisfactory transitional arrangements that will allow existing State and Territory issued Certificates of Competency holders to transition seamlessly into the proposed new national certification scheme at an equivalent level of certification that does not disadvantage the vastly experienced state/NT qualified mariner in any way.

David Breckenridge

10.2.3. Survey and standard requirements

Options 2 and 3 will allow for a risk-based approach to survey and compliance monitoring which is likely to result in reduced costs to industry compared with the existing requirements for vessels. This risk-based system will be introduced in full implementation (2014).

During a national workshop in November 2008, state/NT and Commonwealth maritime agencies developed and agreed on initial and periodic survey requirements to apply to new or up-graded vessels from 1 July 2011, under options 2 & 3. The proposed single survey and standard regime is set out in Appendix D. The changes are summarised below.

This survey schedule will apply to new and upgraded vessels as of 1 July 2011.

In the longer term, the national database will be used to assess the risk of a vessel and determine the regularity of survey. Where possible, risk differentials will allow for risk-based survey regimes to apply immediately, based on information collected by the state maritime agencies.

Hence, while a single national survey regime may mean that more vessels in total will be under survey, the total number of surveys conducted each year is estimated to remain the same.

Following is a brief summary of the proposed survey regime to apply to new and upgraded vessels from 1 July 2011, compared with the existing requirements in each state and the NT.

No stakeholder comment was received in response to this section.

New South Wales

The regime imposes new initial survey/inspection requirements to new and upgraded vessels, and new requirements to comply with commercial vessel standards, on the following vessel types:

- 3D & 3E ≥ 7.5m (currently these vessels are subject only to equipment requirements)
- 2C < 6m no pax (currently subject only to equipment requirements)
- 2D & 2E ≥ 7.5m no pax (currently subject only to equipment requirements)
- 4E ≥ 7.5m which do not operate overnight (currently subject only to equipment requirements)
- Vessels on sheltered waters ≥ 7.5m

Non-propelled barges (sheltered, not high risk, < 24m) will be subject to commercial vessel standards (they are currently exempt from the application of commercial vessel standards).

The following vessel types will not be subject to periodic survey requirements:

- 2C 6m – 7.5m no pax
- 4C which do not operate overnight

Northern Territory

The regime imposes new initial survey/inspection requirements to new and upgraded vessels, and new requirements to comply with commercial vessel standards, on the following vessel types:

- 3C < 7.5
- 3D, 3E vessels 7.5m – 8m
- 4C < 7m which do not operate overnight

3C vessels 7.5m – 8m, and class 4 vessels < 7m which operate overnight, will be subject to new initial and periodic survey requirements and to commercial vessel standards.

The following new and upgraded vessel types will not be subject to periodic survey requirements:

- 2C < 7.5m no pax
- 2D, 2E ≥ 7.5m no pax
- 3C 6m – 7.5m no pax
- 4C 7m – 7.5m which do not operate overnight

2D & 2E vessels 5 – 7.5m, and 4D & 4E vessels 7m – 7.5m (which do not operate overnight) will no longer be subject to initial or periodic survey requirements, or to complete commercial vessel standards.

Queensland

The regime imposes new initial survey/inspection requirements to new and upgraded vessels, and new requirements to comply with commercial vessel standards, on the following vessel types:

- 3C 7.5m - 10m
- 3C < 7.5m

The following vessels will also be subject to new periodic survey requirements:

- 2A & 2B
- 2C ≥ 7.5m no pax
- 2C < 7.5m with pax
- 2E & 2D ≥ 7.5m with pax
- 3A, 3B, 3C ≥ 7.5m no pax
- 3C < 7.5m with pax
- 3E & 3D ≥ 7.5m with pax
- higher risk barges
- class 4 which operate overnight

Class 2D & 2E vessels 6m – 7.5m will not be subject to initial survey requirements, or to complete commercial vessel standards.

South Australia

Under the regime, the following new and upgraded vessels will not be subject to periodic (annual or biannual) survey requirements:

- 2C < 7.5m no pax
- 2D & 2E ≥ 7.5m no pax
- 3D & 3E ≥ 7.5m

Further, 2D & 2E < 7.5m will be subject to reduced survey requirements and will not be subject to complete commercial vessel standards.

Tasmania

Under the regime, the following new and upgraded vessels types will not be subject to periodic survey requirements:

- 2C < 7.5m no pax
- 4C which do not operate overnight

Further, 2D, 2E, 3D & 3E vessels 6m – 7.5m may be subject to reduced survey and standard requirements.

Victoria

Under the regime, the following new and upgraded vessel types will not be subject to periodic survey requirements:

- 2C < 7.5m no pax
- 2D & 2E ≥ 7.5m no pax
- 3C < 7.5m
- 3D & 3E ≥ 7.5m
- 4C which do not operate overnight
- 4D & 4E ≥ 7.5m (not overnight)

Further, the following vessel types will be subject to reduced survey requirements and will not be subject to complete commercial vessel standards:

- 2D, 2E, 3D & 3E < 7.5m
- 4D & 4E < 7.5m which do not operate overnight
- Lower risk, non-propelled barges < 24m and operating in sheltered waters
- Sail training vessels

Western Australia

New and upgraded vessels in classes 2D, 2E, 3D & 3E vessels 7.5m - 8m will be subject to new initial survey/inspection requirements, and new requirements to comply with commercial vessel standards.

2C (no pax) & 3C vessels ≤ 8m and operating within 5nm of the mainland will be subject to new survey requirements and commercial vessel standards.

The following vessel types will not be subject to periodic survey requirements:

- 4C which do not operate overnight
- 4D & 4E ≥ 7.5m (not overnight)
- 2D > 8m no pax
- 3D > 8m

The following vessel types will be subject to reduced survey requirements and will not be subject to complete commercial vessel standards:

- 2D < 7.5m with pax
- 4D & 4E < 7.5m which do not operate overnight
- Lower risk, non-propelled barges < 24m and operating in sheltered waters
- Sail training vessels

10.3. THE LONG TERM AND DISCOUNTING

In calculating the cost benefit analysis in this RIS, it is important to consider not only the immediate costs but also the benefits and costs as they accrue over the long term. For example, initial one-off transition costs may be significant and may or may not be greater than the annual benefits accruing from the changed regulation.

The time value of money refers to the concept that a sum of money received tomorrow is worth less than the same sum of money received today. This is because money received today can be invested and interest earned, so that tomorrow the money held will be the initial sum plus the interest earned. While money received tomorrow will only be worth the face value of the sum of money.

To find the value of a future sum of money in today's term discounting is used to obtain the present value. The expected future sums over a given time period are discounted in to present value. The present value in this cost benefit analysis is for a 20 year time period in accordance with Office of Best Practice Regulation guidelines. In this report two estimates are given, the annual estimate-which is the value in any given year in present value terms-and the long term estimate-which is the sum of benefits for the first 20 years following reform.

A discount rate of seven per cent has been used in this RIS to determine the present value of the future benefits and costs. The sensitivity of the outcome of the cost-benefit to changes in the discount rate is contained in Appendix B. Changing the discount rate (3 and 12 per cent) does not alter the conclusion of the cost-benefit analysis.

10.4. COSTS OF REGULATING MARITIME SAFETY IN AUSTRALIA

10.4.1. Current costs

Ernst & Young were engaged to identify the current costs incurred by the States and Northern Territory in undertaking the safety regulation of commercial shipping activities and collected financial data from all state and NT maritime agencies with the aim of compiling a national view of the total costs of the current regulatory regimes, broken down into the main categories of safety regulatory activity. This data has been important in determining the size of the effort that would be needed to deliver services under a national system.

Whilst considerable effort was made to present a reasonable cost comparison across the seven jurisdictions, there are differences between those administrations in terms of the regulatory requirements they apply, variations in approaches to service delivery, different approaches to the allocation of corporate support costs and the nature and organisational structures of the maritime agencies in each state. Initial costings were returned to each administration for correction and clearance, with the result presented below in summary form.

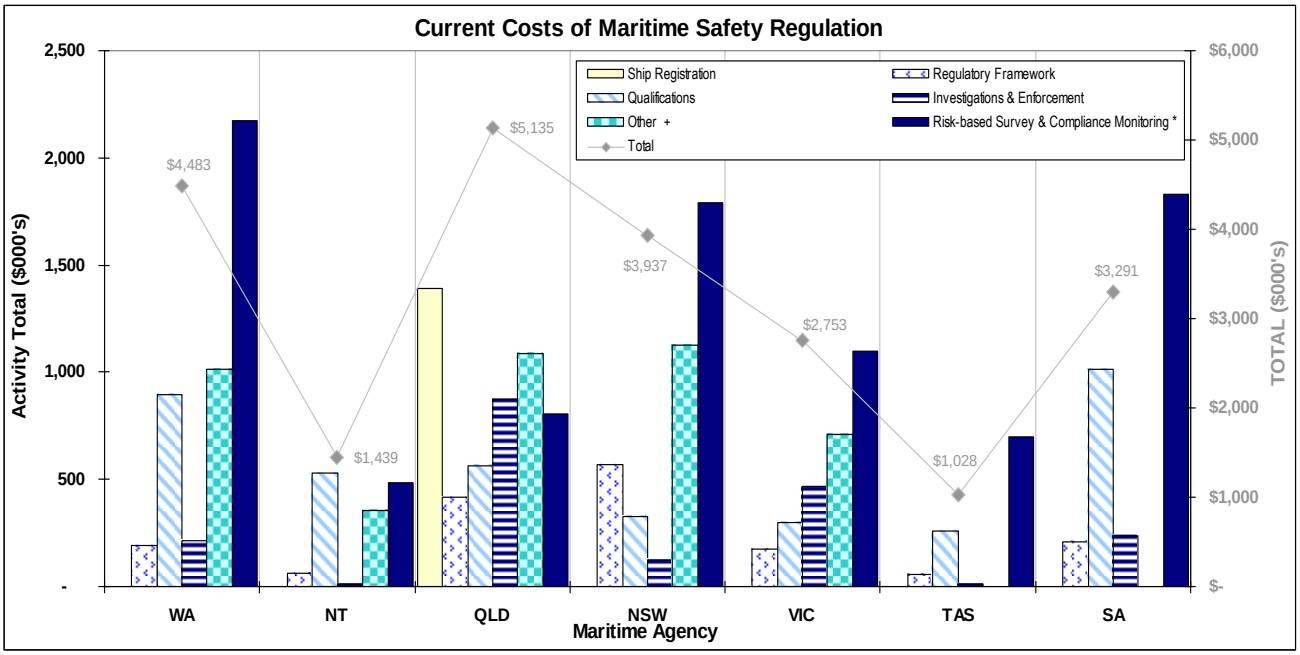
The following data provides a national picture of the current costs of maritime regulation.

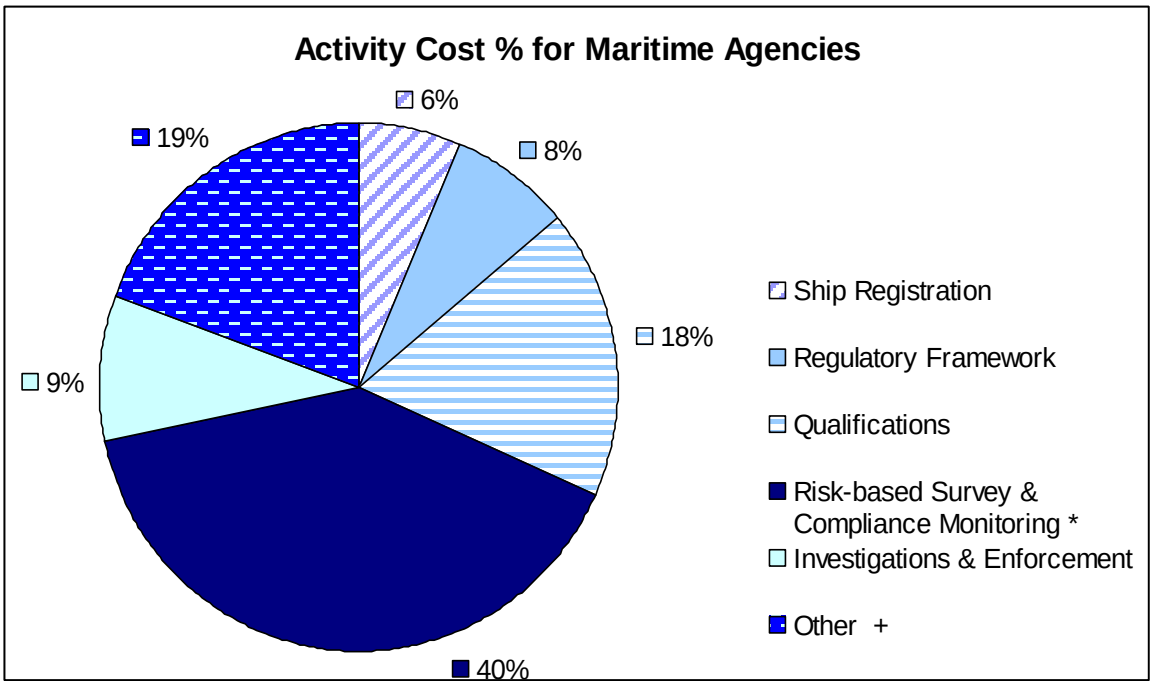
Table 17: Current Costs of Maritime Safety Regulation ($000's)

	WA	NT	QLD	NSW	VIC	TAS	SA	Total	Activity Cost %
Ship Registration	$ -	$ -	$1,390	$ -	$ -	$ -	$ -	**$1,390**	**6%**
Regulatory Framework	$190	$63	$417	$ 567	$ 176	$59	$ 210	**$1,682**	**8%**
Qualifications	$896	$532	$563	$ 324	$ 300	$260	$ 1,012	**$3,888**	**18%**
Risk-based Survey & Compliance Monitoring *	$ 2,173	$482	$805	$ 1,793	$ 1,098	$697	$ 1,830	**$8,878**	**40%**
Investigations & Enforcement	$211	$10	$875	$ 125	$ 468	$12	$ 239	**$1,942**	**9%**
Other +	$1,012	$352	$1,085	$ 1,127	$ 711	$ -	$ -	**$4,286**	**19%**
Total	**$4,483**	**$1,439**	**$5,135**	**$ 3,937**	**$ 2,753**	**$ 1,028**	**$ 3,291**	**$22,067**	

* Includes Safety Management and Safe Manning

\+ Includes auditing of accredited survey providers, education and information, management and administration and IT.





