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The Delimitation of Maritime Boundaries: A Matter of Life or Death for East Timor?

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Abstract

As a newly independent country, East Timor is faced with a number of significant challenges and opportunities—including the delimitation of international boundaries. Although it is the case that the majority of maritime boundaries around the world remain undelimited, where they are defined they provide jurisdictional clarity and certainty (Prescott & Schofield 2005:216-18). This can have multifaceted benefits, for instance in terms of facilitating the sustainable and effective management of the ocean environment and enhancing maritime security. Perhaps of more pressing importance for a developing country, agreement on the limits of maritime jurisdiction serves to secure coastal state rights to access and manage marine resources, both living and non-living. In a similar vein, boundary delimitation can provide an attractive way for a newly independent state, such as East Timor, to assert its sovereignty, legal authority and thus legitimacy. Delimitation also eliminates zones of overlapping maritime claims, which can cause competition and conflict between neighbouring states, thereby removing a significant potential source of friction and dispute in international relations (Schofield 2005a).

Keywords

Delimitation, Maritime, Boundaries, Matter, Life, Death, for, East, Timor

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The delimitation of maritime boundaries: a matter of ‘life of death’ for East Timor?

Clive Schofield and I Made Andi Arsana

As a newly independent country, East Timor is faced with a number of significant challenges and opportunities—including the delimitation of international boundaries. Although it is the case that the majority of maritime boundaries around the world remain undelimited, where they are defined they provide jurisdictional clarity and certainty (Prescott & Schofield 2005:216–18). This can have multifaceted benefits, for instance in terms of facilitating the sustainable and effective management of the ocean environment and enhancing maritime security. Perhaps of more pressing importance for a developing country, agreement on the limits of maritime jurisdiction serves to secure coastal state rights to access and manage marine resources, both living and non-living. In a similar vein, boundary delimitation can provide an attractive way for a newly independent state, such as East Timor, to assert its sovereignty, legal authority and thus legitimacy. Delimitation also eliminates zones of overlapping maritime claims, which can cause competition and conflict between neighbouring states, thereby removing a significant potential source of friction and dispute in international relations (Schofield 2005a).

For East Timor the maritime delimitation issue can be regarded as being of critical importance to future national development and ultimately to its viability as an independent state. Successful resolution of this issue offers the prize of access to vast seabed oil and gas deposits, particularly in the Timor Sea. In recognition of this, former East Timorese Prime Minister Mari Alkatiri went so far as to term the success or failure of maritime delimitation negotiations, especially those with Australia, as a ‘matter of life and death’ for East Timor (Oxfam 2004).

This chapter provides a critical analysis of the delimitation of East Timor’s maritime boundaries with Australia and Indonesia. Following a brief section on the relevant geographical context, a summary of delimitation principles is provided. Consideration is then taken of the maritime claims of each state, as well as their status in respect of the international law of the sea. Existing maritime agreements between Australia and Indonesia and Australia and East Timor are reviewed. The progress in negotiations between Australia and East Timor, culminating in an agreement on the sharing of the resources of the Timor Sea signed on 12 January 2006, is then detailed. Finally, the multiple potential delimitations between East Timor and Indonesia are explored and conclusions drawn as to prospects for the completion of the critical task of delimiting East Timor’s maritime boundaries.

Maritime geographical context

The island of Timor is situated between parallels of 08° 17' and 10° 22' south latitude and meridians of 123° 25' and 127° 19' east longitude in Southeast Asia, northwest of Australia in the Lesser Sunda Islands at the eastern end of the Indonesian archipelago. East Timor includes the eastern half of Timor Island, together with the Oecussi (Ambeno) region, which is surrounded by Indonesian territory apart from its coastal front, on the north coast of West Timor (Deeley 2001:1). Additionally, East Timor encompasses the islands of Atauro and Jaco. The physical separation between Oecussi, which has its own 100-kilometre land boundary with Indonesia, and the main part of East Timor represents a significant logistical and security challenge for the authorities in Dili.

Timor Island is bounded by three distinct sea areas: the Timor Sea with Australia beyond to the southeast, Wetar Strait to the north and Ombai Strait to the northwest. The island is also surrounded by Indonesia's Roti and Saval Islands through the Roti Strait, by Lomblem, Pantar and Ombai Islands across the Ombai Strait, by Kissar islet to the northeast and Leti, Moa and Lakor Islands to the east.

The delimitation of maritime boundaries

Wherever the maritime claims of neighbouring states overlap, a potential maritime boundary situation exists. As states tend to prefer unilateral over shared jurisdictional regimes, negotiations to define maritime boundaries represent the usual way forward in this situation. Within the context of bilateral negotiations, international law generally, and the international law of the sea in particular, provides the legal framework within which negotiations proceed.

The international law of the sea rules relating to the delimitation of maritime boundaries are codified in the 1982 United Nations Law of the Sea Convention (LOSC) (United Nations 1983). Article 15 of the LOSC, dealing with the delimitation of the territorial sea out to 12 nautical miles, provides for delimitation on the basis of the equidistance method unless the interested parties freely agree to the contrary or there exists an 'historic title or other special circumstances' in the area to be delimited. In respect of the extensive national zones of the continental shelf and exclusive economic zone (EEZ), where the LOSC provides coastal states with considerable sovereign rights (but not outright sovereignty) in relation to marine resources, Articles 74 and 83 of the LOSC respectively merely call in identical general terms for agreement to be reached on the basis of international law in order to achieve 'an equitable solution'. The LOSC provisions relating to maritime boundary delimitation therefore provide minimal guidance or, alternatively, offer great flexibility to coastal states.

The key to maritime delimitation, therefore, is to take into account all possible relevant circumstances in order to achieve an equitable result. The factors potentially relevant to maritime delimitation are theoretically without limit (Charney 1987:507). Maritime delimitation is, however, achieved not solely by reference to the LOSC rules, such as they are, but to the abundant relevant state practice and jurisprudence that exists. This

experience indicates strongly that coastal geographic parameters are the critical relevant circumstances, at least when dealing with maritime delimitation within 200 nautical miles of the coast.

One potentially relevant circumstance of particular note in the Timor Sea context is ‘natural prolongation’, that is, the concept that offshore areas should be regarded as a territorial continuation of the land. This proposition led to the idea that geophysical factors relating to the seabed, notably its geology and geomorphology, as opposed to that of the coastline, should have a role in determining continental shelf boundaries. In the North Sea Continental Shelf cases of 1969 the International Court of Justice treated natural prolongation as a key consideration in the delimitation of the continental shelf. Subsequently, however, there was considerable debate as to whether natural prolongation should simply provide the source of title to the continental shelf or be applied as a ‘functional attribute’ dictating the precise division of that shelf (Highet 1989:87–9). In its judgment on the Malta/Libya case, the International Court of Justice (1985) appeared to clarify matters by finding that ‘geological and geomorphological characteristics’ of the seabed ‘are completely immaterial’ to determining the course of a maritime boundary within 200 nautical miles of the coast (see Highet 1993:177).

