

PGCS 2022

Designing for success in a national change program

Bottom Line Up Front

- Have a plan
- Design and build a Proof of Concept
- Trial, Test and Improve
- Use Standards, but tailor to suit
- Be transparent
- DO Incorporate Lessons Learned
- Be patient, Remember that not everyone moves at the same pace
- Engage, engage, engage

PHIL ROKIC

- Education
 - B. Mechatronics / B. Computer Science – Uni of Melbourne (1993-1998)
 - Grad Dip Marine Engineering Management (2005)
 - PRINCE 2 Practitioner (2007)
 - MBA (Finance) (2018)
- Marine Engineering Officer – Royal Australian Navy (2000-2005)
- Operational Safety Manager:
 - Transport Safety Victoria (2009-10)
 - Australian Maritime Safety Authority (2011-14)
- Consulting with:
 - Sinclair Knight Merz (2006-07)
 - KoBold Group (2008-09, 2015-18)
 - Apis Group (2014-15)
 - DFAT via Synergy (2019)
 - Shoal Group (2020-21)
- Executive Roles:
 - PR Consulting Pty Ltd (2021-22)
 - COO Aquaculture Group (2021-22)
- Major Projects:
 - **Safety Management Systems** – Governance, Risk and Compliance model for Audit and assurance of domestic commercial vessel companies – TSV and AMSA, developing the standards, legislation implementation for all commercial vessels in Australia
 - SKM Project Manager – managing a site refurbishment at Boeing, Melbourne for 787s
 - RAN – managing teams of contractors for submarine maintenance periods
 - RAN – 2nd engineer aboard submarines HMAS Dechaineux and HMAS Sheean
- My interests:
 - Business Intelligence
 - Entrepreneurship
 - My kids and scuba diving
- My favourite job: scuba diving in Melbourne Aquarium with the sharks!

A few fun photos from my maritime days

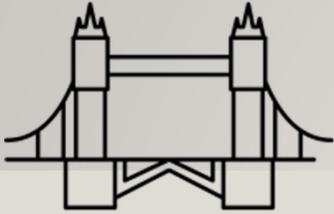


Some weren't so fun!



← Except for this!!
This is still funny!

International Commercial



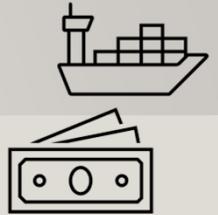
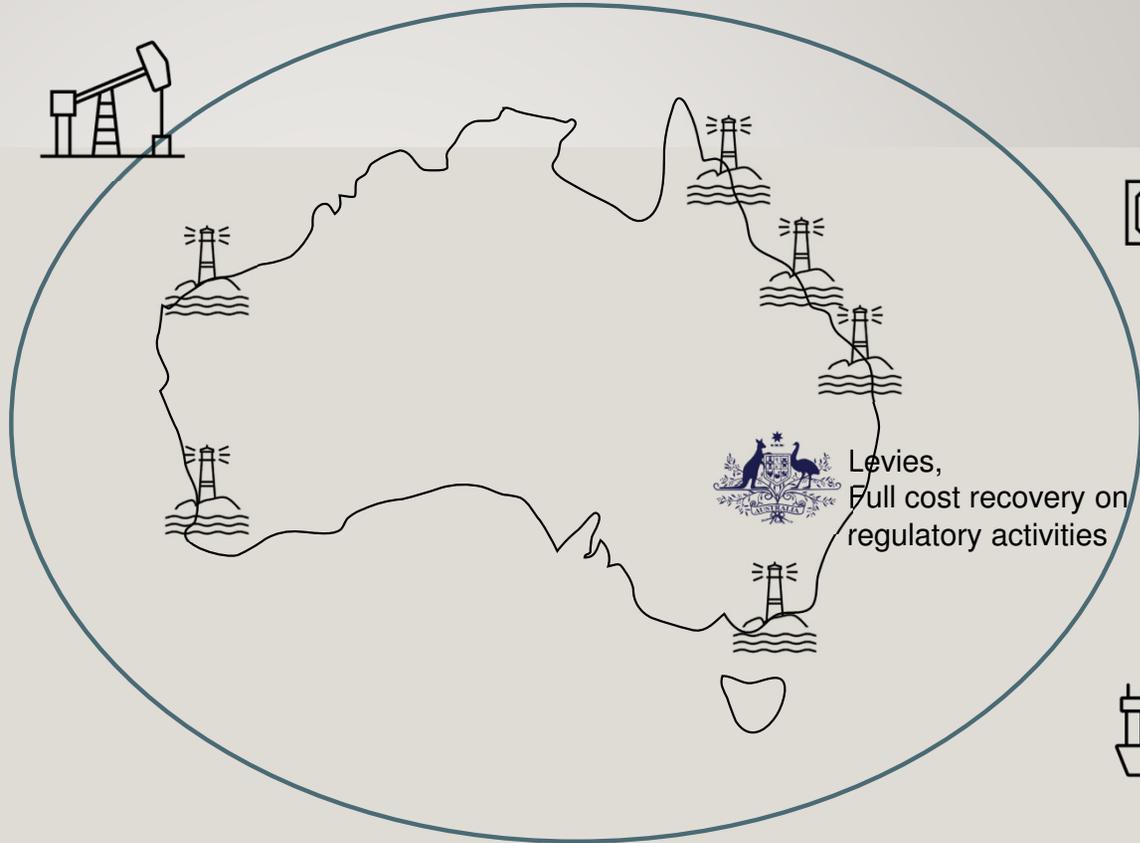
International Maritime Organisation (IMO)

