



CHIEF EXECUTIVE OFFICER

Dr Kathleen Dermody
Committee Secretary
Senate Foreign Affairs, Defence and Trade References Committee
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Dr Dermody

Further to your letter dated 17 September 2009, the Australian Maritime Safety Authority is pleased to provide the enclosed submission to the Committee of Inquiry into matters relating to the Torres Strait region.

Please contact Mr Philip Burgess, Manager Government and International Coordination (02 6279 5601 or philip.burgess@amsa.gov.au) directly in relation to this matter.

Yours sincerely

GRAHAM PEACHEY

// November 2009



**Submission by the Australian Maritime Safety Authority
to the Enquiry into Matters Relating to the Torres Strait Region**

Senate Foreign Affairs, Defence and Trade References Committee

Introduction

This submission outlines the activities of the Australian Maritime Safety Authority (AMSA) in the Papua New Guinea/Torres Strait Treaty Zone. AMSA has particular interests in the challenges facing the Torres Strait region in relation to sea transport linkages referred to in part (d) of the Terms of Reference for the Senate Committee of Inquiry into Matters relating to the Torres Strait region.

AMSA is the national safety agency with a primary role in maritime safety, protection of the marine environment, including marine pollution response and emergency towage services, and aviation and maritime search and rescue.

AMSA has had a long involvement in the Torres Strait and has a strong focus on ship and vessel safety, marine pollution prevention and safety of life. Protection of the region has been enhanced through state of the art navigation aids and technologies, establishment of an internationally recognised system of compulsory pilotage for ships and provision of education and awareness programs relating to boating safety, including with Papua New Guinea.

Shipping traffic in the Torres Strait

The Torres Strait region is used by a wide spectrum of vessels ranging from large tankers and container ships, bulk carriers and cruise ships down to traditional fishing boats, modern trawlers and pleasure craft. All but the smallest vessels are confined to a few well-defined routes which are potentially hazardous to navigation; frequently being very narrow, confined by many charted dangers, depth-limited and strongly influenced by tides and tidal streams often running up to several knots.

The Strait is the primary link between ports in southern Asia, Australia and New Zealand, South America, Papua New Guinea and Pacific Island nations. There are approximately 3000 transits of Torres Strait per year by vessels greater than 50 metres in length. Traffic comprises bulk carriers (38%), general cargo (28%), containers (15%) and loaded tankers (12%). Ships use the Prince of Wales Channel in the central section of the Strait, Varzin and Gannet passages in the western approaches and the Great North East Channel in the East. Vessels entering or leaving the inner route of the Great Barrier Reef also use the Prince of Wales Channel at the western end of the Torres Strait.

Ships that are unable to transit the Strait, must pass north of New Guinea or south of Australia resulting in significant diversion times and additional costs. The numbers of vessels traversing the Strait is expected to continue to increase over the coming years with the increasing demand for Australian commodities.

Initiatives to improve ship safety and marine environmental protection

To cater for the navigational difficulty of the strait AMSA maintains 31 major and minor navigation aids (lights and buoys), five transmitting tidal height gauges, one transmitting tidal stream meter, a Vessel Traffic System and radar coverage. Other major ship safety and environmental protection initiatives implemented in the region include:

a) Designation of the Torres Strait as a Particularly Sensitive Sea Area

AMSA was instrumental in ensuring the Torres Strait was declared a Particularly Sensitive Sea Area (PSSA) by the International Maritime Organization (IMO) in 1991. A PSSA is an area of the marine environment that needs special protection through action by the IMO because of its significance for recognized ecological, socio-economic, or scientific attributes where such attributes may be vulnerable to damage by international shipping activities.

