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TIMOR SEA OIL AND GAS - TOO VALUABLE TO IGNORE?

The Timor Sea is an area rich in natural resources including fish, sea cucumber, oil and gas. For this reason there has been much political and legal debate over the allocation of exploitation rights to the area with Australia, Indonesia and East Timor all claiming rights to a proportion of the resources. Of all the resources in the Timor Sea, oil and gas will provide the region with the greatest long-term benefits. This has resulted in protracted negotiations to determine maritime boundaries between these three countries, which have been resolved through a series of bilateral treaties.

The Timor Sea Treaty between Australia and East Timor is the most recent and a particularly good example of the nature of the negotiation process. East Timor's independence from Indonesia saw the annulment of the previous Timor Gap Treaty between Australia and Indonesia, which established a three part Zone of Cooperation (ZOC) opposite the East Timorese coastline. The annulment of the Timor Gap Treaty reopened the debate on the delimitation of the boundary as Australia and East Timor both claimed rights to the ZOC. Each country's claims could be argued under international law and the matter was resolved by establishing the Joint Petroleum Development Area (JPDA) under the Timor Sea Treaty (see Figure 1). The Treaty allocates 90% of the revenue from the area to East Timor and 10% to Australia.

The resources in the JPDA amount to almost 12 trillion cubic feet of gas and 900 million barrels of oil. At the moment, oil is currently being processed and exported from the JPDA. The majority of the gas resources, which are still in the development phase, are located in the Bayu-Undan and Greater Sunrise deposits. These gas deposits will have a significant impact on the region's petroleum industry. Australia stands to gain \$4 million a year from Greater Sunrise and \$2 billion in total revenue from Bayu Undan. Depending on how the area is developed, downstream financial benefits to Australia could be as much as \$22 billion, including the provision of up to 20,000 jobs in the Northern Territory. The resource sharing arrangements under the Timor Sea Treaty will underpin East Timor's economic development for the foreseeable future and are therefore vital to that country's survival.

The Treaty establishes detailed arrangements for the administration, exploitation, management and protection of the JPDA. Included in these arrangements is the requirement for surveillance and patrols of the area to be conducted in order to protect the resources. East Timor does not currently possess an air force, and has no plans of developing one in the near future. Similarly, East Timor's

navy comprises two Albatross Class Patrol Boats, donated

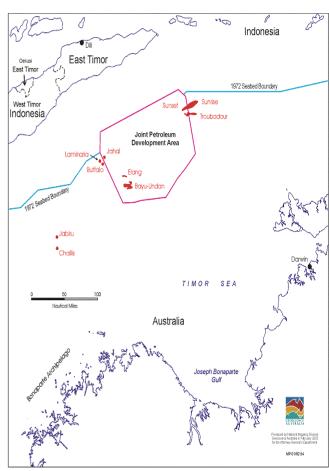


Figure 1: Timor Sea JPDA

by the Portuguese government. Australia's youngest neighbour, therefore, has no real capability for contributing to patrols. Therefore it will fall to Australia to conduct patrols of the JPDA in order to protect these vital resources.

Australia undertook patrols of the ZOC, under the now defunct Timor Gap Treaty. These patrols ceased when East Timor gained independence from Indonesia and the treaty was annulled. Since then, Australia has continued to conduct patrols in and over Australia waters, up to but not including the JPDA. The ratification of the Timor Sea Treaty has reopened the door for surveillance and patrols of the JPDA. These patrols are yet to occur. Foreign fishing vessels and suspected illegal entry vessels receive the highest priority. The region's current strategic situation is constantly changing and has seen an increase in the





emphasis placed on the potential for terrorist activity. This may require JPDA resources and facilities to be protected.

