

SUBMISSION NO. 26

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DEPARTMENT OF TRANSPORT AND REGIONAL SERVICES AND  
THE AUSTRALIAN MARITIME SAFETY AUTHORITY

SUBMISSION TO THE

HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON  
TRANSPORT AND REGIONAL SERVICES

INQUIRY INTO

*MARITIME SALVAGE IN AUSTRALIAN WATERS*

MAY 2004

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## **Introduction**

The Department of Transport and Regional Services (DOTARS) and the Australian Maritime Safety Authority (AMSA) provide this paper for the information of the Committee to assist in their deliberations.

Section 1 (of this submission) provides definitions that could be used in describing salvage capacity and describes current arrangements and roles of interested agencies. It outlines the relevant legislation supporting the International Salvage Convention 1989 and the International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties 1969.

Section 2 describes recent work undertaken by various Government forums including the Australian Maritime Group (a sub group of the Australian Transport Council), the Productivity Commission and the Queensland Department of Transport examining the level of salvage infrastructure and emergency towage capacity around the Australian coastline.

Section 3 addresses current salvage capacity requirements and potential mechanisms for considering Australia's future salvage capacity needs.

Section 4 provides information against the Terms of Reference.

## **Section 1. Definitions**

The definitions outlined below broadly cover the terms commonly used by industry and other maritime practitioners when discussing salvage capacity and emergency towage arrangements.

### **Shipping Incident**

A shipping incident includes any occurrence to a ship, its crew or cargo that affects the safety of its normal operations. It may include minor mechanical breakdowns that can be repaired by the crew at sea or may extend to a major accident that disables the ship or causes loss of the ship, its cargo or lives. Incidents can occur at any time and in any location at sea, and are by their nature largely unpredictable as to where and how they will manifest themselves.

### **Shipping Casualty**

A casualty exists when a ship at sea encounters circumstances such that without assistance the ship, its crew and/or its cargo are in peril. This might include bad weather leading to a vessel foundering, hull or machinery failure, fire or explosion, shifting cargo or other stability impairment, collision or grounding of a vessel.

## **Emergency Towing**

Where a vessel is disabled, it may be able to anchor or drift safely at sea while awaiting assistance. In many circumstances, however, a disabled vessel requires prompt assistance, for example to prevent it from going aground through bad weather or loss of power or steerage. A timely and appropriate response would prevent such an incident from becoming a more serious casualty. An Emergency Towing Vessel (ETV) may provide a first stage response to such a ship. In such circumstances, the casualty may be stabilised at sea, or towed to a port or other place of safety for further repair before being able to resume its voyage.

An ETV is a vessel with ocean-going capability (in terms of design, equipment and personnel), sufficient bollard pull and possibly fire fighting capability, which is able to attend a ship in trouble and provide it with assistance to stabilise the situation. For example, this may include providing towing assistance or holding the ship in position, with the purpose of ensuring crew safety and minimising the risk of pollution. It would not be necessary for an emergency response vessel to be a tug, but could include other types of vessels such as an offshore supply vessel or a navigation aid maintenance vessel. It is not necessarily a salvage capable vessel, but may be.

ETV's may include vessels of opportunity along with those normally dedicated to towing or salvage services despatched from the most appropriate port or facility (eg an offshore petroleum facility). Any available vessel, including another trading ship, in the vicinity of a ship in distress and capable of safely towing a vessel in need of assistance may be used although this has not been common practice in Australian waters.

It should be recognised that availability of ETVs around the coastline will not prevent casualties resulting from a collision or a powered grounding caused through errors of navigation and similar failings in human factors. Response times to prevent collisions or powered groundings can usually be measured in minutes, which would not enable assistance from any ETV's, even those based in nearby ports.

Investigations by the Australian Transport Safety Bureau (ATSB) reveal that powered groundings and collisions (usually between a trading ship and a fishing vessel) are the two most common sources of shipping casualties in Australian waters, and both are generally caused by human error rather than mechanical failure, distress of weather or other causes.<sup>1</sup>

## **Salvage**

Salvage involves the rescue of a ship or cargo from danger at sea. It has been defined as the service of a volunteer to save salvable property from loss or damage<sup>2</sup>, but may also include services to save life and/or to protect the environment from the effects of a maritime casualty. Performance of a successful salvage entitles the salvor to financial

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<sup>1</sup> Australian Transport Safety Bureau marine incident investigation reports, various years

<sup>2</sup> Davies, M and Dickey, A (1990) Shipping Law, The Law Book Company Ltd, Sydney

reward from the owner of the rescued property, and in some instances for actions to protect the environment from pollution even if property cannot be saved. Under the International Salvage Convention 1989 and commercial salvage agreements, the costs of salvage operations generally are met by the ship owner and insurers.

Emergency towage as described above may constitute one element of salvage services. For the purposes of this submission, however, the term "salvage" is used primarily to describe situations where a ship requires a significant level of specialist services for the vessel and its cargo to be recovered, after a serious casualty has occurred, and/or for the threat of significant pollution to be removed. Circumstances at sea may include major structural failure, loss of watertight integrity, fire or explosion. More commonly the circumstances would encompass a ship that has already stranded or sunk, requiring special measures to refloat or remove the vessel and its cargo.

A salvage capable vessel is a highly specialised vessel capable of not only towing large ships for long distances at a reasonable speed, but also being able to release a vessel that is grounded, correct a vessel that is listing or extinguish a large fire on the vessel. This requires a high level of specialised equipment and personnel and the ability to be deployed continuously for long periods.

Most salvage work is now carried out under commercial contracts between the ship owner and the salvor. Historically salvage services have been rendered on the basis of "no cure no pay". "Cure" in this context means that some part the ship or cargo was saved and "pay" (the salvors remuneration) relates to the value of the property saved. This concept is still retained in the most common form of salvage agreement, the Lloyds Standard Form of Salvage Agreement - LOF 90. Salvors' remuneration generally is fixed by Arbitration in London in a manner as set out in the International Salvage Convention 1989.

### **Harbour Towage**

Harbour tugs assist ships to manoeuvre in navigation channels and to enter and leave berths at ports. As these services are provided within the sheltered waters of a port, it is not necessary for the towage vessel to have the capacity in design, equipment or number of trained personnel to provide towage in open waters outside the port boundaries. Harbour tugs may be designed and crewed simply to assist in manoeuvring ships, or may have additional capabilities, such as fire fighting or pollution response, to assist with emergencies inside a port or within the immediate vicinity.

