Options for Overcoming Overlapping Maritime Claims: Developments in Maritime Boundary Dispute Resolution and Managing Disputed Waters

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Structured Abstract

Article Type: Research Paper

Purpose—The purpose of the article is to examine options to overcome and manage overlapping claims to maritime space.

Design, Methodology and Approach—The article outlines global progress in the delimitation of maritime spaces between coastal states, including clarifications in the approaches to international maritime delimitation and options to overcome disputes before exploring pertinent international jurisprudence providing insights into the meaning of the obligations of coastal states where overlapping maritime claims persist.

Findings—It is concluded that while approaches to maritime delimitation have become clearer over time, broad areas of overlapping maritime claims persist, as only a little over half of potential maritime boundaries have an agreement in force. Negotiated solutions for the delimitation of equidistance-based maritime boundaries have proved to be the most popular means of overcoming overlapping maritime claims. In the absence of such resolution, coastal states are subject to obligations under the international law of the sea which constrain what activities they can undertake in areas subject to overlapping maritime claims.

Practical Implications—The article will be of interest to policy-makers and practitioners involved in resolving and managing maritime spaces subject to competing jurisdictional claims. It explores the global scope and importance of overlapping maritime claims and unresolved maritime boundaries and indicates how approaches to maritime boundary-dispute resolution have evolved. Moreover, the article demonstrates that coastal

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states have multiple options to peacefully resolve maritime disputes and underscores that where overlapping maritime claims persist, claimant states need to be wary of undertaking maritime activities and enforcement actions in disputed waters that runs counter to their obligations under international law.

Originality/Value—The paper offers legal and policy guidance with a view to enhancing good ocean governance and the peaceful resolution of international maritime disputes.

Keywords: dispute resolution, joint development, maritime delimitation, maritime disputes, overlapping maritime claims

I. Introduction

The extension of maritime claims seaward, especially following the drafting and widespread adoption of the LOSC, and coupled with the proximity of coastal states to one another, has led to a proliferation of overlapping maritime claims, many of which have yet to be resolved. The objective of this article is to examine options to overcome overlapping claims to maritime space, notably through the delimitation of maritime boundaries and through provisional arrangements of a practical nature such as provisional lines or, more commonly, maritime joint development zones.

The article first outlines the state of play in terms of the delimitation of maritime boundaries globally, as this necessarily determines the number of undelimited maritime boundaries that exist, which, in turn, indicates the scope of competing claims to maritime space. Dispute resolution options under international law are then outlined and critiqued. Provisional arrangements of a practical nature where a maritime boundary has yet to be delimited are then discussed. This leads to consideration of the obligations on states with respect to maritime areas subject to overlapping claims.

II. The Law of the Sea and Maritime Claims

The guiding framework governing claims to maritime jurisdiction is provided by the United Nations Convention on the Law of the Sea (LOSC),[1] which has achieved near universal acceptance with, at the time of writing, 168 parties to it, comprising 167 states plus the European Union. This is especially impressive when it is recalled that only 152 of the 193 United Nations member states are coastal states. Accordingly, the LOSC can be viewed as representative of customary international law applicable to baselines, the delineation of maritime zones and limits, and the delimitation of maritime boundaries between coastal states. On this point, it is pertinent to note that the United States, which is not a party to the LOSC, has taken the view that "the general practice of States reflects acceptance as international law of the non-seabed parts of the LOS Convention."[2]

A key achievement of LOSC was the realization of a clear spatial framework for the limits to national claims to maritime jurisdiction. The Convention provides for a series of national zones of maritime jurisdiction, each with distinct functional components to them, measured offshore from baselines along the coast. These zones include a territorial sea, with consensus being reached on a maximum limit of 12 nautical miles (M) measured from

baselines (something not previously achieved). A particularly significant development was the general acceptance of maritime claims out to 200 M from baselines through the introduction of the exclusive economic zone (EEZ)—something that has resulted in an enormous extension of maritime claims offshore (fig. 1).