International Labour Organisation (ILO)

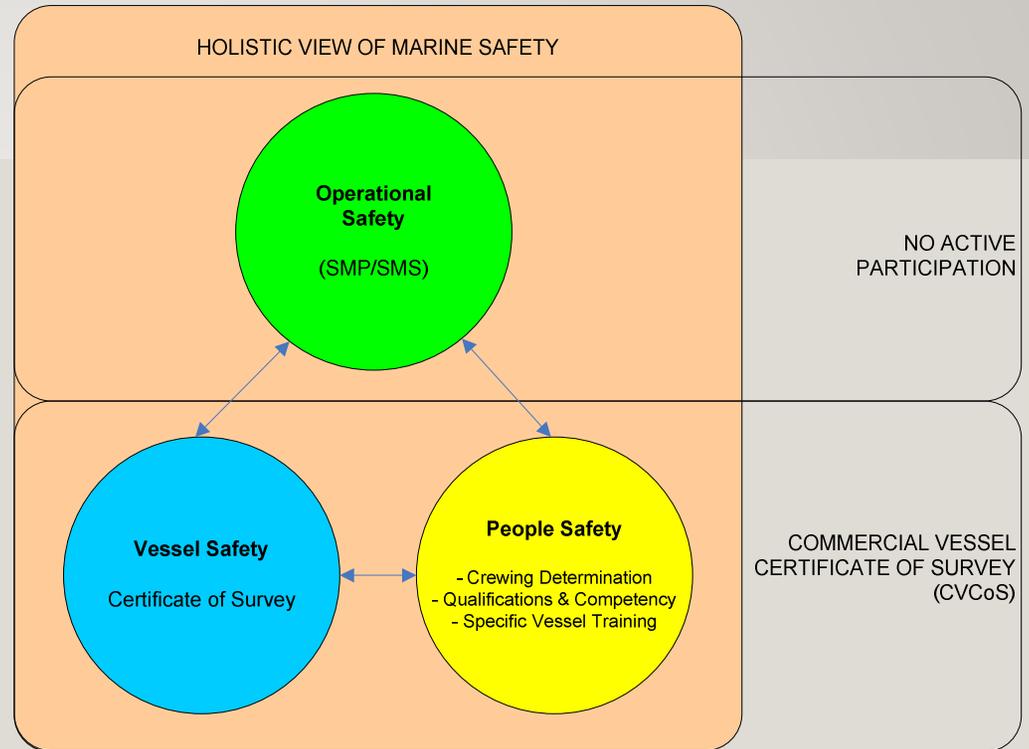
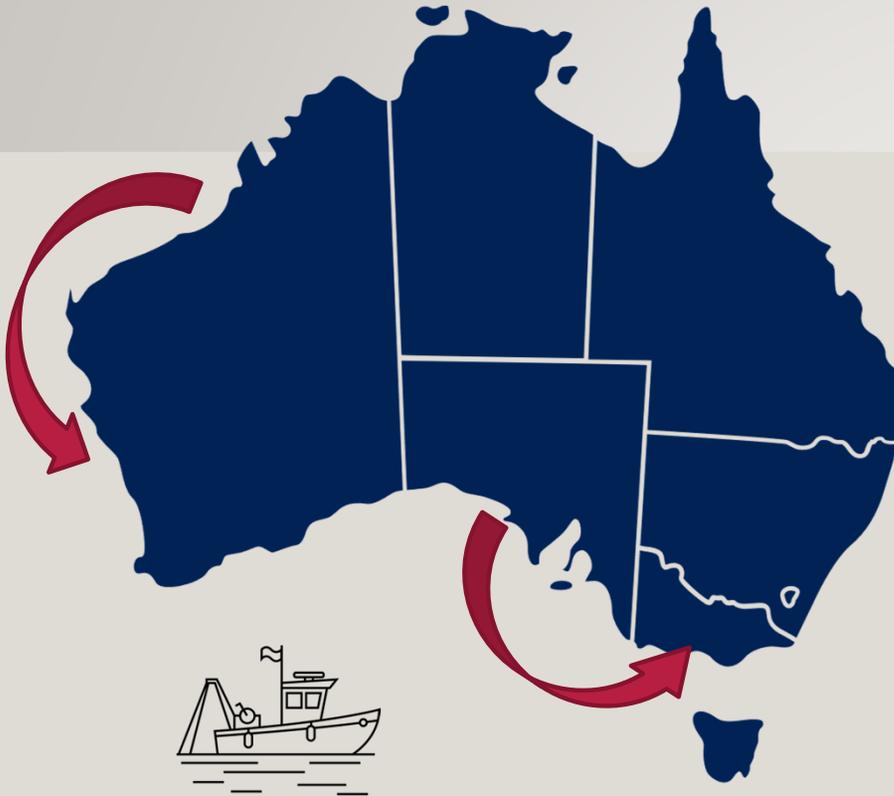


Navigation Act 1912

Navigation Act 2012



Domestic Commercial



No human factors considered

The need for Reform

- 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.
- 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.

COAG – National Partnership Agreement to Deliver a Seamless National Economy

- *The National Partnership also includes a series of challenging and complex competition reforms. These reforms are also continuing to progress:*
 - *The legislative component of the national access regime reform is in place, giving effect to reforms that provide fair and reasonable access arrangements for national infrastructure;*
 - *Single national frameworks for heavy vehicle regulation, **maritime safety regulation** and rail safety regulation and investigation are now well in hand, with COAG signing three Intergovernmental Agreements in August last year to enable the establishment of these regulators in 2013.*
 - *The Heavy Vehicle National Law alone is estimated to generate net benefits to the economy of up to \$12.4 billion.*

<https://ministers.treasury.gov.au/ministers/david-bradbury-2012/speeches/benefits-and-outcomes-seamless-national-economy-agenda>

Stakeholders – Industry and Government

- Big end of town:
 - Ferry operations
 - Aquaculture industry
 - Large-scale Queensland tourism operators
- Small end of town:
 - One-man fishing charters
 - Hire-and-drive (even in ACT)

