

Regulatory Requirements for Pilotage Management Systems

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Creating a single integrated transport network accessible to everyone

We manage:



33,353 km

state-controlled roads



3078

bridges



20

ports

There were:



3.6m

drivers licensed



5.1m

vehicles registered



3259

taxis licensed



232,901

recreational boat
registrations



866,194

recreational boat
licences

We serve:



3.39m

customers served
face-to-face at

59

Customer Service Centres



Our customers conducted

7.2m

online services

Services provided:



178m

in SEQ

11.9m

outside SEQ

trips taken annually on bus,
rail, ferry and light rail



2.6m

go cards
in use



Over 485,000

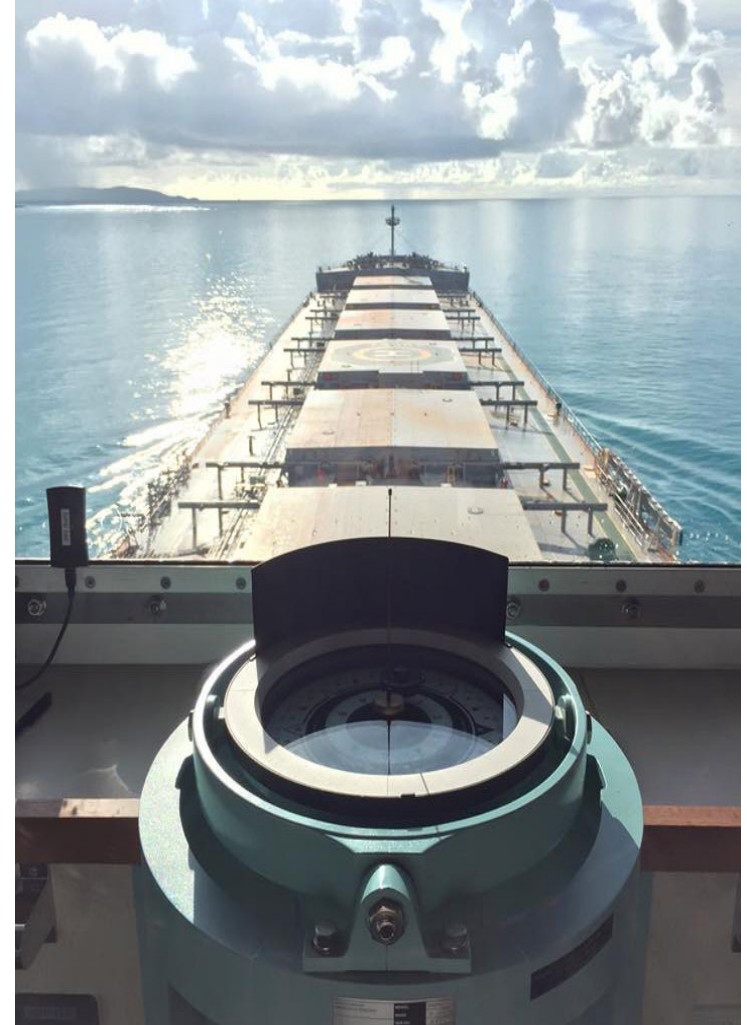
passengers travel on
the SEQ network on
average each day

Statistics sourced from the Department of Transport
and Main Roads Annual Report 2016–17



Overview

- MSQ – who are we
- Pilotage regulator role and intent
- What is a Safety Management System (SMS)
- What are we striving to achieve
- How we do it
- Risk is the key driver
- We have a lot in common with ISPO
- Partnership and relationships
- Data and measurement are critical
- Key insights
- The way ahead



Maritime Safety Queensland (MSQ)

- Who are we?

