

Unlocking the Seabed Resources of the Gulf of Thailand

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Overlapping claims to maritime jurisdiction are a key feature of the Gulf of Thailand. These competing claims have resulted from the Gulf's relatively small dimensions and complex coastal geography, allied to maximalist claims on the part of the coastal states. The Gulf of Thailand also represents a proven source of seabed oil and gas and this factor has contributed to making maritime boundary delimitation agreements difficult to achieve. In order to overcome deadlock in negotiations over maritime boundaries, the Gulf of Thailand states have repeatedly opted to create maritime joint development zones in order to exploit hydrocarbon resources believed to be located in areas of overlapping claims. This remarkable concentration of state practice on maritime joint development is reviewed here and the prospects for further such provisional arrangements of a practical nature are examined.

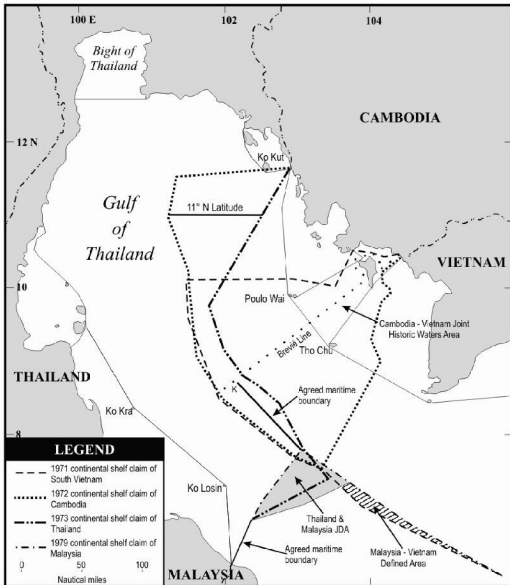
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The Gulf of Thailand is a semi-enclosed arm of the South China Sea bounded by Cambodia, Malaysia, Thailand and Vietnam. In addition to 12 nautical mile (nm) breadth territorial seas, all the Gulf of Thailand littoral states have made claims to extended zones of maritime jurisdiction, that is, to continental shelf and exclusive economic zone (EEZ) rights, in accordance with the United Nations Convention on the Law of the Sea (UNCLOS) (United Nations 1983).¹

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The Gulf's limited size means that no coastal state can claim a full 200 nm EEZ entitlement. This has led to extensive overlaps between competing claims to maritime jurisdiction. These conflicting claims have been exacerbated by complex coastal geography, particularly the presence of numerous islands, islets and rocks, some of which have been subject to sovereignty disputes. Moreover, excessive claims to straight baselines, claims based on dubious treaty interpretations, and differing, self-serving, applications of equidistance as a method of constructing unilateral claim lines have complicated the jurisdictional picture. Consequently, multiple overlapping claims to the same maritime space have been advanced — a case of overlaps of overlaps (see Figure 1).

Figure 1
 Claims to Maritime Jurisdiction in the Gulf of Thailand



SOURCE: Andi Arsana.

The delimitation of maritime boundaries in the Gulf of Thailand has therefore proved particularly problematic. Indeed, the only maritime boundaries to be delimited to date have been a territorial sea border and relatively short, partial, section of continental shelf boundary between Malaysia and Thailand concluded in 1979 (Charney and Alexander 1993, pp. 1096–98 and 1105–07) and a delimitation concerning continental shelf and EEZ rights in the central Gulf reached between Thailand and Vietnam in 1997 (Charney and Smith 2002, pp. 2683–94).² In this context it is also worth noting that the overarching political context has often militated against negotiations towards maritime boundary delimitation. For instance, prior to the end of the Cold War such discussions, or indeed any negotiations, between broadly Western-oriented Malaysia and Thailand and communist Cambodia and Vietnam were off the agenda.

With regard to maritime boundaries, the presence, or perceived presence, of seabed hydrocarbon resources has further complicated the picture. The Gulf of Thailand is an established oil and, particularly, gas province and large areas of prospective seabed fall within zones of overlapping maritime claims. The possible presence of resources and the desire to gain access to them can play a dual role in maritime boundary delimitation. On the positive side, this can encourage states to reach swift agreement so that exploration and exploitation can commence with minimum delay. Conversely, such considerations can encourage coastal states to make, and stubbornly cling to, maximalist claims unlikely to be acceptable to their neighbours. Furthermore, the hydrocarbon resource potential of an overlapping claims area, coupled with the lack of certainty over the precise location of resources, may also inhibit either side from defining a single compromise line for fear of subsequently discovering that the resources in question fall on the “wrong” side of the line. Rather than delimiting maritime boundaries, therefore, the Gulf of Thailand coastal states have instead repeatedly opted to enter into joint arrangements in order to manage their substantial areas of overlapping claims and, crucially, to facilitate access to the seabed hydrocarbon resources of the Gulf.

This article will provide a brief overview of the legal and geographical factors relevant to maritime boundary delimitation as a prelude to an examination of this remarkable concentration of state practice on maritime joint development. The considerable contrasts between the joint arrangements in question will be explored. The potential for the application of further maritime joint development zones to extant zones of overlapping claims will then be examined.