If tugs are to perform any work outside port, they usually would be required by maritime safety administrations to have additional crew and to comply with relevant survey and equipment requirements appropriate to the area of intended operation. As salvage or emergency towage requirements may arise at short notice, it is in the interests of salvors and other parties that the vessels and their crews have prior approval and certification from marine safety authorities for the intended areas of operation, so that they are not unduly restricted in their response to emergencies. For this reason, many of Australia's

salvage and emergency towage vessel operators elect to bring their vessels and crews under AMSA rather than State regulations, which enables them to transfer vessels and crews to any jurisdiction without delay.

### **Places of Refuge**

A place of refuge is a location where a ship in need of assistance is able to find a favourable environment, enabling it to take action to stabilise its condition, protect human life and reduce the hazards to navigation and to the environment.

In Australia, requests for a place of refuge may be granted by the responsible State/Northern Territory agency for a place within a port, internal waters or within the three nautical mile limit of coastal waters, or by AMSA within other waters from the three nautical mile limit to the limit of the Exclusive Economic Zone.

In the operational context, the relevant Australian and State/Northern Territory laws are complementary and AMSA and the various State/Northern Territory agencies have cooperated effectively. However, should there be disagreement on the best course of action following a marine casualty, the *Protection of the Sea (Powers of Intervention) Act 1981* provides that the Commonwealth, through AMSA, has the authority to direct a ship involved in a marine casualty, coming under the scope of the Act, to enter a particular port or sheltered area irrespective of the consent of the relevant port authority or State/Northern Territory government.

To assist agencies in resolving the difficult issue of selecting a suitable place of refuge, the National Plan to Combat Pollution of the Sea by Ships (the National Plan) has developed the National Place of Refuge Risk Assessment Guidelines, which were endorsed by the Australian Transport Council in May 2003. The Guidelines are intended to help maritime administrations, ships' masters and the maritime industry in identifying places of refuge in circumstances where an emergency cannot be dealt with at sea, and the appropriate procedures to access a place of refuge. The Guidelines provide a process for identifying a suitable place of refuge at the time of a casualty, taking into account specific circumstances and prevailing conditions at the time of each case, rather than attempting to pre-determine locations that may be suitable.

### **Salvage Practices and Arrangements**

The supply of salvage and emergency towage infrastructure and services has been largely a commercial matter between the shipping industry and salvage operators, reflecting traditional industry and international practices.

Under traditional international shipping practice, the primary responsibility rests with the ship owner and/or master to arrange for emergency towage or salvage assistance when a ship gets into difficulties. Usually such assistance is arranged through commercial providers, who may be salvage specialists or, less often "opportunity" providers who happen to be available in the vicinity of a ship in distress or difficulty. There are well developed and established shipping industry practices for seeking assistance from

commercial salvage or towage operators, based around standardised industry-developed commercial agreements and forms.<sup>3</sup>

The international maritime salvage industry has undergone significant changes in the past two decades, reflecting a general long term decline in demand for traditional salvage services. The demand for dedicated salvage services parallels the general global improvements in ship safety, and consequently reduced numbers of major ship casualties and significant pollution incidents, despite the increasing numbers of vessels at sea. This trend is a result of a number of factors, including:

- \* New international conventions, regulations and codes applying to shipping at a global level, that encourage higher standards of shipping;
- \* Greater transparency in the condition of vessels, contributing to “targeting” of substandard vessels by flag and port states and more selectiveness on the part of charterers;
- Improvements in technology and reliability of ships and their machinery;
- \* Implementation of safety management systems and quality assurance systems by ship operators;
- \* Reduced demand for long distance tows as specialised heavy lift vessels have been introduced and changes occurred in patterns of world trade;
- Development of new salvage technologies such as "fly-away" systems, heavy lift cranes, information technologies, remote sensing and remotely operated vessels that have made salvage operations more efficient; and
- « Alternative types of vessels competing in the salvage and towage market, such as offshore supply and anchor handling vessels.

At the same time, changes in the commercial operations of ports and specialised technologies used for port towage services are impacting on the availability of suitable vessels and trained crews for salvage and towage work. Worldwide, there has been a reduction in the number of trained salvors and dedicated salvage resources, with a long-term trend towards market concentration in both dedicated salvage suppliers and in port towage services. In world terms, the relatively small market for harbour towage in Australian ports has tended to produce single supplier towage services. Moreover, the Productivity Commission Report on its Inquiry into the Economic Regulation of Harbour Towage and Related Services has stated that there is little prospect, given current and immediately-foreseeable demand patterns and shipping and towage technology, for more

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<sup>3</sup> See for example, Appendix V of Secretary of State for the Environment, Transport and the Regions (1999) Command and Control, Report of Lord Donaldson's Review of Salvage and Intervention and their Command and Control, HMSO, London or Daines (2002) Lloyd's Open Form and the Special Compensation P&I Clause (SCOPIC), National Safe Havens and Salvage Conference, Sydney 2002

than one towage operator to be maintained at most Australian ports.<sup>4</sup> Global influences in investment, ownership, management and crewing are also having their effects on towage and salvage services.<sup>5</sup>

Major salvage incidents are now too infrequent to justify maintenance of a commercially dedicated salvage vessel in many parts of the world, including parts of the Australasian region. Salvage has therefore become a secondary business.<sup>6</sup> Accordingly, the approach to provision of salvage services is in a state of flux in many regions across the world, and often relies on improvised assembly of assets on a case by case basis.

In some cases vessel owners have assumed greater roles in salvage response management rather than relying on a single salvage company, and there have evolved service industries that provide specialised salvage equipment and services on a fly-in basis. Commercial salvage arrangements historically have been aimed at protecting property and associated commercial interests, such as insurance claims for loss of or damage to cargo, loss of life or damage to third parties or the environment.