The prevailing importance of factors related to coastal geography is linked to the application of equidistance lines as a method of delimitation. Equidistance represents a geometrically exact expression of the midline concept. While this method is not obligatory and is not specifically referred to in the LOSC as a preferred method of delimitation beyond the confines of the territorial sea, it has proved far and away the most popular method of delimitation. This is especially the case for delimitations between opposite coasts where equidistance-based solutions have accounted for 89% of delimited maritime boundaries (see Legault & Hankey 1993; Prescott & Schofield 2005:238).

The reasons for the popularity of this method of delimitation include its objectivity, mathematical precision and lack of ambiguity. That is, once agreement is achieved with regard to baselines, there is only one strictly defined equidistance line. Where the parties’ coastlines are broadly comparable, equidistance also delivers an equal division of the maritime space at stake and this can equate to an equitable solution. Furthermore, where irregularities in coastal geography such as islands are present, equidistance can be flexibly applied, for example through giving islands a reduced effect on the final delimitation line so that the strict equidistance line is adjusted in order to achieve an equitable resolution (Carleton & Schofield 2002:26–7).

As a consequence of these virtues and on the basis of substantial state practice, equidistance lines often provide the starting point for both maritime boundary negotiations and third-party dispute resolution. This trend has been reinforced in recent cases before the International Court of Justice. Thus, in the Qatar–Bahrain judgment the Court was explicit in stating that it had followed ‘the most logical and widely practised’ two-stage approach to delimitation consisting of, first, the drawing of a provisional equidistant line and, second, consideration of whether any circumstances existed that should have led to an adjustment or modification of that line in order to achieve an equitable result (ICJ 2001:para176; Prescott & Schofield 2005:240–1).

Claims to maritime jurisdiction and potential maritime boundaries

At the time of writing East Timor had not signed the LOSC. Nonetheless, at the first sitting of East Timor's National Parliament on 20 May 2002, Prime Minister Alkatiri introduced the Maritime Zones Act (MZA).¹ The MZA established East Timor's claims to a 12-nautical mile territorial sea, a contiguous zone out to 24 nautical miles and, pending agreement on boundaries with neighbouring states, continental shelf and 200-nautical mile breadth EEZ (TSO 2005).² With regard to overlapping maritime entitlements with neighbouring states, Article 10 of the MZA states that 'the question of delimitation shall be settled by peaceful means of dispute settlement, in accordance with Article 33 of the Charter of the United Nations, taking into account the relevant principles and rules of international law on maritime delimitation'.

The MZA duly entered into force and became a law in July 2002. Notwithstanding the fact that East Timor is not a party to the LOSC, the MZA has been promulgated on the basis of international law, notably the LOSC (TSO 2005).

In contrast to East Timor, Australia and Indonesia have both signed and ratified the convention.³ For its part, Australia claims a 12-nautical mile territorial sea, contiguous zone out to 24 nautical miles from its baselines and a 200-nautical mile EEZ. Indonesia meanwhile, in addition to the archipelagic waters enclosed within its archipelagic baselines, claims a 12-nautical mile territorial sea and 200-nautical mile EEZ (UKHO 2005).

It is clear from the geographical context, and in particular the proximity of East Timor to Australia and Indonesia, that the maritime claims of the parties overlap and consequently that several maritime boundary delimitation situations exist in three distinct marine areas: Ombai Strait, Wetar Strait and Timor Sea. In this context, it is worth mentioning that East Timor is comparatively geographically disadvantaged as, unlike its maritime neighbours, the proximity of Australian and Indonesian territories and the configuration of the relevant coasts means that East Timor is unable to claim a full 200-nautical mile entitlement from any base point without encountering an overlapping claim from either Australia or Indonesia. East Timor is therefore shelf- or zone-locked by the maritime claims of its neighbours.

As a result of the division of Timor Island into three parts, East Timor and Indonesia have four land boundary terminuses on the coast. Territorial sea delimitation will be required seaward of each of these termini. Delimitation will also be required between East Timor and Indonesia for continental shelf and EEZ rights both beyond 12 nautical miles from the coast and for overlapping entitlements from opposite island coasts, for instance between Oecussi and Pulau Alor and between East Timor proper and Pulau Wetar. For Australia and East Timor, there is a requirement to delimit overlapping continental shelf and EEZ claims between opposite coasts.

Existing agreements

Although East Timor is not party to any international maritime boundary delimitation agreements with its neighbours, it has concluded several significant resource-sharing

agreements with Australia. Additionally, a number of agreements previously reached between Australia and Indonesia are highly relevant to the delimitation scenario in the Timor Sea.

Of particular note are two agreements concluded between Australia and Indonesia dating from the early 1970s and relating to the delimitation of continental shelf boundaries in the Arafura (1971) and Timor (1972) seas. With regard to the Timor Sea, Australia deployed natural prolongation arguments to great effect. Essentially, Australia argued that the boundary in the Timor Sea should follow the axis of the Timor trough on the basis that this feature marks a fundamental divide between distinct continental shelves and therefore between separate natural prolongations. As the Timor trough is located substantially nearer to Timor Island than the Australian coast, such a boundary alignment would clearly be highly advantageous to Australia.

For its part Indonesia argued in favour of an equidistance line between opposite coasts. However, Australia negotiated successfully and a compromise formula was reached that was much closer to Canberra's position than Jakarta's. Instead of the axis of the trough, the boundary approximates the 200-metre depth isobath on the southern margins of the Timor trough. As a result Australia secured around 80–85% of the original area of overlapping claims (Charney & Alexander 1993:1211; Kaye 2001:48).⁴

At the time of the Australia–Indonesia negotiations in the early 1970s, Portugal still administered East Timor. As a result, the Australian–Indonesian delimitation lines were discontinuous, separated by that part of the Timor Sea fronting East Timor's southern coastline—the so-called 'Timor Gap'. In the aftermath of Portuguese withdrawal and Indonesia's swift invasion and incorporation of East Timor, Australia, urged on by oil interests keen to explore the prospective Timor Sea, sought to close the Gap. However, the decline in the role of natural prolongation as a relevant circumstance in maritime boundary delimitation within 200 nautical miles of the coast, allied to a strong perception by the Indonesians that they had been 'taken to the cleaners' by the Australians in relation to the earlier agreements (Kaye 2003:69), led Indonesia to flatly refuse to simply 'join the dots' and close the Timor Gap with a boundary line analogous to that agreed in 1972. The deadlock was overcome through the application of a complex and creative maritime joint development zone—the Timor Gap Zone of Co-operation.