Maritime Boundary Delimitation and Joint Development

Where overlapping claims to territorial seas require delimitation, Article 15 of the United Nations Convention on Law of the Sea (UNCLOS) applies. This article calls for the application of a median line, failing agreement to the contrary or the existence of a “historic title or other special circumstances” in the area to be delimited. In the absence of agreement on a different line or the presence of these factors, therefore, the equidistance method for constructing a delimitation line is favoured. However, no preferred method of delimitation is indicated with regard to the extensive resource-oriented zones of sovereign rights, the continental shelf and EEZ. Articles 74(1) and 83(1) of UNCLOS, dealing with the delimitation of the EEZ and continental shelf respectively, simply call, in identical terms, for delimitation to be effected through agreement on the basis of international law “in order to achieve an equitable solution”. On the one hand this affords coastal states greater flexibility in their task of achieving maritime boundary delimitation agreements with their maritime neighbours. On the other, this lack of guidance as to a preferred method of delimitation gives rise to great potential for uncertainty, conflicting interpretations and thus maritime boundary disputes. Although no particular method of delimitation is recommended, it is clear that in practice the equidistance method has proved far and away the most popular method of delimitation, for example providing the basis for 89 per cent of delimited maritime boundaries between opposite coasts (Prescott and Schofield 2005, p. 238).

Where deadlock in maritime boundary delimitation negotiations does occur, UNCLOS provides clear encouragement for coastal states to reach interim, cooperative, arrangements. Articles 74(3) and 83(3) relating to delimitation of the EEZ and continental shelf both state that:

Pending agreement ... the States concerned, in a spirit of understanding and cooperation, shall make every effort to enter into provisional arrangements of a practical nature and, during this transitional period, not to jeopardise or hamper the reaching of a final agreement. Such agreements shall be without prejudice to the final delimitation.

This provides the international legal rationale for the creation of maritime joint development zones. In the Gulf of Thailand context it is also important to acknowledge that Article 123 of UNCLOS contains a clear obligation for states bordering enclosed and semi-enclosed seas to co-operate.³ It is against this backdrop that the Gulf of Thailand

littoral states have entered into three such “provisional arrangements of a practical nature” — between Malaysia and Thailand, Cambodia and Vietnam, and Malaysia and Vietnam (see also Ong 1999, pp. 210–22).

The Malaysia — Thailand Joint Development Area

As noted, Malaysia and Thailand reached agreement on a territorial sea boundary and part of their potential continental shelf boundary in the Gulf of Thailand in 1979. Beyond a point around 29nm offshore, however, delimitation negotiations between Malaysia and Thailand reached a stalemate. The key reason for this deadlock was a dispute concerning the status of an offshore insular feature, Ko Losin, and its potential impact on claims to maritime jurisdiction.

Ko Losin is located approximately 39nm offshore and is a steep-to rock approximately 1.5 m (5 ft) above high-water with a light-beacon sited on it (Charney and Alexander 1993, p. 1100). Although Thailand did not itself give Ko Losin full effect in the construction of its unilateral 1973 continental shelf claim, in the context of delimitation negotiations with Malaysia in the 1970s Thailand appears to have insisted on Ko Losin being treated as a fully-fledged island in accordance with UNCLOS Article 121(2). This provides that islands, in an identical fashion to mainland coasts, are capable of generating a full suite of maritime zones.⁴ This being the case, Thailand argued that Ko Losin be accorded full-effect in the construction of a potential delimitation line. In contrast, Malaysia appears to have insisted that this small and isolated feature is no more than a “rock” within the meaning of Article 121(3) of UNCLOS which states that “Rocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf”. Uncertainties over how a “rock” is to be distinguished from an island proper contributed to deadlock on this issue and resulted in a substantial overlap in the parties’ respective claims to continental shelf (see Figure 1).⁵

In the face of these competing claims to areas of continental shelf thought to be highly prospective for oil and gas resources, coupled with both parties’ reluctance to compromise on those claims, the parties eventually agreed to differ and proceed with joint development of seabed resources. Malaysia and Thailand thus agreed to establish a jointly administered zone, encompassing the overlapping claims area. The parties did, however, expressly reserve their original positions and the agreement concluded between them is at pains to stress that both governments remain committed to continuing the search for delimitation agreement.

As a result, on 21 February 1979 the two sides signed a *Memorandum of Understanding between the Kingdom of Thailand and [the Republic of] Malaysia on the Establishment of a Joint Authority for the Exploitation of the Resources of the Sea-Bed in a Defined Area of the Continental Shelf of the Two Countries in the Gulf of Thailand* (Charney and Alexander 1993, pp. 1107–11). The objective of the Joint Development Area (JDA) so created is “for the purpose of the exploration and exploitation of the non-living natural resources of the sea-bed and subsoil in the overlapping area for a period of fifty years” from when the MoU enters into force (Article III).

The MoU essentially serves to lay out the basic principles for joint development. The MoU includes a definition of the JDA through a list of geographic coordinates describing a wedge-shaped pentagon that encompasses an area of 2,110 nm² (7,238 km²) and outlines how the JDA is to be governed. These provisions include the establishment of the Malaysia-Thailand Joint Authority. A proviso that the Joint Authority’s powers would have no bearing on pre-existing concessions granted in the area was, however, included. It was also stipulated that all costs and benefits resulting from Joint Authority-inspired activities in the joint development area would be equally borne and shared by the parties and that if hydrocarbon deposits were to be discovered straddling the limits of the joint zone, the Joint Authority would consult with other concerned parties with a view to the effective exploitation and equitable sharing of the deposits.

With regard to issues such as fishing, navigation, hydrographic and oceanographic surveys, the prevention of marine pollution and “other similar matters”, both Malaysia and Thailand’s rights and regulatory powers “shall extend to the joint development area” (Article IV(1)) The goal of a “combined and co-ordinated security arrangement” within the joint zone was also raised here (Article IV(2)). For the purposes of determining criminal jurisdiction, however, the JDA was divided into Thai and Malaysian sectors but it was unambiguously stated that this was without prejudice to either state’s claims.⁶

The duration of the arrangement was set at 50 years. However, should a delimitation agreement be achieved, the MoU provides for the Joint Authority to be wound up and its liabilities/assets split equally between the parties. Alternatively, if no boundary agreement has been reached after the passage of 50 years, the joint arrangement will continue indefinitely. It was also agreed that any dispute over the MoU’s terms or their implementation “shall be settled peacefully by consultation or negotiation” between the two sides (Article VII).