In some countries, such as the USA, UK, France and South Africa, government agencies have become more proactive in handling vessel casualties that involve actual or threatened pollution. Some countries have entered into joint ventures with commercial providers, whereby governments have chartered tugs to provide standby towage or salvage services to vessels threatening environmental damage on their coasts, although typically governments have only participated in commercial salvage operations as the salvor of last resort.<sup>7</sup> In these cases, governments pay towage operators a negotiated daily standby rate, which is suspended once a vessel engages the services of the tug under a LOF90 or like contract. In the UK arrangement, the government is entitled to a percentage of any salvage award for the services of the contracted tug, in order to offset the standby costs.

Government involvement, through regulation, in salvage initially was aimed at ensuring there were appropriate incentives to assist in saving of life. Over the past 30-40 years, however, communities and governments have become increasingly concerned about the risks of pollution from maritime incidents, and have sought to influence emergency response arrangements to provide greater protection for the environment from pollution. High liability and clean-up costs of a polluting casualty also have underscored the importance of adequate salvage response in preventing severe economic costs for ship owners and underwriters.

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<sup>4</sup> Productivity Commission Inquiry Report, Economic Regulation of Harbour Towage and Related Services, 2002

<sup>5</sup> Rowlinson, M (2002) Harbour Towage: Perfect or Imperfect Competition in the Global Market?, LAME Conference, Panama

<sup>6</sup> Commission on Engineering and Technical Systems (1994) Reassessment of the Marine Salvage Posture of the United States

<sup>7</sup> Commission on Engineering and Technical Systems (1994) Reassessment of the Marine Salvage Posture of the United States.



Continued global pressure to protect the environment has resulted in significant changes to the international regulatory regime for shipping concerning the traditional principles of salvage law, as well as power for governments to intervene in salvage operations where there is a significant threat of pollution. To date, however, it has not extended to international obligations for governments to provide or ensure the provision of salvage or emergency towage infrastructure or services, which remain matters for domestic policy.<sup>8</sup>

### *Salvage Convention*

The International Salvage Convention 1989 entered into force in 14 July 1996. The Convention essentially addresses the commercial incentives and relationships between a salvor and owner of a salvaged vessel. It replaced the 1910 international instrument, which incorporated only the traditional "no cure no pay" principle that was the basis for most salvage operations. The revised Convention makes additional provision for special compensation to a salvor by a ship owner for timely and effective actions taken to prevent pollution of the sea even where the ship may not be salvaged. It does not oblige governments to provide or to ensure provision of salvage or emergency towage infrastructure. The Convention was implemented in Australian law in 1997, primarily through section 315 of the *Navigation Act 1912*.

### *Powers of Intervention*

The International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties 1969 (the Intervention Convention), as amended by the Protocol of 1973, was adopted by the International Maritime Organization following a general review of problems of pollution of the sea in international law, in response to the *Torrey Canyon* incident in 1967. There are currently 78 states party to the Convention, which entered into force internationally in 1975 and for Australia in 1984. The objective of the convention is to define circumstances in which governments can intervene in salvage arrangements between a shipowner and a salvor in order to protect the environment and related interests of a coastal state.

The Intervention Convention is implemented in Australia through the *Protection of the Sea (Powers of Intervention) Act 1981* and subordinate legislation in the form of Regulations and Marine Orders. As is customary, the Act applies similar powers in respect of incidents in the Australian territorial sea (to 12 nautical miles) and it also extends to State/Northern Territory internal waters.

The operative provision of the Convention, reflected in the Act is Article 1 which allows parties to "take such measures on the high seas as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests from pollution or threat of pollution of the sea by oil following upon a maritime casualty". There are thus two criteria that have to be satisfied before a coastal state can intervene:

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<sup>8</sup> Commission on Engineering and Technical Systems (1994) Reassessment of the Marine Salvage Posture of the United States.

- there has to be a maritime casualty; and
- that incident must represent a "grave and imminent danger" of pollution to the coastal state.

An additional provision is that parties can intervene where pollution is threatened "from acts related to such a casualty" which may reasonably be expected to result in "major harmful consequences", thereby enabling intervention when salvage operations go wrong.

Although the convention deals only with rights to intervene on the high seas, the position in territorial waters under customary international law is similar. The position in internal waters such as harbours and ports is a matter for domestic law.

The Convention and Protocol require that actions shall not be taken without prior consultation with the Flag State and parties with a commercial interest in the casualty, and that any actions taken must be proportionate to the damage, actual or threatened. Such measures shall not go beyond what is reasonably necessary to achieve the end of preventing significant pollution, and shall cease as soon as that end has been achieved; they also shall not unnecessarily interfere with the rights and interests of the flag State, third States and of any persons, physical or corporate, concerned. Any Party which has taken measures in contravention of the Convention causing damage to others, shall be obliged to pay compensation to the extent of the damage caused by measures which exceed those reasonably necessary to achieve the end.

The *Protection of the Sea (Powers of Intervention) Act 1981* provides the Australian Government with substantial powers in the event of a marine incident that threatens to pollute. With the exception of the power to sink or destroy a vessel, the Minister has delegated these powers to AMSA.

When AMSA is satisfied that, following an incident or acts related to such a casualty, there is a "grave and imminent danger" of pollution to the coastline of Australia, or the related interests of Australia, which may reasonably be expected to result in "major harmful consequences", AMSA may take such measures as it considers necessary to prevent, mitigate or eliminate the danger. AMSA may issue a direction in writing requiring the doing of any act or thing with respect to the ship or the ship's cargo, or prohibit the doing of any such act or thing. Examples include requiring or prohibiting:

- the movement of the ship or part of the ship, its movement to a place or area or its removal from a place or area;
- the removal of cargo from the ship;
- the taking of salvage measures in relation to the ship, part of the ship or any of the ship's cargo;
- the sinking, destruction or discharging into the sea of any of the ship's cargo (with the Minister's authority only); or
- the handing over of control of the ship or part of the ship.

The Act provides authority for the Australian Government to direct a ship involved in a maritime incident to enter a particular port or sheltered area irrespective of the consent of a relevant port authority or State government. However, the Australian Government's powers under the Act do not extend to the requisition of port tugs or other assets to assist a ship in distress outside a port, nor to ordering the intervention of such assets except in circumstances where the assets are under the control of a salvor in possession of the ship.

The powers available under the Act also enable AMSA to direct a shipmaster or owner to engage a salvor or alternatively to contract a salvor to undertake necessary work, with costs recoverable from the owner.

