

# Piper Alpha – The Catalyst for Industry Regulation Change

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June 13, 2018

# Pre-Piper alpha: 1967-88

### **Petroleum (Submerged Lands)**

No. 118 of 1967

An Act relating to the Exploration for, and the Exploitation of, the Petroleum Resources, and certain other Resources, of the Continental Shelf of Australia and of certain Territories of the Commonwealth and of certain other Submerged Land.

*[Assented to 22 November 1967]*

*Preamble.*

WHEREAS in accordance with international law Australia as a coastal state has sovereign rights over the continental shelf beyond the limits of Australian territorial waters for the purpose of exploring it and exploiting its natural resources:

AND WHEREAS Australia is a party to the Convention on the Continental Shelf signed at Geneva on the twenty-ninth day of April, One thousand nine hundred and fifty-eight, in which those rights are defined:

AND WHEREAS the exploration for and the exploitation of the petroleum resources of submerged lands adjacent to the Australian coast would be encouraged by the adoption of legislative measures applying uniformly to the continental shelf and to the sea-bed and subsoil beneath territorial waters:

- Work practices
- Directions
- State regulation

**Seas and Submerged Lands  
Act 1973**

No. 161 of 1973

**AN ACT**

Relating to Sovereignty in respect of certain Waters of the Sea and in respect of the Airspace over, and the Sea-bed and Subsoil beneath, those Waters and to Sovereign Rights in respect of the Continental Shelf and relating also to the Recovery of Minerals, other than Petroleum, from the Sea-bed and Subsoil beneath those Waters and from the Continental Shelf.

*[Assented to 4 December 1973]*

**Preamble.** WHEREAS a belt of sea adjacent to the coast of Australia, known as the territorial sea, and the airspace over the territorial sea and the bed and subsoil of the territorial sea, are within the sovereignty of Australia:


AND WHEREAS Australia is a party to the Convention on the Territorial Sea and the Contiguous Zone a copy of which in the English language is set out in Schedule 1:

AND WHEREAS Australia as a coastal state has sovereign rights in respect of the continental shelf (that is to say, the sea-bed and subsoil of certain submarine areas adjacent to its coast but outside the area of the territorial sea) for the purpose of exploring it and exploiting its natural resources:

AND WHEREAS Australia is a party to the Convention on the Continental Shelf a copy of which in the English language is set out in Schedule 2:

Commonwealth claims rights in relation to the continental shelf outside territorial waters **and** territorial and internal waters.

07/05/2018 Legal database - View Cases: NewSouth Wales v. Commonwealth - (17 December 1975)

 Australian Government  
Australian Taxation Office

Legal database

*New South Wales and Others v Commonwealth*

135 CLR 337

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(Judgment by: Jacobs J)

New South Wales and Others  
v. Commonwealth

**Court:**  
High Court of Australia

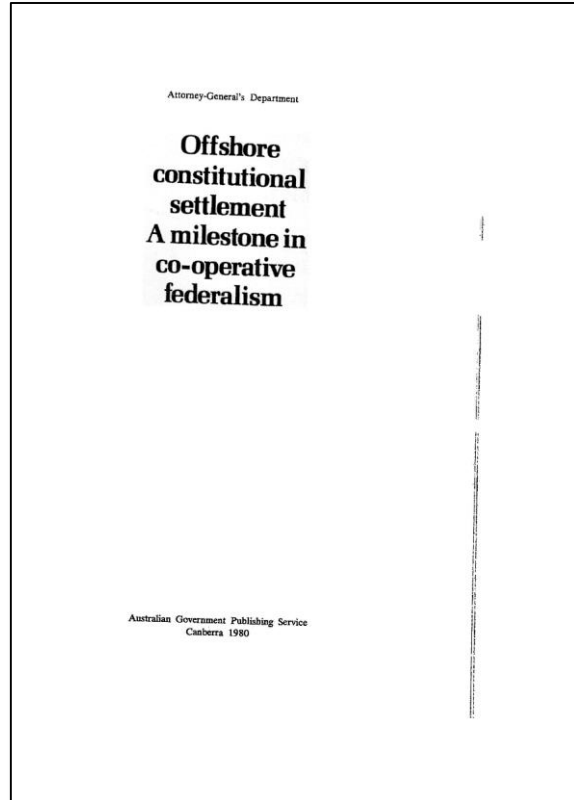
**Judges:**  
[Barwick CJ](#)  
[McLennan J](#)  
[Gibbs J](#)  
[Stephen J](#)  
[Mason J](#)  
[Jacobs J](#) (Majority)