The MoU was duly ratified, entered into force and the Joint Authority established on 24 October 1979.

The 1979 Thai-Malaysian MoU is, therefore, a relatively concise document, comprising eight articles, which essentially serves to lay out the basic principles for joint development. A further agreement was necessary in order to put the terms of the MoU on joint development into practice. This was achieved on 30 May 1990 with the conclusion of the *Agreement between the Government of Malaysia and the Government of the Kingdom of Thailand on the Constitution and Other Matters Relating to the Establishment of the Malaysia-Thailand Joint Authority* (Charney and Alexander 1993, pp. 1111–23).

The 1990 Agreement does not alter the fundamental elements of joint development as laid out in the 1979 MoU. Consequently, the scope of the area to be subject to joint development, the overall purpose of the arrangement, the principle of the equitable sharing of costs and proceeds from joint activities, and the commitment to the peaceful resolution of disputes remain unchanged. Instead, the 1990 Agreement builds on the framework laid out in 1979, establishing detailed rules and regulations concerning key practical issues. It is therefore a much weightier document than its MoU predecessor, consisting of 22 articles divided into seven distinct chapters. The issues dealt with in the 1990 Agreement include: the legal status and organisation of the Joint Authority (Chapter I); its powers and functions (Chapter II); financial matters (Chapter III); regulations governing the Joint Authority's relations with other organisations (Chapter IV); and, issues such as customs and excise and taxation (Chapter VI).

Why, however, was there such a long delay between signing the MoU on joint development in 1979 and the implementing agreement in 1990? This hiatus of just over 11 years is attributable to a variety of, often inter-related, factors. In particular, the political will required to forge ahead with implementing joint development appears to have been lacking. Townsend-Gault (1990a, pp. 102–104) has observed that even though the 1979 agreement has all the characteristics one might expect of a binding bilateral treaty, the choice of terminology applied to it — a memorandum of understanding rather than a fully fledged treaty — is instructive and indicates less than whole-hearted commitment to the agreement on the part of the governments concerned.

Changes in government in both countries that led to the departure of the very prime ministers who signed the MoU also undermined commitment to enacting the terms of the agreement. Political backing for the joint development arrangement was also adversely affected

by the impact of issues unrelated to continental shelf delimitation on bilateral relations. The most significant of these were disputes over fishing rights, which inevitably had a negative impact on bilateral relations and hampered the emergence of a political climate conducive to carrying the joint development scheme through to fruition.

Further difficulties arose in relation to dealing with concessions previously granted by the parties within the zone defined as the joint development area. In particular, the Thai authorities became embroiled in commercial disputes with two oil companies already operating under licence in areas set to become part of the JDA. These disputes led to complications and delay as far as implementing the joint development MoU was concerned (Valencia 1985, pp. 39–40 and 1986, pp. 677–78; see also, Townsend-Gault 1990*b*). Furthermore, the parties also had to reconcile their differing approaches to managing the exploration and exploitation of resources on the continental shelf. Malaysia applied the production-sharing contract approach while Thailand adopted the more traditional concession-based system (Townsend-Gault 1990*a*, pp. 105–106). This issue led to additional dispute between the Thai Government and one of its concerned concessionaires and thus further delays (Ong 1991, p. 60).

Ultimately, the desire for access to the resources outweighed all the obstacles encountered. Indeed, exploration efforts within the JDA have proved successful, yielding several commercially viable discoveries. However, significant challenges remain in respect to bringing the gas extracted from within the JDA onshore via the controversial Thai-Malaysian Pipeline project. This project, which includes the construction of a gas-separation plant as well as on and offshore pipelines, has excited considerable opposition among coastal communities, particularly in southern Thailand, concerned over environmental pollution and potential social and cultural impacts. As a result the project has repeatedly been delayed (Schofield and Tan-Mullins, forthcoming).

Cambodia — Vietnam: Joint Historic Waters

On 7 July 1982 the governments of Phnom Penh and Hanoi signed an *Agreement on Historic Waters of Vietnam and Kampuchea* which laid claim to a roughly oblong-shaped area of maritime space projecting into the Gulf of Thailand offshore the two states' border provinces on the coast (Charney and Alexander 1998, pp. 2364–65) (see Figure 1). The maritime space within the limits of the specified zone are jointly claimed as "historic waters", presumably with analogous characteristics

to the maritime areas within historic bays, and encompasses an area of approximately 4,000 nm² (13,720 km²) (Article 1) (Charney and Alexander 1998, p. 2359).

Although no maritime boundary delimitation was effected through the agreement, future negotiations on this issue are anticipated “at a suitable time” in the future (Article 2). Pending settlement of the maritime boundary between them, the third and final article of this concise agreement includes commitments to undertake joint surveillance and patrolling in the historic waters area, allow local fishermen to continue their operations in the joint area “according to the habits that have existed so far”, and conduct the exploitation of natural resources within the joint area through “common agreement” (Article 3). It remains unclear, however, the extent to which such joint activities have subsequently taken place, although a recent announcement indicated that joint surveys aimed at locating seabed resources would be launched.⁷

The preamble to the agreement seeks to justify the parties' claim to historic waters on the grounds that due to their “special geographical conditions and their great importance for the national defence and economy of both countries” these waters “have long belonged” to the two states. It has been argued that the key requirements for a valid claim to historic waters include the demonstration of “open, effective, long-term, and continuous exercise of authority over the body of water, coupled with acquiescence by foreign States to the exercise of that authority” (Roach and Smith 1996, p. 31). Accordingly, the vast majority of claims to the regime of historic waters concern bays surrounded by the declaring state on three sides and thus very closely linked to that state.