- MSQ is a statutory entity within the Department of Transport and Main Roads
- MSQ is the maritime safety regulator for vessel operations in Queensland waters
- This role encompasses responsibility for regulating the delivery of safe and efficient pilotage services in Queensland's many and varied trading ports (15)
- 110 licenced port pilots in Queensland
- Prior to 2013, MSQ was the pilotage service provider for all Queensland ports, except Brisbane, where pilotage services are provided under private contract - BMP

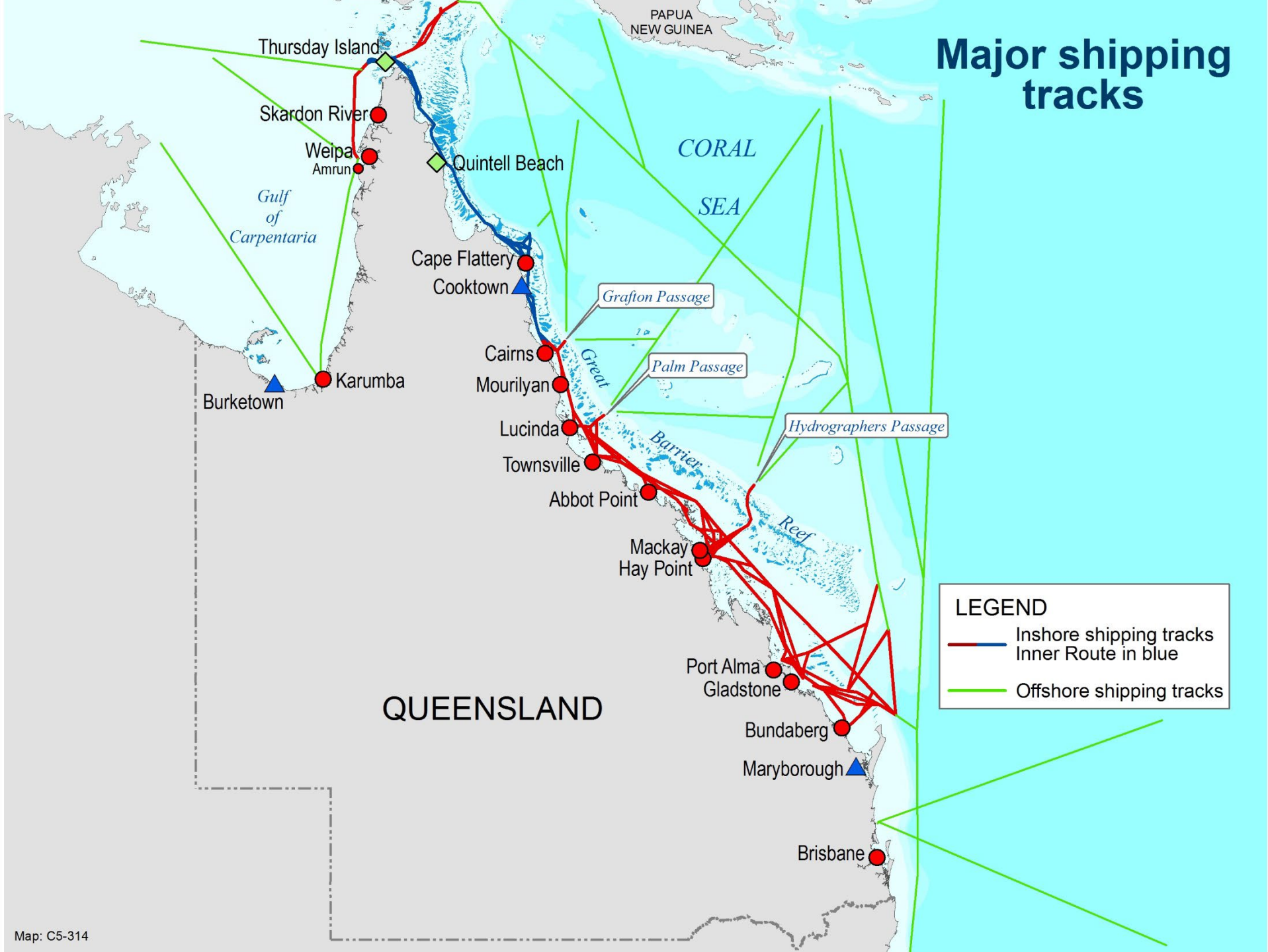
MSQ – what do we do?