**Legislative References:**  
*Judiciary Act 1903* - s 18  
*Territorial Waters Jurisdiction Act 1878* - The Act  
*Seas and Submerged Lands Act 1973* - The Act  
*Federal Council of Australasia Act 1885* - s 15  
*Australian Constitutions Act 1850* - s 1  
*New South Wales Constitution Act 1855* - s 7  
*Australian Colonies Act 1861* - s 2  
*Colonial Boundaries Act 1895* - s 2  
*Statute of Westminster (Adoption) Act 1942* - The Act

**Case References:**  
*Airlines of New South Wales Pty Ltd v State of New South Wales* (No 2) - (1968) 113 CLR 54; [1968] ALR 984  
*Amalgamated Society of Engineers v Adelaide Steamship Co Ltd* (the Engineers Case) - (1920) 28 ALR 337, 28

<https://www.austlii.gov.au/au/other/auflii/document/Mode-type8T0C-%205%3ACases%3AHigh%20Court%3A1975%3ANew%20SOUTH%20Wales%20v.%20The%20C>

- High Court challenge
- Commonwealth wins



- Vesting in the States the title to the seabed beneath the “coastal waters”
- States regulate coastal waters & Designated Authorities regulate adjacent “offshore areas”
- Major decisions made by Joint Authority (offshore areas)



PETROLEUM (SUBMERGED LANDS) ACTS

SCHEDULE

SPECIFIC REQUIREMENTS AS TO OFFSHORE  
PETROLEUM  
EXPLORATION AND PRODUCTION

NOVEMBER 1985

- Consolidated
- Standing direction
- Commonwealth and State and Territory versions



- P(SL)A s97 – “A permittee or licensee ....shall secure the safety, health and welfare of persons engaged in those operations in or about the permit area or licence area.”
- Prescriptive requirements regarding OHS matters in the Schedule of Specific Requirements

- Flixborough 1974 - **UK CIMAH Regulations 1984**
- Seveso 1977- **European Seveso Directive 1982**
- Bhopal 1984 - **US CCPS, UN/World Bank initiatives**
- Sandoz 1986 - **European Seveso II Directive**
- Kings Cross 1987- **UK Railway Safety Cases 1994**

# Post Piper alpha: 1988-05

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REPORT OF THE CONSULTATIVE COMMITTEE ON SAFETY IN THE  
OFFSHORE PETROLEUM INDUSTRY

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- COSOP formed Oct 1988
- Reported in Feb 1991
- Considered Petrie and Cullen Reports
  - Initial Response
  - Guidelines
  - Cullen recommendations

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- Key Recommendations:
  - Adopt safety case principle
  - Progress objective approach
  - 2 year transition period
  - Endorsement of Cullen recs
  - OHS provisions
  - Single point of contact for OHS (DAs)
  - DA resources and training



**Petroleum (Submerged Lands) Amendment  
Act 1992**

No. 217 of 1992

**An Act to amend the *Petroleum (Submerged Lands) Act 1967* to promote the occupational health and safety of persons employed in the designated areas, and for related purposes**

[Assented to 24 December 1992]

The Parliament of Australia enacts:

**Short title etc.**

1.(1) This Act may be cited as the *Petroleum (Submerged Lands) Amendment Act 1992*.