In a major casualty, the possibility may arise for AMSA to require access to independent salvage advice. AMSA has identified three suitable internationally recognised companies with which it can make arrangements to provide specialist advice on the salvage operation, including whether the proposed actions are appropriate, independent of the salvor or the owner.

In exercising powers of intervention, careful consideration is needed to be satisfied that there is in fact a serious and imminent threat of significant pollution, and actions being taken by responsible agencies and salvors are inadequate, before making any directions. To do otherwise would expose the direction to legal challenge from the owner, and also exposes the Government to potentially significant claims for compensation.

Australia's convention obligations require that actions shall not be taken unreasonably and that the rights of other parties are respected. International law generally recognises the right of the shipowner to engage suitable salvage capacity, and also places commensurate liability upon the ship owner for any pollution or other damage as a result of the casualty. Intervention by government at too early a stage, ie before there is a grave and imminent danger of significant pollution, could shift the burden of liability to the government if pollution results from the intervention. A ship owner might also claim compensation for any commercial disadvantage caused by a precipitate intervention.

## **Section 2. Recent work undertaken to examine the level of salvage infrastructure and emergency towage capacity around the Australian coastline**

The level and provision of salvage capacity is being examined by a range of Government agencies including:

## **Australian Maritime Group Project on National Salvage Capacity**

In 2001 the Australian Maritime Group (AMG) of the Australian Transport Council (ATC) commissioned a study to provide members with a stocktake on salvage capacity around Australia.<sup>9</sup> The study noted that:

- Australia's cost efficient, user pays salvage arrangements are under severe threat due to changes in administration of ports and the consequential responsibility of port authorities to meet their contractual arrangements.
- Australia is dependent on its local fleet of salvage suitable vessels and there is no international assistance (eg Singapore) likely within 10+ days of a casualty occurring. The local fleet is made up of secondary support vessels, which can cope with near-shore operations up to 50nm, and 18 strategically placed primary response salvage vessels capable of deep-sea work.
- « Experienced salvors in Australia have also expressed concern at the generational change taking place in the industry and the current trend to discourage towage operators from providing salvage suitable tugs in ports and the necessary training to maintain the competence of their salvage personnel.
- There are currently no powers to enable a marine authority to require a port authority to release a tug or tugs to attend a marine casualty. Port authorities may be liable for contractual penalties were they to release a tug, which then led to delays for other shipping.
- Licensing of towage operators generally requires them to maintain a fleet of agreed capacity in the port at all times. Some port authorities suggest that port users are charged substantially higher port towage fees to allow towage operators to position tugs to earn potentially high returns. The ability of the Harbour Master to authorise release of tugs for marine casualties varies across ports, dependent on whether ports are privatised, corporatised or otherwise.
- Most port authorities made the point that the commercial operation of their ports and thus (by inference) their reluctance to release tugs was of major concern to them. However most also indicated that their consent to a tug leaving their port to attend a marine casualty would not be "unreasonably withheld."

At its meeting of 31 May 2002, the AMG decided to defer further consideration of this project until the report of the Productivity Commission Inquiry into the Economic Regulation of Harbour Towage and Related Services into Harbour Towage was available (see below).

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<sup>9</sup> K. Dwyer & Associates Pty Ltd (2002) Study of the National Salvage Capacity, Report for the Australian Maritime Group

## **Review of the Great Barrier Reef Ship Safety and Pollution Prevention Measures**

In 2001, Minister for Transport and Regional Services commissioned a Review of Ship Safety and Pollution Prevention Measures in the Great Barrier Reef and Torres Strait. The Review was undertaken by officials from the Department of Transport and Regional Services (DOTARS), the Australian Maritime Safety Authority (AMSA), the Great Barrier Reef Marine Park Authority (GBRMPA) and Queensland Transport.<sup>10</sup>

The review recommended that AMSA, GBRMPA and Queensland Transport (now Maritime Safety Queensland) should reassess emergency response measures in the Great Barrier Reef and Torres Strait. The review also noted that this should include the assessment of necessary salvage capacity and its operational location. The Shipping Management Group<sup>11</sup> (overseeing implementation of the Review's recommendations) has agreed that its consideration of this matter will be linked to the work being undertaken by the Australian Maritime Group (AMG) on this issue and the matter will be monitored and assessed depending on the outcome of the AMG process (see below).

### **Safe Havens and Salvage Conference**

In February 2002 the Australian Maritime Safety Authority (AMSA) and the Association of Australian Marine and Port Authorities hosted a joint National Conference and Workshop on Safe Havens and Salvage.<sup>12</sup> This Conference and Workshop was convened in Sydney before an invited audience of representatives from Commonwealth, State and overseas marine safety and environmental agencies, port authorities, industry, providers of salvage services, Protection and Indemnity (P&I) Clubs and the legal profession.

The conference addressed issues such as safe haven policy and practice in Australia and the UK, legal and liability implications arising from granting safe haven, current major salvage issues, salvage awards under Lloyds Open Form 2000 and the Special Compensation Protection and Indemnity Clause (SCOPIC) together with the current International Maritime Organization position on safe havens, salvage and wreck removal. The key issues arising from the Workshop were the need for:

1. greater cooperation and consultation between all parties: AMSA, State marine safety & environmental agencies, ports, salvors and industry, on the future provision of safe havens and the planning of Australia's salvage capability;
2. clarification of the respective powers of intervention of the Commonwealth and the States in directing a casualty to a safe haven;
3. adoption of improved, consistent processes to underpin the assessment of requests for safe haven through the development of national risk assessment

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<sup>10</sup> Steering Committee Final Report 2001, *Review of Great Barrier Reef Ship Safety and Pollution Prevention Measures*.

<sup>11</sup> Comprising DOTARS (Chair), AMSA, GBRMPA and MSQ.