10.4.2. Future costs

The costs of a national system under option 3 have been calculated based on AMSA as a national regulator, delivering services in cooperation with the states/NT maritime agencies. This delivery model is the same as Delivery Model 3 under Option 3. The future annual ongoing cost is estimated at $20.4 million compared with the current costs of $22.1 million.

This saving is through efficiency gains, primarily relating to regulatory framework activities, with minimal change in overall resources in key safety areas such as qualifications/crew certification and risk-based survey and compliance monitoring activities.

It should also be noted that while periodic survey resources remain unchanged, there are substantial savings for industry under a risk-based system, and these have been accounted for in the overall cost-benefit analysis.

Table 18: Current and Future Costs for Maritime Safety Regulations ($000's)

	Current Costs		Estimated Future Costs				*Variance*	
			Costs			FTE's		
	Costs	FTE's	State/NT	AMSA	TOTAL		*Costs*	*FTE's*
Registration	$1,390	14.42	$578	$210	$788	7.50	*-$601*	*-6.92*
Regulatory Framework	$1,682	13.09	$ -	$700	$700	5.00	*-$982*	*-8.09*
Qualifications	$3,888	35.51	$3,473	$280	$3,753	35.20	*-$136*	*-0.31*
Risk-based Survey & Compliance Monitoring *	$8,878	86.35	$9,649	$210	$9,859	80.50	*$980*	*-5.85*
Investigations & Prosecutions	$1,942	14.91	$1,029	$140	$1,169	10.50	*-$772*	*-4.41*
Other +	$4,286	27.11	$1,431	$2,691	$4,121	25.25	*-$165*	*-1.86*
	$22,067	**191.39**	**$16,160**	**$4,231**	**$20,390**	**163.95**	***-$1,677***	***-27.44***

* Includes Safety Management and Safe Manning

\+ Includes auditing of accredited survey providers, education and information, management and administration and IT.

11. BENEFITS AND COSTS OF A SINGLE NATIONAL SYSTEM

The benefits and costs of the single national system are relative to the status quo (Option 1) and are achievable under Option 2 and Option 3.

In assessing the benefits and costs, the differences in services delivery models are noted and a range of values provided, where relevant.

11.1. BENEFITS

11.1.1. Application of National Safety Standards

If maritime safety were not regulated, vessel owners would consider various factors in determining what level of safety to incorporate in their vessel. They would likely consider their own preferences for risk, given that they are likely to spend time on the vessel. They may also consider the risk preferences of potential passengers, clients and crew who will travel, work or have their goods transported, at least insofar as this influences crew costs and passenger demand. They must also consider the upfront and ongoing costs of achieving a particular level of safety.

The decision about the optimal level of safety to embody in the vessel in the absence of any regulation is important because it indicates a particular trade-off of risk and return that is acceptable to the owner. A vessel built for operations in inland waters or calm weather conditions will not be appropriate for use in more hazardous conditions, and the only way that a vessel operator could increase returns from such a vessel (other things being equal) is by exposing themselves to more risk (say, by operating in rougher waters). Essentially, the operator chooses the level of vessel safety that offers the most attractive risk/return trade-off for the variety of conditions that the operator will most often face.

Nevertheless, a case can be made for mandating national standards of safety because doing so can overcome at least three types of market failure:

- They can reduce the costs to crew and clients in terms of ascertaining the safety of a vessel (that is, they can overcome information asymmetries and information search costs);
- They can reduce the moral hazard arising from the fact that an owner does not face the full liability for their failure to meet safety requirements; and
- They can reduce the impact operators may place on others by their adoption of lower safety standards (that is, they can overcome negative externalities).

If collecting and processing information were costless, potential passengers would assess the riskiness of a vessel and determine whether they would be willing to travel on the vessel and, if so, at what cost. A vessel operator would choose a level of safety that balanced the extra cost of increased safety against the extra revenue from the custom of additional passengers. A similar situation would apply to those employing crew on a vessel – the level of safety would balance the costs of embodying that safety with the extra wage savings of having crew willing to work at less cost because they are being exposed to less risk.

Of course, information about exposure to risk is not costless to collect and process and this is one motivation for having mandated safety standards (see Calcott (2004) for a discussion regarding the conditions under which government mandated standards are preferable to simply providing information). A benefit of regular accreditation of a vessel is that it avoids the costs to potential

passengers, crew and clients of having to each independently assess and ascertain the level of safety embodied in a vessel whenever a journey is undertaken. Accreditation by an informed inspector is a signal that some minimum safety standard, sufficient for most individuals, has been met. It avoids the costs of each stakeholder having to undergo their own process of vessel inspection with the attendant costs of lost revenue for the vessel and the cost of the time of the potential passengers and crew. These avoided costs are probably large given that the seaworthiness of a vessel is rarely apparent by cursory inspection.

However, certification that a national standard has been met does not give a complete picture of the absolute level of safety of a vessel. Operators who might otherwise have chosen to embody higher levels of safety in their vessel are potentially dissuaded from doing so because there is no costless way of conveying to potential passengers, crew and clients that exposure to risk has been reduced. Looked at another way, improvements beyond what is required by the standard are not optimal because it is exceedingly costly to convince potential passengers and crew of the extra safety features of the vessel. The optimal choice becomes one of building to satisfy the prevailing standard only; other risk and return tradeoffs that might be superior are not deemed optimal.

The situation becomes worse if over time national safety standards no longer contain the level of assurance that is suitable for the majority of individuals. As technology improves and society's expectations about appropriate levels of risk change, a safety standard that is not regularly updated contains increasingly less information. Essentially, the safety standards become less useful as a 'stand-in' for costly repetitive inspection by stakeholders. At the same time, few operators opt for safety levels in excess of the mandated standard for the reasons already outlined.

It should be noted that there are other arguments for safety standards apart from a reduction in information costs. For example, it is unlikely that a vessel owner would internalise fully the costs to a passenger of a serious injury. Also, maritime incidents can have spill-over effects for the environment that will not be felt in full by a vessel operator and will therefore not be incorporated in the level of safety adopted voluntarily. Search and rescue costs would not be internalised fully by an operator either.

The benefits of updating national safety standards accrue to various parties. One group is those owners who have implemented or are considering implementing greater standards of safety. They benefit from not having to incur the costs of signalling to potential passengers and crew/clients that their increased levels of safety exceed the minimum levels required by the previous standard. Another group who benefits are crew who can work in more hazardous conditions and are thereby more productive. Other groups likely to benefit are passengers (who are now exposed to lower risk) as well as demanders of freight services (whose goods are now also exposed to less risk). Both these groups are likely to demand greater quantities of maritime services in future under the new safety standards. On the other hand, owners who are forced to adopt higher levels of safety but who do not employ crew or carry passengers or freight are unlikely to benefit from the indirect demand increases of safer maritime regulations. Finally, any individual who could potentially be affected by a negative externality arising from a lower safety standard (such as an oil spill or the failure of crew to keep a proper lookout) would benefit from having the likelihood reduced of this event taking place.

Given that processes are underway to have new national safety standards developed and introduced under the status quo (option 1), it is important to keep in mind that the benefits of a single national system (options 2 and 3) lie in the likelihood that safety standards can be adopted earlier and with more consistency than they could otherwise be. The proposed national system under options 2 and 3 also includes a proportionately significant number of commercial vessels within the system, which are currently not subject to registration or survey.

Estimating the benefits

There are two methods that may be used to provide an indication of the magnitude of the benefits that may be expected from implementing the NSCV under options 2 and 3. Firstly, through the productivity improvement in the maritime industries from reducing market failures in these industries, or secondly, through the total welfare impacts to Australia from reduced injuries and fatalities resulting from the consistent application of national safety standards. These two methods are not cumulative; they are two separate methods for estimating the benefit of increased safety.

Productivity improvements

One way to estimate the benefit of increased safety standards is through applying a productivity shock to a model of the economy. The productivity improvement in the maritime sector due to the reform would need to be calculated first and then applied, as a 'shock' to a model of the Australian economy. A productivity shock rests on the assumption that decreasing the size of market failures in these maritime industries – that is, reducing information asymmetries and information search costs, moral hazard and negative externalities – would result in an increase in productivity to the economy as a whole.

One limitation of this approach is that it only considers the value of economic output. There are other potential welfare gains or losses as health affects overall quality of life and benefits that accrue to leisure time.

Additionally estimating what the potential productivity improvement would be is difficult. In this case it has not been possible to estimate.

Reduced injuries and fatalities

Another way to estimate the benefit of the consistent and broadened application of national safety standards is to estimate the benefit of reduced injuries and fatalities. This rests on the assumption that improvements in safety beyond what is required by the standard are not optimal for vessel owners because it is exceedingly costly to convince potential passengers and crew of the extra safety features of the vessel (as explained above). It also rests on the assumption that vessels owners face a moral hazard when providing a level of safety because they do not face the full costs of an injury or fatality resulting from providing a lower level of safety.

A limitation of this approach is that it fails to capture many of the productivity improvements as discussed previously – such as reduced information search costs.

To estimate the benefit of reduced injuries and fatalities an estimate of the value of an avoided injury and fatality is required. The National Occupational Health and Safety Commission provide estimates of the average cost of a workplace incident resulting in injury in the workplace in Australia. The Australian Safety and Compensation Council provide estimates of the value of statistical life (VSL). These values are used to estimate the potential benefit from increased safety standards in terms of reduced number of injuries and fatalities.

The value of injuries avoided

The average weighted cost of an incident resulting in a workplace injury in, 2008 prices, is $237 000. This weighted average is calculated from the numbers in table 19. It is calculated by multiplying the cost of each injury category by the number of injuries for each category and then dividing by the total number of all injuries. An average of this kind must be used in this cost benefit analysis as no breakdown of the severity of maritime injuries was available. The average cost of a fatality has been

removed from the weighted average as the value of fatalities avoided is estimated using the value of a statistical life.

Table 19: Average cost of injuries (including pain, suffering and early death), 2000-01 prices

	Temporary < 5 days off work	Temporary, return to full duties	Temporary, reduced return	Permanent incapacity, no return
Number of injuries	177,778	101,042	11,590	24,487
cost per injury	$1,719	$20,813	$1,008,621	$2,000,000

Source: Derived from tables 2.4 and 3.1 in NOHSC 2004.

To calculate the value of the reduced cost of injuries the number of injuries that may be avoided through implementing the NSCV needs to be estimated.

In all of the standards and RIS for the NSCV there is no indication of the reduction in the risk of incidents, injuries or fatalities. Hence it is necessary to estimate the potential number of injuries (and fatalities) that may be avoided through application of the NSCV as intended. For existing vessels all vessels will have some level of inspection (whether a safety assessment or survey) and risk-based survey and compliance monitoring that provides a greater chance that unsafe aspects of vessels do not go undetected (see Box 13 for a discussion of coronial reports highlighting unsafe aspects of vessels in current survey). For new and upgraded vessels, given that the NSCV requirements for buoyancy and stability after flooding are expected to reduce the consequences of the majority of individual incidents by separating compartments and limiting the potential effects of flooding, the injuries that are due to capsizing, swamping, loss of stability, flooding and sinking would be expected to fall under full implementation of the NSCV.

On average, 43 serious injuries (that is, injuries requiring hospitalisation) occurred in the commercial maritime industry in 2005 and 2006, with;

- Capsizing, swamping, loss of stability, flooding and sinking was the initial occurrence in for 20.8 per cent of all incidents in 2005 and 2006
- Material factors (categories relating to various forms of vessel failure) were the main contributing factor in 18 per cent of incidents.

Although human factors accounted for just over half of all the contributing factors, it may have been another factor that caused the injury directly. This is because a marine incident consists of a series of events and as the NMSC states *"for classification purposes only ONE of these events must be selected. The nature of the incident code relates to the data which best describes the type of marine incident that occurred. In deciding the nature of the incident, it is the INITIAL OCCURRENCE in that incident which should be selected from the data items listed below. For example: A vessel contacts a submerged object and subsequently floods with water, then sinks. The nature of the incident should be recorded as collision with a submerged object*"[12].

So although improvement of safety standards may not greatly reduce the number of incidents caused by human factors, improved safety standards mean it is more likely that a well-maintained vessel properly equipped with safety equipment will be safer for its crew in the event of an incident – whether human-induced or otherwise. Hence the number of incidents that may be affected by

[12] NMSC 2007, p11

implementation of options 2 or 3 may be greater than the numbers quoted above as only the initial occurrence or main contributing factor has been recorded.