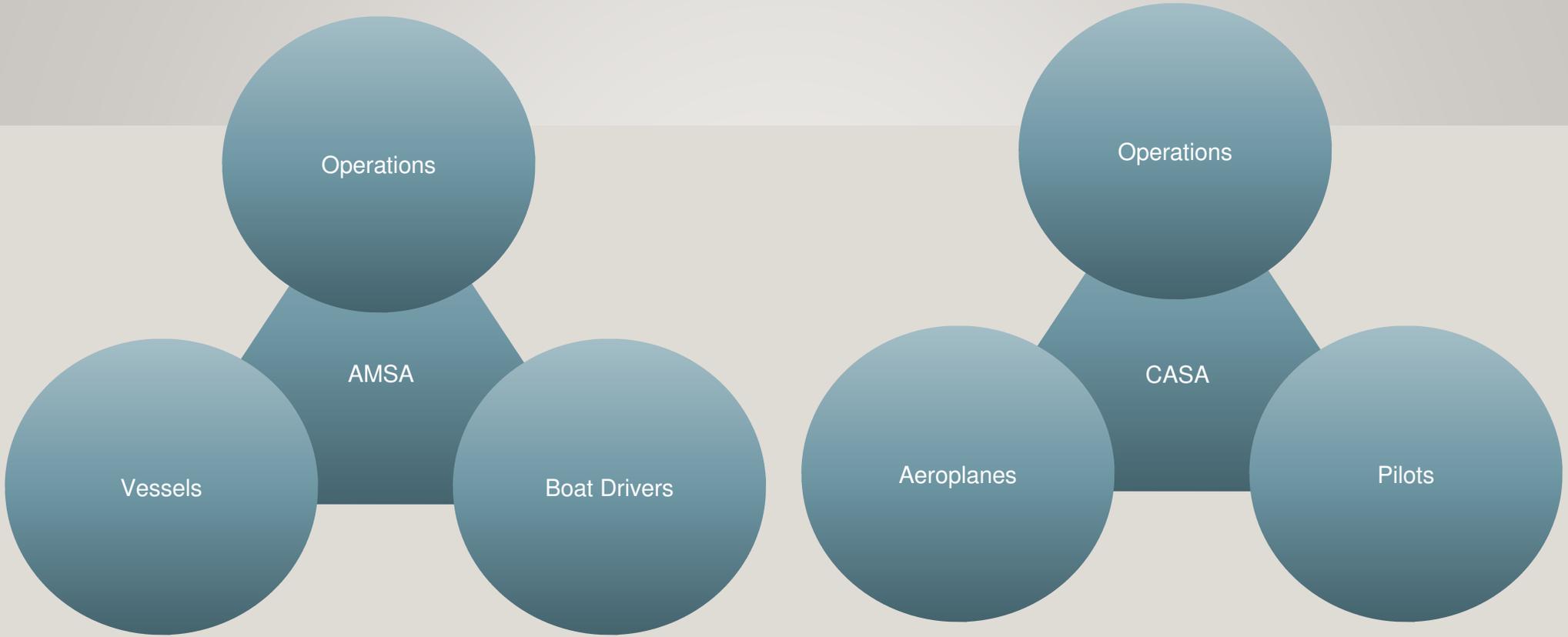
Jurisdiction	Name of agency
New South Wales	New South Wales Maritime
Northern Territory	Marine Safety Branch, NT Transport Group
Queensland	Maritime Safety Queensland
South Australia	Department of Transport, Energy and Infrastructure, SA
Tasmania	Marine and Safety Tasmania
Victoria	Marine Safety Victoria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