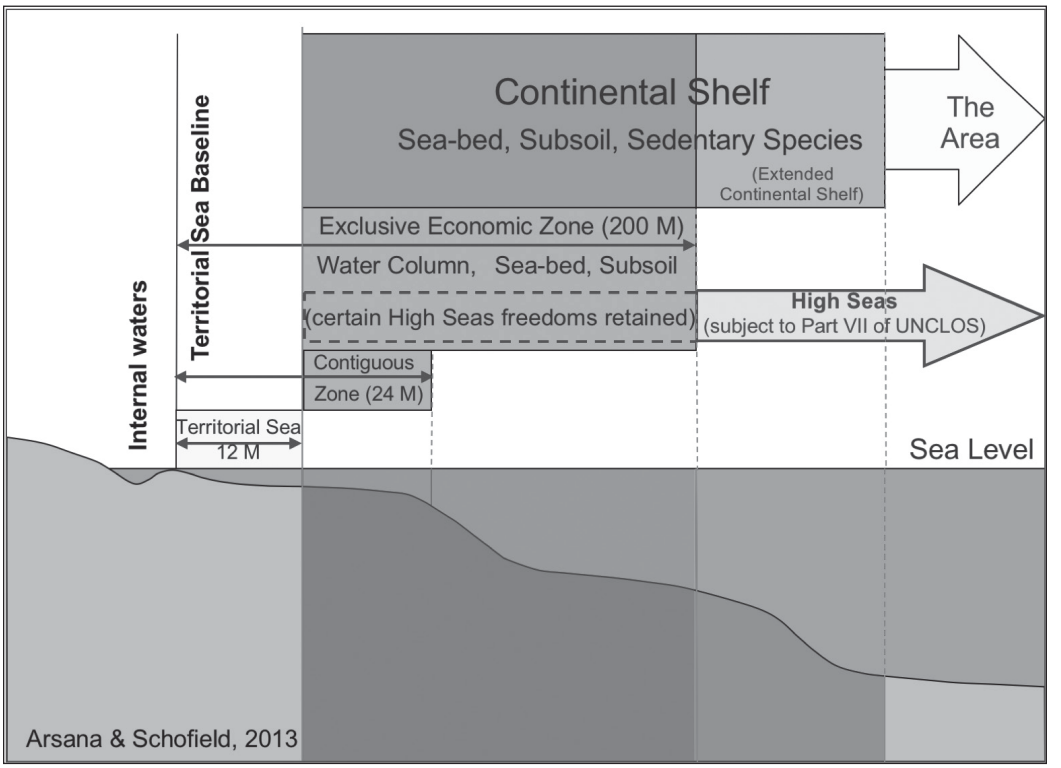

Figure 1: Schematic of Baselines and Maritime Claims of a Coastal State. Source: Clive Schofield and I Made Andi Arsana[3]

III. Progress in Maritime Delimitation

As noted above, the vast majority of coastal states are parties to the LOSC, which is representative of the international law applicable to the delineation of maritime claims and delimitation of maritime boundaries between states where such claims overlap with one another. Thus, if there is a distance of less than 24 M between opposing coastlines, a potential territorial sea boundary will exist, while if coastal states' coastlines are within 400 M of one another, a potential EEZ boundary will arise. In relation to the delimitation of the territorial sea, Article 15 of LOSC applies and offers a clear preference for the use of an equidistant or median line. This does not apply, however, if the states concerned agree to the contrary or there exists an "historic title or other special circumstances" in the area to be delimited which justifies a departure from the equidistant line.

Under the 1958 Convention on the Continental Shelf, delimitation was also to be effected by the use of median lines unless, similarly, an agreement to the contrary or "special

circumstances" existed that justified an alternative approach.[4] However, the relevant provisions of LOSC Articles 74 and 83, dealing with delimitation of the continental shelf and EEZ respectively, merely provide, in identical general terms, that agreements should be reached on the basis of international law in order to achieve "an equitable solution," with no preferred method of delimitation indicated. While this provides for substantial flexibility in ocean boundary-making, the lack of guidance offered by the provisions of the LOSC dealing with EEZ and continental shelf boundary delimitation also affords great scope for conflicting interpretation and dispute. Here it can be observed that the delimitation provisions of the LOSC were among the last elements of the package deal to be agreed on, and the general wording used was a means to overcome disagreement on a contentious issue. Indeed, as the arbitral tribunal in the Eritrea-Yemen Arbitration observed in reference to the drafting of Article 83, this was "a last-minute endeavor … to get agreement on a very controversial matter," and therefore "consciously designed to decide as little as possible."[5]

In order to achieve delimitation of the continental shelf and/or EEZ in accordance with LOSC, a theoretically limitless list of potentially relevant circumstances needs to be taken into consideration in the delimitation equation in order to reach the goal of an equitable result. Nonetheless, it has become abundantly clear from the practice of coastal states, allied to the rulings of international courts and tribunals, that geography, and particularly coastal geography, has a critical role in the delimitation of maritime boundaries. Aspects of coastal geography that have proved especially influential include the configuration of the coasts under consideration, the relative coastal length and the potential impact of outstanding geographical features, notably islands.[6]

The salient role of coastal geography in maritime boundary delimitation is linked to the widespread use of equidistant lines. While, as noted, there has been a shift away from equidistance as a preferred method of delimitation over time in the law of the sea, not least because in certain circumstances the application of strict equidistance can lead to clearly inequitable results, equidistance has nonetheless proved extremely popular as a basis for maritime boundary delimitation in practice.