Safer Ships – Cleaner Seas

- Pilotage regulation
- Managing/maintaining ATONs
- Managing buoy moorings
- Pollution prevention & response
- Vessel traffic services (VTS)
- Marine safety regulation and compliance
- RHM has control of pilotage area
- RHM can issue directions
- Separation of powers from ports



Major shipping tracks







Government Regulation

- The ***Transport Operations (Marine Safety) Act 2004 and Regulation*** articulate the Queensland government's regulatory framework for pilotage in the State's ports
- However, like most legislation, these statutes cannot hope to definitively cover all the specific elements of a particular service delivery environment
- To meet the diversified needs of stakeholders, MSQ works closely with pilotage service providers and industry bodies to develop and implement self-governance arrangements that complement the regulatory requirements of the Crown
- ISPO is such an arrangement

Regulatory Intent

- Government is committed to ensuring safety of vessel movements in Queensland ports
 - Safety of vessels
 - Safety of vessel movement
 - Safety of the environment
- MSQ provides or arranges for pilotage services under a statutory scheme
- Responsible for provision & management of pilotage services Queensland ports
- A serious marine incident has a high consequence
- Community expectation for government to apply strict regulatory controls
- Community has zero tolerance to major environmental damage or serious marine incidents

ISPO and MSQ

- We seek the same outcomes
- MSQ commends ISPO for raising pilotage standards
- 3rd party auditing is normal today
- ISPO acknowledges the role of the regulator – MSQ
- ISPO will not be in conflict with national or regional rules
- ISPO and MSQ are partners through a robust audit regime
- Key mutual objectives are:
 - Support safety management practices
 - Support quality management practices (certification)
 - Seek continuous improvement through learning and data
 - MSQ annual audit is more of a technical assessment
 - ISPO is more holistic and overarching
 - We don't want tick and flick
 - Maintain a just culture throughout pilotage fraternity

ISPO states “**A well-run organisation does not need to change its working practices to meet this standard.**”

Pilotage Regulatory Role

- Frontline defence against serious marine incidents
- Ensure safety of vessel movements in ports
- Pilot licences - 110
- Some 16,000 pilotage movements in 2017/18
- Legislative responsibility
- MSQ conducts audits of pilotage services
- Clear separation between regulator & service provider
- CPD & training standards
- Investigate pilotage incidents



Marine Safety Culture

- We all know what safety is
- It's when we don't have bad safety outcomes
- Bad safety outcomes are accidents & incidents
- Absolute safety will never be achieved
- Human error is inherent in the system
- We can strive to reduce incidents
- Regulating safety is about applying risk management and risk control measures
- Identifying/controlling risks to a level ALARP.



What is a Safety Management System (SMS)

- Ultimate goal is to develop a safety culture within the pilotage organisation
- A systematic approach to managing safety
- Risk is the key driver
- Includes the necessary organisational structures, accountabilities, policies and procedures
- A proactive safety culture characterised by systematic and continuous improvement
- Safety Culture = Attitudes + Behaviours.



SMS Key Elements

- Management policy, commitment
- Organisational responsibilities
- Clearly documented procedures
- Risk assessment & control measures
- Training programs
- Regular safety meetings
- Auditing, monitoring & review
- Need for regulatory oversight
- Ultimate goal is a safety culture throughout pilotage organisation
- A partnership between regulator and service provider is vital
- SMS encourages reporting
- A level of trust must be in place.



The Right Stuff

- The right kit (equipment)
- The right procedures (instructions & practices)
- The right people (skills, culture & behaviours)
- The right attitudes
- Just culture = the carrot and NOT the stick



MSQ Annual Audits of Pilotage

- Conducted each year by Regional Harbour Master
- The first question posed in the audit is “**Does the pilotage service provider have an SMS?**”
- The audit process then continues to drill down on the effectiveness of the SMS in meeting the legislative requirements of the regulator
- The audit is designed to not only ensure compliance with current requirements, but to identify opportunities for improvement, whereby new procedures, technologies or systems may be able to be introduced to further enhance service delivery and ultimately, maritime safety