A national system will mean that safety standards are applied and implemented consistently and uniformly under options 2 and 3. However, there is a level of risk in achieving uniformity under option 2, discussed further in Section 11.3. This removes the potential for misinterpretation by the jurisdictions that may potentially compromise the intended safety outcomes of the safety standards.

A number of Coroner's reports and incident investigation reports point to the vessel not meeting the full requirements of the jurisdictions' safety standards (*see Coronial Examples*). It is possible that consistent application and enforcement of safety standards will maximise the application of national safety standards to all vessels intended to be part of the national system under options 2 and 3 and improve safety, resulting in fewer incidents and fewer resulting deaths and serious injuries.

However, the implementation of the USL/NSCV (existing vessels) and NSCV (new and upgraded vessels) will only deliver an incremental reduction in incidents beyond what state implementation of these safety standards would deliver. Determining what this number may be is very difficult. To demonstrate the potential benefit table 20 presents the range of potential benefit – from the implementation of safety standards having no affect on the injury rate (0 injuries avoided) to preventing all of the injuries that are caused by material factors or capsizing, swamping, loss of stability, flooding and sinking (8.3 injuries avoided – calculated as the average of 20.8 and 18 per cent (19.4 per cent) multiplied by the number of injuries (43)).

Table 20: The value of potential injuries avoided

Injuries avoided	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**8.3**
Value per year ($ million)	0.24	0.47	0.71	0.95	1.19	1.42	1.66	1.90	1.97
Long term value ($ million)	2.5	5.0	7.5	10.0	12.6	15.1	17.6	20.1	20.8

The benefit of injuries avoided ranges from zero if no injuries are prevented, to $1.97 million per year if all injuries of the nature described above are prevented. To provide an indicative number for the RIS it was assumed that of these incidents a third would be prevented by state implementation of the USL/NSCV and NSCV, a third would be prevented by reform under options 2 and 3 and a third of injuries would not be affected by the safety standards (regardless of the method of implementation). Options 2 and 3 are expected to achieve this reduction as they will:

- include vessels that are currently exempt from safety standards (most of which are fishing vessels) and subject them to a risk-based survey and compliance monitoring scheme; and
- will also ensure that vessels operating in Australia have a full survey, compliance and incidence history attached to their national registration which removes any issues that currently arise when vessels transfer between states/NT without their full history being available to the receiving jurisdiction.

A number of coronial findings across Australia have noted serious issues that have arisen from either jurisdictional splits or jurisdictions not adequately enforcing or administering national standards. See Box below.

Options 2 and 3 are estimated to reduce by a third the number of injuries that are due to, or caused by, material factors or capsizing, swamping, loss of stability, flooding and sinking.

A reduction in 2.7 injuries per year at an average cost of $237 0000 would result in an annual saving of $640 000. Over the long term the saving would be $6.78 million.

Coronial Examples:

Incidents 1*: On the 29 January 2004, a crew person was lost from a commercial fishing vessel when the boat rolled over and sank. The coroner identified inadequacies in safety requirements and recommended changes to legislation aimed at reducing the likelihood of similar incidents. The coroner recommended:*
-the state regulator consider curtailing any concessions that exclude the application of safety design requirements to any commercial fishing boats so that the National Standard for Commercial Vessels (NSCV) is applied to all trawlers and that if necessary regulations be amended to make mandatory the inspection and approval of any changes to trawling equipment that could impact upon a vessel's stability
- the installation of quick release mechanisms on trawl cables be mandated for all commercial trawlers
- the state regulator investigate to identify the most appropriate type and models of inflatable life raft and hydrostatic release, Personal Flotation Device (PFD) and Emergency Position Identification Radar Beacon (EPIRB) to ameliorate the dangers faced by trawler men and that relevant regulations be amended to mandate that trawlers carry such life rafts, and commercial fishermen wear such PFDs and carry such EPIRBs when working offshore whenever they are on deck.

Incident 2*: On June 12, 2008, the coroner found the state safety regulator failed to inspect an unseaworthy pilot vessel in the years before a deckhand fell to his death. It is assumed the deckhand slipped, tripped or stumbled and fell from the vessel. An inspection of the vessel following his death revealed numerous safety concerns and resulted in it being classified as unseaworthy. The coroner found that the regulator had been warned of the safety concerns by a former staff member in May 2004, months before the incident, but failed to respond due to a shortage of resources. He recommended the regulator review its inspection regime for commercial vessels to ensure they are seaworthy and develop guidelines to enable relevant vessel operators to better understand what was required to comply with safety management regulations.*

Incident 3: *On 25 October 2004, an owner/operator of a commercial vessel drowned. At the time of death, the vessel was engaged in squid fishing being in survey as Class 3D for fishing in port limits, but was also in survey to carry passengers (class 3D). While the coroner found that the deceased could have taken greater care of his own personal safety by wearing a personal floatation device or attaching a lifeline, the vessel was not being operated in accordance with the applicable survey of state legislative requirements. The vessel was extremely untidy, dirty and not in a seaworthy condition. The coroner commented on the inadequate action taken to police compliance with those requirements and recommended that the regulator carry out policing at such a level to positively influence compliance levels.*

Incident 4: *On 22 April 2006, a commercial fishing vessel rolled over and soon sank when its nets snagged on an unidentifiable object. The skipper was lost overboard. The coroner commented adversely upon the divergence between the NSCV and relevant state laws which permit exemption in terms of stability and safety requirements for commercial fishing vessels and the delays in*

removing these divergences. He recommended that compliance with the NSCV be made mandatory by the state regulator for all commercial fishing vessels to which it relates forthwith and that in particular, the elements concerning crew competencies and safety equipment be made operative immediately. The coroner also recommended that the policies governing the investigation of marine incidents are reviewed by the state regulator to ensure that incidents involving serious injury and loss of life are properly investigated, and that issues arising from such investigations are responded to in the manner most likely to promote marine safety. The coroner commented in his report that a search of the National Coronial Information System indicated that in the ten years 1994 to 2004, 16 trawler men died at sea in fishing vessel incidents.

Incident 5: *On 14 January 2007, a passenger charter vessel carrying the master, 3 crew and 41 passengers experienced an engine room fire. The vessel required evacuation. A safety investigation by the state's chief investigator for marine safety found the engine room fire was caused by a faulty electrical connection and the fixed fire suppression system was not operational at the time of the incident. In this case, the state regulator's annual survey had required that the vessel's fire system be tested and a report submitted, but did not clearly identify the components requiring testing. The regulator had also accepted a statutory declaration from the owner that all requirements in the relevant survey report had been completed which may not have provided adequate proof. The engine room fire suppression system was not serviced as required by the regulator's survey of the vessel. The investigator recommended the state regulator review its survey processes especially with respect to modifications to vessels and survey requirements for critical safety equipment. The investigator also made recommendations for the regulator to review the requirements for safety management plans for passenger vessel operators and crew competency requirements.*

The value of fatalities avoided

The Australian Safety and Compensation Council (ASCC) (2008), after conducting a meta-analysis, suggests an average VSL of $6.0 million in 2006 prices – which is $6.34 million in 2008 prices. There is a large range of values for a VSL that are recommended by various organisations in Australia – sensitivity testing of the value of the VSL is provided in Appendix B.

To calculate the value of the reduced cost of fatalities the number of fatalities that may be avoided through implementing safety standards under options 2 and 3 need to be estimated as for injuries.

On average, there were 8 fatalities a year between 2005 and 2007 (please refer to the incident data section in 5.3.2). From 1994 to 2004;

- Capsizing, swamping, loss of stability, flooding and structural failure was the initial incident contributing to commercial vessel fatalities in approximately 41 per cent of cases; and
- Equipment failure was the initial contributing factor in 13 per cent of cases.

Similarly to injuries, it is difficult to determine the number of fatalities that may be avoided through consistent application of national standards. To demonstrate the potential benefit table 21 presents the range of potential benefit – from having no affect on the fatality (0 fatalities avoided) to preventing all of the fatalities that are caused by material factors or capsizing, swamping, loss of stability, flooding and sinking (2 fatalities avoided – calculated as the average of 41 and 13 per cent (27 per cent) multiplied by the number of fatalities (2.16)).

Table 21: The value of potential fatalities avoided

Fatalities avoided	1	2	2.16
Value per year ($ million)	6.3	12.7	13.7
Long term value ($ million)	48.3	67.1	134.3

The benefit of fatalities avoided ranges from zero if no fatalities are prevented, to $13.7 million per year if all fatalities of the nature described above are prevented by the implementation of the single national system under options 2 or 3. To provide an indicative number for the RIS it was assumed that of these incidents a third would be prevented by state implementation of the USL/NSCV and NSCV, a third would be prevented under options 2 or 3 and a third of fatalities would not be prevented by changes in the safety standards (regardless of the method of implementation). The same reduction as injuries is assumed for the same reasons. This RIS only considers the one third improvement under options 2 and 3, because the one third improvement due to state implementation of the USL/NSCV and NSCV will occur independent of the national system (and is not a marginal benefit of the option 2 and 3).

The single national system (options 2 or 3) is estimated to reduce by a third the number of fatalities that are caused by material factors or capsizing, swamping, loss of stability, flooding and sinking.

A reduction in 0.72 fatalities per year at VSL of $6.34 million would result in an annual saving of $4.6 million. Over the long term the saving would be $48.73 million.

Consistent and comprehensive application of national safety standards is most likely to proportionately reduce injuries and fatalities, and deliver an estimated benefit of approximately $55.51 million ($6.78 million and $48.73 million respectively). It should be noted that it is difficult to estimate the number of injuries and fatalities that may be avoided under options 2 and 3. The method used has only considered that a single national system (options 2 or 3) will affect injuries and fatalities that result from material factors or capsizing, swamping, loss of stability, flooding and sinking – it is more likely that the number of injuries and fatalities from other incidents (due to improved stability and decreased risk of swamping, flooding, and sinking follow an incident) would also be reduced, however there was no way to determine this given the way the data is recorded. Hence the maximum number of injuries and fatalities that may potentially be prevented is likely to be understated – with only a third of this saving attributed to options 2 and 3 in the analysis. Hence it is unlikely that the number included in the RIS is an upper bound estimate.

It should be noted that this approach is likely to underestimate the total benefit to Australia as productivity improvements have not been able to be estimated. This figure also does not take into account the fast-tracking of other safety strategies such as safety management systems, which will occur under options 2 and 3.

1.	**Consistent application of national safety standards.**	**$55.51 million**

The Maritime Union of Australia noted that this benefit was understated.

The other main difficulty with the RIS in our view is that it focuses too much on the processes, like resolution of cross border administrative inefficiencies, at the expense of a focus on the underlying rationale for the reform and the outcomes of good policy, and that is to improve maritime safety.

This has two effects. First, it camouflages the policy objective, which is to reduce deaths and injuries to maritime employees, other workers on vessels and passengers on the one hand, and the commercial and secondary impacts of poor vessel safety such as losses of, and damage to, property and cargo,

with consequential impacts on insurance costs, legal costs, regulatory costs (inquiries etc) – all this being overarched by a loss of public confidence which impacts on tourism and other aspects of maritime operations.

Second, it results in an under-estimation of the costs of not pursuing reform. The administrative savings as shown by the cost benefit analysis included in the RIS are relatively modest though nevertheless important, but if the actual costs of deaths, injuries, loss of property etc were factored in, which we believe they should be, the benefits would far outweigh the costs once a correlation between reform and reduction of such losses is established. We think such costs can be indicatively quantified (as shown by the discussion in Section 11 of the RIS) and should be attempted in the final version of the RIS.

Maritime Union of Australia

No alternative costings were submitted by stakeholders.

11.1.2. Transferring certificate of survey to another jurisdiction

The majority of states and territories have policies of mutual recognition that mean a certificate of survey in one jurisdiction is recognised in another. This means that in many jurisdictions it is not difficult to transfer a certificate of survey. Submission responses were mixed about whether the transfer of vessels was difficult. Some reported no difficulties:

"I have experienced no problems transferring vessels in Tasmanian survey into other Authorities that are not easily resolved through timely and open liaison between all parties. I have also been involved in the refitting of vessels in Tasmania intended for operation in other states and, again, have found no problems not resolved through mutually respectful dialogue.

The import of vessels into Tasmania from overseas and Queensland, needs to be dealt on a case-by-case level with ready consultation with MAST. Having been involved in a number of such vessels, I have developed a procedure of documentation, survey and liaison that satisfies the combined needs of the owner, financiers and authority. I believe much of the work of this procedure would still need to be undertaken even if there was a single National authority due to the need to satisfy the owner and financiers of the value of the asset.

I have, of course, heard stories - more repeated then numerous - of difficulties 'bringing' vessels into survey with a different Authority. I believe such cases are almost always due to a combination of too ready acceptance of the broker's representation; poor initial survey and a failure to recognise an Authority's more global Duty of Care (to other operators, the public, the environment, etc)."

Murray Isles, TAS

"I support MAST's point that while our regulatory regime is not perfect its problems are being attended to and add that wherever this exercise may lead, on what basis might any substantive change be expected to produce a better or even just an equivalent outcome in a more timely manner?

The USL code contains a clause that provides for an exemption to be sought or an equivalent arrangement proposed to any such prescriptive requirement set out in the Code. The NSCV has equivalent provisions scattered all through it in a mass of verbiage with amounts to little more than

exactly the same. In both documents it is incumbent upon the applicant for either the exemption or equivalent arrangement on the one hand or a not deemed to comply solution on the other to set out a proper basis, as of course it should.