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

A contemporary regulatory framework



The challenge

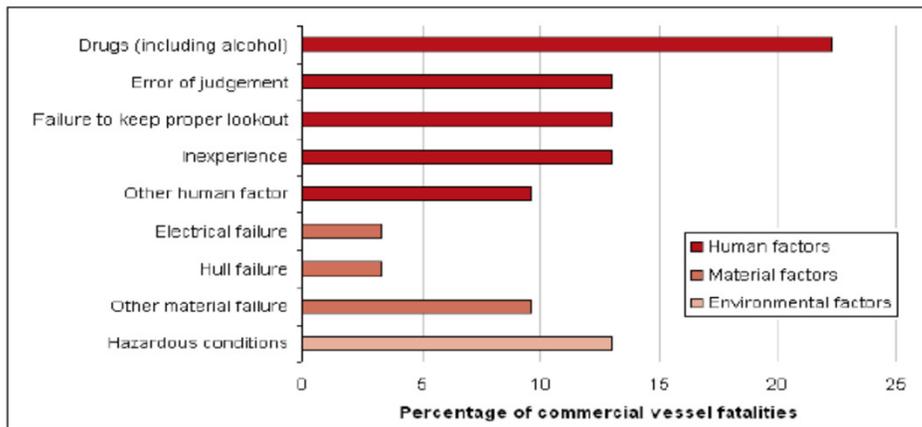
- A 30 year history of focussing on Vessel Survey and Vessel Captains
- National Marine Safety Committee (NMSC) – A standards body that was a quasi-legislation negotiator
- Government and industry reluctance to change
- Differing attitudes to regulation in each jurisdiction
- Different fee structures in each jurisdiction
- Different government subsidies in each jurisdiction

<u>Services</u>	<u>Option 1</u> Status Quo	<u>Model 1</u> AMSA	<u>Model 2</u> AMSA with State/NT	<u>Model 3</u> 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