The Cambodia-Vietnam claim, encompassing an area reaching from the mainland coast seawards to be bounded by offshore islands, is unique and can be considered to be extremely hard to justify in the context of customary international law relating to historic waters. Cambodia and Vietnam's claim only emerged relatively recently, in 1982, which undermines its validity on historical grounds. Furthermore, the fact that the zone's outer limits are approximately 60nm (110 km) offshore makes claims on the part of Cambodia and Vietnam that they have consistently and effectively exercised jurisdiction throughout the area claimed, problematic to say the least. The Cambodia-Vietnam claim has also been questioned on the basis that Vietnam's 1978 invasion of Cambodia was illegal and thus the government in Phnom Penh, which signed the 1982 Joint Historic Waters Agreement, was itself illegitimate (Kittichaisaree 1987, p. 43). Although prior to the UN's intervention in Cambodia, opposition parties tended to denounce

agreements of this era, Cambodia and Vietnam's subsequent practice has given every indication that the Joint Historic Waters agreement remains in force.

A number of other states have, perhaps unsurprisingly, taken exception to the Cambodian-Vietnamese agreement and issued formal diplomatic protest notes, thereby demonstrating that they have not acquiesced to the claim. For example, Thailand protested against the agreement in a note to the UN Secretary General on 9 December 1985, stating that Cambodia and Vietnam's claims "cannot be justified on the basis of the applicable principles and rules of international law" (United Nations 1986, p. 111). Similarly, in a note to the UN Secretary General, dated 17 June 1987, the United States Government protested against the Cambodian-Vietnamese claim on the basis of its recent character and for lack of evidence of effective exercise of authority by the claimants over the waters concerned. The protest note concluded that the United States did not acquiesce to the claim nor could the international community be said to have done so (United Nations 1987, p. 23; see also Roach and Smith 1996, pp. 39–40).

The conclusion of the Cambodia-Vietnam Joint Historic Waters Agreement helped to facilitate the integration of the parties straight baseline systems. The two baseline systems meet at "Point O" on the southwestern limit of the historic waters area. The precise location of this point was not specified but was to be determined by mutual agreement in the future (Article 3). This arrangement was criticized by the United States (Roach and Smith 1996, pp.128–29). However, the designation of a "floating" point to connect two separate straight baseline systems is unusual but not unique (Prescott 1998, pp. 26–27).

Regardless of the peculiar nature of the joint area claimed and the questionable nature of the straight baseline issue associated with its limits, perhaps the most important aspect of the Cambodia-Vietnam Joint Historic Waters Agreement was that it served to resolve what had been a contentious dispute over island sovereignty. The agreement provides that the parties would "continue to regard the Brevié Line drawn in 1939 as the dividing line for the islands in this zone" (Article 3). The Brevié Line, defined by French Indochina's Governor-General Jules Brevié, to determine administrative control over islands, confirmed a number of small islands in close vicinity to and "scattered along the coast" as Cambodian, the large island of Phu Quoc as belonging to Cochín China (Vietnam) and further defined a dividing line following "a 140 grad angle with the north meridian". This equates to an international bearing of 234° (see Figure 1).⁸

Applying this line to determine sovereignty places the Poulo Wei group of islands under Cambodian jurisdiction while Phu Quoc and the Tho Chu (Poulo Panjang) group of islands come under Vietnamese jurisdiction. While this distribution of islands is clearly advantageous to Vietnam, it has been noted that this was consistent with the occupation of the disputed features by the two sides at the time (Charney and Alexander 1998, p. 2358). Both Cambodia's and Vietnam's claims to continental shelf as expressed in declarations dating from the 1970s were based on the contention that each had exclusive sovereignty over all these island groups. Implicitly at least, therefore, the Joint Historic Waters Agreement serves to substantially reduce the area of overlap between Cambodia and Vietnam's maritime claims (even though their continental shelf claims have not formally been revised).

As noted, no maritime boundary line was established through the 1982 Cambodia-Vietnam Joint Historic Waters Agreement and the precise position of "Point O" was also left undefined. However, there have subsequently been indications that these have now been fixed, at least on a preliminary basis. Indeed, when Thailand and Vietnam concluded a maritime boundary agreement in the central Gulf of Thailand in 1997, the north-western terminus of this line (Point K) was defined as being, "... situated on the maritime boundary between the Socialist Republic of Vietnam and the Kingdom of Cambodia" and specified the precise location of "Point O" through geographic coordinates (Charney and Smith 2002, pp. 2683-94).⁹ As Prescott dryly notes, this "might come as a surprise to the Cambodian authorities" (1998, p. 41). On 17 February 1998 Cambodia duly issued a formal protest note to both Thailand and Vietnam which stated that "Cambodia has never agreed to" a maritime boundary with Vietnam and emphasized that "all provisions" of the Thai-Vietnamese boundary treaty are "without prejudice with respect to Cambodia".

Malaysia — Vietnam: Joint "Defined Area" Agreement

Malaysia and Vietnam's claims over the continental shelf overlap between their opposite coastlines. The area of overlapping claims consists of a long but narrow strip of maritime space extending from the northeastern corner of the Thai-Malaysian joint development area in a southeasterly direction beyond the limits of the Gulf of Thailand and into the southwestern South China Sea. This overlap

is caused by the two sides' differing use of island basepoints rather than straight baseline considerations, which apparently played no part in determining the dimensions of the dispute. Malaysia constructed its 1979 claim giving full weight to its island basepoints but discounting the Vietnamese island of Hon Da as a legitimate basepoint.¹⁰ In contrast, (South) Vietnam's 1971 claim ignored all island basepoints and constructed a claim line based exclusively on mainland coasts.