The Timor Gap joint zone established in December 1989 was probably the most sophisticated maritime joint development zone developed in the world.⁵ Following the events of 1999 and the Australian-led intervention under UN auspices, an interim agreement was established between Australia and UNTAET.⁶ On attaining independence, however, East Timor maintained that it was not bound by any of the agreements entered into on its behalf by Indonesia—including the Timor Gap joint development zone. However, if East Timor had completely rejected the joint zone arrangement it would have meant no oil revenues pending the conclusion of fresh maritime boundary delimitation negotiations with Australia.

A practical compromise was therefore achieved in 2002 when another interim arrangement, termed the Timor Sea Treaty, was signed.⁷ The Timor Sea Treaty established

a Joint Petroleum Development Area (JPDA), which encompasses the central part of the old Australia–Indonesia joint zone. Whereas resources in this area had been split between Australia and Indonesia on an equal basis, sharing of revenues within the JPDA favours East Timor, which is set to receive a 90% share of government revenues therein. The Timor Sea Treaty entered into force in April 2003, allowing production of natural gas from the Bayu-Undan field located within the JPDA from February 2004.

A long and winding road: negotiations between Australia and East Timor

The existence of previous boundaries and joint arrangements between Australia and Indonesia, coupled with significant seabed hydrocarbon deposits in the Timor Sea, made the negotiation of maritime boundaries between East Timor and Australia especially challenging. At stake are oil and gas reserves with an estimated value of US\$30 billion (AU\$41 billion).⁸ Given the profound developmental challenges faced by East Timor, it is unsurprising that securing a substantial share of these resources is regarded as a ‘make or break’ issue for East Timor. It is an issue capable of making the difference between viability and sustainable independent economic development as opposed to underdevelopment, unrest and long-term aid dependency (Schofield 2005b:256–62).

Australia has steadfastly clung to its longstanding position that the boundary should be determined on the basis of natural prolongation and thus the alignment of the Timor trough. East Timor has equally vehemently argued in favour of equidistance as the basis for maritime boundary delimitation. East Timor contends that Australia’s natural prolongation-related arguments are based on outdated concepts of international law and would lead to an inequitable division of the Timor Sea and its resources. Indeed, East Timor points out that the entirety of the JPDA is located on the East Timorese side of an equidistance line between the parties’ opposite coasts.

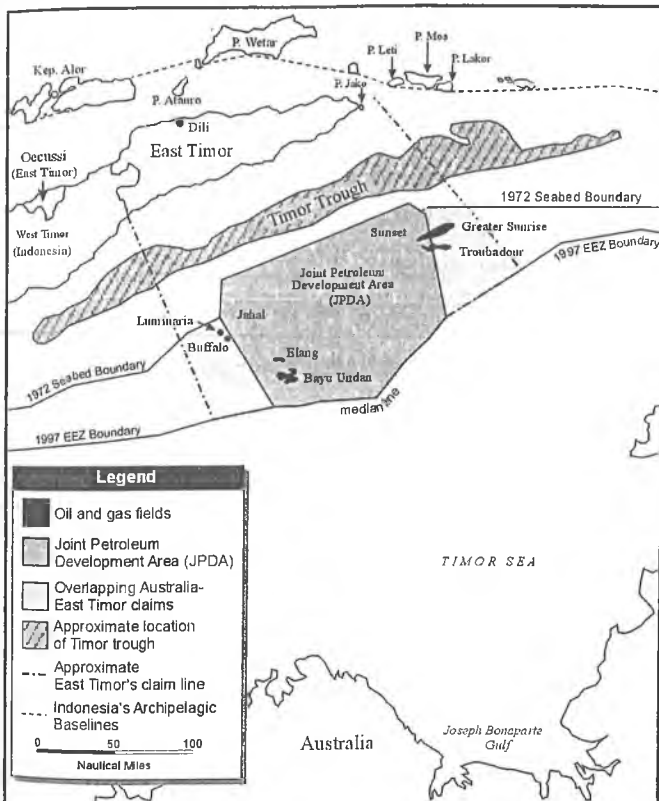
A particular frustration for East Timor has been the fact that significant seabed resources lie just outside the JPDA. In particular, according to a unitisation agreement of early 2003, designed to provide a mechanism for sharing oil fields that straddle the boundary, it was determined that only 20.1% of the Greater Sunrise complex of gas fields fall within the JPDA.⁹ The deposits collectively referred to as Greater Sunrise include the Sunrise and Troubadour fields and are estimated to contain 7.8 trillion cubic feet of gas and 300 million barrels of condensate—therefore they constitute a significant prize. As a consequence of the unitisation agreement, allied to the 90:10 split in its favour within the JPDA, East Timor would receive only an 18.1% share of this huge complex of fields. As a negotiating tactic East Timor therefore refused to ratify the unitisation agreement, thereby forestalling the development of Greater Sunrise.

Significantly, East Timor also sought to ‘widen the Gap’ and claim areas to the east and west of the JPDA but on the East Timorese side of the median line between opposing coasts that Australia maintains are under its sole jurisdiction by virtue of being on the Australian side of the 1972 boundary agreement signed between Australia and Indonesia. Just as East Timor is not bound by the terms of the Timor Gap treaty, so East Timor is not party to the existing seabed boundary agreements between Australia and Indonesia that

define the scope of the Timor Gap itself, which East Timor argued is too narrow. East Timor made this claim on the basis of 'international case law' (TSO 2005). These areas include the vast majority of Greater Sunrise to the east of the JPDA and the Laminaria and Buffalo fields to the west (see Figure 1). Despite East Timor's claims, Australia has continued to exploit these fields and collect revenue at a reported rate of over AU\$1 million per day (Oxfam 2004).