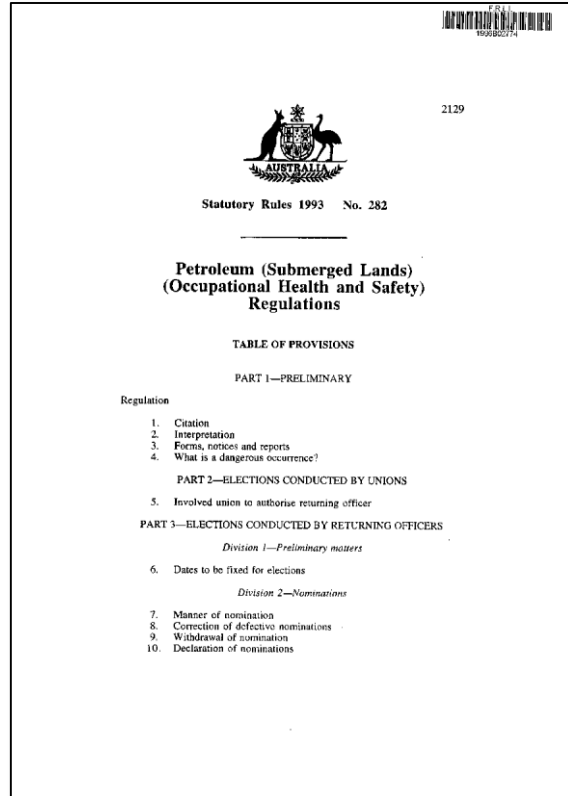
5 (2) In this Act, "Principal Act" means the *Petroleum (Submerged Lands) Act 1967*.

**Commencement**

2.(1) Subject to subsection (2), the provisions of this Act commence on a day or days to be fixed by Proclamation.

10 (2) If a provision of this Act does not commence under subsection (1) within a period of 6 months beginning on the day on which this

- Schedule 7 – OHS
  - General and specific duties
  - Workplace arrangements
  - Investigation
  - Reporting



- OHS Regulations established
  - Primarily concerning HSR elections

PETROLEUM (SUBMERGED LANDS) ACTS


SCHEDULE

SPECIFIC REQUIREMENTS AS TO OFFSHORE  
PETROLEUM  
EXPLORATION AND PRODUCTION

18 DECEMBER 1995

- Schedule includes safety case
  - Single page covering:
    - (a) HAZID & MAEs
    - (b) SMS
    - (c) provision for TR & EER, in the event of a major emergency.
  - Required by 1 July 1996



 <p><b>Petroleum (Manager Facilities)</b></p> <p>Statutory Rules made under the <i>Petroleum (Sa</i></p> <p>Prepared by the O Attorney-General</p>	<p><b>THE REGULATION OF HEALTH AND SAFETY IN THE AUSTRALIAN OFFSHORE PETROLEUM INDUSTRY (1996 BARRELL REPORT)</b></p> <p><b>REPORT BY DR TONY BARRELL, 1996</b></p> <ul style="list-style-type: none"> <li>• Preface</li> <li>• Foreword</li> <li>• Chapter 1 - Introduction</li> <li>• Chapter 2 - Effectiveness of the Regime</li> <li>• Chapter 3 - Future roles of the various parties</li> <li>• Chapter 4 - Recommendations</li> <li>• Chapter 5 - References</li> </ul> <p>This report records the findings and conclusions of a review of the management of safety in Australian offshore oil and gas operations. It is addressed to Senator the Hon. Warwick Porter, the then Minister for Resources and Energy. The review was carried out by Dr Tony Barrell on behalf of Tony Barrell Partnership during the period April and May 1996.</p> <p>After an initial briefing from Senator Porter and senior officials from the Department of Primary Industries and Energy, Dr Barrell held meetings with Commonwealth and State/NT officials, operators and other companies involved in the offshore oil and gas industry, unions, industry associations and also met a number of other companies and organisations through joint meetings such as the Maritime Offshore Petroleum Safety Advisory Group. His review was further informed by visits to a number of offshore facilities on the North West Shelf and the Timor Sea.</p> <p>Chapter One outlines the reasons for the review and sets the context of the new safety case (objective-based) regulatory regime which has replaced the traditional prescriptive system. Dr Barrell also discusses the role of the regulator in this new context.</p> <p>Chapter Two details Dr Barrell's assessment of the effectiveness of the parties to the new regime. In brief, he considers that, with some exceptions, safety standards in the Australian offshore oil and gas industry are reasonably good and getting better, and that the prospects are encouraging for a well focused and cost-effective regime in the coming years.</p> <p>Chapter Three considers the future roles of operators, the States/NT and the Commonwealth in their involvement in offshore safety. Dr Barrell discusses aspects of the roles of these parties in regard to the design/construction and implementation of new facilities, the development of guidance for preparing safety cases, and auditing and inspection. He also comments on the use of performance measures and some aspects of the legislative/regulatory framework.</p> <p>Chapter Four summarises Dr Barrell's specific recommendations for improving Australia's offshore safety arrangements. These have been extracted from the main body of the text, where the recommendations are detailed in bold text.</p>
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- **Safety Case Regulations**
  - Still includes some consents
  - Establishes FD, FSA and SMS descriptions
  - Detailed content requirements
  - “Operator” (notification)
- **Barrel Review**
  - Implementation progress