I have had on numerous occasions reason to make application for equivalent arrangements for vessel stability, structure, pumping arrangements, hatch coatings and covers, fire fighting etc through to means of escape and passenger protection on large passenger vessels (i.e. 500 to 1000 passengers). All these were under the USL Code, many were in Tasmania but many were for inter state projects (including the large passenger vessels). I have also personally arranged for the USL code to apply to a fast ferry built in WA for service in Malaysia.

I put it very firmly that that while I agree that there are niggling issues that arise when having to work between states and that the USL Code was never perfect, I have never had any serious problem in getting a reasonable outcome. On a percentage scale the shortcomings of the USL Code and the present jurisdictional arrangements are in the low units, not even into the tens."

Mike Seward, Seward Maritime, TAS

However, many other participants at the consultations suggested that it was difficult to transfer vessels across jurisdictional boundaries.

"On inspection in different states, invariably there is a request for some additional safety equipment due to a difference of interpretation of that national standard. This usually results in frustrating admin work for our production team; delays in having the boat in operation and therefore loss of earnings; frustration from the customer; frustration for the charter boat operator."

Mike Rees, Seawind Catamarans,NSW

Usually it is necessary to apply to the receiving jurisdiction and they will recognise the certificate. In some cases, for a certificate of survey issued with exemptions, or in any other case where the receiving jurisdiction is not willing to immediately recognise an interstate survey, it may be necessary for a vessel to be resurveyed. Other vessels can be moved without requiring a re-survey.

However, the process of transferring a certificate of survey for a vessel from one jurisdiction to another can be time consuming. There are also costs associated with applying to the jurisdiction even if the state or territory ultimately recognises your interstate certificate of survey.

In a single national system, this requirement would be removed. Under Option 2, mutual recognition should occur and under Option 3, the survey certificate will be national and automatically valid in all states/NT.

For the purposes of estimating benefits in this RIS, it is assumed that when vessels transfer interstate (those not requiring re-survey), there are costs borne by the maritime agency in processing or re-certifying the vessel as well as costs by the owner/operators in applying for re-certification. This time is estimated at approximately half a day for each party. These FTE savings to the maritime agency have been taken into account in the calculation of administrative efficiencies. 380 vessels transfer interstate each year without requiring re-survey[13].

The calculation of the costs to the operator of the loss of half a day of profit is determined using the average weekly gross cash receipts for charter fishing vessels in Queensland. The average revenue of

[13] NMSC November 2007

Queensland vessels was selected as this is the jurisdiction in which most of the re-surveys occur. The average weekly cash gross receipts of charter fishing vessels less variable (avoidable) costs, in 2008 prices, is $2625 (Galeano et. al. 2004). Variable costs include for example, fuel, bait and casual labour. Unavoidable costs include for example, repairs, licence fees and insurance. As these unavoidable costs are covered by gross cash receipts they are not deducted and are part of the opportunity cost of downtime. These costs are representative of the 'nuisance' factor of going through this additional administrative procedure, which has nothing to do with the safe operation of the vessel (which was previously operating legally in the jurisdiction it has left), and simply to do with operating in a different state/NT.

A	Vessels moving interstate per year	380	380
B	Half day profit for operator ($2,625 weekly)	($2,625/5)*0.5	$262
C	A x B = Annual Cost		$99,560
	Net Present Value		$1,054,740

2.	**Savings to industry and state/NT by removing the requirement for interstate re-certification of survey certificate**	**$1.05 million**

No alternative costings were provided by stakeholders.

11.1.3. Re-survey

In an average year, of the vessels seeking permanent transfer from one jurisdiction to another, at least 60 have to be re-surveyed[14]. It is assumed that this cost of re-survey would be avoided under options 2 and 3, and so the resulting cost savings are a benefit. Discussions from the consultation process and some submissions indicate that boat builders often pay consultants to conduct an interstate transfer of vessel on their behalf. Anecdotal evidence indicates that the fee for this service is in the range of $500 to $4000 for a certificate of survey, with the average fee around $2000. Even for those vessel owners that do not pay this fee when they transfer their vessel it provides a good indication of the value of time and effort required to transfer a vessel.

Bringing forward a survey sooner than the expiration of a current certificate means that the timing of all future certificates are brought forward. Bringing forward the cost increases the cost over the long term as bringing forward cost means that it is discounted by less. If, on average, certificates are transferred halfway through their validity, then over a 20 year period the increased total cost for all future periodic surveys is $265 (based on a discount rate of seven per cent and an average fee for periodic survey ($580), along with the 'nuisance' factor of time spent arranging the transfer and having the boat resurveyed ($2000). In an average year this represents an additional cost to industry of approximately $135 900.

[14] Various sources

In addition to these costs is loss of income while waiting for the new certificate of survey. These periods of inactivity usually result from remedial work needing to be completed before the certificate of survey will be issued. This usually involves the addition of more safety equipment to the vessel and generally does not involve structural changes. Anecdotal evidence suggests that the average time that a vessel may be 'out of action', while the standards in the new jurisdiction are met, is about a week and a half. The average revenue that is foregone has been calculated as the average weekly gross cash receipts for charter fishing vessels in Queensland. The average revenue of Queensland vessels was selected as this is the jurisdiction in which most of the resurveys occur. The average weekly cash gross receipts of charter fishing vessels less variable (avoidable) costs, in 2008 prices, is $2625 (Galeano et. al. 2004). Variable costs include for example, fuel, bait and casual labour. Unavoidable costs include for example, repairs, licence fees and insurance. As these unavoidable costs are covered by gross cash receipts they are not deducted and are part of the opportunity cost of downtime. With 60 boats no longer out of operation for a week and a half, this represents a cost saving of approximately $236 250.

A	Vessels requiring re-survey	60	60
B	Average consultant fee to transfer a survey interstate	$2,000	$2,000
C	The cost of bringing forward all future surveys by 6 months		$265
D	Loss of profit for 1.5 weeks waiting for re-issue of certificate	1.5 x $2,625	$3,938
	A x (B + C + D) = Annual Cost		$372, 180
	Net Present Value		$3,942.800

3.	**Savings to industry and state/NT by removing the requirement for re-survey on interstate transfers.**	**$ 3.94 million**

No alternative costings were provided by stakeholders.

Companies and organisations in the maritime industry are well aware of the existence of differences in application of design and construction standards between states and territory. So while they may not have the detail of these differences they know they exist and therefore need to devote staff time to checking what the differences are before they can move ahead. Even if in a particular case they find there is no difference, they have wasted time and effort in undertaking the checking process.

And of course if there are differences then they need to vary their design and construction - again an unneccessary waste of time and effort and extra cost.

Graham Taylor, Taylortech, NSW

11.1.4. Construction survey of new interstate vessels

Participants at the first round consultations and also some of the submissions suggested that there is transaction costs involved in having a vessel designed and built in another jurisdiction for use in the home jurisdiction. Boat builders approach this problem in two ways, they either;

1. Build and design the vessel to the standards of their jurisdiction and then have the certificate of survey transferred to the buyer's jurisdiction when complete; or they
2. Build and design the vessel to the standards of the buyer's jurisdiction and fly a surveyor from the receiving jurisdiction to their jurisdiction at appropriate times during construction.

In the first case the costs are included as some of the interstate transfers of certificates, assessed in the previous section.

In the second case the costs of the interstate travel is assumed to be on average $1000. $500 for flights and $500 for the travel time of the inspector during which they are unable to perform other duties. It was not possible to determine from the available data the number of new boats each year that were built in another jurisdiction that required the interstate transportation of a surveyor. Given that there are approximately 600 new boats every year entered into survey there may be a significant number of boats affected. However, the number of interstate builds is likely to be much less than the total number of new boats each year; as an order of magnitude indication of how large these savings may be, and based on anecdotal evidence from the first round of consultations, a quarter of new boats has been used to estimate the potential savings.

A	Average cost of survey by interstate surveyor	$1,000	$1,000
B	Approximately 150 new vessels requiring interstate survey	600 / 4	150
	A x B= Annual Cost		$150,000
	Net Present Value		$1,589,102

4.	**Savings to industry and state/NT from removing requirement for interstate survey of new vessels during construction**	**$1.59 million**

The consultation RIS noted that it is difficult to find reliable numbers for interstate builds and sales. The information used was based on anecdotal evidence from the consultations. No alternative costings were provided by stakeholders.

11.1.5. Introduction of risk-based survey and compliance monitoring

As discussed previously in Section 8, it is estimated that a national risk-based survey and compliance monitoring scheme is likely to bring significant savings to vessels. Based on AMSA's model for compliance monitoring already in place for large vessels, it is estimated that one third of the 8, 966 vessels currently under annual survey[15] would be surveyed each year (based on categories of risk). Therefore, the 8,966 would generally be surveyed once every three years, gaining an annual benefit of two-thirds of the cost of periodic survey.

A	Number of vessels in low risk category	8,966	8,966
C	Annual savings of periodic survey under new scheme	$580 x 2/3	$387
	A x C = Annual Cost		$3,469,842
	Net Present Value		$36,759,556

5.	**Savings to industry from the introduction of a risk-based survey and compliance monitoring system.**	**$36.76 million**

No alternative costings were provided by stakeholders.

11.1.6. Administration

Analysis and modelling of future state, NT and national regulator costs was undertaken by Ernst & Young from October to December, 2008. In addition, alternative delivery models were developed and discussed at a national workshop in February, 2009 in Adelaide. AMSA, as the proposed national regulator, has also considered current and future state service delivery models in relation to its own needs during transition and over the longer term.

Most state/NT maritime agencies have indicated their willingness to continue to be involved in delivering services, at least during the transition period. During this time it is unlikely that administration efficiencies will be realised due to the need to establish and set up the national regulator, while maintaining services to industry.

Under the alternative delivery models described in Section 7.5, there is a range of savings achievable – from 47 FTEs to 28 FTEs, depending on the final model chosen for service delivery.

[15] This figure represents total vessels under annual survey taking into account biennial survey of vessels in South Australia and triennial survey of some vessels in Tasmania.

These savings are based on the average annual FTE costs reported by maritime agencies of $115,000[16] for a full time worker. The potential savings are based on a range to show the variations in delivery models.

This FTE analysis assumes the functions of standard development including consultation with industry, community education, policy and general support are under a national regulator and is calculated in the net FTE benefits. However, it does not include the savings of these functions from the NMSC estimated to be 3 FTEs.

A	Average FTE costs in existing maritime agencies	$115,000	$115,000
B	FTEs savings under Delivery Model 1 (AMSA)	47 FTEs	47
C	FTEs savings under Delivery Model 3 (Collaborative)	28 FTEs	28
D	Standard development savings	3 FTE's x 115,000 = $345,000	
	D+ (AxC), D+(AxB) = Annual Cost		$3,565,000 to $5,750,000
	Net Present Value		$37,767,661 to $60,915,581

6.	**Administrative efficiency savings**	**$ 37.77 million to $ 60.92 million**

No alternative costings were provided by stakeholders.

[16] Various sources

TOTAL BENEFITS OF A SINGLE NATIONAL SYSTEM

1.	**Consistent application of national safety standards**	**$55.51 million**
2.	**Savings to industry and state/NT agencies by removing the requirement for interstate re-certification of survey certificate**	**$1.05 million**
3.	**Savings to industry and state/NT agencies by removing the requirement for re-survey on interstate transfers**	**$ 3.94 million**
4.	**Savings to industry and state/NT agencies from removing requirement for interstate survey of new vessels during construction**	**$1.59 million**
5.	**Savings to industry from the introduction of a risk-based survey and compliance monitoring system**	**$36.76 million**
6.	**Administrative efficiency savings**	**$ 37.77 million to $ 60.92 million**
	TOTAL	**$136.62 million to $159.77 million**

11.2. COSTS

11.2.1. National regulator

This section includes the costs of setting up a new national regulator. These will be one-off costs and staff costs during the transition stage. These costs include FTEs that overlap between those starting with the national regulator during transition and those still working in the states/NT at the same time.

Significant legislative development, drafting and consultation will be required to implement a national system under options 2 or 3. The cost estimate is based on meeting the proposed start date of 1 July 2011. This legislative work will occur largely during 2010. This will include additional legal advice, lawyers and technical experts to prepare National Partnership Agreements, internal drafting instructions for new legislation and supporting documentation (eg. explanatory and consultation material), as well as non-legislative procedures assisting with administration and interpretation of legislation.

A major education awareness campaign will also be needed to advise stakeholders of the introduction of the national system under either option. This campaign is likely to occur during 2010-2011. This cost is based on the significantly larger recent national education campaign managed by AMSA for all recreational and commercial vessel owners to upgrade to the 406mHz global positioning beacon and to become registered. A smaller national campaign will involve 3 FTEs and $500,000 for campaign material, PR consultancy, distribution, printing, industry events and publications.

It is estimated that the majority of staff working directly for the national regulator will need to begin work during transition to manage data transfer, negotiate and accredit service providers and set up the database and other systems. Using the modelling by Ernst & Young, this would require approximately 30 FTEs for the three year implementation period.

Staff in the regions (either state/NT or national regulator staff) will need training during the implementation period. Based on AMSA's surveyor training conducted each year, this will cost approximately $50,000 per one-week training block. It is estimated that 14 workshops across Australia will be necessary.

A	Development and drafting of national legislation - external legal advice - 15 FTEs during the first year - drafting costs	 $300,000 $1,725,000 $420,000	$2,445,000
B	Education Awareness Campaign - 3 FTEs @ $115,000 - Campaign budget	 $345,000 $500,000	$845,000
C	National system staff costs during	30 FTEs for 3 year	$9,053,890

	transition (net present value)	implementation @ $115,000= Ann cost $3,450,000	(NPV over 3 years)
D	Training of staff in regions	14 one-week workshops @ $50,000	$700,000
	Net Present Value		$13,043,890

1.	**Establishment of national regulator**		**$13.04 million**

No alternative costings were provided by stakeholders.