The need for Safety Management Systems

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



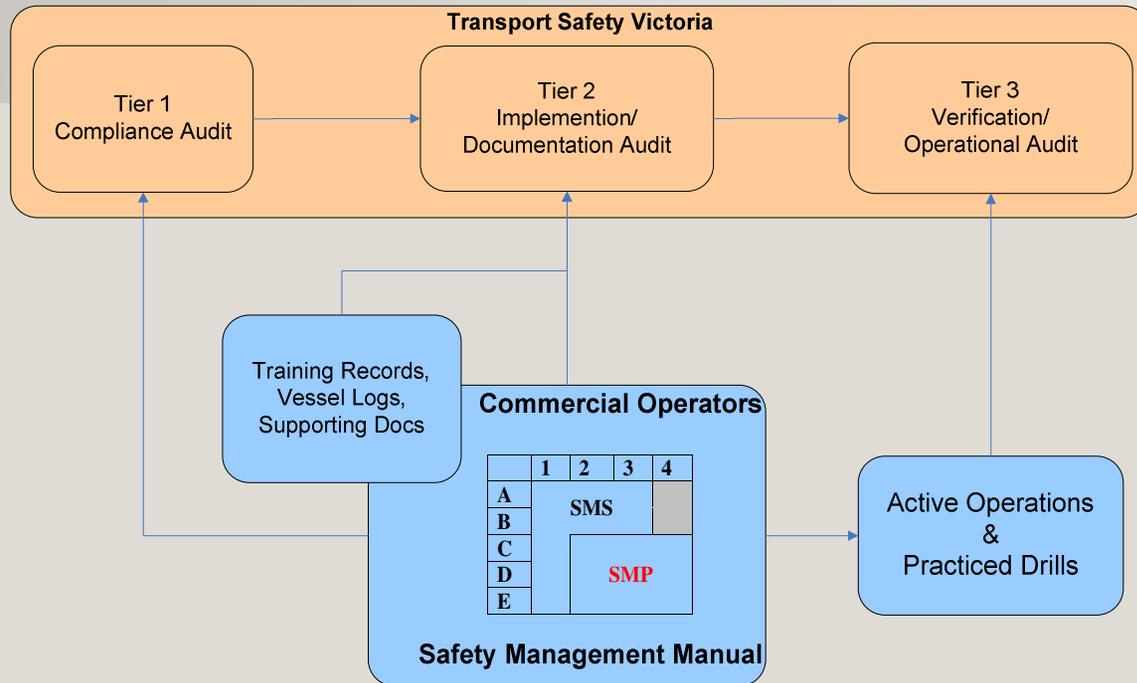
Source: NSMC 2008a

NATIONAL ASSESSMENT OF BOATING FATALITIES
IN AUSTRALIA 1999-2004

NSW	Class 1 - Passenger	Passenger jumped overboard while vessel was underway. The passenger was recovered without injury.
NSW	Class 1 - Passenger	Vessel lost main engine following fuel issues. No damage or injuries reported.
NSW	Class 1 - Passenger	Passenger jumped overboard while vessel was underway. The passenger was recovered and required medical attention.
NSW	Class 1 - Passenger	Vessel collided with a sailing catamaran while underway. Significant damage sustained.
NSW	Class 2 - Non-Passenger	Acetylene bottle caught fire onboard. The vessel was evacuated. No injuries or pollution reported.
NSW	Class 2 - Non-Passenger	Vessel collided with an open bridge. Damage sustained to vessel's mast and rigging.
NSW	Class 2 - Non-Passenger	Vessel collided with rowing boat while underway. The person onboard the rowing boat fell overboard and required medivac.
NSW	Class 3 - Fishing (commercial)	Passenger fell overboard while fishing. The passenger was recovered without injury.
QLD	Class 1 - Passenger	Passenger fell overboard while disembarking vessel. The passenger was recovered with minor injuries.
QLD	Class 1 - Passenger	Vessel's dory capsized during snorkelling operation. Four passengers fell overboard and were recovered without injury.
QLD	Class 2 - Non-Passenger	Vessel collided with wharf following steering failure. No damage or pollution reported.
QLD	Class 3 - Fishing (commercial)	Vessel's hatch cover fell from an open position during fishing operation. A crew member sustained head laceration and arm fracture.
QLD	Class 3 - Fishing (commercial)	Vessel collided with another vessel. No damage or pollution reported.
QLD	Class 4 - Hire 'N' Drive	Vessel made contact with reef. Minor damage sustained.