DEPARTMENT OF INDUSTRY, SCIENCE AND RESOURCES  
Offshore Safety and Security, Petroleum and Electricity Division

AUSTRALIAN OFFSHORE PETROLEUM SAFETY CASE REVIEW


Future  
Arrangements  
For The  
Regulation  
Of Offshore  
Petroleum Safety

September 2001

- Review established in 1999
  - Legislative overlap
  - Lack of regulatory skills, capacity and consistency
  - Legislative deficiencies
  - Recommended a single expertise based, independent agency

  
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 Office of Legislative Drafting  
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**Petroleum (Submerged Lands)  
 (Pipelines) Regulations 2001**

**Statutory Rules 2001 No. 314** 314

I, PETER JOHN HOLLINGWORTH, Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, make the following Regulations under the *Petroleum (Submerged Lands) Act 1967*.

Dated ' 8 OCT 2001 2001

**PETER HOLLINGWORTH**  
Governor-General

By His Excellency's Command


**NICK MINCHIN**  
Minister for Industry, Science and Resources

NAMECORA-210002-2000/01/11 07 AM


• PMPs

• DSMSSs

• DPPs

  
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**Petroleum (Submerged Lands)  
 (Diving Safety) Regulations 2002**

**Statutory Rules 2002 No. 300** 300

I, PETER JOHN HOLLINGWORTH, Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, make the following Regulations under the *Petroleum (Submerged Lands) Act 1967*.

Dated 27 NOV 2002 2002

**PETER HOLLINGWORTH**  
Governor-General

By His Excellency's Command

**IAN MACFARLANE**  
Minister for Industry, Tourism and Resources

NAMECORA-210002-2000/01/11 07 AM

Both later incorporated into the OPGGS (Safety) Regulations

Note: An electronic version of this Act is available in SEIADplus (<http://seiadplus.usa.gov/seiad/contents/browse?XXXN.htm>)

Note: An electronic version of this Act is available in NCAL Express (<http://ncalexpress.uscourts.gov/publicaccess/browset?URL=1100>).