A Memorandum of Understanding between Malaysia and the Socialist Republic of Vietnam for the Exploration and Exploitation of Petroleum in a Defined Area of the Continental Shelf Involving the Two Countries was signed on 5 June 1992 (Charney and Alexander 2004, pp. 2341–44). It is understood that the discovery of seabed resources by Malaysian contractors within the disputed zone played a key role in driving negotiations towards the agreement. The Defined Area is about 150 nm in length and is approximately 12 nm-wide at its broadest point. It has an area of 585 nm² (2,007 km²) (see Figure 1).

Under the terms of the MoU, Malaysia and Vietnam specifically agreed to “explore and exploit petroleum” in the Defined Area “pending delimitation of the boundary lines” in that zone (Article 2(1)). Where a hydrocarbon field is found to straddle the limits of the Defined Area it is simply provided that both parties shall develop the resources concerned on mutually acceptable terms (Article 2(2)) and it is also stated that all costs incurred and benefits derived are to be borne and shared equally by the parties (Article 2(3)). The two states nominated their respective national oil companies — Petronas for Malaysia and PetroVietnam for Vietnam — as the two governments' agents to undertake exploration and exploitation of petroleum in the Defined Area, though the terms and conditions of agreements between the oil companies were subject to governmental approval (Article 3).

The joint development arrangement is explicitly without prejudice to either state's position concerning their sovereignty claims to the whole of the Defined Area (Article 4), and it was stated that the delimitation of a boundary remains the long-term objective of the two states. In the eventuality of a dispute concerning the interpretation or implementation of the MoU, this would be settled “peacefully by consultation or negotiation” between the two sides (Article 6). The MoU entered into force through an exchange of diplomatic notes between the parties on 4 June 1993 with the duration of the arrangement set at 40 years.

Contrasting Zones

The Gulf of Thailand represents a remarkable concentration of state practice on maritime joint development. There are, however, substantial contrasts between the joint arrangements under discussion. Both the Thai-Malaysian JDA and Malaysian-Vietnamese "Defined Area" arrangements represent "classic" provision arrangements of a practical nature squarely within the meaning of UNCLOS Articles 74(3) and 83(3). As discoveries have been made in both areas and co-operative exploitation of seabed hydrocarbon resources is under way they can both be characterised as success stories.

These maritime joint development initiatives have therefore successfully side-stepped seemingly intractable delimitation disputes, facilitated seabed resource exploitation without undue delay and thus represent excellent examples of functional responses to shared resource management concerns. The conclusion of both joint zones has also served to circumvent the concerns associated with the delimitation of a final and binding maritime boundary line that the bulk of or all the resources in question might ultimately be located on the "wrong" side of the line. The agreements can also be viewed as fundamentally co-operative in nature and thus a contribution to conflict prevention (Schofield 2005, p. 105).

The Thai-Malaysian example does, however, provide a clear illustration of the importance of that somewhat nebulous factor "political will" in implementing a joint maritime arrangement where sovereign rights are being pooled. Stormont and Townsend-Gault (1995, p. 61) term this "the single most important ingredient in the successful conclusion and continuation" of any joint development arrangement. The same authors (1995, p. 52) argue that joint development should not be rushed into, simply because negotiations are deadlocked as:

The conclusion of any joint development arrangement, in the absence of the appropriate level of consent between the parties, is merely redrafting the problem and possibly complicating it further.

It will be recalled that it took over 11 years to convert their agreement in principle to a fully-fledged joint development agreement. It has taken even longer to reach the stage of exploitation of the resources concerned and the parties are still contending with difficulties over the pipeline project designed to bring the gas extracted to shore. Among the obstacles to progress was that of reconciling differing petroleum licensing systems with previously granted concessions and commercial disputes. Nevertheless, it is also fair to say that the delay was in part caused by a change in government in both countries,

bilateral disputes over issues such as fisheries and a distinct cooling in Thai enthusiasm for the deal on the grounds that Bangkok felt it deserved a bigger slice of the disputed area. Ong aptly terms Malaysia and Thailand's political commitment to the joint development project "intermittently coincidental" (1999, p. 221).

The Malaysian-Vietnamese MoU concerning their overlapping claims is a brief document that provides little in terms of institution-building or an organizational framework for joint development and it has been implemented swiftly. Indeed, the two governments specifically delegate their rights as far as petroleum exploration and development are concerned to their respective national oil companies, albeit while retaining the final say with regard to any agreements those companies might reach. This approach diverges substantially from the Thai-Malaysian case where implementation of joint development could only proceed in the wake of detailed agreements on all manner of institutional, organisational and procedural issues. The Malaysian-Vietnamese agreement represents a more streamlined approach to joint development which is unifunctional and sharply focused on facilitating petroleum exploration and exploitation at the earliest opportunity with the minimum of governmental participation or interference. This approach can perhaps be viewed as something of a reaction to the long delays which prevented the implementation of the Thai-Malaysian JDA.

The Cambodia-Vietnam Joint Historic Waters Agreement has a very different character to the two joint maritime development zones mentioned above. Its primary role appears to be political in nature, rather than being resource-oriented. The agreement is significant in terms of confirming sovereignty over islands that had previously been disputed and therefore, implicitly at least, much reducing the area of overlapping maritime claims between the parties. The agreement also facilitated the integration of the parties' straight baseline claims. The legal basis for both the Joint Historic Waters area is, however, highly dubious and subject to regional and international protests.