<sup>12</sup> Thomson Clarke Shipping Pty Ltd (2002) Report on Safe Haven and Salvage Conference and Workshop.

guidelines for assessing requests for safe haven under the aegis of the National Plan Management Committee;

- 4, national safe haven risk assessment guidelines to be referred to ATC and ANZECC (Australian and New Zealand Environment and Conservation Council) Ministerial Councils for endorsement;
5. completion of the AMG assessment of Australia's salvage capability and, taking into account the outcomes of that report, action to be taken to address issues such as the cost of providing such a capability and the level of salvage expertise that exists in Australia;
- 6, the release of harbour tugs by port authorities to perform salvage and the ability for Governments to requisition harbour tugs under powers of intervention should the need arise.<sup>13</sup>

### **Productivity Commission Report on the Economic Regulation of Harbour Towage and Related Services**

In February 2002, the Australian Government asked the Productivity Commission to report on whether harbour towage at major ports should continue to be a 'declared' service under the *Prices Surveillance Act*. In doing so the Commission was asked to report on the impact of structural reforms on the provision of harbour towage and other measures that could be undertaken to increase the level of competition in harbour towage and related services.

The Government received the Productivity Commission's Final Report on 20 August 2002. The Government accepted the Commission's findings and the four recommendations based on those findings. In relation to the provision of salvage capacity, the Government noted the Commission's view that the provision of salvage services need not be adversely affected by the efficient pricing and provision of towage services. Given the importance of adequate salvage capability, the Government indicated it considers that the retention of adequate salvage capability needs to be factored into tender specifications and contracts where port authorities seek to licence towage operators.

In relation to Recommendation 1 concerning the harmonisation of minimum crew standards and minimising impediments to the movement of crews and tugs across jurisdictions, the Minister for Transport and Regional Services approached his Australian Transport Council (ATC) counterparts on the issue of harmonisation of crew qualifications and licensing of towage operators. Some State Ministers indicated that their jurisdiction was assessing or would be addressing the licensing issue, as appropriate.

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<sup>13</sup> Thomson Clark Shipping Pty Ltd (2002) Report on Safe Haven and Salvage Conference and Workshop

<sup>14</sup> <http://www.treasurer.gov.au/parlsec/content/publications/2003/20030328.asp>

In response to Recommendation 4, the Government accepted that there should be limited price monitoring of towage prices. The Bureau of Transport and Regional Economics (BTRE) is monitoring towage prices in a number of main and regional ports on an annual basis with the results being published in its publication *Waterline*.

### **The Australian Maritime Group (AMG)**

In August 2003, the AMG considered the Report of the Productivity Commission and the Australian Government's response to the report. AMG decided to undertake further work before addressing the directions proposed in the Australian Government's response. AMG established a working party to consider how best to progress the issues relating to the provision of emergency towage capacity around the Australian coastline.

The working party, consisting of officials from the Australian Government, New South Wales, Queensland and Western Australia, prepared a draft discussion paper outlining possible options for the provision of emergency towage.<sup>15</sup> The focus of the AMG draft paper is on measures to provide an adequate first -strike capability to assist in stabilising those ships in difficulty. The draft discussion paper therefore concentrates on emergency towage capacity, as a preventative measure, rather than salvage capacity, as a response measure. The issue addressed is one of identifying the need for any additional measures to be put in place to help prevent a situation of a ship in difficulty developing into an actual casualty requiring activation of the National Plan and salvage operations. It also notes that there is no intention for governments to intervene in salvage matters, which will remain the responsibility of the shipowner and their representatives.

Options presented in the draft discussion paper include:

- Dedicated emergency towage vessels (ETV's). A fleet of special purpose vessels with towing and fire-fighting capacity located and crewed permanently along the Australian coast and available for immediate deployment;
- Networked ETV's integrated into commercial activities. A fleet of vessels with towing and fire-fighting capacity mainly involved in commercial activities being made available for emergency purposes on the basis of a contract between the relevant government(s), the regular purchaser of the services of the vessel and the service provider and backed by legislative authority; and
- Status Quo (Opportunity ETV's). A fleet of vessels with towing and fire-fighting capacity mainly involved in commercial activities (eg port towage or offshore supply) being used for emergency purposes on the basis of availability and under commercial terms and conditions.

Consideration of these options, and the identification of whether there are any areas where such services are needed, would need to be based on a rigorous risk assessment taking into account existing industry and State responsibilities and response capacity, the level of shipping traffic, the type of incident, economic and environmental sensitivity to a

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<sup>15</sup> Australian Maritime Group (2004) Draft Discussion Paper: Emergency Towage Vessels - Options for Australia

major pollution incident, the required response time and other measures already in place to mitigate the risk.

The working party is currently undertaking consultations with stakeholders, including industry groups, on these options and is scheduled to report back to the AMG in September 2004. A final report is expected to be provided to SCOT (the Standing Committee on Transport, comprising the CEOs of State, Territory and Australian Government transport agencies) and ATC in late 2004.

### **Queensland Discussion Paper**

The Queensland Department of Transport and Maritime Safety Queensland (MSQ) distributed an industry discussion paper titled *"Emergency Response Capacity for Port Precinct and Coastal Waters Incidents"* in January 2004. It sought input from key stakeholders before the Queensland Government considers the way forward. We understand that the consultation process was expected to be completed by the end of April 2004 and the paper will be revised following that process.

This paper acknowledged that port towage cannot be seen simply in terms of port specific services, but plays a bigger role in ensuring adequate response capability along the coast. It canvasses options for supplementary emergency towage capacity based on a Queensland legislated requirement for towage operators at nominated ports to have available at least one tug with capacity to undertake an initial emergency response, and for the tug to be released at the request of the General Manager of MSQ. It also notes that such arrangements should be clearly specified in towage service specifications developed by port operators. The Queensland paper, however, leaves open the issue of costs and how such a supplementary service is to be funded.

### **Section 3. Current Salvage Capacity vs Current and Future Needs**

The provision of salvage and emergency towage standby capacity is a complex and challenging issue. The K Dwyer and Associates Pty Ltd stocktake of emergency towage response capability has recently been addressed in the discussion paper prepared by the AMG working party. While the discussion paper provides a relatively simple analysis of the geographic areas where Australian port-based tugs of a particular power (50 tonne bollard pull) could provide emergency towage capacity within a pre-determined response timeframe, it does not examine the availability of other potential response assets in or outside Australia, nor does it assess the nature and frequency of maritime incidents or casualties where an emergency towage vessel could provide an adequate preventative capability at reasonable cost.

Further research and analysis of current arrangements is required to establish the extent, if any, of critical emergency towage or salvage needs and gaps, and the cost-benefits of possible prevention and response measures, before further consideration should be given as to how best to address the salvage/towage capacity issue.