TAS	Class 1 - Passenger	Vessel grounded during strong weather conditions. Damage sustained to vessel's propellers.
NT	Class 1 - Passenger	Crew member sustained hand injury while setting up compressed air hose. Medivac required.
NT	Class 2 - Non-Passenger	Vessel's bow door separated from vessel. Investigation underway.
NT	Class 3 - Fishing (commercial)	Vessel's fixed fire fighting system suffered an electrical fault and caught fire. The fire was extinguished by crew.
WA	Class 1 - Passenger	Vessel collided with a docked vessel during strong weather conditions. Minor damage sustained.
WA	Class 2 - Non-Passenger	Vessel collided with a passenger vessel while underway. No damage or injuries reported.
WA	Class 2 - Non-Passenger	Vessel's port outboard engine caught fire. The fire was extinguished by crew. Repairs completed.
WA	Class 3 - Fishing (commercial)	Very Serious: Vessel collided with reef and sustained significant hull damage. The vessel was evacuated and later sank.
ACT	Class 1 - Passenger	Passenger jumped overboard while the vessel was berthing. No injuries reported.
ACT	Class 1 - Passenger	Passenger tripped on door sill. The passenger sustained a dislocated shoulder and required medivac.
SA	Class 1 - Passenger	Vessel made contact with submerged object. Damage sustained to propellers.
SA	Class 2 - Non-Passenger	Vessel capsized after failure to remove the buoy line. Two persons fell overboard and were wearing life jackets. One person sustained leg bruising.

<https://www.amsa.gov.au/vessels-operators/incident-reporting/2021-monthly-domestic-commercial-vessel-incident-reports>

GRC Assurance Model



- **Governance** – Company governance checked by regulators through the 3-tiers of auditing
- **Risk** – Company Risk Management and Regulator Risk-Based Audit
- **Compliance** - The principles of compliance as outlined in AS3806

Compliance (2) – National Standards

Uniform Shipping Laws (USL) Code (1980-2011+)