11.2.2. Existing vessels

Existing vessels under survey will be expected to continue to meet their existing standards including their current survey regime during transition period. For vessels currently exempt from survey, an initial safety assessment will be conducted and appropriate standards applied to allow registration.

There are approximately 11,989 vessels not under registration or under survey. Excluding the Hire and Drive vessels (3,397) in this number, there are 8,592 vessels, mostly fishing vessels (5,017 vessels).

It is expected that a safety assessment will on average, cost the same as half the average cost of a periodic survey ($290) as well as approximately half a day of profit by the owner/operator, (*as per the estimate for half day profit for operators in 11.1.2 Transferring certificate of survey to another jurisdiction*). This is also a one-off cost of bringing vessels into the national system, including the issuing of national identification plates for all vessels to be covered by this safety regulatory program.

A	Number of vessels not in survey, not in registration	8,592	8,592
B	Average cost of periodic survey	$580/2	$290
C	Half day profit for operator ($2,625 weekly)	($2,625/5)*0.5	$262
	A x (B + C)		$4,742,784
	Issue of new identification plates for all commercial vessels	28,346*$40	1,133,840
	Net Present Value		**$5,876,624**

2.	**Costs of bringing vessels into the national system**	**$ 3.63 million**

No alternative costings were provided by stakeholders.

11.2.3. National commercial fleet and certification databases

As previously discussed, one of the key benefits under options 2 and 3 would be the creation and maintenance of a national database of all commercial vessels so that accurate data could be obtained. This database would be important in the development of the risk-based compliance monitoring system, as well as providing data that would allow the evaluation of service delivery (by accurately identifying where vessels were located) and also enable appropriate investigation of incidents and enforcement of legislation. There would also be a need for a new national database of seafarers licensed under the national regulatory system.

AMSA has received preliminary quotations that indicate the establishment cost of a national database (including data migration from state/NT databases) is approximately $15 million, as a one-off cost. The ongoing maintenance costs of the database are included in the FTE modelling and taken account of in the administrative efficiencies savings.

A	National databases	$15,000,000	$15,000,000
	One-off cost		$15,000,000
	Net Present Value		$15,000,000

3.	**Establishment of national database**	**$15.00 million**

There would also be some significant savings to the states/NT, as they would otherwise have needed to upgrade their equivalent databases in the next few years, given that most of these systems are at or near end of life, and one is still paper-based. At least three of the agencies have reportedly held off upgrading their systems pending a decision on the consideration of these options.

No alternative costings were provided by stakeholders.

TOTAL COSTS OF A SINGLE NATIONAL SYSTEM

1.	**Establishment of national regulator**	**$13.04 million**
2.	**Costs of bringing vessels into the national system**	**$ 5.88 million**
3.	**Establishment of national database**	**$15.00 million**
	TOTAL	**$33.92 million**

SUMMARY OF THE COSTS AND BENEFITS OF A SINGLE NATIONAL SYSTEM (Option 3)

(Net Present Value)

	TOTAL BENEFITS	
1.	**Consistent application of national safety standards**	**$55.51 million**
2.	**Savings to industry and state/NT by removing the requirement for interstate re-certification of survey certificate**	**$1.05 million**
3.	**Savings to industry and state/NT by removing the requirement for re-survey on interstate transfers**	**$ 3.94 million**
4.	**Savings to industry and state/NT from removing requirement for interstate survey of new vessels during construction**	**$1.59 million**
5.	**Savings to industry from the introduction of a risk-based survey and compliance monitoring system**	**$36.76 million**
6.	**Administrative efficiency savings**	**$ 37.77 million to $ 60.92 million**
	TOTAL	**$136.62 million to $159.77 million**
	TOTAL COSTS	
1.	**Establishment of national regulator**	**$13.04 million**
2.	**Costs of bringing vessels into the national system**	**$ 5.88 million**
3.	**Establishment of national database**	**$15.00 million**
	TOTAL	**$ 33.92 million**
	TOTAL NET BENEFITS	**$102.70 million to $125.85 million**

11.3. DIFFERENCES IN COSTS AND BENEFITS – OPTIONS 2 AND 3

Under Option 2, the administration of the scheme is likely to remain with the states as legislation is introduced in one state and applied in the other states/NT. Under this option, states/NT remain responsible for the legislation and AMSA would be responsible for developing and maintaining overall standards, national consistency in administration and any updates to the legislation. The impact of this on the costs and benefits as described above is relatively small. However, under Option 2, there are additional risks associated with achieving the benefits.

The consistent application of national safety standards relies on timely adoption of the NSCV and any future updates of safety standards. Option 2 may allow the states/NT to introduce 'local exemptions', thereby undermining the national system. A number of stakeholder submissions expressed support for maintenance of these local exemptions and there would likely be pressure on state/NT agencies in the long-term to continue these. While it is difficult to estimate the impact of this on the $55.51 million benefit estimated to stem from improved implementation of safety standards, it is likely to decrease the total amount.

The national system under Option 2 should imply automatic recognition of survey certificates from other states/NT, but this may also be affected by local exemptions.

The administrative efficiencies would also be in doubt, as the Delivery Model under Option 2 would most likely resemble the status quo (or Delivery Model 2), and therefore, no substantive savings of $38-61 million.

However, the costs to establish a national regulator of $13.04 million would likely be significantly reduced, to around $5 million, as it would mainly involve the setting up of an oversighting body. Similarly, the costs to establish and maintain a national database would be significantly reduced for the national regulator as it would be more of a collation/coordination function. However, these additional costs would be needed by the states/NT to ensure that a national database with compatibility and interrogation functions would be available for use by all agencies.

Therefore, the national benefits under Option 2 would be $98.85 million, noting that there is some element of risk around at least half of that benefit. The national costs would be $25.88 million. Delivering a national net benefit of $72.97 million, noting a level of risk relating to at least $55.51 million of that benefit.

SUMMARY OF THE COSTS AND BENEFITS OF A SINGLE NATIONAL SYSTEM (Option 2)

(Net Present Value)

	TOTAL BENEFITS	
1.	**Consistent application of national safety standards**	**$55.51 million**
2.	**Savings to industry and state/NT by removing the requirement for interstate re-certification of survey certificate**	**$1.05 million**
3.	**Savings to industry and state/NT by removing the requirement for re-survey on interstate transfers**	**$ 3.94 million**
4.	**Savings to industry and state/NT from removing requirement for interstate survey of new vessels during construction**	**$1.59 million**
5.	**Savings to industry from the introduction of a risk-based survey and compliance monitoring system**	**$36.76 million**
6.	**Administrative efficiency savings**	**-**
	TOTAL	**$98.85 million**
	TOTAL COSTS	
1.	**Establishment of national regulator**	**$5 million**
2.	**Costs of bringing vessels into the national system**	**$ 5.88 million**
3.	**Establishment of national database**	**$15.00 million**
	TOTAL	**$ 25.88 million**
	TOTAL NET BENEFITS	**$72.97 million**

12. OTHER COSTS AND BENEFITS

There are several other costs and benefits of a national system under options 2 and 3 which are more difficult to quantify under traditional cost benefit analysis, largely due to their intangible nature or because accurate data is not available. These are discussed below.

12.1. DOMESTIC LABOUR MARKETS

> *"We envisage that [Option 3] would allow our organisation to expand the provision of quality, best international practice training for commercial mariners. This will in turn have the following outcomes:*
>
> - *Stop the skill drain of commercial yachtsmen overseas*
> - *Address the acute skills shortage for qualified personnel in our sector*
> - *Reduce the impact of over regulation on businesses in our sector which is especially important in the current economic climate."*
>
> Phil Jones, Yachting Australia, NSW

In early 2009 COAG will implement a national licensing recognition system that aims to facilitate a more mobile workforce across maritime jurisdictions. This has resulted from the mapping of certificates issued by one jurisdiction to equivalents in another. The majority of jurisdictions already mutually recognise certificates issued by other jurisdictions—provided that they do not carry restrictions. For unrestricted certificates from interstate it is generally not necessary to have the certificate endorsed in the receiving jurisdiction (New South Wales may require endorsement until December 2008 and is currently charging a nominal administration fee). If the qualification is on a renewal cycle (typically of five years), then it would need to be renewed in the new jurisdiction at expiry.

In some cases, a restricted certificate will have an interstate equivalent under the COAG-initiated license recognition system. In other cases, it will be possible to transfer a restricted certificate but only to a lower, unrestricted certificate.

The difference between the arrangements for mutual recognition that will be introduced and the 'Australian certificates' issued as part of a single national jurisdiction is that the former is likely to involve ongoing costs of mapping equivalent certificates as jurisdictions introduce new qualifications over time. It was difficult to determine the number of FTE's saved across all jurisdictions.

While also difficult to cost, a national system will enable a more robust and consistent application of training and assessment standards across all training institutions in Australia. This would be achieved by engagement by the national regulator with Skills Councils, Registered Training Organisations, and State Accreditation Authorities under the Australian Qualifications and Training Framework. This would provide certainty and confidence to industry and students that minimum national standards are being delivered.

12.2. INTERNATIONAL LABOUR MARKETS

Various submissions suggested that there were difficulties associated with having Australian state and territory certificates recognised internationally, and that crew who had gained experience overseas had trouble having their certificates and sea time recognised in Australia. The majority of the submissions related to this matter were made by representatives of the super yacht industry.

Some of the submissions suggested that STCW95 might be overly rigorous for the demands of the industry and suggested other international standards, such as the UK's MCA Super Yacht Code which they thought might be more appropriate. This is currently being debated in the International Maritime Organization.

There is not a clear mapping from state and territory certificates to STCW95 standards.

> *"If Australian Federal Tickets were issued using STCW guidelines throughout the maritime sector this would improve systems of integration with International yachting standards. Changes and standardising of the training qualifications would be a huge plus for the Superyacht industry".*
>
> Wayne Moore, Mackay Whitsunday Super Yacht Cluster Inc., QLD

The current revision of NSCV Part D and Marine Order 3 of the Commonwealth *Navigation Act 1912* to incorporate "near coastal" certificates should assist in resolving these issues. As part of this review a seamless transition from "near coastal" certificates to unlimited STCW certificates will benefit industry in accessing full international and may make it easier for internationally qualified mariners to work in Australia. Overall it is thought that the reforms will be a benefit.

The incremental benefit of the single national jurisdiction would be the removal of the need to have AMSA endorse a STCW95 compliant licence that has been issued by the states or NT. Although there is no data to indicate how many mariners would apply to AMSA for endorsement of either their state/NT issued licence or internationally issued licence, the fee that is likely to be charged will be small.

12.3. TRANSITION COSTS FOR VESSELS

There are expected to be some minor transition costs to industry where vessels do not currently meet the required standard. Given that the number of vessels not meeting the standard is not expected to be large, and that the discrepancies between the existing condition of vessels and required standards not expected to be large, the cost of transitioning vessels to the national system are not expected to be significant. This is a question that was posed several times during consultations and in the consultation RISs with no submissions received indicating there would be significant costs under the proposed national system.

12.4. BARRIERS TO TRADE – INTERSTATE VESSEL TRANSFERS

During the consultations some participants suggested that they would never attempt to move a vessel a second time after experiencing difficulties the first time, so it is possible that jurisdictional issues create some cost barriers between jurisdictions and lead to greater levels of within-jurisdiction buying and selling than would otherwise occur. Alternatively the costs of sourcing a vessel within a state may be relatively low. Some participants also suggested that the perceived costs of commercial downtime, surveying and frustration may be preventing the temporary transfer of vessels, to take advantage of seasonal demand across jurisdictions for example. By their nature, potential movements such as these cannot be observed.

13. CONCLUSIONS

The benefits and costs of a single national system will, theoretically, accrue whether the system is implemented using applied legislation (Option 2) or whether it is implemented by a broadening of the *Navigation Act 1912* (Option 3), noting the risks associated with achieving full benefits under Option 2.

The total benefit and costs of a single national system, administered by one national regulator are estimated to be between $136 – 160 million and $34 million respectively. Therefore, the net present value of a single national system is positive and estimated to be between $103 – 126 million, relative to the status quo.

Option 3 is the preferred option, given its higher net benefits and the risks associated with achieving the benefits of a national system under Option 2.

This was supported by submissions and opinions provided by stakeholders during public consultations. Because of the difficulty in obtaining comprehensive cost information, stakeholders were specifically asked to provide comment on each costing used in the cost benefit analysis. No alternative costings were provided. However, one submission suggested that the benefits to safety may be under-stated.

Stakeholders commonly requested more information on individual cost impacts which will be available during the development of the Cost Recovery Impact Statement, which also includes opportunity for further consultation.

Table 22: The table below provides a comparative analysis of the three options against the objectives set out in Section 6.

Objective	Option 1	Option 2	Option 3
• Seamless transfer of labour and vessels between jurisdictions. • Reduced complexity surrounding requirements applying to design, construction, equipment, operation and crew certificates • Enhanced productivity and reduced costs for businesses and workers operating across state and territory borders.	Industry would continue to incur costs when operating across state and territory borders due to inconsistent application and administration of standards between jurisdictions.	Achievable, however as states and NT would retain jurisdiction over commercial vessels in their state or territory, there is a risk that safety standards could be amended to suit local stakeholders, in which case all benefits may not be realised.	Achievable - the national standards would be developed, implemented and administered by the national regulator in accord with agreed consultative arrangements. This would create a consistent market across industry, whereby efficiency gains and cost savings could be realised.