The final provisions of the Joint Historic Waters Agreement, concerning joint surveillance, fishing and resource exploitation within the zone, bear some similarities to the other joint zone agreements wholly or partially within the Gulf of Thailand. There are, however, significant differences between these joint zones and the Cambodian-Vietnamese joint area are firstly, that the former do not purport to claim extensive offshore areas as "historic waters". Moreover, unlike the other joint zones, although the Cambodian-Vietnamese zone is composed of areas of overlapping claims, it is not defined by such

claims. The limits of the zone bear no relation to the limits of the earlier continental shelf claims of the parties (Charney and Alexander 1998, p. 2359). Furthermore, the Cambodian-Vietnamese zone is multi-functional rather than unifunctional in nature, dealing with both fisheries and seabed resources and encompassing non-economic provisions such as joint patrolling and surveillance related to military and strategic issues.

Prospects for Further Joint Development

Although considerable progress has been made in terms of clarifying the jurisdictional picture and enhancing maritime management in the Gulf of Thailand through the agreements outlined above, large areas of overlapping claims remain. Any seabed resources that these areas may contain are highly unlikely to be developed in the absence of agreement among the parties concerned and thus the environment of fiscal and legal certainty required by international oil companies to protect their investments. What, then, are the prospects for maritime boundary delimitation in these areas or, failing that, the emergence of further maritime joint development zones in the Gulf of Thailand?

Vietnamese Claims and the Thai-Malaysian JDA

The Thai-Malaysian JDA detailed above is itself not free from dispute by a third party. The seaward part of the joint zone is also subject to a claim on the part of Vietnam. This claim covers approximately 256 nm² (879 km²). However, there have been strong indications that trilateral negotiations over this overlap are or have been contemplated. In particular, the aforementioned Thai-Vietnamese maritime boundary treaty of 7 August 1997 indicates that such negotiations are to take place. No trilateral agreement has yet been forthcoming however.

One potential sticking point in such discussions may be Thai and Malaysian reluctance to accept Vietnam's claims in full. Vietnam is likely to argue for a three-way split in the revenues accruing from oil and gas production in the zone of Vietnamese overlap with the JDA. However, in the maritime boundary agreement between Thailand and Vietnam (see above), Vietnam's claims were only accorded around a one-third effect. Every maritime boundary delimitation scenario is unique. However, Thailand and Malaysia are nonetheless likely to argue that in light of this previous practice Vietnam should be accorded a lesser share in the zone. The final outcome of these negotiations remains to be seen.

The Thai-Cambodian Overlapping Claims Area

Cambodia and Thailand's area of overlapping maritime claims arises from their competing claims to continental shelf in 1972 and 1973 respectively.¹¹ Although it can be deduced that the resolution of Cambodia's and Vietnam's dispute over islands through the Joint Historic Waters agreement has significantly reduced the area disputed by the two countries, the area in question is nonetheless substantial and represents the largest remaining overlapping claims zone in the Gulf of Thailand, encompassing an area of approximately 7,550 nm² (25,895 km²) of maritime space.

The reasons for the overlap relate to fundamentally differing approaches being applied to construct the lateral boundary claims from the terminus of the land boundary on the coast offshore, and divergent treatment of island basepoints in the application of the equidistance method for the delimitation line between opposite coasts in the central Gulf.

With regard to the lateral delimitation, Cambodia's claim is based on a profoundly flawed interpretation of the Franco-Siamese boundary treaty of March 1907.¹² Cambodia has misconstrued the statement in the 1907 Treaty that "the boundary between French Indo-China and Siam leaves the sea at the point opposite the highest point on Ko Kut island" as justification for projecting its territorial sea and continental shelf claims in a straight line from the land boundary terminus on the coast offshore in the direction of, and beyond, the highest point on Koh Kut island.¹³ This is despite the fact that the treaty in question is predominantly concerned with the land boundary and does not mention the division of maritime space. In any case, at the time of its conclusion in 1907, coastal state jurisdictional claims extended no more than 3 nm offshore. It is therefore fanciful to suggest, as Cambodia does, that the 1907 Treaty provides for an international maritime boundary line for a 12 nm territorial sea, let alone a continental shelf boundary extending into the central Gulf of Thailand.

The Cambodian claim is also problematic since it discounts Thailand's straight baselines and the islands they enclose, including Koh Kut itself. Indeed, the southern part of Koh Kut is apparently accorded no maritime jurisdiction whatsoever, despite being a substantial and populated island. Even if Koh Kut were a mere rock under UNCLOS Article 121(3) (which it clearly is not), Thailand would still be entitled to claim a 12 nm-breadth territorial sea from it.

For its part, Thailand has also advanced a lateral continental shelf claim at variance with strict equidistance. This claim consists of

a single straight line approximately 130 nm (240 km) in length, from the land boundary terminus to a point in the central part of the Gulf. Thailand's claim therefore ignores Cambodia's claimed straight baselines as well as potentially relevant Cambodian islands.

As far as their delimitation between their opposite coastlines is concerned, both Cambodia and Thailand have based their claims on equidistance. The significant overlap between their claims in the central Gulf of Thailand is the consequence of the selective use of island basepoints in constructing each sides claim lines. Cambodia has given full weight to its small offshore islands while entirely discounting the Thai features Ko Kra and Ko Losin. In contrast, Thailand has discounted Cambodia's straight baseline claims and all island basepoints significantly offshore, including its own features Ko Kra and Ko Losin, in defining the limits of its claim. This is to Thailand's advantage as Cambodia's islands are further offshore than are Thailand's. It will be recalled, however, that Thailand did rely on Ko Losin as a valid basepoint in the context of its negotiations with Malaysia which led to the establishment of the Thai-Malaysian JDA (see above), vividly illustrating the inconsistent way in which equidistance principles and law of the sea rules have been manipulated to advance maritime claims in the Gulf of Thailand.