For its part, as well as its clear resource interests, Australia is concerned with the wider context. Australia is loath to agree to an equidistance-based delimitation line with East Timor given that its earlier seabed boundaries with Indonesia are based on natural prolongation arguments. There is unease that, even though the existing boundary treaties are final and binding, agreeing to equidistance as the basis for delimitation with East Timor would rekindle Indonesian calls for those boundaries to be renegotiated, thus disrupting improving bilateral relations (Schofield 2005b:270–2). Furthermore, the 1997 EEZ agreement between Australia and Indonesia remains unratified. On this issue Australian Minister for Foreign Affairs Alexander Downer has stated that Australia has no wish to 'unscramble the omelette' of all its previously agreed boundaries with neighbouring states in the region.¹⁰

Figure 1: Maritime boundaries and claims in the Timor Sea



The negotiations between Australia and East Timor concerning the Timor Sea proved painstaking and, at times, surprisingly acrimonious. For example, in the aftermath of negotiations breaking down in October 2004, then-Foreign Minister José Ramos-Horta stated that Australia's proposals 'amounted to an unacceptable blackmail' (Ramos-Horta 2004). In response, Alexander Downer bluntly urged East Timor to 'respond with grace' to Canberra's offer and acknowledge the 'tremendous' assistance provided by Australia to East Timor without which 'East Timor wouldn't be an independent country' (DJN 2004).

Key issues of contention were, unsurprisingly, the precise dimensions of the sharing of revenues from the Timor Sea and also the issue of downstream development and, particularly, whether the gas from the Greater Sunrise field should be piped to Dili or Darwin for processing (Schofield 2005b:272–7). Nonetheless, genuine progress was made in the first half of 2005, with a draft agreement being agreed in May, eventually culminating in the signature of the *Treaty on Certain Maritime Arrangements in the Timor Sea (CMATS)* on 12 January 2006.¹¹

The agreement does not delimit a maritime boundary between Australia and East Timor; instead it provides for an additional practical resource-sharing agreement between them. The geographical scope of the treaty is confined to the 'Unit Area' defined under the parties' unitisation agreement of 2003 and therefore includes the Greater Sunrise complex of fields. Within the Unit Area, Australia and East Timor will 'share equally' revenues derived from the upstream exploitation of petroleum resources. Under the terms of CMATS, therefore, East Timor is set to gain a 50% share of the proceeds from Greater Sunrise, as compared with the 18.1% share under earlier arrangements. While it is difficult to put a precise figure on how much this additional revenue is likely to be worth to East Timor, Alexander Downer was reported to have stated that East Timor would be AU\$5.3 billion better off under the terms of the treaty (O'Malley 2006).

The agreement is, in common with other provisional arrangements of a practical nature, without prejudice to either side's claims to maritime delimitation. CMATS also contains robust clauses relating to a moratorium on either party asserting claims while the treaty is in force, including a prohibition on the direct or indirect initiation of or participation in any proceedings relating to maritime boundary delimitation in the Timor Sea before 'any court, tribunal or other dispute resolution mechanism' or even raising such issues in 'any international organisation'. With regard to duration, the treaty is set to run for 50 years after entering into force, or until five years after exploitation ceases within the Unit Area, 'whichever occurs earlier'. According to the terms of the agreement, however, the treaty will cease to apply if either a Greater Sunrise development has not been approved in six years or production has not started from within the Unit Area in ten years from the agreement entering into force. CMATS also provides for East Timorese jurisdiction over the water column above the JPDA and serves to establish a bilateral joint Maritime Commission to 'constitute a focal point for bilateral consultations with regard to maritime matters of interest to the Parties'.

Australian Prime Minister John Howard welcomed the agreement as a 'fair and just outcome': for his part, Ramos-Horta termed it 'a fair and just deal for the two sides' and 'a win-win solution' (IHT 2006). Pro-East Timorese lobby groups have, however, been strongly critical of the CMATS treaty.¹² The key concerns raised by such organisations

were that no maritime boundary had been delimited and that the distribution of revenues from seabed resource, while an improvement, still did not represent a fair reflection of East Timor's entitlements under international law. This situation was largely put down to the allegedly unequal nature of the negotiations process leading, in their view, to an unfair result. Nonetheless, it should be recognised that CMATS undoubtedly represents a significantly better deal for East Timor with the potential to deliver a substantial additional income stream—a not insignificant consideration with East Timor's long-term development goals in mind. The CMATS and Greater Sunrise unitisation treaties came into force following ratification in the East Timorese parliament (by 48 votes to five with three abstentions) on 20 February 2007 and a formal exchange of notes, in Dili, on 23 February 2007 (see Downer 2007).

As far as the destination of the pipeline is concerned, and thus the location of downstream processing, this issue is not covered by CMATS and it appears that the final decision will be a commercial one to be made by the consortium led by major Australian oil company Woodside Petroleum Ltd.

Maritime delimitation between East Timor and Indonesia

No maritime boundary was agreed between Portugal (on behalf of East Timor) and the Netherlands (on behalf of Indonesia) in the colonial period (Deeley 2001:22). Similarly, no maritime boundary agreement has yet been concluded between East Timor and Indonesia. Negotiations towards that end have been proposed (TSO 2005) and both states have undertaken preliminary, preparatory analyses.

A key reason why maritime boundary negotiations have not been initiated is that the land boundaries between East Timor and Indonesia have not yet been fully established. As a result, the precise locations of the four East Timor–Indonesian land boundary terminuses on the coast remain uncertain. Negotiations relating to the land boundary have therefore taken priority and a provisional agreement covering 96% of the boundary by length was reached on 8 April 2005 (United Nations 2005a). Once the land boundary delimitation is finalised and demarcation is under way, it can be anticipated that attention will shift to the negotiation of maritime boundaries.

Baselines

East Timor has, through Article 4 of its MZA, claimed the right to declare closing lines for rivers and bays, as well as reserving the right to define historic bays. However, at the time of writing East Timor does not appear to have defined the precise location of these closing lines. The default situation provided for under Article 5 of the LOSC—that the 'normal' baseline consists of the low-water line along the coast as shown on large-scale charts officially recognised by the coastal state—therefore applies.

Indonesia is an archipelagic state and claims archipelagic baselines consistent with Article 47 of the LOSC. Indonesia's first archipelagic baselines claim was made through Law No 4/Prp/1960 of 1960 (Geographer 1971). Surprisingly, the Indonesian archipelagic baselines system so defined did not wholly enclose the Indonesian archipelago—a gap was left north of Timor Island in the vicinity of the Ombai and Wetar Straits (Prescott

1999–2000:79). In 1996 Indonesia issued Law No 6/1996, which made Law No 4 invalid; subsequently, Indonesia issued *Peraturan Pemerintah* (Government Regulation) No 38/2002 as a supplement to Law No 6/1996, but this, unfortunately, does not provide a complete definition of archipelagic baselines enclosing the whole of the Indonesian archipelago either. Consequently, for the purposes of the present analysis the archipelagic baselines defined through Law No 4/Prp/1960 have been used, despite the fact that they are technically invalid and do not apply to the whole of the area under consideration. For the gap in Indonesia's archipelagic baselines system, normal baselines have been used, for example for the coast of West Timor. The application of Indonesia's archipelagic baselines in generating an equidistance-based solution is likely to be a key point of negotiation with East Timor (see below).