Following a number of ship groundings in Torres Strait and the Great Barrier Reef, in 2001 the Ministers for Transport and Regional Services and Environment and Heritage agreed with the recommendation of the *Review of Great Barrier Reef Ship Safety and Pollution Prevention Measures* that Australia should pursue at the IMO the designation of the Torres Strait as a PSSA. Following several joint submissions to IMO by Australia and PNG, in July 2005, the IMO's Marine Environment Protection Committee approved the extension of the Great Barrier Reef PSSA to include the Torres Strait.

b) Compulsory pilotage for the Torres Strait

As part of the associated protective measures for the Torres Strait, the IMO also adopted Australia's proposal to designate a revised shipping route and extend the system of pilotage within the Great Barrier Reef to include the Torres Strait. While there was unanimous support at IMO for protecting the environmental values of the area, there was considerable debate around the sensitive issue of the international legal basis for adopting such measures in international straits used for navigation. Some delegations agreed with the Australian position that international law does not prevent such measures while others argued the opposite, based on concerns about precedent for other straits.

Amendments to the Commonwealth *Navigation Act 1912* entered into force on 6 October 2006 and provide for an offence under section 186I to navigate in a compulsory pilotage area without a pilot. A compulsory pilotage area for the Torres Strait is specified in Marine Orders Part 54 and significant penalties apply to a master or owner who fails to comply with the compulsory pilotage requirements in the Navigation Act and Marine Orders Part 54.

Section 186J of the Navigation Act requires the pilot to provide a certificate to the master in the approved form specifying details about the completed piloted voyage before disembarking the ship. Such a certificate will provide an owner and master evidence that they engaged a pilotage service and complied with the compulsory pilotage requirements of the Act. In certain circumstances, a master or owner may apply to AMSA to seek an exemption from the requirement to navigate with a pilot in a compulsory pilotage area – see section 186K of the Act and provision 11 of Marine Orders Part 54.

c) Under-keel clearance management (UKCM) system for ships

The recommended maximum draft for transiting ships is 12.2 metres with an under-keel clearance of 10% of draught. Deeper draught vessels (greater than about 9 metres) must make use of tidal windows and reduce speed to manage their under-keel clearance. In recent years, vessel operators have requested AMSA to re-examine the prevailing draught limitation of 12.2m in the Torres Strait in certain circumstances (bathymetric and met-ocean conditions permitting). An increase in the maximum permissible draught will offer significant economic benefits and provide the means to obtain a more accurate assessment of the margin of safety.

AMSA is now in the process of selecting a single UKCM system for use in Torres Strait, through an open tender process. AMSA has decided that the UKCM system will be used for the management of all transits of the Torres Strait for vessels whose draught is eight metres or greater. The objectives for introducing UKCM are to deliver enhanced safety and efficiency of navigation by validating the existing safety margin for deep draught vessels transiting the region; and evaluating the appropriateness of the current draught regime.

d) Vessel Traffic System

On 1 December 2004, a Coastal Vessel Traffic System (ReefVTS) was declared by the International Maritime Organization as a measure to further enhance navigational safety in Torres Strait and the Great Barrier Reef.

The objectives of ReefVTS are to:

- Enhance navigational safety in the Torres Strait and the inner route of the Great Barrier Reef by interacting with shipping to provide improved information on potential traffic conflicts and other navigational information
- Minimise the risk of a maritime accident and consequential ship sources pollution and damage to the marine environment in the Torres Strait and Great Barrier Reef region
- Provide an ability to respond more quickly in the event of any safety or pollution incident.

Through the integrated use of Automatic Identification System (AIS), Radar, Automated Position Reporting via Inmarsat-C (satellite), VHF reports and detailed route plans provided by vessels, ReefVTS compiles a timely and accurate traffic image of shipping throughout the region. ReefVTS

generates and disseminates ship encounter predictions in the form of ship traffic information. Ships receive this ship traffic information via Inmarsat-C messaging or VHF voice communications.

e) National Maritime Emergency Response Arrangements

In November 2005, as a response to the 2004 *House of Representatives Standing Committee on Transport and Regional Services Inquiry, Ship Salvage Inquiry into Maritime Salvage in Australian Waters* (the Neville Report), the Australian Transport Council endorsed the establishment of an integrated national approach to the provision of Emergency Response arrangements, involving minimum levels of emergency towage capability in strategic regions around the Australian coastline and a regulatory framework to support a coordinated approach to Emergency Response issues. In February 2008, the Australian Transport Council Ministers formalised the agreement of all jurisdictions to the Intergovernmental Agreement (IGA) on the National Maritime Emergency Response Arrangements (NMEMA).