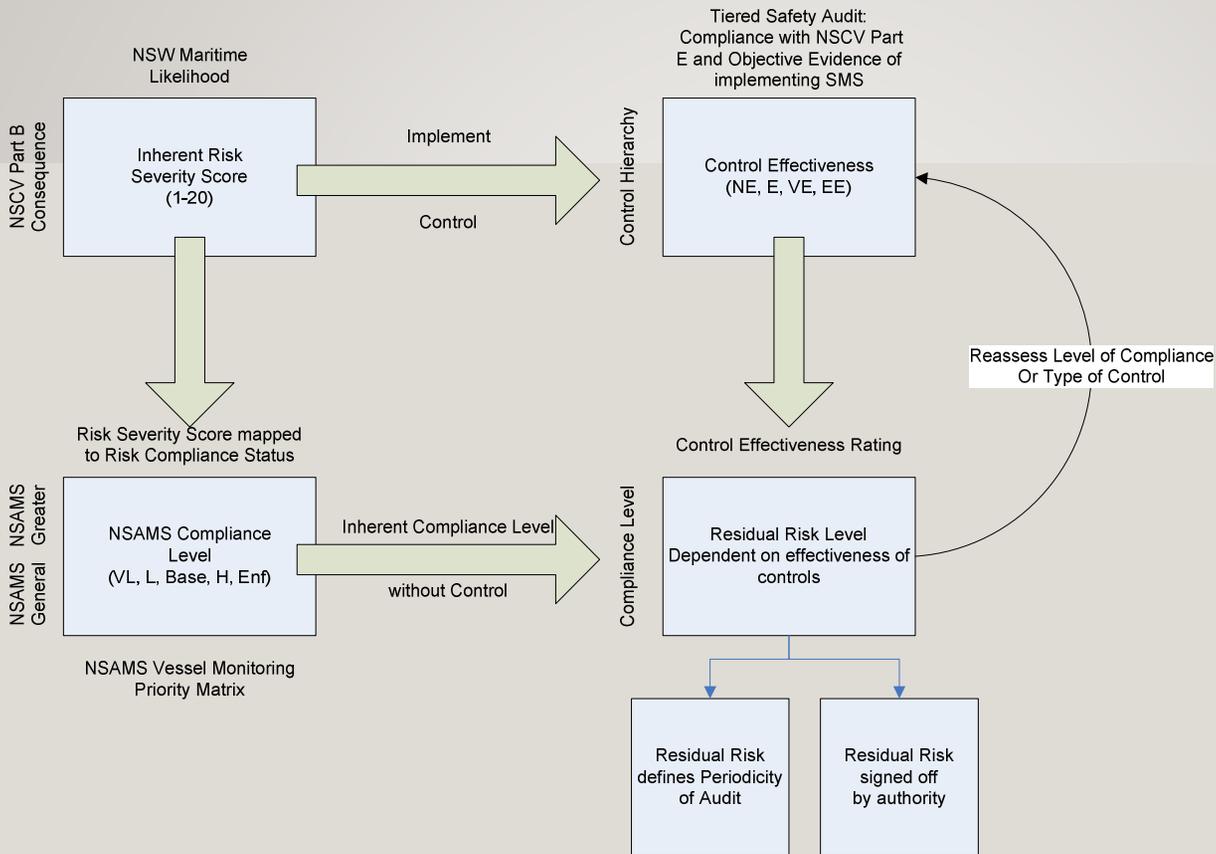
National Standard for Commercial Vessels (NSCV)

- *Part C – Construction* *MO503*
- *Part D – Crew Qualifications* *MO505*
- *Part E – Safety Management* *MO504*

International Maritime Organisation (IMO)

- *International Safety Management (ISM) Code*

Risk Management (See attachment)



Incorporating Lessons Learned from ISM

Review of the ISM Code audit process, July 2009, Ernst & Young:

1. Reinforcing role as a regulator, and strengthen the audit function through improved auditor training
2. Consider the development of a formal risk assessment framework...
3. Improve preparedness of ISM code auditors, consider the inclusion of SMSs to be a mandatory part of ISM audit requests submitted.
4. Consider reviewing and strengthening current practices for planning audits, and evidence collection and retention to justify decisions around conformance with the ISM code
5. Revise the audit methodology to include risk based sampling
6. Consider a redesign of documentary guidance [...] for each type of audit
7. Formal classification of what constitutes an observation, a non-conformance and a major non-conformance to promote consistency
8. Revise the training program for ISM auditors to include technical training [...]
9. Investigate the feasibility of monthly meetings [...] for all AMSA's auditors to develop the ISM code knowledge network
10. Consider documenting and communicating their detailed interpretation and expectations of the ISM code formally to industry... promote consistency in the design and operation of a SMS and to strengthen their position as a regulator.

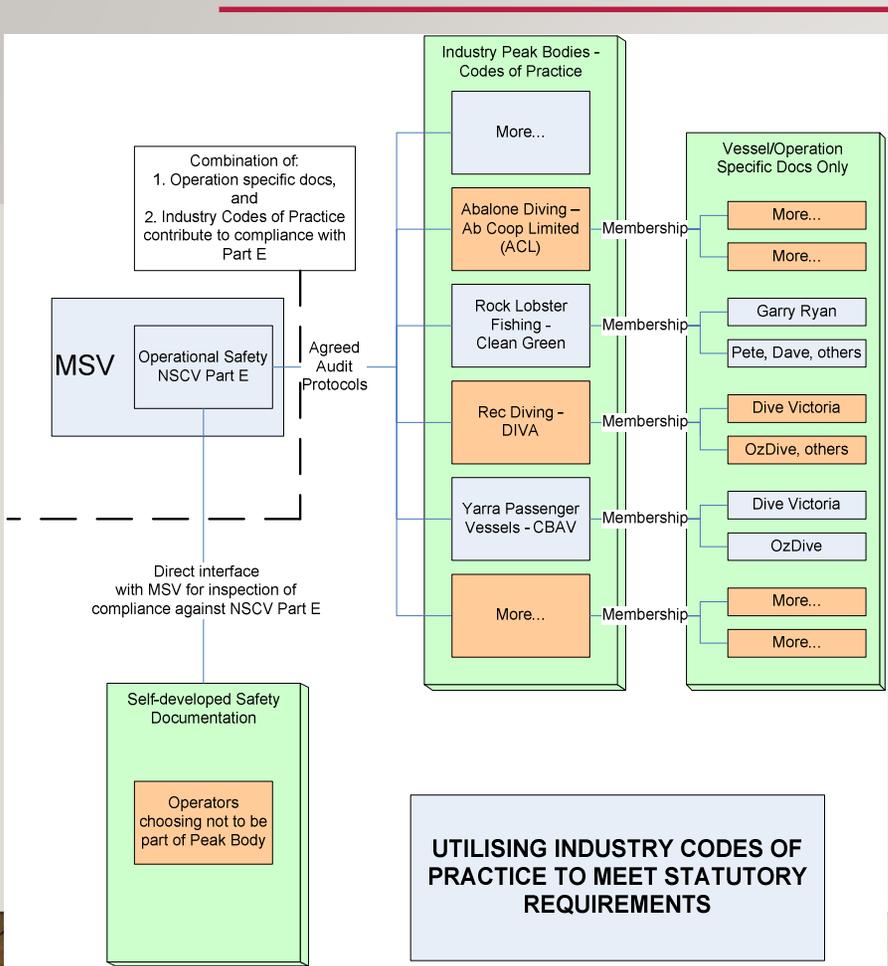
Engaging Governments

- National Regulator Information Portal (Atlassian Confluence)
- Intergovernmental Committees on NSCV Part E
- National Database for Commercial Vessel Safety (NDCVS)
 - Expand the same intergovernmental cultural battles to the ICT space
 - Tailored delivery of a regulatory ICT system

Following lots of discussions and fostering relationships:

- Peak body on Safety Management

Engaging industry



Images sourced from boat show websites.

THANKYOU!!