This is understandable in that equidistance lines offer considerable advantages: if there is agreement on the baselines to be used, there is only one strict equidistant line, and this provides the appeal of mathematical certainty and objectivity as well as affording coastal states the not-inconsiderable attraction of jurisdiction over those maritime areas closest to them. Equidistant lines can also be flexibly applied and may be simplified, adjusted or modified to take specific geographical circumstances into account.[7]

Despite, as noted above, the lack of clear guidance for the delimitation of, particularly, continental shelf and EEZ boundaries under LOSC, it is notable that equidistance has found enduring popularity as a method of delimitation in state practice.[8] Further, there has been a distinct shift in recent jurisprudence towards the application of a three-stage approach, the first stage of which involves the construction of an equidistant line as a provisional delimitation line.

This approach was clearly articulated in the 2009 judgment in the *Black Sea* case[9] between Romania and Ukraine, which stated that at the first stage, a provisional delimitation line should be established using geometrically objective methods "*unless there are compelling reasons that make this unfeasible* in the particular case";[10] at the second stage, assessment is to be made as to "whether there are factors calling for the adjustment or shifting of the provisional equidistance line in order to achieve an equitable result";[11] and at the third stage,

verification of the resulting potential delimitation line is to be undertaken through what the court termed a "disproportionality test."[12]

All subsequent international cases involving maritime boundary delimitation have similarly applied this three-stage approach to maritime delimitation. These have included cases before the ICJ, the International Tribunal on the Law of the Sea (ITLOS), and international arbitral tribunals.[13] Efforts towards the settlement of overlapping claims to maritime space through the delimitation of maritime boundaries before an international arbitral tribunal, ITLOS or the ICJ are therefore highly likely to involve the three-stage approach to ocean boundary-making.

While the three-stage process provides the broad outlines of how an international judicial body is likely to approach a maritime boundary delimitation case before it, substantial uncertainties remain. First, it can be observed that in none of these cases have international courts or tribunals opted to begin with a strictly equidistant line at the crucial first stage of the three-stage process. Instead, judicial discretion has been exercised such that, as articulated in the *Black Sea* case, the court will take into account "the most appropriate points on the coasts of the two States concerned, with particular attention being paid to those protuberant coastal points situated nearest to the area to be delimited" when choosing its own base points, rather than relying on those selected by the parties to the case.[14] As strictly equidistant lines are not used at the first stage of the three-stage process, this arguably undermines the objectivity and impartiality as well as the clarity and consistency of the three-stage process. An alternative, and arguably more rigorous and methodologically systematic approach, would be to construct strictly equidistant lines including all potential basepoints at the first stage and then to adjust or modify the provisional delimitation line at the second stage of the three-stage process.

Second, it is clear that the key factors considered at the second stage that may yield an adjustment of the delimitation line away from the equidistant line defined at the first stage of the process are often related to coastal geography. These include the existence of distinct concavities and convexities in the configuration of the coasts involved, marked disparities in relevant coastal lengths and the presence of islands. Examples of this type of factor include the marked concavities in the Bay of Bengal cases,[15] the disparities in relevant coastal lengths in both the Libya-Malta[16] and Jan Mayen[17] cases and the presence of islands, for instance, in the Eritrea-Yemen arbitration,[18] all of which justified departures from equidistance. However, the degree to which such factors will actually influence the course of a particular maritime boundary line remains obscure.

Third, the disproportionality test at the third stage appears to be illusory in character, as in every case that has employed the three-stage process, the court or tribunal in question has found that no disproportion between the ratios of relevant coasts and areas falling to each party exists, and so there is no call for a readjustment of the maritime boundary line under consideration. It seems likely that, in fact, judges consider disproportionality issues as essentially part of the second stage of the process.