An appropriate mechanism for achieving this would be for a rigorous risk-assessment analysis to be undertaken involving Australian Government, State and Territory agencies. A risk assessment could assess:

- the ecological and economic sensitivity of the marine environment in various regions;
- » which regions face the greatest risk of a maritime incident taking place;
- the extent and nature of risk for each region;
- appropriate response times required for preventative emergency assistance in each region;
- the effectiveness of particular risk reduction measures; and
- the potential gaps in emergency towage or salvage capacity at ports and other strategic locations.

In this context, it is unlikely to be possible to guarantee that serious casualties could always be prevented, even if emergency response or salvage vessels were available close by. As well, responses to casualties will require different assets or approaches depending on the circumstances of each case. Recent experiences in Australia and New Zealand have shown that it is often necessary to assemble resources from a range of ports and from overseas to undertake successful towage or salvage operations.

Any risk assessment should also include a cost-benefit analysis. This could assess, among other things, the costs and benefits to the public interest of having dedicated salvage/towage equipment on stand-by to respond on a first strike basis to a potential maritime incident relative to the frequency of an incident and the extensive length of the Australian coastline that would need to be covered by such arrangements. Provision of dedicated salvage equipment in a particular region could be a very expensive exercise, and may not prove to be providing the most cost-effective option for minimising the risks of an incident occurring. A risk assessment would help to clarify these issues.

Cost-benefit calculations were conducted by the United Kingdom before it decided to contract emergency response vessels on a stand-by basis. While in that case it was judged a cost effective option, it does not necessarily follow that this would be the case for Australian conditions. For comparison, traffic in the Dover Straits alone was around some 480 vessels per day in March 2004, compared to some 355 vessels per day during the same period over the entire Australian ship reporting area of around 47 million square kilometres, of which around 22 per day were in the 2340 kilometres length of the Great Barrier Reef region.

An analysis of options would also need to canvass issues of which party should bear the costs. Standby salvage and towage capacity involves relatively high capital and personnel costs, which would almost certainly be under-utilised.

In Australia's case, this capacity cost has to date been borne through a level of cross subsidy in port towage fees, supplemented by salvage rewards or towage contracts paid by ship owners contracting for salvage services. In other words, the shipping industry

traditionally has borne the standby costs, either directly or indirectly. This is consistent with the commercial interests involved and with "polluter pays" and/or "potential polluter pays" principles regarding potential for environmental damage or losses caused to third parties from casualties.

The effects of port corporatisation and commercialisation in Australia over the last decade or so has encouraged port authorities to concentrate on minimising the costs of their port services in the interests of greater competitiveness and profitability. This has involved pressures to identify and remove cross-subsidies, such as have existed in the towage market. Greater transparency in costs of port services is desirable from a commercial efficiency perspective for port operations. It has, however, exposed the issue of how non-port towage and salvage standby capacity should be determined and funded, especially as it is not a commercially self-supporting proposition in many areas.

In considering this issue, the 1994 Donaldson report in the UK<sup>16</sup> concluded that salvage is and should remain a primarily private sector service, and that it would not be sensible for the Government to buy its own salvage (including emergency towage) capacity as it would be an inefficient use of taxpayers money. The report noted and supported the suggestions of the 1993 Salvage Working Group, comprising shipowners, insurers and salvors, that the costs of maintaining standby capacity should be given greater weight in salvage award payments. This direction also was supported in the recommendations of the 1994 US Reassessment of Salvage Posture.<sup>17</sup> It maintains the "polluter pays" and "potential polluter pays" principles, which acknowledge the shift from purely commercial interests to include the greater public interest in protecting the environment and economy from the potential adverse impacts of a shipping casualty.

To some extent the revised Salvage Convention, as adopted in Australia, provides for a greater reward to operators through provision for payment of special compensation for work undertaken to prevent or minimise damage to the environment. This compensation is to be equivalent to the salvors expenses (which may include a component for standby capital costs) plus a discretionary "uplift". Such compensation would be payable irrespective of the type of vessel or environmentally damaging substances involved.

Another option that maintains the "potential polluter pays" principle is to retain a charge for such standby capability as part of port towage charges paid by ship owners to port towage providers, as is currently the case. If the additional specification for standby emergency towage capacity is specified in port towage tender requirements, as proposed in the Queensland discussion paper, all tenderers would be competing against the same criteria and there would be no market distortion.

A further option would be for ports to levy a separate charge on visiting ships to cover any additional costs of a standby towage capacity in their port. However, this is likely to

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<sup>16</sup> Secretary of State for Transport (1994) Safer Ships, Cleaner Seas - Report of Lord Donaldson's Inquiry into the Prevention of Pollution From Merchant Shipping, HMSO, London, p307

<sup>17</sup> Commission on Engineering and Technical Systems (1994) Reassessment of the Marine Salvage Posture of the United States

be more cumbersome and less efficient to administer than incorporation into the normal towage fee.

#### **Section 4. The Terms of Reference**

The following comments are directed towards the Inquiry's Terms of Reference.

##### **1. *The three tiers of government's responsibility to provide salvage infrastructure.***

Beyond legislating for incentives to saving life and to improve environmental protection, Australian and State governments have not generally sought to assume greater responsibilities in salvage operations, which remain the responsibility of the shipowners and their representatives. Neither the Australian nor State Governments previously have assumed any obligation to directly provide or subsidise the provision of salvage or emergency towage infrastructure.

##### *Australian Government Role*

The Australian Government's role in maritime casualty responses is primarily undertaken by the Australian Maritime Safety Authority (AMSA), which is the Australian Government's national maritime safety agency, established under the *Australian Maritime Safety Authority Act 1990*. AMSA responsibilities include maintaining a national distress and safety communications service and managing the National Plan, the framework for coordinating national strategy for preparedness and response to marine pollution incidents.

AMSA also administers Australian Government legislation that relates to salvage and emergency responses. These include the *Navigation Act 1912*, Part VII, Division 3 which applies relevant provisions of the International Salvage Convention 1989, and the *Protection of the Sea (Powers of Intervention) Act 1981*, which implements in Australian law the International Convention for Intervention on the High Seas in Cases of Oil Pollution Casualties 1969.