Objective	Option 1	Option 2	Option 3
• An efficient national market.			
Ability to immediately implement updated or new safety standards, and enable their application to Australia's entire commercial vessel fleet.	States and the NT would continue to develop and review national standards under the terms of the 1997 IGA. Differences between state, NT and Commonwealth legislative and administrative frameworks make this a slow and difficult process.	Achievable – however, legislation would need to be approved by the ATC, passed in one jurisdiction and adopted by reference in other jurisdictions. This could be a lengthy process.	Achievable – the national regulator would have the capability to readily update or implement safety standards.
Reduced costs in the long term by moving to a national system regulated by one agency rather than eight independent agencies	The existing reported inefficiencies and costs would remain within the industry.	Achievable – the net present value of the single national system under this option is estimated to be $75 million. However, there is a risk that benefits may not be realised under this option if independent amendment of safety standards by jurisdictions occurs over time by jurisdictions to suit local stakeholders.	Achievable – the net present value of the single national jurisdiction is estimated to be $110-129 million.
A national register of domestic commercial vessels linking ownership, vessel details and inspection and survey history, to allow improved compliance monitoring leading to improved safety levels	States/NT would continue to operate with old and/or less-than ideal database systems. There would be a continued administrative load, with poor information quality and accessibility in many jurisdictions.	Achievable - enabling increased understanding and awareness of the scope, size, issue and risks of the vessels and allowing improved management of marine safety at a national scale would require significant coordination between the Commonwealth, state/NT.	Achievable - enabling increased understanding and awareness of the scope, size, issue and risks of the vessels and allowing improved management of marine safety at a national scale.

14. IMPLEMENTATION

A key principle of national reform has been minimal impact on existing vessels. To ensure that this impact is managed carefully and to ensure that all owner/operators are aware of the changes to the system, a staged implementation approach has been proposed.

Introduction of legislation

The national scheme is expected to come into force on 1 July 2011 - assuming COAG agreement to the details of the national scheme before the end of 2009 and passage of legislation through Commonwealth, state and NT parliaments during 2010.

By 2011, the national regulator would have administrative, operational and consultative functions in place including agreements with government and authorised agents. In addition, the remaining sections of the NSCV will be finalised as well as NSAMS.

Under the national regulator, it is anticipated that reform would be implemented progressively from the start date of the national legislation, expected to be 1 July 2011. This progression has been described as two stages identified as:

Transition: Years 1-3

Full Implementation: Year 4 onwards

It is anticipated that during transition, changes for existing vessels will be minimised while the national system under options 2 or 3 is progressively implemented in accordance with agreements between governments to be negotiated later in 2009, subject to COAG approval. These agreements may include ongoing involvement of some state/NT agencies in the delivery of services. AMSA has indicated it will develop a comprehensive risk-based survey and compliance monitoring system which will be introduced under full implementation.

In negotiating the inter-governmental arrangements, for matters of a particularly government-to-government nature eg. Constitutional issues, drafting national laws, Federal/State financial relations and negotiation of delivery models, there may be benefit in governments identifying guiding principles that can facilitate the way forward in implementing reform, while recognising that all of these issues are clearly matters for Ministers and governments to determine and that the principles are non-binding. The future Cost Recover Impact Statement will provide the opportunity for consultation with stakeholders on the financial implications of the move to a national system.

Treatment of new, upgraded and existing vessels

From 1 July 2011, new and upgraded vessels will be expected to comply with the national legislation, and existing vessels will be subject to the national legislation in accordance with **Chart 2**.

Chart 2 Application of safety standards to commercial vessels under a single national jurisdiction

Vessels	**From 1 July, 2011**
NSCV post 1 July 2011	Subject to the national legislation.
Combined USL/NSCV Code (post 1 October 2008) Vessels	Remain subject to Combined Code. Must register within 3 years or at next scheduled periodic survey.

Pre-2008 USL Code Vessels	Remain subject to USL Code. Must register within 3 years or at next scheduled periodic survey.
Commercial vessels, currently exempt.	Required to have an initial safety assessment before 2014 and become registered.

A decision matrix has also been developed to assist stakeholders to determine the impacts and new requirements under the national scheme.

Table 23: Transition Arrangements

Transition Arrangements 2011-2014		**Currently Under Survey (as at 1 July 2011)?**	
		Yes ⇩	**No ⇩**
Currently Registered (as at 1 July 2011)?	**Yes ⇨**	Vessel information will transfer to the National Database. Vessels will continue under current survey schedule, until 2014. Notified in 2014 on vessels Risk based Survey Schedule.	Vessel information will transfer to the National Database. Vessel compliance monitoring will continue. Notified in 2014 on vessels Risk based Survey Schedule.
	No ⇨		Vessels would be required to become registered prior to 2014. To become registered would undergo a minimal safety inspection. Notified in 2014 on vessels Risk based Survey Schedule.

The Maritime Union of Australia supported a shorter transition period.

With the emergence of such a strong case for Option 3, and the clear benefits this will bring, we would request that officers developing the RIS reconsider the lengthy timeframe proposed for full implementation, particularly given the parallel reforms being proposed in national shipping policy and regulation. It seems to us that the RIS has been developed by officials who perhaps are not fully aware of the development of a new national shipping policy to emerge from the Federal Government's response to the Parliamentary Inquiry into Australian coastal shipping policy and regulation, and the timeframe for implementation of that new policy. We believe the RIS should be amended to ensure there is harmony between the two reform processes.

Maritime Union of Australia

The Commonwealth Government will consider maritime safety regulatory reform in the context of all current policy and legislative reviews relevant to the maritime industry.

Review

A review of the implementation of the preferred option is scheduled for 2013 and the first full review of the national system planned for 2016.

As the national safety regulator of commercial domestic vessels, AMSA would extend its own model of ongoing stakeholder consultation through the establishment of a permanent stakeholder advisory committee as a mechanism for regular participation of industry and other stakeholders. This would also draw on the model currently used by the National Marine Safety Council in its Industry Advisory Committees.

AMSA currently has an AMSA Advisory Committee with membership drawn from the commercial and recreational maritime sectors, peak industry bodies, port authorities, educational institutions, union movements, the Royal Australian Navy and State Governments. It is expected that the Terms of Reference of this Committee will remain on the international commercial vessel sector and that a separate Committee would be formed with representatives drawn from the domestic vessel sector.

This advisory committee would also consult closely with stakeholders to ensure that local and regional issues are appropriately dealt with under a national system. Some of the issues that may be considered by the committee include those raised in a submission from industry representatives of the fishing industry.

The local Moreton Bay commercial fishing industry regards maritime safety very seriously and has developed its own industry code of best practice in the Environmental Management System for professional fishers for Moreton Bay. There is concern that best practice models which respond directly to regional issues will be restricted within a national framework. MBSIA supports a provision within the proposed options 2 or 3 to recognise these circumstances without undermining the benefits of the national reform.

Moreton Bay Seafood Industry Association, Hamilton, Queensland

15. OTHER MARITIME REGULATION REMAINING WITH THE STATES

Under all options the states and NT would retain control over matters such as state environment protection measures outside the international marine pollution convention (known as MARPOL) requirements, navigation in port areas, congestion issues and fishing and other commercial operating licenses. The appropriate allocation of responsibility for matters such as drug and alcohol testing would be negotiated during the development process for the national partnership agreement and the supporting legislative framework for the preferred option. The single national system would apply to the operation of commercial vessels and not to the waterways on which vessels operate.

The national maritime safety law would not affect existing arrangements for crew safety standards covered by the International Labour Organisation; occupational health and safety and workers compensation; the regulation of marine pests, ballast water and biofouling; or the economic regulation of coastal shipping.

A stakeholder submission, as well as some comments at public meetings, raised the issue of a national maritime safety system including safety standards relating to recreational vessels as a later phase of the process, given that there were common threads of risk and safety concerns. They also noted the inclusion of the recreational sector would also allow cost sharing of regulatory development and administration. This would be significant, given that there are around 800,000 recreational craft in Australia. However, this RIS does not include recreational vessels and it is not envisaged that recreational vessels would be included in a national system.

APPENDIX A - TERM MODEL

The TERM regional model is a "bottom-up" computable general equilibrium model of Australia. The model was developed by the Centre of Policy Studies at Monash University as a more disaggregated tool than the Monash Multi-Regional Forecasting (MMRF) model for regional policy analysis. The TERM database distinguishes 144 industry sectors and 57 regions. The high degree of regional detail makes TERM a useful tool for examining the regional impacts of shocks that may be region-specific. Each region in TERM is modelled as a separate economy with links to the other regions to account for product and factor mobility between regions. TERM draws on national input-output data and disaggregated regional data.

The theoretical structure of TERM consists of equations describing:

- producers' demands for produced inputs and primary factors;
- producers' supplies of commodities;
- demands for inputs to capital formation;
- household demands;
- export demands;
- government demands;
- the relationship of basic values to production costs and to purchasers' prices;
- market clearing conditions for commodities and primary factors; and
- numerous macroeconomic variables and price indices.

Demand and supply equations for private-sector agents are derived from the solutions to the optimization problems (cost minimisation, utility maximization, etc) which are assumed to underlie the behaviour of the agents in conventional neoclassical microeconomics. The agents are assumed to be price-takers, with producers operating in competitive markets which prevent the earning of pure profits.

APPENDIX B – SENSITIVITY TESTING

Sensitivity testing was conducted for the cost benefit analysis. Discount rates of 3, 7 and 12 per cent were used. In addition, the estimated benefit of fatalities avoided is tested for sensitivity to the value of the VSL. The Office of Best Practice Regulation recommended sensitivity testing using a VSL of $3.5 million in 2007 prices ($3.62 million in 2008 prices).The net benefit of the cost benefit analysis remains positive for all discount rates, results are presented in Table 1.

Table 1 Sensitivity testing

	Discount rate		
	0.03	***0.07***	***0.12***
Benefits	***$m***	***$m***	***$m***
Consistent application of national safety standards	48.20 to 77.96	34.32 to 55.51	24.20 to 39.14
Savings to industry and state/NT by removing the requirement for interstate re-certification of survey certificate	1.48	1.05	0.74
Savings to industry and state/NT by removing the requirement for re-survey on interstate transfers	5.55	3.94	2.77
Savings to industry and state/NT from removing requirement for interstate survey of new vessels during construction	2.23	1.59	1.12
Savings to industry from the introduction of a risk-based survey and compliance monitoring system	58.1	41.35	29.15
Administrative efficiency savings	53.04 to 85.55	37.77 to 60.92	26.63 to 42.95
Total Benefits	168.57 to 230.83	120.03 to 164.36	84.62 to 115.88
Costs			
Establishment of national database	15	15	15
Establishment of national regulator	13.75	13.04	12.28
Costs of bringing vessels into the national system	5.88	5.88	5.88
Total Costs	34.63	33.92	33.16
Net benefit			
Benefits less costs	133.94 to 196.20	86.11 to 130.44	51.46 to 82.72

APPENDIX C – VARIATIONS

Tables 1a, 1b, 1c: Design, construction & equipment standards currently applied

The information for NSW is drawn from the current regulations made pursuant to the Commercial Vessels Act 1979. From October 2008, for new vessels and vessels upgrading in service, references to sections 5F, 9, 10 and 11 of the USL Code in effect apply the equivalent NSCV requirements (except where indicated that the section is 'unchanged by Amendment Lists 5 & 6').