Pilotage Audits

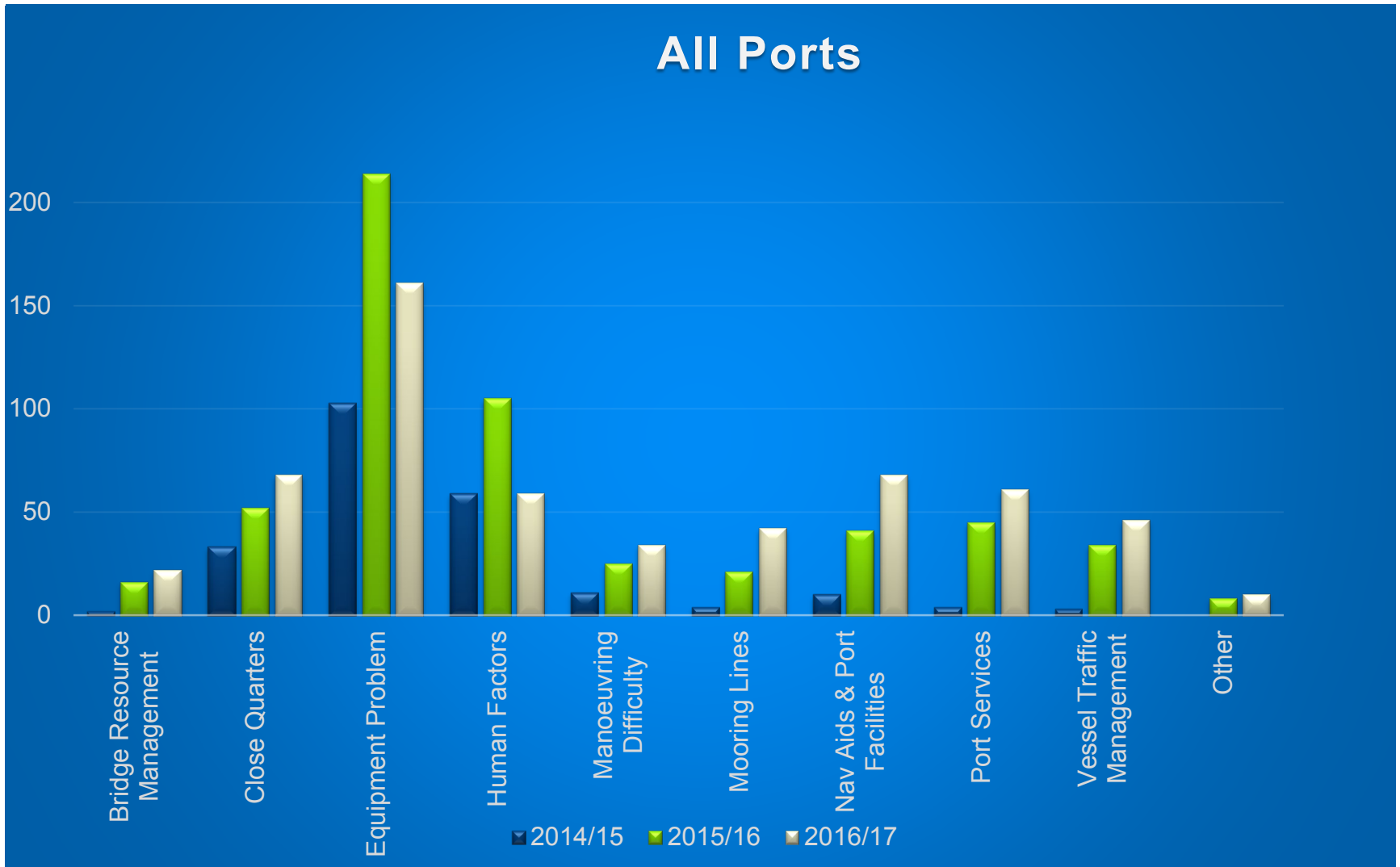
- MSQ conducts annual audits of pilotage services
- Recruitment
- Certification & Licensing
- Conduct of Pilotage
 - Pilot allocation
 - Fatigue management
 - Training
 - Passage Planning
 - BRM
 - Emergency Situations
- Pilot transfers
- Tug Services & Lines Services
- Marine Incidents/Risk events