The aim of the National Maritime Emergency Response Arrangement (NMEMA) is to protect the marine environment from actual or potential ship-sourced pollution. This is done by enhancing current response arrangements under the *National Plan to Combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances* (the National Plan) through ensuring the continuing provision of an appropriate level of maritime emergency towage capability around the Australian coastline and the enhancement of the Emergency Response management framework, which includes the appointment of a single national decision maker to coordinate a response to a maritime casualty.

f) Emergency Towage

Emergency Towage is taken to be the initial response required to assist a ship that is incapacitated and/or drifting, and is in danger of grounding, sinking or of suffering some other peril of the sea, so as to stabilise the situation and prevent or minimise the extent of consequent pollution of the sea. Under the NMEMA, a number of emergency towage vessels (ETVs) are located in strategic Australian coastal regions. These ETVs provide a minimum level of emergency towage capability to deal with a significant, or potential significant, threat to Australia's marine environment.

AMSA has contracted the Brisbane firm Australian Maritime Systems Limited, in conjunction with Swire Pacific Offshore, to supply and operate under AMSA's direction a 24/7 dedicated chartered ETV that will provide emergency towage and first response capability in the particularly sensitive sea area in the Torres Strait and Great Barrier Reef area north of Cairns/Mourilyan.

The vessel, named *Pacific Responder*, has its home port in Cairns but spends the majority of its time at sea, available for emergency tasking by AMSA should a maritime incident occur. The vessel is also able to respond to other marine incidents, such as pollution of the sea and search and rescue action.

g) Pollution response arrangements for the region

The extremely high cultural, social and economic significance of marine resources to the people of Torres Strait could lead, in the event of an oil or chemical spill, to a significant decline in productivity of their subsistence fisheries until the marine ecosystem recovers. In Torres Strait there is an extremely high rate of water movement due to currents, tidal streams and surface winds. In the event of an oil or chemical spill, this could result in the rapid movement of oil or chemical plumes, possibly to even more remote areas. Logistical problems associated with moving response personnel and equipment to remote areas and the fact that much of Torres Strait is unsurveyed may cause considerable difficulties in mounting an on-water response to an oil or chemical spill.

In recognition of the particular risks associated with Torres Strait, a specific Marine Oil Spill Contingency Plan for the Torres Strait Region (Torresplan) was produced in 1994 to provide both a range of options for a spill response and guidance for the spill combat team, should a spill occur in the area. The Plan was revised in 2001 to reflect policy and operational changes in the management of oil spills in Australia. *Torresplan* is an integral part of Australia's *National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances*.

With regard to pollution prevention, Annexes I, II, IV and V of the International Convention for the Prevention of Pollution from Ships (MARPOL) include special provisions in the definition of "nearest land" for protecting the north-eastern coast of Australia, encompassing the Torres Strait and the Great Barrier Reef. No operational discharges from vessels are permitted in these areas.

Initiatives to improve safety of small boats

The local population use small boats to move between settlements and island villages, for fishing and transport of goods. Due to the geographic spread of the islands, voyages of more than 80 nautical miles may be undertaken, including in all kinds of weather. Search and rescue incidents for operators of small boats that travel amongst the island communities have been common in the Torres Strait over the years, representing one of the highest number of search and rescues in Australia. Of these, up to twenty five percent are for the rescue of Papua New Guinea nationals.

In reaction to more recent incidents, Maritime Safety Queensland (MSQ) and the AMSA have sponsored the Torres Strait Marine Safety Project in partnership with the Torres Strait Regional Authority (TSRA) and the Papua New Guinea National Maritime Safety Authority. This project commenced in July 2006 and aims to improve boat safety education and awareness. The project team identified the major causes of boating safety problems in the Torres Strait and the need for training in trip planning and emergency procedures; motor maintenance and trouble shooting; and the availability and cost of boat safety equipment, particularly the new 406MHz EPIRB. The objectives are to reduce the number of incidents of lost seafarers in the Torres Strait, increase the chances of survival of lost

seafarers, increase community and industry commitment to safety and achieve outcomes through partnerships with communities, industry and government agencies.