As part of its 24-hour a day rescue coordination responsibilities, AMSA is able to provide advice on request to shipping companies or individual ships on the availability of salvage or emergency towage resources in Australian waters. On receipt of advice of a ship requiring assistance, AMSA can contact the closest port authorities or specialist salvors to determine the availability of suitable vessels and this information can be quickly passed to owners or masters. Ship owners may choose to use these contacts or may choose to arrange their own assistance through other sources. In addition AMSA can make general broadcasts to shipping for the nearest ships to assist a ship in distress.

AMSA also manages the National Plan to Combat Pollution of the Sea by Oil and Other Hazardous and Noxious Substances (National Plan) whereby a range of oil pollution response equipment is available for hire by a salvor in accordance with standard terms and conditions. Where it deems it appropriate, AMSA may arrange for personnel to

supervise the use of the equipment and AMSA can also assist with the import of equipment and personnel from its counterparts overseas if required.

#### *State, Territory and Local Government Roles*

The States and Northern Territory have title to the seabed and associated coastal waters to three nautical miles, as established in the four Commonwealth Coastal Waters Acts of 1980, and have corresponding responsibilities in these areas. State and Northern Territory legislation also generally reflects the obligations under the MARPOL convention for pollution prevention within State/Northern Territory waters.

The States and the Northern Territory also have the constitutional responsibility for internal waters, including ports. Legislation governing the operations of ports and their responsibilities varies considerably among the States. Some ports are owned and operated privately, some are operated by corporatised government-owned agencies and others are operated by Government authorities. There also are different arrangements for the provision of towage services within the ports, and for combating pollution within State waters outside the port boundaries. We understand that currently, State legislation does not require port authorities to either provide or ensure provision of towage capacity needed for salvage or deep sea emergency responses, and co-operation is based on goodwill.

Traditionally, port-based commercial towage provided the primary source of vessels and skilled crews to meet salvage and emergency towage demands around Australian waters. The Productivity Commission Report has noted changing arrangements resulting from commercialisation of ports and related commercial pressures is driving the present concern about the adequacy of response capacity in a number of regions.

Local governments generally are not involved in the provision of salvage or towage infrastructure. Coastal local governments have responsibilities in assisting with pollution responses and clean-up for incidents that occur along their coasts.

#### *National Plan*

Within Australia, a response to a maritime incident posing an environmental pollution threat generally will be managed through the arrangements under the National Plan. Details of the National Plan may be found at [http://www.amsa.gov.au/Marine Environment Protection/National Plan/](http://www.amsa.gov.au/Marine_Environment_Protection/National_Plan/).

The National Plan is a cooperative arrangement between Australian and State/Northern Territory governments and industry. While AMSA coordinates and manages the National Plan at the national level through the National Plan Management Committee, each State and the Northern Territory has a complementary arrangement (State Plan) that operates within their jurisdiction. There are also special complementary plans in place for the Torres Strait (TORRESPLAN) and the Great Barrier Reef (REEFPLAN).

The responsibilities of National Plan participants are clearly defined in the National Plan Inter-Governmental Agreement. These include access to response equipment and dispersant stockpiles, equipment maintenance and storage, funding and joint use of resources. Based on the Agreement arrangements, the Australian Government's role through AMSA is coordination, training, and the provision of technical and logistic support, spill response equipment, materials and finance.

The National Plan is principally an oil or chemical spill response strategy focussed on pollution preparedness and response measures. The Plan is concentrated on risk assessments, contingency planning, spill response equipment stockpiles, and training and exercising of personnel and equipment. The National Plan does not cover the provision of, or responsibilities for, providing salvage infrastructure or emergency towage capacity or services.

## ***2. The inclusion of a defined level of salvage capability in harbour towage service agreements.***

In its response to the Productivity Commission Report, the Australian Government indicated that it considers that the retention of adequate salvage capability needs to be factored into tender specifications and contracts where port authorities seek to licence towage operators. The Government also recognised that any move to implement competitive tendering arrangements at the discretion of port authorities rests solely with the State and Territory Governments and their agencies. As ports come under State/Territory legislative jurisdiction, it is appropriate that the States and Territories have the responsibility to determine the appropriate level of salvage capacity to be incorporated into harbour towage service agreements.

There are different arrangements in place in each State and the Northern Territory to address harbour towage services. At present, State legislation does not require port authorities to either provide, or ensure provision of, towage capacity needed for salvage or emergencies outside ports.

One option that could be investigated by the States is a model proposed by the Queensland Department of Transport (QDoT), which identifies that the necessary emergency response capacity could be provided as a supplement to current port towage services. The key features of this model include:

- Capacity to be prescribed in a limited number of nominated ports;
- Successful licencees being required to have at least one tug equipped and crewed for sustained coastal/open waters emergency response arrangements; and
- Licences to be issued on the basis that the nominated first response tug will be released at the request of the General Manager of Maritime Safety Queensland.

Further consultations would need to take place between Port Authorities, State Governments, ship owners and salvage companies to ascertain the most appropriate mechanisms for the funding of emergency towage capacity and salvage capacity.

### ***3. The provision of relief tugs when salvage tugs are engaged in a salvage operation.***

At this stage it is not clear to what extent the provision of relief tugs is required when tugs have been diverted to salvage operations.

As Port Authorities are currently responsible for operational matters involving harbour towage services, it is appropriate for them to determine how they should manage their resources, in the event that one or more of their tugs is required to respond to a maritime incident outside the port. This would be a prudent action as part of port emergency response planning.

### ***4. Minimum standards of salvage tug safety, training and operational capacity***

There are no international conventions or national standards specifically dealing with salvage or emergency towage vessels or crew requirements. International and national standards for ship safety and crew competency treat tugs and their crews in the same way as for any other ship of similar size. These standards encompass equipment and training/competency requirements for such matters as firefighting, towing, buoyancy and stability, and damage control.

Specific skills for salvage crews are determined by the specialist salvage operators, who provide appropriate training to their employees. Milwee<sup>18</sup> notes that ideally all salvage personnel should attend marine fire fighting courses and first aid courses, and all should be qualified in cardiopulmonary resuscitation (CPR). Supervisors should attend ship's officer's courses dealing with safety in specialised ships and cargoes, and in diving safety. Salvage masters should have training in disaster management, incident command, and the reaction of people to a disaster. Regular realistic drills should supplement course training directly and indirectly related to safety. Entry into confined spaces potentially involves toxic or hazardous fumes and training in use of breathing apparatus is important. Other specific areas identified for specialised training for salvors include small boat handling, diving and electrical safety.