IAN MACFARLANE  
Minister for Industry, Tourism and Resources

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Attorney General's Chambers

# Establishing NOPSA

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**Petroleum (Submerged Lands)  
(Management of Safety on Offshore  
Facilities) Regulations 1996**

Statutory Rules 1996 No. 298 as amended  
made under the

*Petroleum (Submerged Lands) Act 1967*

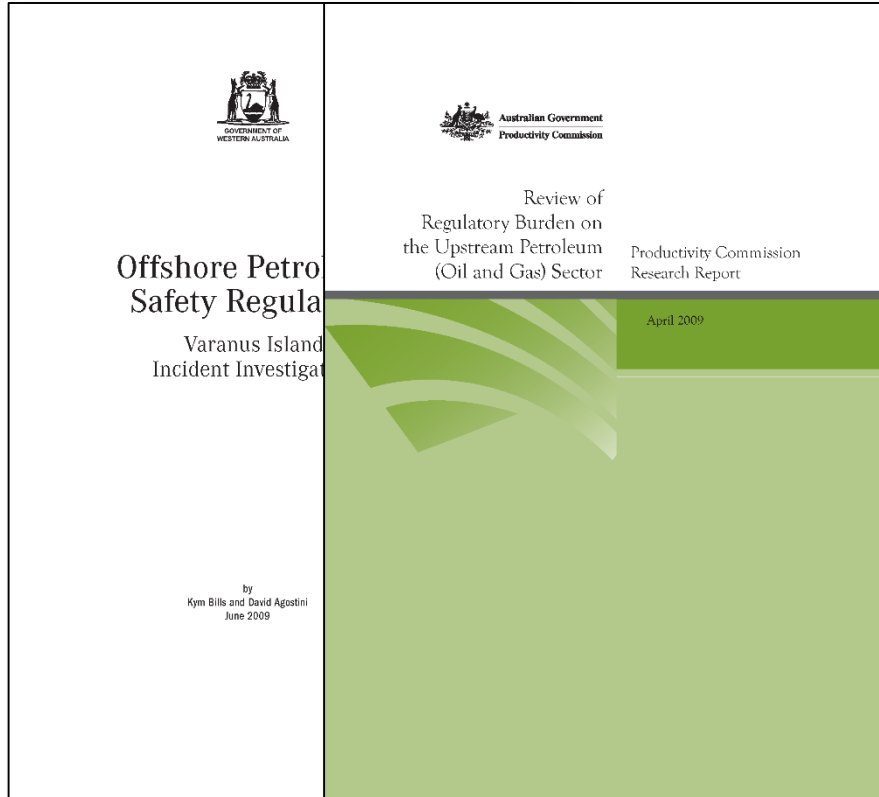
This compilation was prepared on 1 January 2005  
taking into account amendments up to SR 2004 No. 272

Prepared by the Office of Legislative Drafting and Publishing,  
Attorney-General's Department, Canberra

[Federal Register of Legislative Instruments 12005C00013]

- Single Independent Regulator for safety in offshore areas (NOPSA)
- Safety cases
  - No consents
  - Operator nomination (by titleholder or owner)

# Further drivers of regulatory change: 2006-18



- Recurring themes
  - Conferral
  - Jurisdiction



## Report of the Montara Commission of Inquiry

Commissioner  
David Borthwick AO PSM

June 2010



### Offshore Petroleum and Greenhouse Gas Storage Legislation Amendment (Miscellaneous Measures) Act 2010

No. 118, 2010

An Act to amend the *Offshore Petroleum and  
Greenhouse Gas Storage Act 2006*, and for other  
purposes



### Offshore Petroleum and Greenhouse Gas Storage (Resource Management and Administration) Regulations 2011

Select Legislative Instrument 2011 No. 54 as amended  
made under the

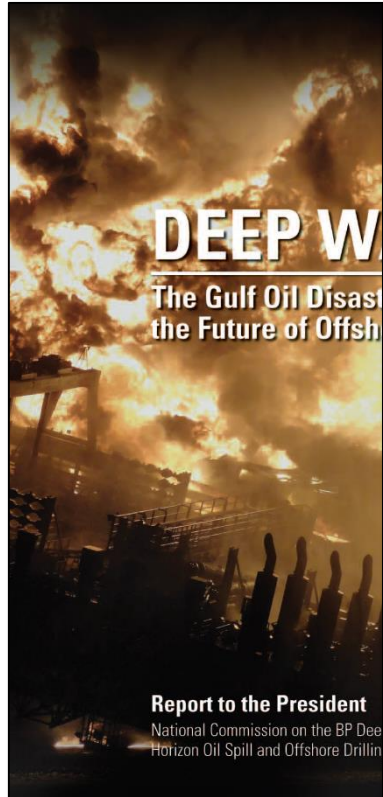
*Offshore Petroleum and Greenhouse Gas Storage Act  
2006*