The economic importance of the JPDA to both Australia and East Timor should not be underestimated. Not only will the resources primarily underpin East Timor's development, they also have the potential to turn Darwin into the region's major petroleum producing centre. However, the JPDA resources and facilities are as vulnerable as they are valuable. The installations used to extract oil and gas in the JPDA include Floating Petroleum Storage and Offloading facilities (FPSOs), tankers converted for the task. FPSOs are located adjacent to oil and gas fields and are moored to the sea bed using a system of lines and anchors. Their large size and fixed position makes them inherently vulnerable to attack from small, agile craft. Tanker and support vessel traffic will also increase in the JPDA as development and production continues. This traffic is similarly vulnerable to attack during close manoeuvres and also while docked.

Maritime terrorism has become an issue of international importance in recent years since the attacks off Yemen on the *USS Cole* in 2000 and the *MV Limburg* in 2002. The suicide attack on the *USS Cole*, which occurred while the ship was refuelling, killed seven and caused significant damage to the ship. The explosive packed speedboat that rammed *the MV Limburg* penetrated both its double hulls, killing one of the crew and causing 90,000 barrels of oil to spill into the ocean.

Maritime terrorism is not restricted to the waters in the Middle East. Abu Sayyaf and the Moro Islamic Liberation Front (MILF) are two separatist terrorist groups active in the Philippines since 1991. Abu Sayyaf has a strong history of abducting foreign nationals for profit and publicity. MILF has perpetrated attacks against shipping, primarily domestic ferries. In addition, Al-Qa'eda, which has been linked to terrorist organisations in Southeast Asia such as Jemaah Islamiah (JI) and Abu Sayyaf, has made specific threats against the global petroleum industry. Despite the lack of immediate threat to JPDA facilities, the pre-existence of maritime terrorism in the region, and links between Al-Qa'eda and regional terrorist organisations, creates the potential for unexpected attacks. This should be taken into when tasking maritime operations, particularly given planned developments in the JPDA.

Southeast Asia, and Indonesia in particular, continues to be a haven for pirates. Of the 374 reported cases of piracy across the world last year, 103 were in Indonesian waters. The majority of these occurred when the target vessel was either at anchor or in port. While the bulk of these attacks are cases of theft, a number were hijackings. In most cases pirates used small vessels to carry out their attacks, typically gaining access via ropes or anchor chains. The attack on the *MV Limburg* has shown that maritime terrorists need only behave like pirates to achieve a successful attack against shipping in Southeast Asian waters.

Large numbers of small fishing vessels frequent the JPDA. These vessels often sail quite close to FPSOs, and have been known to approach the rigs seeking assistance and supplies. FPSO crews would have a great deal of difficulty differentiating between an innocent fishing vessel and a pirate vessel, and therefore may not have the opportunity to request assistance or otherwise prevent the attack. Furthermore, FPSO crews have neither the capacity, nor the authority, to carry weapons to defend themselves against such attacks. The JPDA's remote location means that the time required for a response would reduce its ineffectiveness. The JPDA is therefore a soft target and very vulnerable to terrorist attack.

Early detection remains the best method for preventing terrorist attacks. Surveillance capabilities, such as the Jindalee Operational Radar Network, enable Australia to monitor its sea and air approaches, allowing incoming craft to be detected, but not identified, well before they reach Australia. Surveillance data of this type allows surface response craft to be deployed to identify suspect craft, and if necessary, intercept them as they enter Australian territorial waters. This type of technology enables Australia to protect and defend the JPDA.

Navigation safety zones are established around every petroleum installation in Australian waters, including the JPDA. These zones prohibit unauthorised vessels from entering within 500 metres of an installation. They provide Australia with the ability to prevent potentially dangerous craft from approaching valuable oil and gas installations and causing damage through either attack or accidental collision. These zones therefore constitute a very useful legislative tool for protecting the JPDA.

The emergence of global terrorism, and its impact in the region, has caused Australia to review its strategic policy in the region. In the light of developments in the JPDA, Australia should continue to regularly examine its strategic outlook and patrol priorities in order to ensure that this valuable area remains protected in the future.

This is a summary of SPC-A Working Paper 13 – The Timor Sea Joint Petroleum Development Area Oil & Gas Resources: The Defence Implications. This paper can be obtained from the SPC-A by contacting the Editorial Officer.

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