'Normal' baseline information for East Timor and in respect of Indonesian West Timor was derived from a nautical chart of the Indonesian EEZ co-produced by the Indonesian Navy's Hydro-Oceanographic Office (Dishidros TNI-AL) and Indonesia's Co-ordinating Agency for Surveys and Mapping (Bakosurtanal) in conjunction with the public domain World Vector Shoreline.¹³ Bakosurtanal also provided a topographic map of Timor Island.

Geodetically robust equidistant lines

Analysis of potential maritime boundary delimitation between East Timor and its neighbours is based on the two-stage approach to boundary-making outlined above. Geodetically robust equidistance lines were calculated with the aid of CARIS LOTS (Law of the Sea)TM, which is a specialised geographical information system for use in the maritime arena (Carleton & Schofield 2002:40–1). Two equidistant lines were constructed, one exclusively using normal baselines and the other giving full effect to Indonesia's archipelagic baselines.

Consideration was then given to any relevant circumstances that either side might argue would warrant shifting the robust equidistance lines to their advantage. In this context, East Timor's claim lines in respect of the Timor Sea were taken into account. Discussion of the merits of each side's claims or likely claims is, where possible, followed with a necessarily tentative assessment of potential outcomes and possible final delimitation lines, including partial effect for various islands. Illustrative sketch maps of the potential boundary lines constructed are also provided. It should be emphasised, however, that in the final analysis it is up to the states concerned to agree on the course of their maritime boundaries; ultimately these may differ by a considerable margin from the potential boundary options presented here.

Delimitation in the Ombai Strait: Oecussi and Pulau Batek

In the Ombai Strait, the existence of East Timor's territory of Oecussi, surrounded by Indonesian West Timor (save for its coastal front), means that there are two land boundary termini on the coast, located at Noel Besi to the west and Noel Meto to the east. Seaward of these points, lateral territorial sea boundaries and, beyond 12 nautical miles from the

coast, continental shelf/EEZ boundaries are required, as well as a continental shelf/EEZ delimitation between the opposite coasts of Oecussi and Indonesia's Pulau Pantar and Pulau Alor.

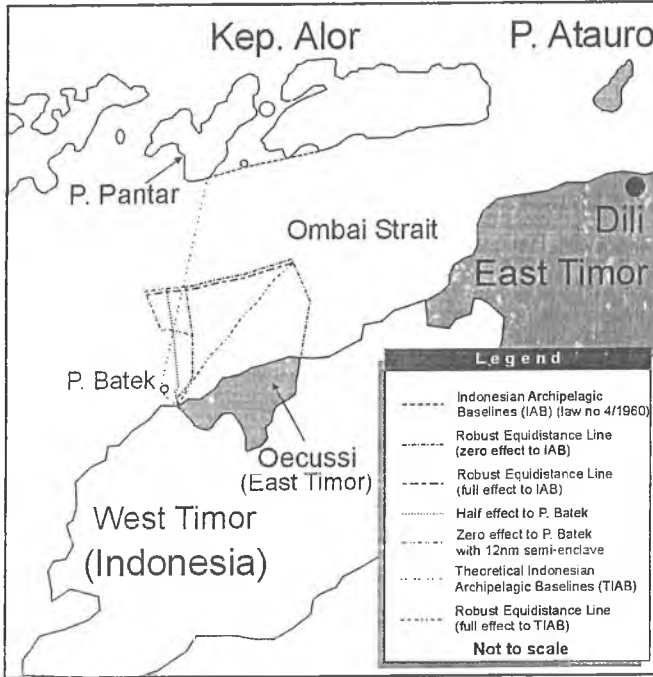
A likely complication in the westernmost lateral delimitation is the existence of the small islet of Pulau Batek, which is immediately offshore and slightly to the west of the land boundary terminus on the coast at Noel Besi. Though there were initial reports of a sovereignty dispute over Pulau Batek, it now appears that this has been resolved in Indonesia's favour (Fointuna 2004). This does not, however, resolve the potentially contentious issue of Pulau Batek's role in the delimitation of an adjacent maritime boundary between Indonesian West Timor and East Timorese Oecussi.

As a small and apparently unpopulated insular feature, East Timor is likely to argue that Pulau Batek is no more than a 'rock' within the meaning of Article 121, paragraph 3 of the LOSC. If Pulau Batek was considered as such, Indonesia would be entitled to generate no more than a 12-nautical miles territorial sea claim from it. Additionally, if Pulau Batek was given full weight in the definition of a strict equidistance line, its position, almost directly offshore the terminus of the land boundary on the coast, would have a dramatic impact on the course of the line. As illustrated in Figure 2, Pulau Batek deflects the strict equidistance line significantly to the east to East Timor's disadvantage and Indonesia's gain, thereby curtailing Oecussi's potential maritime entitlement. East Timor is therefore likely to argue for relief from this situation on the basis that a boundary based on strict equidistance using Pulau Batek as a base point would yield an inequitable result. East Timor could argue for a reduced (for example, half) effect for Pulau Batek. However, even if Pulau Batek was classified as a mere rock, it would still be entitled to generate a 12-nautical miles territorial sea claim. One potential option, therefore, would be for Pulau Batek to act as a valid base point for the generation of a territorial sea boundary, but have no impact on the continental shelf/EEZ boundary. The full effect (for territorial sea) and no effect (for continental shelf/EEZ) lines could then be joined by a line describing a 12-nautical mile arc from the islet, thus semi-enclaving it (see Figure 2). It is worth noting that examples exist in state practice to support this method of dealing with islands that would otherwise have an inequitable influence on an equidistance-based delimitation line (Carleton & Schofield 2002:13–20).

For its part Indonesia is likely to push for the application of a strict equidistance line. Having said that, it is worth observing that Jakarta may be mindful of the wider context and the potential impact of its claims *vis-à-vis* East Timor on its undelimited maritime boundary situations with other states. For example, in the context of its dispute with Malaysia over the so-called 'Ambalat offshore area', Indonesia appears to be arguing that two small Malaysian islands, Pulau Sipadan and Pulau Ligitan, should be accorded just the sort of reduced effect described above in respect of Pulau Batek. It is notable here that both the Malaysian islands in question are substantially larger than Pulau Batek.