Key initiatives arising from the project are the boating safety campaign, fuel usage stickers, a small vessel census, an EPIRB exchange program, the 'BoatSafe' training course and increased engagement with Papua New Guinea.

a) Boating safety campaign

An integrated boating safety campaign has been developed for the region targeting the common barriers and safety issues confronting seafarers. The campaign features:

- television advertising
- local radio advertising
- local press advertising
- a pocket handbook in local languages
- a map and safety sticker to determine fuel requirements for travel between island communities
- provision of safety grab bags
- supply of safety equipment through island stores.

b) Fuel usage stickers

AMSA recently funded the production of a large number of fuel usage guide stickers, 2000 of which were sent to the Papua New Guinea National Maritime Safety Authority and an additional 440 to the Department of Foreign Affairs and Trade Treaty Liaison office on Thursday Island for distribution to the owners and operators of the vessels that operate from Papua New Guinea out to the islands of the Torres Strait.

c) Vessel census

A vessel census has been completed which gathered information on all boats within the Torres Strait and data is being analysed. The census provided information about:

- the numbers of vessel in use and not in use
- the overall condition and seaworthiness of boats
- what safety equipment is carried
- boat make and model plus motor size and type.

It is anticipated the census will provide a benchmark and direction for future safety initiatives

d) EPIRB exchange program

Emergency Positioning Indicating Radio Beacons (EPIRBs) are an essential item of safety equipment. An EPIRB exchange program, in conjunction with the Australian Maritime Safety Authority (AMSA), has been in place since 2007. The program offers seafarers a new 406 MHz beacon at a nominal cost in exchange for their 121.5 Mhz beacon. With the increased use of 406 MHz EPIRBs, the rescues that are required should be responded to more quickly with a greater chance of survival. This program is continuing.

e) BoatSafe

BoatSafe was introduced in August 2007 through a partnership with the locally based TAFE college.

The BoatSafe is a course that covers:

- motor maintenance
- breakdown prevention
- safety equipment and its use
- emergency procedures at sea
- general boating rules.

TAFE deliver courses throughout the island communities and to date all communities have had the opportunity to attend a course which is now on its second round. It is also being delivered within the high school curriculum for year 10 students. It is anticipated that eventually all community members will have completed the BoatSafe course as they pass through the school system.

f) PNG engagement

AMSA has sought agreement from the other three parties in the Torres Strait Marine Safety Project with an interest in marine safety in the Torres Strait – Maritime Safety Queensland, Torres Strait Regional Authority and the Papua New Guinea National Maritime Safety Authority – via a 'letter of intent' to develop a Memorandum of Understanding that would reaffirm the goals of the Torres Strait Marine Safety Program. The Memorandum of Understanding will acknowledge the importance of ship safety and environmental protection in the Torres Strait and provide a platform to build partnerships amongst the key governance bodies in the region to develop and deliver targeted marine safety programs. It would also formalise the role of the Papua New Guinea National Maritime Safety Authority as a full member of the Torres Strait Marine Safety Steering Committee

Future challenges

In terms of small vessel safety, challenges remain to improve sea safety awareness, the need for good passage planning, the need to monitor the weather and provide enough fuel to handle conditions if the weather deteriorates with little warning. A number of activities are proposed under the Torres

Strait Marine Safety Program to address these issues including examining establishment of island-based safety officers who can take on a community role of monitoring and promoting safety within the community; continuation of the integrated safety education program and EPIRB exchange program; and continuation of the delivery of BoatSafe courses.

AMSA is also looking at options for a Community Liaison Officer in the Torres Strait by about mid-2010. This officer would provide additional support for the Torres Strait Marine Safety Program and work with Maritime Safety Queensland officers already present in the region. It is also expected that this officer, assisted by subject matter experts will conduct a review of search and rescue response assets available to Torres Strait. This work will also involve consultation with Papua New Guinea in an attempt to bring greater coherence to search and rescue planning for Torres Strait.

In terms of ship safety, the challenges for AMSA in the near future are in implementing the Under-Keel Clearance Management system, achieving improvements in coordination of search and rescue and provision and maintenance of aids to navigation and navigational systems to ensure the highest standards of ship safety and environmental protection.

AMSA would be pleased to provide any additional information on the activities described in this submission.