Table 1a Standards applicable to vessels in survey (to registered vessels in Queensland)

NSW	USL Code sections 5, 6, 7(1984 version with modifications), 8, 9, 10 (1984 version, with modifications), 11 (1984 version, with modifications) and 13 (1984 version, with modifications) apply Alternative requirements for radio equipment and certain hire and drive vessels apply
QLD	USL Code sections 5, 6, 8, 9, 12, 13 and 18 are deemed to satisfy solutions USL Code sections 7, 10 (with modifications and unchanged by Amendment Lists 5 & 6) and 11 (with modifications and unchanged by Amendment Lists 5 & 6) apply Compliance with any approved NSCV section is a 'deemed to satisfy' solution for building and design Compliance with NSCV Part C Section 7A (with modifications) is a deemed to satisfy solution Compliance with any AMSA approved classification society rules is also a 'deemed to satisfy' solution for building and design
VIC	USL Code sections 5, 6, 7, 8, 9, 10 and 11, 12, 13 and 18 (with modifications for some hire & drive houseboats) apply
WA	USL/NSCV Code applies
SA	USL Code sections 5, 6 (vessels over 25m), 7, 8, 9, 10 (with modifications and largely unchanged by Amendment Lists 5 & 6), 11 (with modifications and unchanged by Amendment Lists 5 & 6) and 13 (with modifications) apply Alternative requirements for radio equipment and hire and drive houseboats on River Murray apply
TAS	USL Code sections 5, 6, 7, 8, 9, 11, 12 and (aspects of) 13 are deemed to satisfy solutions Part C, sections 4, 5 and 7A of the NSCV are deemed to satisfy solutions 'Equivalent design' standards are also deemed to satisfy solutions; hence recently approved NSCV sections are likely to be acceptable
NT	USL Code sections 5, 6, 7, 8, 9, 10, 11, 12 and 13 apply
CTH (non-SOLAS)	USL Code sections 5, 7, 8, 9, 10 and 11 apply Alternative requirements for radio and miscellaneous equipment apply (Marine Orders Parts 21 and 27 apply)

Table 1b Exemptions – standards applicable to vessels in survey

NSW	Refer to Table 1c.
QLD	Tenders, provided they comply with the recreational boat safety equipment Vessels < 6m registrable as a class 1F, 2C, 2D or 2E and which operate only in smooth or partially smooth waters or within 15nm of land, provided they have a Statement of Positive Flotation and suitability statement for registration (by manufacturer or an accredited marine surveyor) Sail training vessels, provided they have a safety compliance certificate issued by Yachting Queensland
VIC	Modified USL Code requirements apply to small workboats, being: • class 2E vessels operating on Inland Waters • class 2D that is used within 500 m of the shore, which are no more than 7.5 m measured length, < 37.5 kW, operated during daylight hours only, and that carry no passengers Modified USL Code requirements apply to tenders to trading vessels which are < 6m and operate within 500m of the mothership and are used: • to transport passengers; • to transport equipment; or for fishing or netting related operations
WA	Radio equipment requirements do not apply to class 1E, 2E, and 3E vessels
TAS	None
SA	Fishing vessels of 7.5m or less operating in restricted areas; alternative requirements apply to these vessels Hire & drive houseboats; alternative requirements apply 'Observation vessels' (designed to float in water and used to observe marine life but not used in navigation); sections 5, 8, 10, 11, 12 and 13 of the Code apply
NT	None
CTH (non-SOLAS vessels)	None

Table 1c Standards applicable to vessels not in survey but within the application of the Act (Not registered in Queensland)

NSW	Class 2D & 2E vessels exempt from survey requirements must comply with the equipment requirements (USL Code sections 10 (1984 version, with modifications), 11 (1984 version, with modifications) and 13 (1984 version, with modifications) 3D/3E commercial fishing vessels and class 2 < 6m vessels must comply with must comply with the Boating (Safety Equipment) Regulation – NSW Oyster vessels < 3.65m used during daylight hours and within .5nm from shore must comply with specified equipment requirements (lifejackets, fire extinguisher, bucket/ bailor, anchor & cable, hawsers and ropes) Vessels < 3.5m must carry prescribed equipment (oars, bucket) AWWF accredited vessels subject to recreational boating safety equipment requirements of the Boating (Safety Equipment Regulation) - NSW) Powered hire and drive vessel < 6.0m in length and powered hire and drive (i.e. kayak, canoe, rowboat, off-the-beach sailing vessel) are exempt provided they operate in accordance with a licence
NT	Fishing vessels exempt from survey must comply with safety equipment requirements 'determined by the director' Vessels < 5m exempt from survey must comply with the safety equipment requirements applying to recreational vessels Existing fishing vessel < 15m, new fishing vessel < 8m, and vessels < 5m exempt from survey must comply with the safety equipment standards
QLD	Fishing ships < 10m and tenders to fishing ships must comply with recreational boat safety equipment (except tenders within tender boat range under *Fisheries Act (Qld)* of fishing mothership and < 3kw power – no safety equipment requirements apply) The following commercial (not fishing) vessels exempt from registration: • commercial barges < 15m • ships permanently fixed to shore; • tenders; • restricted use vessels, must comply with the equipment standards applicable to registered vessels
SA	Alternative structural and equipment requirements apply to non-surveyed vessels (Restricted fishing vessels and some Class 2E vessels)
TAS	Vessels exempt from survey must still comply with the applicable standards. 'Commercially registered' vessels must be maintained, equipped and operated by qualified personnel the same

	way as surveyed vessels. (These vessels are subject to initial survey)
VIC	All vessels are in survey
WA	The standards apply to all commercial vessels, including those not in survey
CTH (non-SOLAS vessels)	Commonwealth government vessels are subject to the same standards as surveyed vessels

Tables 2a – 2g: Existing commercial vessel registration and survey regimes

Primary legislation does not give a complete picture of the registration and survey regimes imposed in each jurisdiction.

Following is a matrix of registration and survey requirements, including and outline of the vessels which are subject to survey or registration and the standards that apply to commercial vessels.

The information for NSW is drawn from the current regulations made pursuant to the Commercial Vessels Act 1979 (and gazetted exemptions).

Table 2 a Initial survey requirements

NSW	Yes Includes design approval (for certain vessels); inspection during construction; inspection at completion; stability approval; survey on completion
NT	Yes, section 14 of USL Code applies
QLD	Yes (vessels must comply with standards at registration) Vessels < 6m registrable as a class 1F, 2C, 2D or 2E and which operate only in smooth or partially smooth waters or within 15nm of land must have a Statement of Positive Flotation and a suitability statement for registration (by manufacturer or an accredited marine surveyor) A sail training ship must have a safety compliance certificate issued by Yachting Queensland All other vessels require certificates of compliance for registration, which must be completed by accredited persons and relate to design, survey, stability and equipment Certificate of survey is optional for all vessels (only required for interstate transfer).
SA	Yes Includes design approval; survey during construction; stability approval; Certificates of Compliance; survey on completion Hire and drive houseboats that operate on the River Murray are subject to similar requirements. They are required to be inspected (ie surveyed) and issued a Cert of Inspection. Fishing vessels of 7.5m or less are restricted to certain areas (Gulf waters and nominated bays and coastal areas < 3nm from the coast). These 'restricted vessels' are 'inspected' prior to initial registration and subject to random inspections
TAS	Yes Section 14 (with modifications) of USL Code applies Includes design approval; inspection during construction; inspection at completion; stability approval by Naval Architect; survey on completion

VIC	Yes. Section 14 of USL Code applies
WA	Yes Includes: plan approval; survey during construction; surveys at completion
CTH (Non-SOLAS vessels)	Yes Marine Orders Part 31, except for Commonwealth vessels of < 24 metres in length, which are required to comply with section 14 of the USL Code

Table 2b Legislative exemptions – initial survey

NSW	Certain vessels within application of the Navigation Act, being those: • proceeding on an overseas voyage; • proceeding on an interstate voyage (except fishing vessels); and off-shore industry vessels
NT	Certain vessels within application of the Navigation Act, being those: • proceeding on an overseas voyage; • proceeding on an interstate voyage (except fishing vessels); and • off-shore industry vessels Fishing vessels < 6.2 metres and operating in conjunction with a mother vessel and within 5 nm of mother vessel Fishing vessels < 6.2 metres operating within 5nm of coast Existing fishing vessels < 15m New fishing vessels < 8m Hire and drive vessels < 7m Vessels < 5m which carry no more than 4 persons on: • inland waters; or • smooth or partially smooth waters Pontoon or a vessel hulk that is permanently moored or anchored and not for public use
QLD	n/a
SA	Ferries or punts that cross a river by means of ropes or cables Fishing vessels that are 7.5m or less and operating only in inland waters (defined as waters not subject to the ebb and flow of the tide – ie River Murray) Certain hire and drive operations eg “bare boat charters” (no inspection requirements). These are subject to recreational registration
TAS	Vessels < 6m (unless unique) are exempt from design approval for hull & deck construction and may be exempt from other equipment survey requirements
VIC	Certain vessels within application of the Navigation Act, being those: • proceeding on an overseas voyage;

	proceeding on an interstate voyage (except fishing vessels)
WA	Certain vessels within application of the Navigation Act, being those: • proceeding on an overseas voyage; • proceeding on an interstate voyage (except fishing vessels) Fishing vessels not exceeding 8m and operated within 5nm of mainland (by application for exemption) Class 2 vessel not exceeding 8m and operated within 5nm of mainland and that is not intended to carry passengers (by application for exemption) Class 2E or Class 3E vessels (by application for exemption)
CTH (Non-SOLAS vessels)	Survey requirements do not apply to: • a trading ship proceeding on a voyage other than an overseas voyage or an inter-State voyage; • an Australian fishing vessel / fishing fleet support vessel proceeding on a voyage other than an overseas voyage; • vessels used solely on inland waterways unless the vessel 'opts in' under section 8AA of the Act

Table 2c Gazetted and other class/type exemptions – initial survey

NSW	3D/3E commercial fishing vessels Class 2 (with no fare paying passengers) & < 6m Class 2 PWC vessels Class 2D & 2E, other than: • barges with lifting capacities of > 5 tonnes • landing barges • dangerous goods barges • dredges > 24m • tugs, provided the vessel does not carry passengers Class 4E subject to hire & drive licence Vessels on sheltered waters (except fishing vessels and commercial vessels that do not carry passengers) Oyster vessels < 3.65m used during daylight hours and within .5nm from shore. PWC operating in certain areas Sail training vessels Sponsored sailing vessels participating in licensed events. Vessels < 3.5m used in smooth water operations as a means of transport to or from a vessel (which holds a permit) not more than 300m from shore or within 300m of the vessel (which holds a permit) Rafts engaged in commercial whitewater operations (and which comply with the Whitewater Code) Hire and drive vessels < 6 metres (powered) Unpowered hire and drive vessels Royal Volunteer Coastal Patrol vessels only used on Lake Macquarie and engaged in training exercises related to recreational boat licensing Vessels accredited by the Australian Waterski and Wakeboard Federation Incorporated and used in AWWF sanctioned events, subject to registration
NT	None
QLD	n/a
SA	None

TAS	(On application) tenders that are adequately constructed, maintained and equipped, and solely human powered (used under oars), and < 3.6m, (On application) vessels intended for use in conjunction with a Hire and Drive operation that are adequately constructed, maintained and equipped, and solely human powered (oars, paddles) or wind powered, and < 7.5 m. Includes kayaks, canoes, sailing dinghies, peddle boats and sailboards (On application) vessels intended for use in conjunction with a Training Vessel Licence if they are assessed as suitable for the purposes of the training intended, equipped as required by MAST and the peak sporting body, and < 12 m. Includes sailing dinghies, rowing craft, and yachts The Authority undertakes random surveys of vessels exempt from survey
VIC	None
WA	None
CTH (non-SOLAS)	None

Table 2d Annual survey requirements

NSW	Yes
NT	Yes Section 14 of USL Code applies
QLD	None required, but to renew registration need to complete a compliance declaration (or have it completed by an accredited surveyor)
SA	Yes
TAS	Yes Section 14 of USL Code applies
VIC	Yes Section 14 of USL Code applies
WA	Yes Every year: equipment Every two years: hull (inc removal from water) Every 4 years: propulsion shaft & supporting machinery
CTH (non-SOLAS vessels)	Yes Marine Orders Part 31 applies, except for Commonwealth government vessels < 24 metres which are required to comply with section 14 of the USL Code

Table 2e Exemptions – annual survey (Vessels exempt from initial survey are exempt from periodic survey also)

NSW	Class 3C fishing vessels < 7.5m and which do not carry fare-paying passengers and which are registered and have a permit plate affixed
NT	None
QLD	n/a
SA	Time share vessels Fishing vessels > 7.5m: biennial surveys Hire & drive houseboats: biennial inspections (survey) including out of water survey Hire and drive vessels < 5 metres (holding hire business licence) are inspected PWCs for hire (holding hire business licence) are inspected Other hire and drive operations eg "bare boat charters" (no inspection requirements). These are subject to recreational registration Class C vessel compasses not adjusted every 3 years
TAS	The following vessels are surveyed every two years: • Class 2 / class 3 & < 7.5m • Class 3 & 7.5 – 12m • Class 4 & < 12m On application the following vessels may be 'commercially registered' and not subject to periodic survey: • Class 3 & Class 4 < 7.5m • Class 2 & Class 3 < 12m < 250kw in sheltered waters & do not have a stability book & which do not carry dangerous goods or passengers; are not landing barges; do not have a crane or davit exceeding 1 tonne capacity; do not tow; and are not dredges 'Commercially registered vessels' (exempt from periodic survey inspections) must be self-inspected in order to be registered yearly. Authority undertakes random surveys of vessels exempt from survey
VIC	None
WA	None
CTH (non-SOLAS)	Commonwealth government ships < 7 metres are exempt from annual survey provided the vessel has a planned maintenance and inspection system for the vessel (currently under review)

Table 2f Registration requirements

NSW	All, except those covered by Hire & Drive licenses.
NT	No
QLD	All, yearly
SA	Fishing vessels of 7.5m or less that are only operated within smooth or partially smooth water and used in connection with the propagation or rearing of molluscs in marine waters (yearly registration) Restricted vessels of 7.5m or less (biennial registration)
TAS	All Yearly for those vessels exempt from survey or periodic survey. For vessels in survey, registration remains valid provided the vessel passes periodic inspections and pays the relevant fees
VIC	No Commercial vessels are exempted from registration requirements
WA	No
CTH (non-SOLAS vessels)	All trading (not fishing) vessels over 24 metres All vessels intending to undertake an international voyage Others may opt to be registered

Table 2g Exemptions - Registration

NSW	Certain vessels covered by the Navigation Act, being those: • proceeding on an overseas voyage; • proceeding on an interstate voyage (except fishing vessels); and • off-shore industry vessels Vessels in State waters for < 3 months and registered under the law of another State or a Territory.
NT	n/a
QLD	Fishing ships < 10m Tenders w/n 2 miles of mother ship (not to fishing boats) Tenders within tender boat range under *Fisheries Act (Qld)* of fishing mothership Restricted use flag ships Vessels registered under the *Shipping Registration Act 1981* (Cth) and which hold Commonwealth certificates of survey Vessels (not barges) with engines of < 3kw or without an engine Barges < 15m and < 3kw or without an engine unless used to carry passengers, bulk petroleum or gas products; for living or entertainment or to operate a pile frame; and provided not equipped with a crane of more than 3t; dredging machinery having a total brake power of 500kW or more Vessels not powered, not intended for navigation and which are permanently fixed to a structure on the shore by a steel cable, chain or rod A ship not on or in water A jetski provided and operated by a person participating in a jetski training program
SA	Vessels registered under the law of another State / Territory / the Commonwealth and in State waters for < 90 days Vessels under current interstate / Territory / Cth Certificate of Survey are permitted to operate for period of validity of Certificate
TAS	(On application) class 4 vessels < 7.5m that do not have machinery Vessels exempt from commercial registration must self-inspect to ensure the vessel is in satisfactory condition
VIC	n/a
WA	n/a

CTH (non-SOLAS vessels)	None

Tables 3a, 3b, 3c: Crew competency and minimum crew standards currently applied

The information for NSW is drawn from the current regulations made pursuant to the Commercial Vessels Act 1979.