It is not yet clear what Indonesia's claims are in this area and it is certainly the case that every boundary delimitation situation is unique and should be treated separately; nonetheless, Indonesia might be wise to be circumspect with regard to its claims from

Figure 2: Options for maritime delimitation in the Ombai Strait



Pulau Batek. If Indonesia insists on full effect to Pulau Batek, it could potentially lay itself open to accusations of inconsistency with regard to some of its other maritime claims, notably with regard to Malaysia in the Celebes Sea.

A more elegant and potentially advantageous approach for Indonesia would be to amend, in fact complete, its archipelagic baseline system: At present, Indonesia's archipelagic baselines adapted from Law No 4/Prp/1960 have minimal impact on delimitation in the Ombai Strait area. This is because baselines were only specified linking Pulau Alor and Pulau Pantar. The close alignment of the declared baselines to the configuration of these coasts means that they have no significant influence on an equidistance line between opposite coasts. Simply defining an archipelagic baseline between Pulau Alor and the West Timor–East Timor land boundary terminus on the coast would seem to run afoul of LOSC Article 47(5) (see below) by cutting off East Timor's Oecussi territory within Indonesian archipelagic waters.

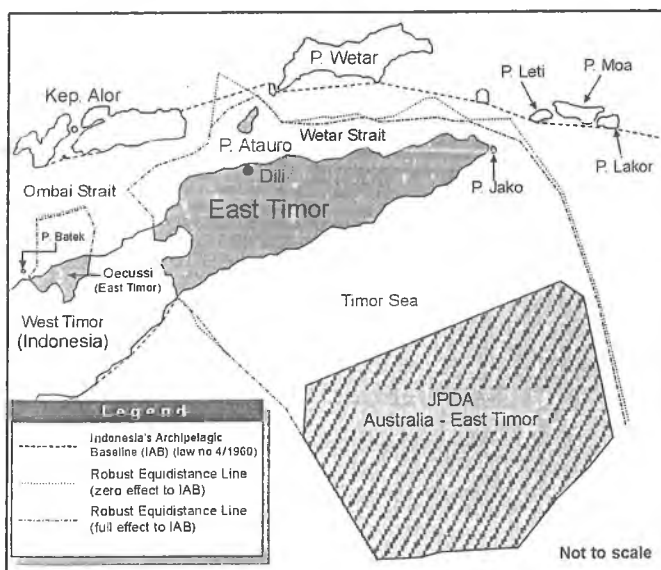
If Indonesia was to designate additional archipelagic baseline segments, for instance linking Pulau Pantar to the West Timorese coast in the vicinity of the land boundary terminus at Noel Besi via Pulau Batek, however, these could have a significant impact on an equidistance-based delimitation line, restricting East Timor's maritime claims from Oecussi (see Figure 2). Although East Timor would be likely to resist such a move in negotiations, Indonesia would appear to be within its rights and the terms of the LOSC

in defining such baselines. This is because Article 47 of the LOSC, which provides the rules governing the definition of archipelagic baselines, allows that archipelagic states 'may draw straight archipelagic baselines joining the outermost points of the outermost islands and drying reefs of the archipelago' so long as a series of conditions, all of which Indonesia's claim in this area fulfils, are met.

Delimitation in the Wetar Strait

In the Wetar Strait there is a requirement for an adjacent territorial sea delimitation out to 12 nautical miles between the main part of East Timor and West Timor starting from the terminus of the land boundary on the coast at Mota Biku. Beyond 12 nautical miles from the relevant baselines an adjacent continental shelf/EEZ will be required. However, the main part of the delimitation through the Wetar Strait will consist of the definition of both a territorial sea and continental shelf/EEZ boundary between the northern coast of East Timor and Indonesia's Wetar Island.

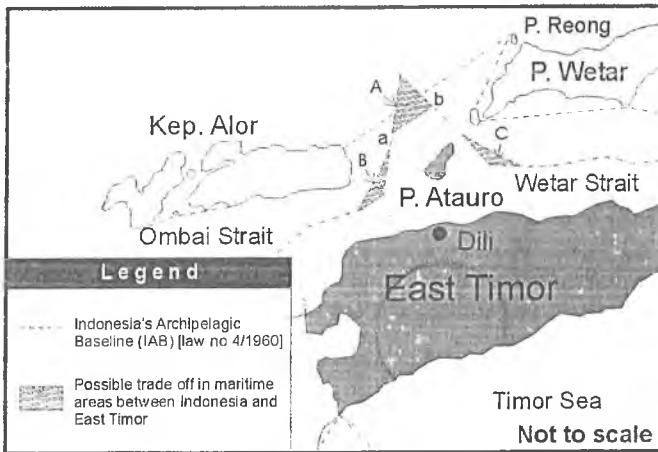
Figure 3: Potential maritime delimitation based on strict equidistance



The key points of contention for this part of East Timor's maritime boundaries with Indonesia are likely to be the influence of Indonesia's archipelagic baselines and the presence of East Timor's Pulau Atauro (Pulau Kambing) in the central part of the strait. As can be seen from Figure 3, Indonesia's archipelagic baselines, especially the segment linking Pulau Wetar to Pulau Alor, are problematic for East Timor. If used to construct a strict equidistance line, this section of Indonesia's archipelagic baselines serves to severely curtail East Timor's maritime entitlements northwards from Pulau Atauro.

Arguably, such a situation would seem to contravene Article 47(5) of the LOSC, which provides that archipelagic baselines ‘shall not be applied by an archipelagic State in such a manner as to cut off from the high seas or the exclusive economic zone the territorial sea of another State’. This is because, on the basis of strict equidistance from normal baselines, Pulau Atauro could generate maritime claims to the north to a distance of approximately 23 nautical miles. Such a claim would therefore include a relatively small area of continental shelf and EEZ jurisdiction, which the Indonesian archipelagic baselines would cut off East Timorese access to. In order to overcome this problem, Indonesia could opt to redraw its archipelagic baselines in this area. A counter-argument can, however, claim that Article 47(5) has not been breached—the current alignment of Indonesia’s archipelagic baselines does not, after all, cut the East Timorese territorial sea surrounding Pulau Atauro from other parts of East Timor’s EEZ. Being zone-locked, East Timor cannot, in any case, access the high seas proper without passing through the EEZ of Australia or Indonesia.