Following Cambodia's reintegration into the international community in the early 1990s, maritime boundary negotiations with Thailand were initiated. Although the precise content of these confidential discussions is not in the public domain, it is understood that while Thailand has pressed for the delimitation of maritime boundaries, Cambodia has consistently favoured a joint development solution to be applied to their large area of overlapping maritime claims. A significant step forward was achieved in 2001 with the conclusion of a Memorandum of Understanding on the "Area of their Overlapping Maritime Claims to the Continental Shelf". Described by McDorman as "best seen as an agreement-to-agree" (2003, p. 277), the MoU nonetheless represents a breakthrough. In particular, this is because the lateral delimitation, including the issue of dealing with Cambodia's contentious historic-based claims in the vicinity of Koh Kut, have been separated from discussions on joint development in the most prospective, central part of the Gulf of Thailand between opposite coasts. The MoU divides the overlapping claims area into two along the 11° north parallel of latitude with a delimitation solution to be sought to the north whilst, simultaneously, joint development will be sought to the south.

This approach addresses a key drawback in joint development associated with applying a co-operative mechanism to the entirety of the area of overlapping claims to maritime jurisdiction. Arguably, such uncritical acceptance of unilateral claims, which may have little or no legal validity, confers on them an inappropriate degree of significance and legitimacy. This process may be seen as encouraging states to adopt extreme claims. A good example of this can arguably be seen in Thailand's insistence on the use of Ko Losin as a basepoint with regard to Malaysia, resulting in the overlap in maritime claims that eventually became the Thai-Malaysian JDA, despite its dubious insular status and whilst simultaneously ignoring the feature in order to advance its claims against Cambodia and Vietnam on the opposite side of the Gulf (see above).

It can be considered highly likely that Thailand would find it near to impossible to accept in any way Cambodia's lateral boundary claims in the vicinity of Koh Kut, thus making acceptance of a joint zone encompassing the entirety of the overlapping claims area inconceivable. By dividing the overlapping claims area in two, the Cambodia-Thailand 2001 MoU circumvents this concern. Negotiations are ongoing, though media reports concerning their progress have been mixed.¹⁴ In this context it is worth noting that both states have strong incentives to reach agreement and gain access to the significant resources thought to be present in the overlapping zone. Cambodia has long sought access to offshore resources as a potential means of transforming its developing economy. Despite the fact that oil has reportedly been discovered in exclusively Cambodian waters,¹⁵ the Thai-Cambodian overlapping claims area includes seabed thought to be highly prospective for seabed hydrocarbon resources and thus may well represent a significantly greater prize.¹⁶ For its part, Thailand, as a rapidly industrializing state, has ever more pressing energy security concerns.

Conclusion

Undoubtedly the Gulf of Thailand littoral states have made a substantial contribution to state practice in terms of co-operative maritime joint development. These examples of pragmatic bilateralism provide useful indications as to both good practice and potential pitfalls for future such arrangements both within and beyond the Gulf of Thailand. On the positive side, such joint development mechanisms provide a welcome emphasis on cooperative and functionalist approaches to ocean management, as opposed to more traditional legalistic,

and thus confrontational, approaches focusing on the definition of a particular boundary line. Importantly, they have also proved broadly successful in realising their objectives. As noted, however, they also can have potentially significant drawbacks, especially where the crucial ingredient of political will proves insufficient. Further, such mechanisms should not be advocated simply because deadlock has been reached in delimitation negotiations and an area of overlapping claims exists.

This article has concentrated on the existing examples of maritime joint development arrangements in the Gulf of Thailand and provided some discussion of potential further agreements that are understood to be currently subject to negotiation. With the exception of the rather anomalous Cambodia-Vietnam Joint Historic Waters area, these joint mechanisms have tended to restrict their attention to facilitating exploration for and exploitation of seabed hydrocarbon resources. This is unsurprising in that the prospect of potential oil riches often acts as a potent lure, stimulating states to enter into maritime joint development initiatives in order to allow exploration to proceed without delay.

Nonetheless, it is worth emphasizing that there exists a pressing need for cooperative approaches in the Gulf of Thailand on issues beyond gaining access to seabed oil and gas reserves — notably protecting and preserving the marine environment and fostering sustainable use of living resources in the face of over fishing. While cooperative initiatives do exist with the objective of addressing these issues for the Gulf of Thailand as a whole,¹⁷ it is worth observing that joint maritime development approaches have been applied to these pressing issues elsewhere.¹⁸ Such “provisional arrangements of a practical nature” dealing with environmental or marine living resource issues, were they to be applied in the Gulf of Thailand context, would certainly be in accordance with UNCLOS Articles 74(3), 83(3) and 123. It is to be hoped that the existing cooperative experiences of the Gulf of Thailand states outlined above can be translated into joint action to address these urgent trans-boundary concerns.