Table 3a Crew competencies standards

NSW	USL Code sections 2 and 3 (1984 version with modifications is called up in the Regulation, however two Exemptions apply to allow the 1991 Code to operate) apply
NT	USL Code sections 2 & 3 apply
QLD	Requirements for qualifications and classes of licences contained in USL Code section 2, part 4 clause 37 and section 3, part 4 clause 24 (with modifications) apply
SA	USL Code section 2 (part 3 – syllabuses) and section 3 (part 3 – syllabuses) apply
TAS	NSCV Part D applies
VIC	USL Code sections 2 & 3 apply
WA	Syllabuses and minimum requirements for certificates set out in regulations
CTH	STCW

Table 3b Crewing level requirements applicable to commercial vessels

NSW	Safety manning tables set out in regulations
NT	Determined by authority in accordance with USL Code sections 2 & 3
QLD	Masters and owners to ensure ships are manned with adequate crew to meet General Safety Obligation of Act This places an obligation on the owner or master to assess how many crew members are required to: • operate the ship under normal conditions; • comply with the emergency procedures in section 15 of the USL Code; • fulfil the roles set out in the operational manual and marine OH&S manual; and • fulfill roles set out in the vessel's safety management plan for onboard emergencies (mandatory for most commercial ships over 8m and fishing ships over 10m) Every ship will have a master and most an engineer (who may also be the master if the ship's propulsion power is less than 750kW) All crew must be appropriately licensed
SA	Crew level of trading vessels determined by the State Crewing Committee Minimum crew for fishing vessels set out in regulation – these mirror the requirements of the minimum safety manning of the USL Code
TAS	NSCV Part D applies
VIC	USL Code sections 2 (part 4) and 3 (part 4) apply Subject to crewing determining by MSV
WA	Safety manning tables set out in regulations
CTH	NSCV Part D . SOLAS Chapter V Regulation 14 and IMO Resolution A.890(21) as amended

Table 3b Exemptions from crewing requirements

NSW	Certain vessels within application of the Navigation Act, being those: • proceeding on an overseas voyage; • proceeding on an interstate voyage (except fishing vessels); and • off-shore industry vessels Class 2D and 2E vessels on which the master holds a current 'General Boat Licence' and has completed specified training approved by authority 3D/3E commercial fishing vessels provided they are registered under the Water Traffic Regulations & do not carry fare paying passengers Class 2 (with no fare paying passengers) & < 6m Oyster industry vessels >3.65m and <10m used for smooth water operations, in daylight hours and not more than .5mile from the shore. Casual employees may be in charge of the vessel provided they are given a course of instruction in handling the vessel, engine operation and rules relating to the avoidance of collision Vehicular ferries operating in chains, provided the operator has a licence to operate the vehicular ferry Royal Volunteer Coastal Patrol vessels used on Lake Macquarie and engaged in training exercises related to recreational boat licensing (provided accredited instructors operating vessel). The operator must hold a Personal Watercraft or General Licence if the vessel travels at > 10 knots Sail training vessels provided the master has the relevant AYF certificate and the crew have completed training in emergency (sheltered waters) or hold AYF Introductory Certificate (inshore waters) or AYF Competent Crew Certificate (offshore waters) Class 2 PWCs Vessels < 3.5m used in smooth water operations as a means of transport to or from a vessel (which holds a permit) not more than 300m from shore or within 300m of the vessel (which holds a permit) Sponsored sailing vessels participating in licensed events Vessels accredited by AWWF provided master and skier have appropriate Federation and club membership and that master holds General Boat Licence
NT	Certain vessels within application of the Navigation Act, being those: • proceeding on an overseas voyage; • proceeding on an interstate voyage (except fishing vessels); and • off-shore industry vessels Vessels < 5m which carry no more than 4 persons on: • inland waters; or

	• smooth or partially smooth waters. Fishing vessels < 6.2 m and: • within 5 nm of a mothership; or • within 5nm of the coast hire-and-drive vessels
QLD	Navigation Act vessels Vessels < 3kw or unpowered Vessels < 6m provided operator has recreational licence and does not carry anyone other employees of the ship's owner Vessels < 6m provided master has recreational licence and operated by government research departments or institutes, police, or emergency services Fishing ships < 10m with certificates issued by QFITC Tenders < 6m provided operator has recreational licence Bareboat and Hire & drive vessels and their < 4.5 kw tenders operating under hire standards Tender to fishing ship provided driver has recreational licence Commercial training ships provided under supervision of trainer Tender to a commercial ship within 1km of mothership and under supervision of master of mothership Vessels owned and operated by the emergency services department or accredited volunteer marine rescue associations or surf lifesaving associations
SA	Ferry or punt that crosses a river or fairway by means of ropes or cables Fishing vessels of 7.5m or less that are only operated within smooth or partially smooth water and only used in connection with the propagation or rearing of molluscs in marine waters (yearly registration) Government vessels and volunteer search and rescue vessels
TAS	Registered training vessels provided operator has a boat licence Hire and drive vessels operations which utilise rescue boats as part of their safety management plans are required only to have a boat licence when operating the rescue boat Other exemptions by application only
VIC	Certain vessels within application of the Navigation Act, being those:

	• proceeding on an overseas voyage; and • proceeding on an interstate voyage (except fishing vessels)
WA	Certain vessels within application of the Navigation Act, being those: • proceeding on an overseas voyage; • proceeding on an interstate voyage (except fishing vessels) Class 2E vessels < 6m Class 3E vessels < 6m Fishing vessel not more than 8m and operates only in sheltered waters or within 5nm offshore, provided manned by a person who is the holder of a certificate of proficiency Class 2 vessel not more than 8m that does not carry passengers; and operates only in sheltered waters or within 5nm offshore, provided manned by a person who is the holder of a certificate of proficiency
CTH	Crewing requirements do not apply to: • a trading ship proceeding on a voyage other than an overseas voyage or an inter-State voyage; • an Australian fishing vessel / fishing fleet support vessel proceeding on a voyage other than an overseas voyage; • vessels used solely on inland waterways, unless the vessel 'opts in' under section 8AA of the Act.

APPENDIX D - PROPOSED SINGLE SURVEY REGIME FOR COMMERCIAL VESSELS

	Class 1 (Passenger Vessels)	Class 2 (Trading Vessels)	Class 3 (Fishing Vessels)	Class 4 (Hire and Drive)	Other
Full Initial & Periodic Requires an initial survey/inspection (against the NSCV), with follow-up survey/inspections on a periodic basis (to be determined through a risk analysis process.)	Class 1	Non-propelled barges if higher risk (excl. spudded) 2A 2B 2C ≥ 7.5mt 2D, 2E and 2C < 7.5mt if high risk	3A 3B 3C ≥ 7.5mt		Ferries in chains
Full Initial & Partial Periodic Requires an initial survey/inspection (against the NSCV), with a partial periodic survey/inspection (to be determined through a risk analysis process).		2C < 7.5mt with pax 2D ≥ 7.5mt with pax 2E ≥ 7.5mt with pax		4C o/night 4D o/night 4E o/night	
Initial					

	Class 1 (Passenger Vessels)	Class 2 (Trading Vessels)	Class 3 (Fishing Vessels)	Class 4 (Hire and Drive)	Other
Requires an initial survey/inspection (against the NSCV) only.		2C < 7.5mt with no pax 2D ≥ 7.5mt with no pax 2E ≥ 7.5mt with no pax	3C < 7.5mt 3D ≥ 7.5mt 3E ≥ 7.5mt	4C (not o/night) 4D (not o/night) ≥ 7.5mt 4E (not o/night) ≥ 7.5mt	
NSCV					
Requires compliance with NSCV Standards only.		Non-propelled barges - **(sheltered, < 24mt) (excl. spudded)			
Other					
Requires compliance with level flotation standards, recreational boat equipment standards or ABP, and NSCV Part E.		2D < 7.5mt* 2E < 7.5mt*	3D <7.5mt* 3E <7.5mt*	4D < 7.5 mt (not o/night) 4E < 7.5 mt (not o/night)	Sailing training vessels
* to be defined AYF - Australian Yachting Federation ABP - Australian Buoyancy Plate				4E o/night (powered day boat, high speed, unlimited area, tenders)	

APPENDIX E – LIST OF SUBMISSIONS RECEIVED

1.	ACE Fishing Charters	**VIC**
2.	ACV Holdfast Bay	**SA**
3.	Ainsworth, John	**VIC**
4.	Anchor Marine	**NSW**
5.	Astill, Brad	**QLD**
6.	Aurora Marine Design	**QLD**
7.	Austral Fisheries Pty Ltd	**WA**
8.	Australian Maritime Museums Council	**National**
9.	Australian Southern Bluefin Industry Association	-
10.	Beverley Bragg	**WA**
11.	Blizzard Expeditions	**QLD**
12.	Boating Industry Association of NSW Ltd	**NSW**
13.	Catts, Paul	**NSW**
14.	Commercial Vessel Association of NSW	**NSW**
15.	Compton, Michael	**-**
16.	Council of Inland Rivers SA Chapter	**SA**
17.	Fishermans Association Ltd	**TAS**
18.	Fly Fishing Australia	**NSW**
19.	Gippsland Lakes Charter Boat Association	**VIC**
20.	Gippsland Water Police	**VIC**
21.	Grenville Silvester	**VIC**
22.	Gulf St Vincent Prawn Fishery Licence Holder Group	**SA**
23.	Isles Design*	**TAS**
24.	Joint Accreditation System of Australia and New Zealand (JASANZ)	**ACT**
25.	Kentish, Neil	**WA**
26.	Lobster Advisory Council Inc	**SA**
27.	Mackay Whitsunday Super Yacht Cluster Inc	**QLD**
28.	Marine Surveyors Association*	**QLD**
29.	Marine Training Services	**VIC**
30.	Maritime Trayning	**NSW**
31.	Maritime Union of Australia	**ACT**
32.	Mermaid Storm - Master	**-**
33.	Moreton Bay Seafood Industry Assoc	**QLD**
34.	Mustang Marine Australia Services	**QLD**
35.	National Bulk Commodities Group Inc	**National**
36.	National Marine Safety Committee	**COMM**
37.	Niemann, Michael	**QLD**
38.	NSW Dive Charter Vessel Association	**NSW**
39.	NSW Maritime	**NSW**
40.	NT Seafood Council	**NT**
41.	Oceanic Design	**QLD**
42.	Offshore Marine Training Australia	**-**
43.	P.S Ruby Wentworth Inc	**NSW**
44.	Paddle Steamer Ruby	**NSW**
45.	Port of Melbourne Corporation	**VIC**

46.	Port Phillip and Western Port bay fisherman's association	**VIC**
47.	Pro Dive Cairns	**QLD**
48.	Queensland Maritime Museum	**QLD**
49.	Quicksilver Connections *	**QLD**
50.	Rosskelly, Steven	**NSW**
51.	Russ Larkin and Associates*	**QLD**
52.	S.W Booth & Associates	**NSW**
53.	Scantec Industries	**QLD**
54.	Sea Stradbroke	**QLD**
55.	Seacare	**Cwth**
56.	Seafood & Maritime Industries Trg Ltd	**NT**
57.	Seawind Catamarans	**NSW**
58.	Seward Maritime	**TAS**
59.	Sharp, David	**VIC**
60.	Shields, Brian	**VIC**
61.	Shipping Australia Limited*	**National**
62.	South Australian Blue Crab Pot Fishers Association	**SA**
63.	South Australian Northern Zone Rock Lobster Fisherman's Association	**SA**
64.	South Australian Oyster Growers Association	**SA**
65.	South Eastern Professional Fisherman's Association*	**SA**
66.	South West Yacht Charters Pty Ltd	**WA**
67.	Southern Cross Yachting	**QLD**
68.	Spencer Gulf & West Coast Prawn Fisherman's Association Inc	**SA**
69.	State Marine Engineers	**-**
70.	Svitzer	**QLD**
71.	Sydney Heritage Fleet*	**NSW**
72.	TAFE South Australia	**SA**
73.	Tasmanian Seafood	**VIC**
74.	Tasmanian Seafood Industry Council*	**TAS**
75.	Taylortech Pty Limited*	**NSW**
76.	The Royal Institute of Naval Architects	**National**
77.	Transport and Logistics Industry Skills Council*	**National**
78.	Traynor, Mike	**NSW**
79.	Whitsunday Charter Boat Industry Association	**QLD**
80.	Whitsunday Development Corporation	**QLD**
81.	Wildcatch Fisheries SA	**SA**
82.	Wise, Aubrey	**-**
83.	Yachting Australia	**National**

* - Stakeholders provided submissions for first and second round consultation RIS

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