Figure 4: Options for maritime delimitation in the Wetar Strait



Farther to the west in the Wetar Strait it is also clear that Indonesia’s archipelagic baselines have a significant impact as compared with an equidistance line generated from ‘normal’ baselines. East Timor is likely to argue that Pulau Atauro should be accorded full weight in the delimitation in this area and for a delimitation based on normal baselines. Indonesia is likely to stand by the validity of its archipelagic baselines as a basis for an equidistance line-based solution, despite the cut-off effect in the vicinity of Pulau Atauro. Reaching final agreement in this area will therefore require compromise between the parties’ contending positions. The two sides’ claims do not, however, appear to be absurdly far apart from one another.

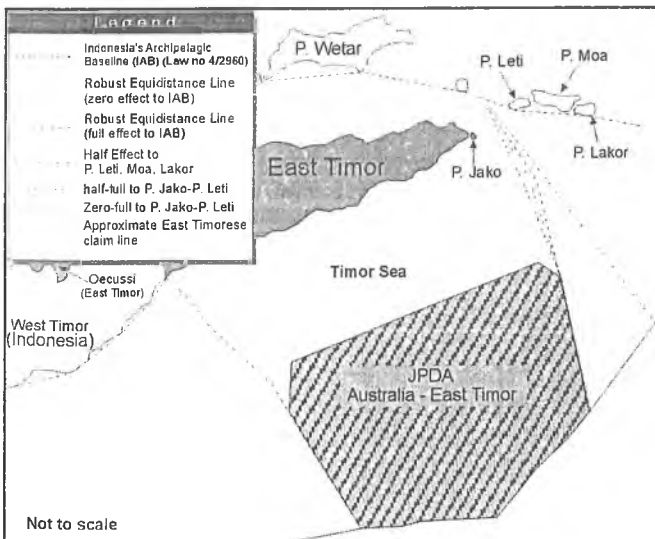
As previously mentioned, Indonesia could opt to redraw its baseline segment to the north of Pulau Atauro. Instead of drawing a line connecting Pulau Alor and Pulau Wetar,

the segment could instead join Tg Manamoni (Pulau Alor) to Pulau Reong. As Pulau Reong is an islet to the north-west of Pulau Wetar, this option would serve to shift Indonesia's archipelagic baselines segment to the north. Between this new baseline segment and Pulau Atauro, a median line could then be drawn by giving a non-full (for instance, half) effect to the Indonesian baseline segment. Figure 4 illustrates this scenario and suggests a possible trade off in maritime areas whereby East Timor's potential maritime area beyond line a-b (area A) would be conceded to Indonesia, with East Timor being compensated with areas B and C, which lie on the Indonesian side of a strict median line. Area A covers 300 square kilometres, while areas B and C are 100 square kilometres and 200 square kilometres respectively. Therefore, the area traded off between Indonesia and East Timor is equivalent—an area-compensated solution. However, the size of the area traded off is not the only issue. Both sides should also be seriously concerned with the economic and security factors involved in these options.

Delimitation in the Timor Sea

In the Timor Sea adjacent territorial sea and continental shelf/EEZ delimitations are required between the southern East Timor–West Timor land boundary terminus located at Mota Masin, as well as between the east side of Timor Island between East Timor's Jako Island and Indonesia's Leti, Moa and Lakor Islands. The latter delimitation will initially be between opposite coasts but as it proceeds offshore into the Timor Sea it will swiftly acquire an adjacent character. Finally, a delimitation between overlapping continental shelf and EEZ entitlements between the opposite coasts of East Timor and Australia is required (see above).

Figure 5: Options for maritime delimitation in the Timor Sea



In the context of its negotiations with Australia in the Timor Sea, East Timor has argued that there is justification for a departure from equidistance in respect of its lateral boundaries with Indonesia, with a view to widening its 'window' on the Timor Sea. It has been argued that East Timor can justifiably depart from strict equidistance for its lateral boundaries with Indonesia in the Timor Sea context because the Indonesian coast to the east and west is 'salient in relation to the general direction of East Timor's façade' and that, as such, the flanking Indonesian coasts create an 'unreasonable cut-off effect', inequitably squeezing East Timor's maritime claims based on strict equidistance (Antunes 2003:383).

East Timor's lateral boundary claims are likely to represent a serious potential source of contention in maritime boundary delimitation negotiations with Indonesia. Figure 5 illustrates a suite of hypothetical equidistance lines extending into the Timor Sea. With regard to the eastern delimitation line, the key question relates to the weight to be accorded to islands—particularly Pulau Jako on the East Timorese side and Pulau Leti, Pulau Moa and Pulau Lakor on the Indonesian side. It is conceivable that Indonesia will argue for a delimitation consistent with the limits of the previous, and now defunct, agreement made with Australia relating to the Timor Gap (see above).

The reality is that assigning different weights or effects to the neighbouring islands of Indonesia's Pulau Leti and East Timor's Pulau Jako only influences the initial part of the eastern lateral segment as it proceeds south, in fact up to a point to the north of the JPDA north-eastern corner. The eastern lateral line is significantly shifted eastward only if Pulau Moa, Pulau Lakor and Pulau Meatimearang are also discounted. Indeed, as can be seen from Figures 1 and 5, East Timor's claim line relies on this approach, appearing to be consistent with one giving half effect to Pulau Leti, Pulau Moa and Pulau Lakor.

Antunes (2003:383–4) argues that the impact of these islands on the equidistance line is 'clearly unreasonable'. Similarly, Lowe, Carleton and Ward (2002) call for these Indonesian islands to be accorded a half or perhaps three-quarters effect. In contrast, Prescott has observed that 'there are no grounds for discounting any of the Indonesian islands such as Pulau Leti', which have been part of the Indonesian archipelagic baseline system since 1960 (Prescott 2004). Thus, each side's potential claims partially discount the other's islands while giving full effect to their own. Robust equidistance lines giving full and zero effect to Indonesia's archipelagic baselines, unsurprisingly, fall between the two extremes.

Concerning the western delimitation originating from the terminus of the land boundary on the southern coast of Timor Island at Mota Masin, a robust equidistant line is consistent with the western limit of the JPDA and this is likely to form the basis of Indonesia's claim. In this context Indonesia's archipelagic baselines have a relatively minor impact on the course of the hypothetical equidistance line and, even then, only close inshore. As previously noted, East Timor argues that it should gain some relief from the way in which the coast of Indonesian West Timor pushes a strict equidistance line eastwards, inequitably curtailing East Timor's maritime claims. East Timor therefore maintains that the lateral delimitation line here should depart from equidistance and instead extend into the Timor Sea significantly to the west of the theoretical equidistance line-based solution. East Timor's claim appears to be based on the construction of a line perpendicular to the general direction of the coast of the island of Timor. As is the case for the eastern adjacent

boundary in the Timor Sea, East Timor justifies this departure from strict equidistance on the basis that a boundary delimited 'according to international case law' would result in lateral boundaries that would deliver to East Timor 'a significantly wider area than the Timor Sea Treaty area' (TSO 2005). Prescott has acknowledged the fact that, although East Timor's coastal front on the Timor Sea stretches for approximately 140 nautical miles, the lateral equidistance lines are only 120 nautical miles apart in the central Timor Sea. Nonetheless, Prescott maintains that, 'there do not seem to be any strong arguments supporting the view that median lines between Indonesia and East Timor in the Timor Sea are inequitable' (Prescott 2004).