This compilation was prepared on 1 November 2011  
taking into account amendments up to 2011 No. 198

Prepared by the Office of Legislative Drafting and Publishing,  
Attorney-General's Department, Canberra

Responsibly for regulation of well  
integrity in offshore areas transferred to  
NOPSA





**Offshore Petroleum and Greenhouse Gas Storage (Environment) Amendment Regulations 2011 (No. 1)**

Select Legislative Instrument 2011 No. 251

I, QUENTIN BRYCE, Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, make the following Regulations under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*.

Dated 7 December 2011



**Offshore Petroleum and Greenhouse Gas Storage (Safety) Amendment Regulations 2011 (No. 1)**

Select Legislative Instrument 2011 No. 254

I, QUENTIN BRYCE, Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, make the following Regulations under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*.

Dated 7 December 2011



**Offshore Petroleum and Greenhouse Gas Storage (Resource Management and Administration) Amendment Regulations 2011 (No. 1)**

Select Legislative Instrument 2011 No. 253

I, QUENTIN BRYCE, Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, make the following Regulations under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*.

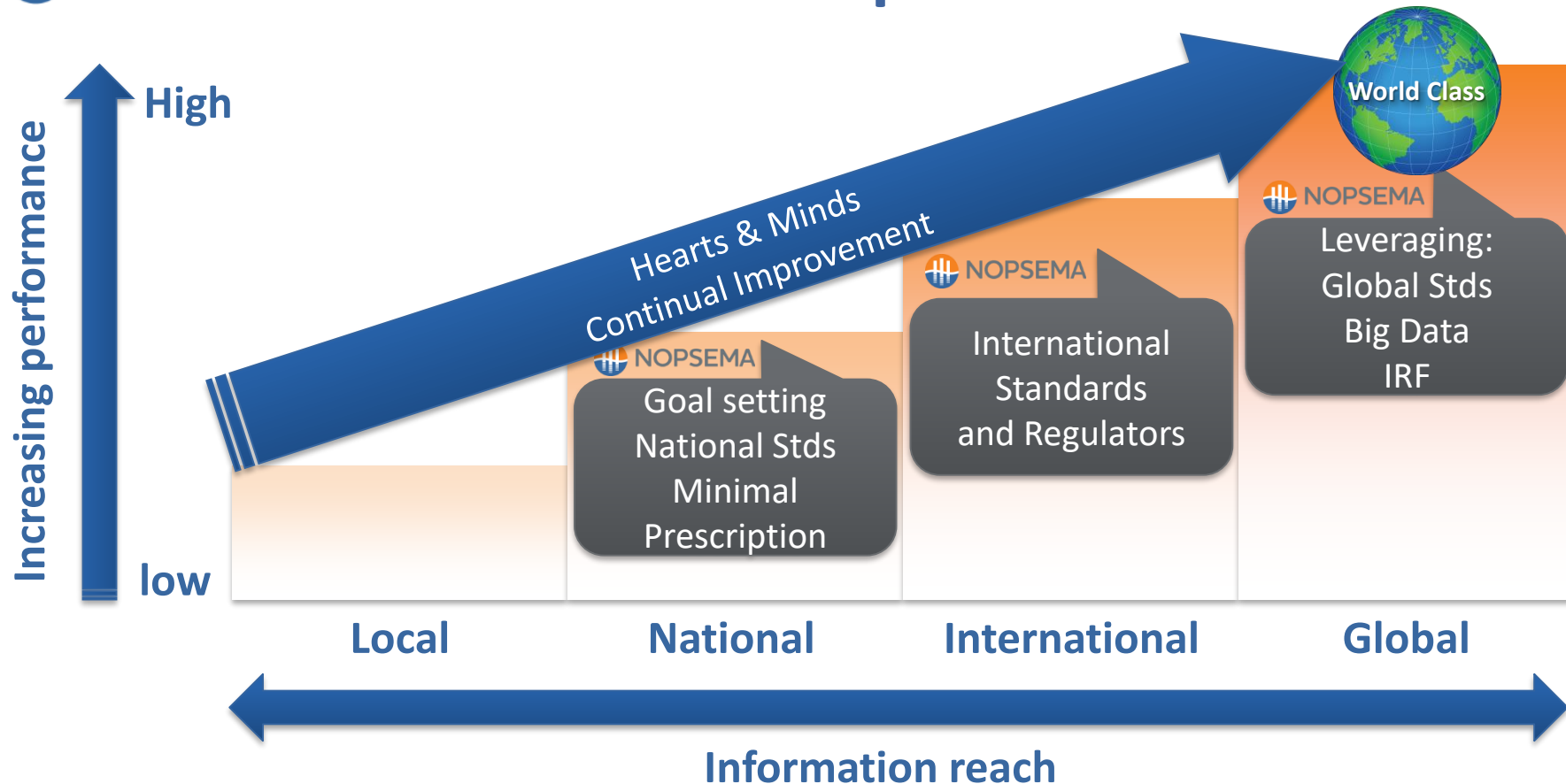
Dated 7 December 2011

Establishing NOPSEMA & NOPTA  
Responsibly for regulation of environmental  
management in offshore areas transferred to  
NOPSEMA

- Single regulator for OHS, ENV, WI in offshore areas
- Objective based
  - Act with duties (OHS)