For vessels coming under AMSA's jurisdiction, vessel operators are required to have in place appropriate safety management plans in accordance with the International Safety Management Code requirements of the SOLAS Convention. Safety management plans require the operator to identify and assess the risks relevant to a ship's intended operations and to have in place appropriate procedures, equipment, competencies and vessel standards suitable to address those risks.

For those vessels coming under State/Northern Territory jurisdiction, standards of vessel safety and crew competency are generally similar across jurisdictions, based on the adoption within each jurisdiction's laws of the Uniform Shipping Laws (USL) Code. There are differences, however, in the way that various States implement and administer the USL Code in law, which has previously created difficulties in the movement of

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<sup>18</sup> Milwee, W. I. (1996) *Modern Marine Salvage*, Cornell Press, Maryland

vessels and crews between jurisdictions. The USL Code is progressively being replaced by the National Standard for Commercial Vessels (NSCV), which is being developed jointly by Commonwealth and State/Territory marine safety authorities through the National Marine Safety Committee (NMSC), a technical sub group of the AMG.

The NMSC has also been progressing work to promote a system of mutual recognition of minimum crew qualifications. The adoption of Part D of the National Standard for Commercial Vessels (NSCV), which was approved by the Australian Transport Council in May 2002, will help minimise the impediments to the movement of crews and tugs across Australia. Following ATC approval of the standard, each State will need to adopt the standard in its own legislation for it to become law. Tasmania adopted this standard in legislation from January 2003. The NMSC recently released a new Part E of the NSCV for public comment. The new Part, which promotes use of safety management plans in the marine industry, will also contribute to the safe operation of towage vessels.

The Australian Government noted, in response to the Productivity Commission Inquiry into the Economic Regulation of Harbour Towage and Related Services, that the Australian Transport Council has already initiated work through the National Marine Safety Committee (NMSC) in relation to minimum standards and crew qualifications to achieve the national adoption of all aspects of the USL Code, which governs the standards of seafarer training and ship safety for smaller commercial vessels. The Government further indicated that the Minister for Transport and Regional Services would seek agreement from ATC to have additional work undertaken by NMSC in relation to the Code and international agreements to which Australia is a party, as identified in the Commission's report.

Where port based towage services have traditionally provided a capacity to assist in salvage situations, these vessels have been equipped and crewed accordingly. However, with increasing world-wide commercial pressure to provide port-specific towage solutions, there is some move towards providing tugs that are specifically designed to operate only in sheltered waters and with less power (around 60 tonnes bollard pull, with some having a bollard pull of 6 tonnes or less), and for crewing to be reduced to the minimum necessary for port operations. Such vessels are unlikely to have the capability to undertake offshore towage or salvage work. Harbour tugs also may have different towing gear from that employed for ocean towing.

An offshore towage vessel should have an International Load Line certificate, which would attest to its watertight integrity suitable for offshore operations. The vessel should also have sufficient fuel capacity to undertake sustained operations at sea, with or without a vessel in tow. Emergency towage vessels ideally should have a capacity for stowage of salvage gear, fire fighting capacity and pollution response capability. The power of the towing vessel would also need to be matched to the size of the vessel in distress.

The 1994 Donaldson Report<sup>19</sup> noted that tugs vary enormously in their purposes and capacity. It noted evidence that suggested a bollard pull of around 125 tonnes should be enough in most circumstances for a ship to be held in position, and that under reasonable weather conditions a towing vessel with a bollard pull of 100 tonnes would be capable of towing a fully loaded VLCC<sup>20</sup>, but a capacity of 150 tonnes would be needed to control a VLCC successfully in bad weather. This is referring to one tug performing salvage or emergency towage on its own. Australia's salvage tugs are all in the range 50 to 60 tonne bollard pull and therefore two or more are generally used for salvage jobs. Some offshore support vessels in Australia would have up to 100 to 150 tonnes bollard pull range.

Ships intending to be used for emergency towage or salvage duties should have in place a safety management system that identifies the nature of operations they are suited for, assesses the risks likely to be faced in such operations and which covers the competence and training of all crew, appropriate crew numbers, and the necessary equipment. Care is needed not to sanction the use of tugs for purposes for which they are not designed.

#### ***5. The need for public interest obligations to release tugs for marine emergencies.***

In the event of a serious maritime incident it is expected that the relevant port authorities would release harbour tugs in order to respond to marine emergencies, although there has been at least one occasion recently where an Australian port authority initially was reluctant to release a port towage vessel to attend a casualty. The 2002 Dwyer report for AMG<sup>21</sup> noted that most port authorities in Australia indicated they would be prepared to release a tug to assist in an emergency outside the port. This is consistent with the findings of the 1994 Donaldson Report<sup>22</sup> that port authorities in the UK would be willing to release at least one tug immediately for emergencies, although port authorities would want to retain a capacity to deal with any problems arising within the port itself.

It should be noted that the State Governments do not have any legislative provision in place giving legislative backing to such a scenario.

The Queensland Department of Transport and Maritime Safety Queensland (MSQ) suggest in their discussion paper that tender specifications for port towage services should also include Queensland Department of Transport-specified requirements to meet in-port emergencies and that MSQ should have the legislative power to require tugs to provide emergency assistance within port limits. This could be an option that other States and port authorities may wish to consider when establishing arrangements suitable for their own harbour towage requirements.

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<sup>19</sup> Secretary of State for Transport (1994) Safer Ships, Cleaner Seas - Report of Lord Donaldson's Inquiry into the Prevention of Pollution From Merchant Shipping, HMSO, London

<sup>20</sup> Very Large Crude Carrier

<sup>21</sup> K. Dwyer & Associates Pty Ltd (2002) Study of the National Salvage Capacity, Report for the Australian Maritime Group

<sup>22</sup> Secretary of State for Transport (1994) Safer Ships, Cleaner Seas - Report of Lord Donaldson's Inquiry into the Prevention of Pollution From Merchant Shipping, HMSO, London