Data is Key

- Data integrity is critical to the process
- You can't manage or improve if you can't measure it
- Evidence based and heightens awareness
- Benchmarking and measurement
- Need pre-event & post-event information
- If pilots believe that they are compiling reports for a reason, comprehensive data recording is more likely
- Feedback & closure are important
- Analysing trends provides confidence in the reporting system & encourages use

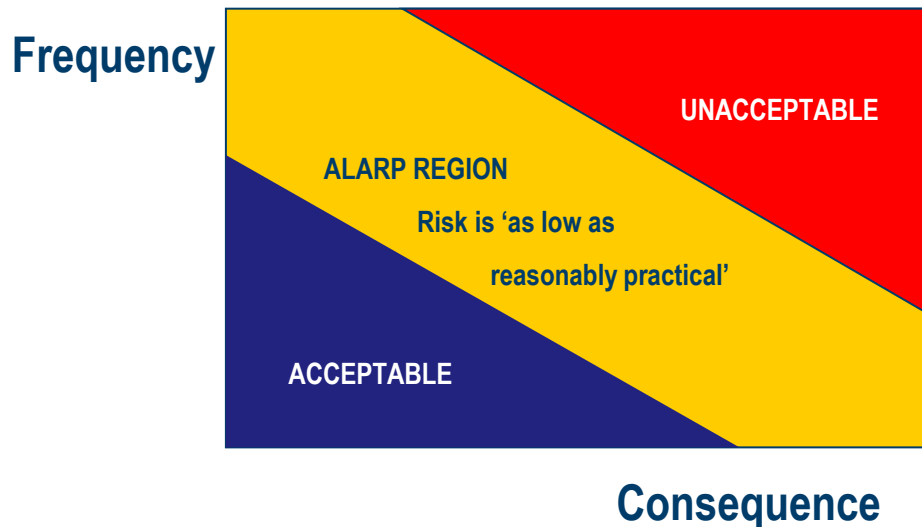
Data & Trends Analysis



Risk Management = ALARP



- Regulating safety is about applying risk management and risk control measures
- Risk is key to decision making
- Risk profiles are constantly changing
- Risk reduction programs are incremental
- Review risk for ship & port profiles through trends, analysis, incidents.