  - Regulations with permissioning documents
- Conferral only for OHS in Victorian state waters

# The challenge

- Industry
  - Belief that good business = safe & environmentally responsible
  - Buy-in throughout industry
  - Aspiring to be to “World Class”
- NOPSEMA
  - Believes that a “step change” is not just possible, but achievable, likely and can occur faster
  - Our whole organisation working together
  - Increasingly drawing on broader data sets
  - Using of all our powers and functions to get there





# Pathways to Improvement



**Stopping  
old incidents**



**Finding one,  
fixing many**



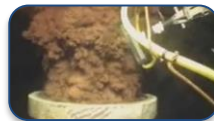
**Responding to  
evolving trends**



**Preventing MAEs:  
loss of life,  
containment**



**Preventing loss  
of well control**



**Effective incident  
response & spill  
source control**



**Oil spill  
preparedness  
arrangements**

Incident

Investigation

Recommendations  
(Operator & Manufacturer)



A596995

US  
Incident

UK  
Incident



13 June 2018

# An Example: DP Incidents

2005: "Two pushes of the stand-by button took place within the allowed 4 seconds through a **clipboard** being put on the DP console"

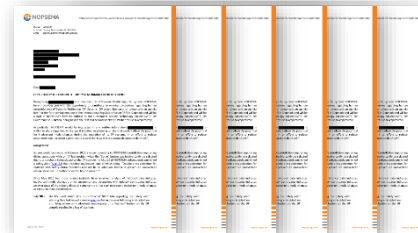
2009: "Main Cause Human error – Placing of **logbook** on surge switch"

2013: "a **clipboard** was placed on the DP desk which resulted in the fore/aft surge button being inadvertently pressed"

2013: "DPO inadvertently pressed the joystick button with the **logbook** he was reading from"

2014: "Initiating Event: Auto DP was deselected when the rough DP **logbook** was placed on the DP control desk"