There is therefore a considerable potential overlap between East Timor's claims in the Timor Sea and Indonesia's likely claims, and much to negotiate. It is worth observing in this context that East Timor articulated its lateral boundary claims in this area primarily with Australia and access to the seabed resources of the central part of the Timor Sea in mind. The conclusion of an Australia–East Timor agreement deferring maritime boundary delimitation until these seabed resources have been exhausted may significantly reduce East Timor's need to maintain its present lateral boundary claims in discussions with Indonesia, offering the East Timorese side greater flexibility and therefore enhanced potential to reach a mutually acceptable agreement.

Prospects

A co-operative agreement between Australia and East Timor, which will defer delimitation of the potential maritime boundary between their opposite coasts but provide for more equitable sharing of the revenues derived from seabed resources, is now in force. The agreement delivers to each side their key requirements. For Australia this means safeguarding existing delimitation agreements with Indonesia in the Timor Sea, retaining access to the seabed resources of the Timor Sea, and providing continued legal and fiscal certainty to oil companies operating there. Australia will also remove an embarrassing dispute with a newly independent neighbouring, developing state that has resulted in considerable international criticism of Australia's conduct (Schofield 2005b:263–4). For East Timor, despite the reservations of some commentators, the agreement will deliver a significantly increased share in the resource benefits to be extracted from the Timor Sea, something that can be considered as vital to the future development and viability of East Timor as an independent state. It is worth observing here that Australia's withdrawal from the jurisdiction of the International Court of Justice and LOSC dispute-settlement provisions in respect of the delimitation of maritime boundaries meant that East Timor had little choice but to negotiate a settlement with Australia and, in that context, appears to have negotiated relatively successfully. Additionally, considerable downstream benefits will flow to either Australia or East Timor depending on the final decision to pipe gas onshore to Darwin or Dili for processing.

With regard to the delimitation between East Timor and Indonesia, negotiations have yet to get underway. While there is clearly potential for dispute, there is also potential for compromise and the eventual conclusion of an agreement between Australia and East Timor must be considered as a positive factor facilitating negotiations between East Timor and Indonesia in the Timor Sea. It is clear that East Timor and Indonesia

have multiple potential boundary situations. In this context it is well to recall the maxim in negotiations that 'nothing is agreed until everything is agreed' (Prescott & Schofield 2005:325). There is therefore great scope for flexibility and trade-offs in seeking a pragmatic boundary line that fulfils each state's key objectives. Ultimately, however, it is up to the two governments concerned whether they have the political will to reach a mutually acceptable compromise.

Notes

- 1 For an unofficial English language translation of East Timor's MZA, see TSO (2005).
- 2 Article 9 of the MZA states that East Timor claims continental shelf to a distance of 200 nautical miles 'or the outer edge of the continental margin, where the continental margin extends beyond two hundred miles from the baseline'. East Timor's geographical circumstances dictate that its continental shelf rights will not extend beyond 200 nautical miles from the coast as a result of overlapping 200-nautical mile maritime entitlements with neighbouring states.
- 3 Australia ratified the LOSC on 5 October 1994, while Indonesia did so on 3 February 1986 (see www.un.org/Depts/los/reference_files/status2006.pdf).
- 4 In the subsequent 1981 and 1997 Australia–Indonesia agreements relating to a Provisional Fisheries Surveillance and Enforcement Line and EEZ delimitation, the water column boundary is largely an equidistance-based line in the Timor Sea. However, Australia retains jurisdiction over the seabed out to the 1972 line (Charney & Alexander 1993:1229–43; Charney & Smith 2002:2697–727).
- 5 Covering an area of 60,500 square kilometres, the Timor Gap arrangement was divided into three sub-zones. The initial duration of the agreement was 40 years, to be followed by successive terms of 20 years. Additional detailed regulations were added in 1991 (see Fox et al 1989; Fox 1990; Charney & Alexander 1993:1245–328). For the treaty text, see www.un.org/Depts/los/legislationandtreaties.htm.
- 6 Australia and UNTAET entered into an Exchange of Notes whereby UNTAET, on behalf of East Timor, assumed all the rights and responsibilities previously held by Indonesia in respect of the Timor Gap joint zone. A Memorandum of Understanding was also concluded, which ensured continuity in terms of the legal regime, production-sharing contracts, Ministerial Council and Joint Authority established under the Timor Gap treaty (Charney & Smith 2002: 2753–95).
- 7 Timor Sea Treaty (Dili, 20 May 2002, entry into force 2 April 2003). For the treaty text, see www.un.org/Depts/los/legislationandtreaties.htm.
- 8 Estimates of the value of the oil and gas reserves of the Timor Sea vary considerably and it is frequently unclear precisely which areas are being referred to. Nevertheless, figures in the broad range of US\$20–40 billion are commonplace in media reports.
- 9 For the treaty text, see www.un.org/Depts/los/legislationandtreaties.htm.
- 10 Comment made at a symposium on 'Strategic directions for Australia and the Law of the Sea' held at the Australian Department of Foreign Affairs and Trade, Canberra, 16 November 2004.
- 11 For treaty text, see www.laohamutuk.org/Oil/Boundary/CMATS%20text.htm. See also comments of the Australian Prime Minister (Howard 2006).
- 12 For example, see the statements made by the Timor Sea Justice Campaign (www.timorseajustice.org), the East Timor Institute for Reconstruction Monitoring and Analysis (www.laohamutuk.org) and East Timor and Indonesia Action Network/US (www.etan.org).
- 13 The chart was obtained in raster format and georegistered using the Affine Transformation Model using adequate numbers of pairs of co-ordinates. Technically, the georegistration was achieved using the image registration feature of the CARIS LOTS software that also produced the root mean square (RMS) error as an indicator of georegistration quality. The georegistered raster was then overlaid with the World Vector Shoreline obtained from the United States National Imagery and Mapping Agency.