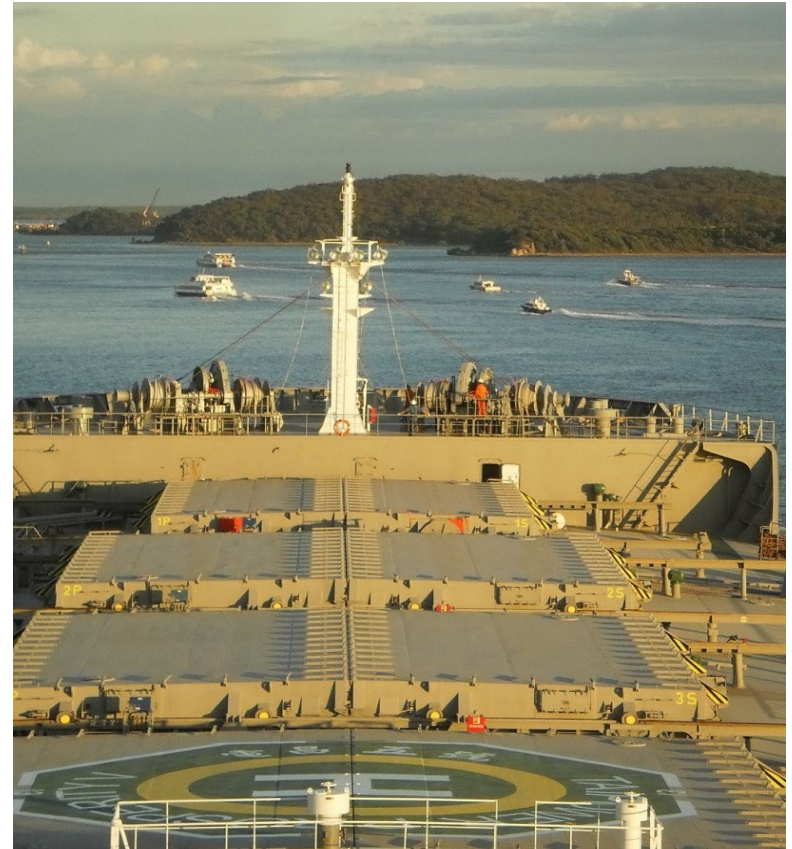
Key Insights

- A number of barriers must be in place to prevent marine incidents
- **Pilotage is the frontline tool to reduce serious marine incidents**
- Need to create a culture where all accidents are preventable
- Comprehensive annual audits of pilotage services
- Greater ship/shore interaction
- Need to continually reassess risk profile & data is critical
- Risk reduction programs are incremental
- Continuous improvement the goal
- Further efforts are still needed.



The Way Ahead

- Maintain good relationships and dialogue with pilots, pilot providers, peak bodies such as ISPO and AMPI
- Monitor risk and trends closely
- Continue to learn and review
- Continuous improvement
- Remain transparent
- Familiarity breeds contempt
- **DO NOT BE COMPLACENT**



If you think the cost of safety is high
- wait till you have an accident!

Prevention is better than cure.

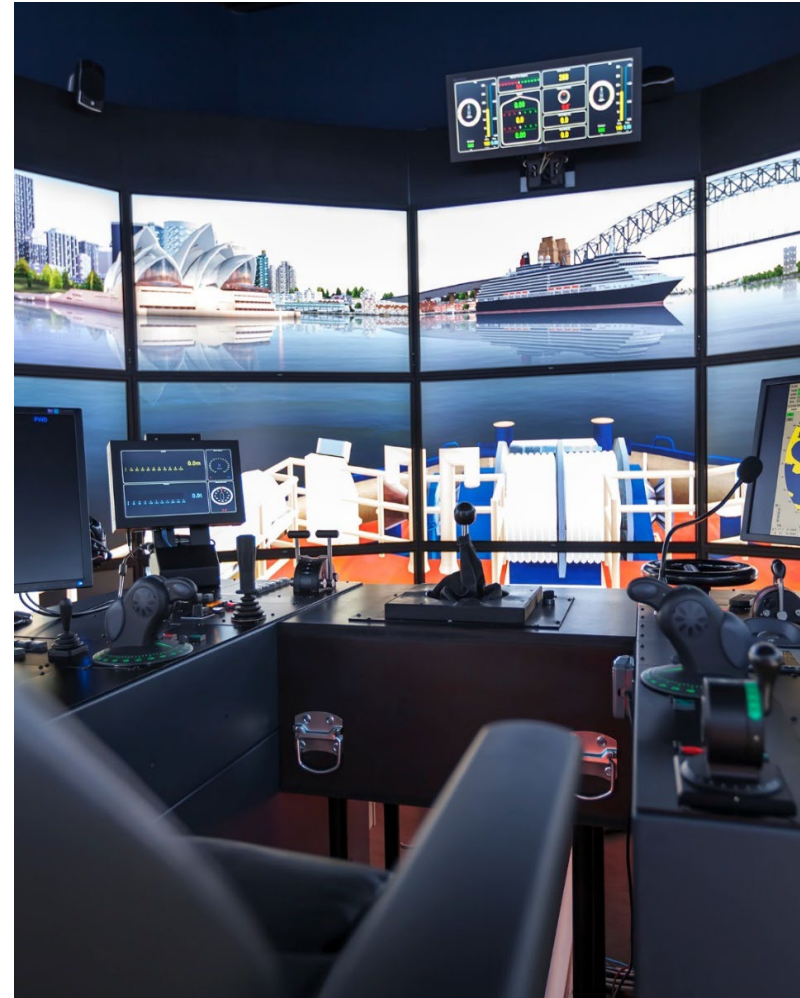


Smartship Australia



Smartship Australia

- World class facility
- High fidelity
- Port development & design
- Centre of maritime excellence
- Contemporary training
- Seafarer and pilot training
- Emergency training
- Pilot selection
- Tug master training
- BRM
- Incident re-creation
- Boeing flight simulator next door.



Smartship Australia Simulations



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