## Manufacturers



## Regulators

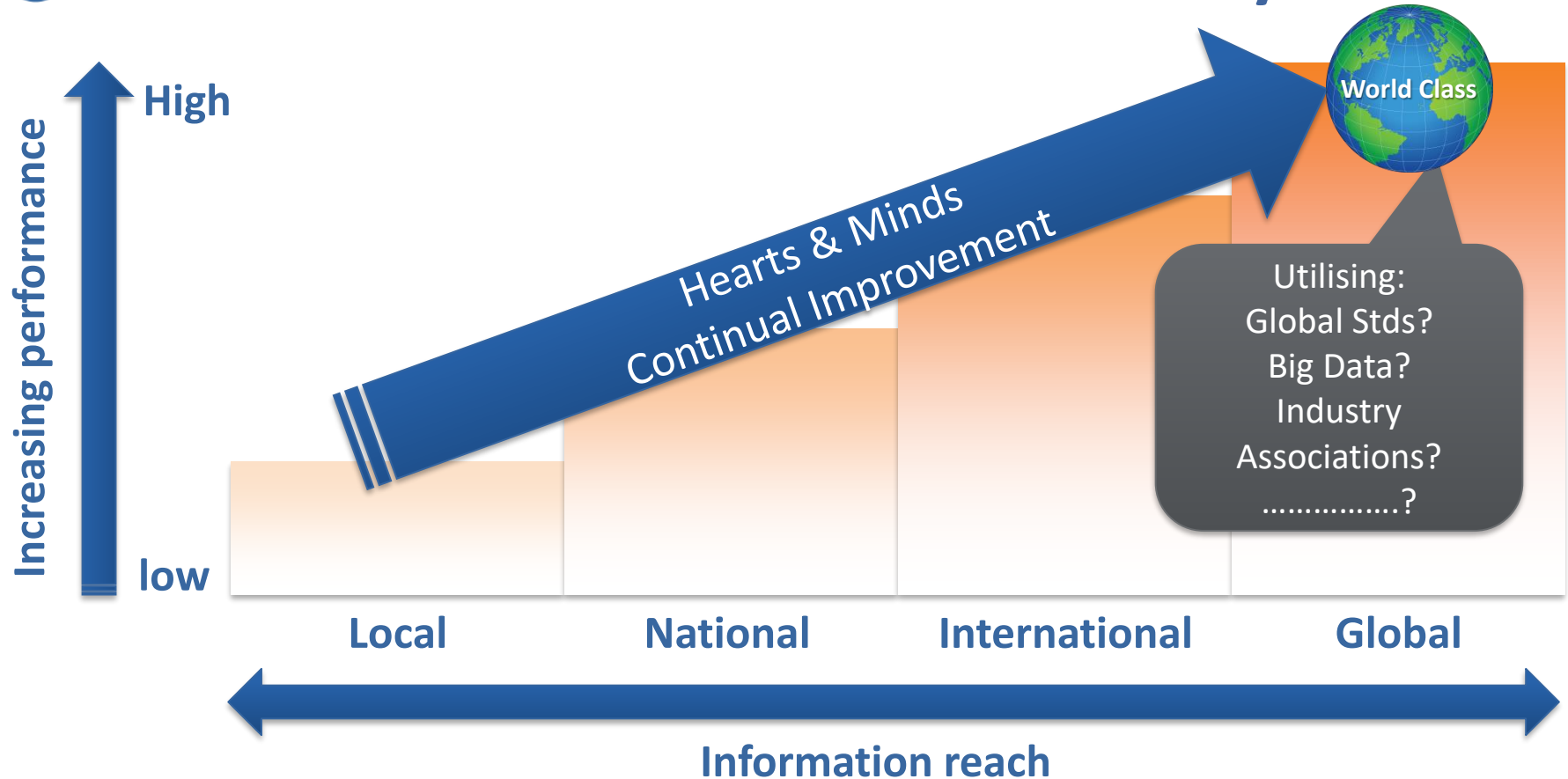


International Regulators' Forum  
GLOBAL OFFSHORE SAFETY

## Industry







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