NOTES

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- 1 All four of the Gulf of Thailand coastal states have signed UNCLOS. However, only two of them — Malaysia and Vietnam — are full parties to it. Nonetheless, all the Gulf of Thailand littoral states have made claims to maritime jurisdiction (territorial sea, continental shelf, EEZ) largely consistent with UNCLOS. Furthermore, three of the four Gulf of Thailand littoral states — Cambodia, Malaysia and Thailand — are parties to two key forerunners to UNCLOS, the 1958 Conventions dealing with the Territorial Sea and Contiguous Zone, and the Continental Shelf. It is also worth noting that parts of UNCLOS (and the Geneva Conventions before them), for example those provisions relating to maritime boundary delimitation, are generally considered to have entered into customary international law.
- 2 The agreements in question are the *Treaty between the Kingdom of Thailand and [the Republic of] Malaysia Relating to the Delimitation of the Territorial Seas of the Two Countries* of 24 October 1979, the *Memorandum of Understanding between Malaysia and the Kingdom of Thailand on the Delimitation of the Continental Shelf Boundary between the Two Countries in the Gulf of Thailand* of 24 October 1979 and the *Agreement between the Government of the Kingdom of Thailand and the Government of the Socialist Republic of Vietnam on the Delimitation of the Maritime Boundaries between the Two Countries in the Gulf of Thailand* of 24 October.
- 3 States bordering an enclosed or semi-enclosed sea should cooperate with each other in the exercise of their rights and in the performance of their duties under this Convention. To this end they shall endeavour, directly or through an appropriate regional organization:
 - (a) to co-ordinate the management, conservation, exploration and exploitation of the living resources of the sea;
 - (b) to co-ordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment;
 - (c) to co-ordinate their scientific research policies and undertake where appropriate joint programmes of scientific research in the area;
 - (d) to invite, as appropriate, other interested States or international organizations to co-operate with them in the furtherance of the provisions of this article” (UNCLOS Article 123).
- 4 Where the term “full effect” is mentioned, this means that the feature or basepoint concerned is given full weight in the definition of a strict equidistance line. Frequently, certain features such as small islands are accorded a reduced, for example half, effect in the construction of an equidistance-based line as part of a compromise boundary agreement (Prescott and Schofield 2005, pp. 224–28). UNCLOS Article 121(2) reads as follows: “Except as provided for in paragraph 3, the territorial sea, the contiguous zone, the exclusive economic zone and the continental shelf of an island are determined in accordance with the provisions of this Convention applicable to other land territory”.
- 5 The interpretation of UNCLOS Article 121 has generated a wealth of academic debate. For reviews of the literature see, for example, Kwiatkowska and Soons (1990) and Prescott and Schofield (2005).
- 6 As the JDA is not symmetrical but is, rather, an uneven polygon, the two criminal jurisdiction sectors are, consequently unequal in area. Malaysia’s zone is approximately 1,038 nm² (3,560 km²) and Thailand’s 1,069 nm² (3,666 km²) in area. Article V of the MoU explicitly states that this division “shall not in

any way be construed as indicating the boundary line of the continental shelf between the two countries in the joint development area ... nor shall such definition in any way prejudice the sovereign rights of either Party in the joint development area".

- 7 "Vietnam, Cambodia to share oil resources", *Bangkok Post*, 21 August 2006.
- 8 The French "grad" is equivalent to 1/400th of a circle in contrast to the international degree, which equates to 1/360th of a circle. Furthermore, under the grad system angles are measured counter-clockwise unlike the degrees, which are traditionally measured in a clockwise manner. Thus, a 140 grad angle is equivalent to an international bearing of 234° (United States 1976, p. 12).
- 9 The coordinates provided for "Point O" were: Latitude N 09° 35' 00".4159 and Longitude E 103° 10' 15". 9808.
- 10 As expressed in the *Peta Menunjukkan Sempadan Perairan dan Pelantar Benua Malaysia* or "Map Showing the Territorial Waters and Continental Shelf Boundaries of Malaysia", often referred to as the "Malaysian Map".
- 11 Cambodia's claim was made through *Kret* No.439/72-PKR of 1 July 1972 while Thailand's claim was articulated through its *Proclamation on Demarcation of the Continental Shelf of Thailand in the Gulf of Thailand* of 18 May 1973 (copies on file with the author).
- 12 For treaty text see Prescott (1975, pp. 444–46).
- 13 Cambodia's lateral continental shelf claim should be considered in conjunction with *Kret* No. 518/72-PRK of 12 August 1972 relating to the territorial sea (copy on file with the author).
- 14 It was reported in August 2006 that agreement had been reached regarding a split in revenues within the proposed joint zone. Subsequent reports have, however, indicated that this issue remains a key sticking point. See, "Cambodia oil exploration pact possible", *Bangkok Post*, 6 August 2006; and, A. Symon, "Cambodia and Thailand struggle over petroleum", *Asia Times*, 13 June 2007.
- 15 Initial estimates put recoverable reserves from Chevron's discoveries in the region of 400-500m barrels of oil plus 2-3 trillion cubic feet of natural gas. Subsequent reports have, however, proved less optimistic in light of technical challenges that have emerged in relation to extracting these resources. See, "ChevronTexaco finds oil in four wells drilled in Offshore Cambodia Block A", *Press Release*, 12 January 2005, available at: <www.chevron.com/news/press/2005/2005-01-12.asp>; "Cambodian windfall sparks corruption concern", *Radio Free Asia*, 14 July 2005, available at: <www.rfa.org/english/features/lelyveld/2007/03/12/cambodia_oil/>; and, "Blow for Cambodian hopes", *Upstream Online*, 7 June 2007, available at <www.upstreamonline.com/live/article134885.ece>.
- 16 The Thai-Cambodian overlapping claims area is regarded as especially prospective because it encompasses the northern and eastern parts of the Pattani Trough geological structure that has yielded significant discoveries in exclusively Thai waters.
- 17 Notably through the UNEP/GEF "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand" Project. See <www.unepscs.org/>.
- 18 The agreement reached between Australia and Papua New Guinea in 1978 concerning the Torres Strait provides an excellent example in this context (see, Charney and Alexander 1993, pp. 929–75).

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