Finally, the phrasing in the *Black Sea* case—"unless there are compelling reasons that make this unfeasible in the particular case"[19]—provides scope for the three-stage process not to be applied, if the circumstances warrant it. This option to circumvent the three-stage process where the circumstances warrant it, aside from affording judges leeway to depart from a set method, likely arises from the then-relatively-recent case between Nicaragua and Honduras, in which, because of the convexity of the coastlines of the two states, only a tiny proportion of each state's coast, and an unstable coastline at that, would have contributed to the

construction of an equidistant line, rendering the application of such a line at the first stage of the three-stage process problematic.[20]

These uncertainties are essentially tied to judicial discretion. While this seemingly undermines the clarity and consistency of the three-stage process, this can also be regarded as a "prerogative essential to judges" in reaching their assessment of the facts peculiar to a particular case in order to allow international courts and tribunals the flexibility necessary to achieve equitable outcomes.[21] Consequently, while the advent of the three-stage process in maritime delimitation provides welcome clarity in international approaches to maritime delimitation, predicting the final course of an undelimited maritime boundary remains fraught with uncertainty.

IV. An Incomplete Maritime Political Map of the World

The practical consequence of the significant expansion of maritime zones seawards has resulted in a proliferation of overlapping maritime claims and, inevitably, disputes. Wherever the maritime claims of (now) neighboring states overlap, a potential maritime boundary situation exists. Thus, countries whose coastlines are up to 400 M apart from one another may now require an EEZ boundary to be delimited between them (fig. 2). Further, with respect to extended continental shelf rights, states sharing a potential boundary may be even further distant from each other. Where each inter-state maritime boundary relationship is as one potential maritime boundary, even if it may be composed of multiple distinct segments, the number of potential maritime boundaries within 200 M limits has been calculated to be 454 of which 277 (61 percent) have been at least partially agreed, with 240 of these agreements ratified and in force (52.8 percent of the number of potential maritime boundaries).[22]

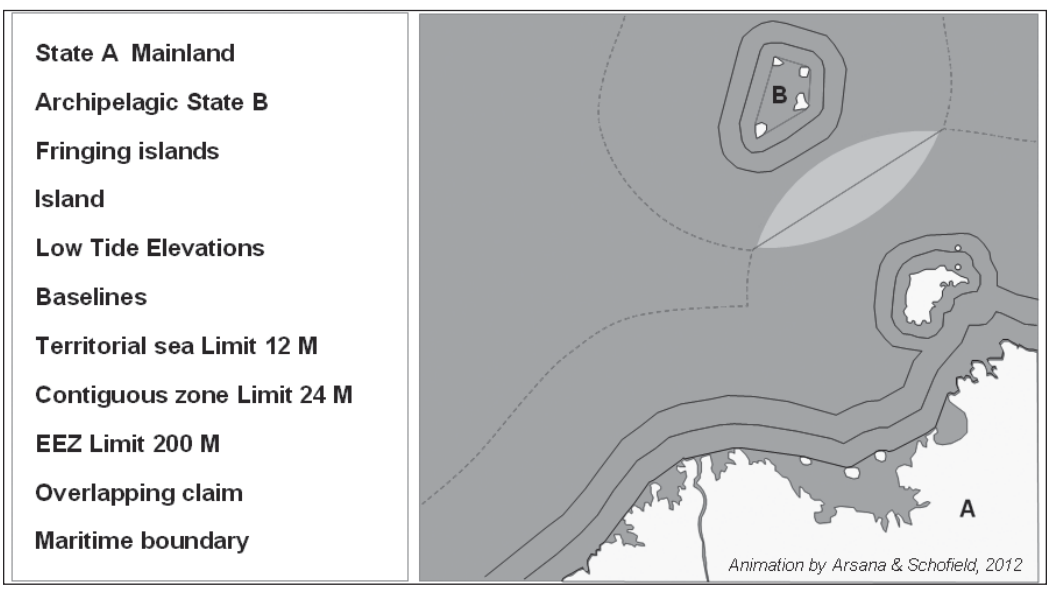

Figure 2: Key Elements in the Delimitation of Maritime Boundaries. Source: Clive Schofield and I Made Andi Arsana[23]

There are, however, important caveats related to these figures. For example, many of these existing delimitation lines are partial either in terms of their length or because they predate the advent of the EEZ; or the delimitation line has been agreed in a piecemeal fashion and resolved one sector or step at a time.

For the first scenario, the maritime delimitation situation of Indonesia with its neighbors Malaysia and Vietnam provides a good example. Although Indonesia reached continental shelf boundary agreements with Malaysia and Vietnam in 1969[24] and 2003[25] respectively, Indonesia does not accept this seabed boundary line as a basis to delimit the water column in the area. Indeed, Indonesia has claimed water column jurisdiction beyond the agreed continental shelf boundary lines, resulting in an area of overlapping claims to water column jurisdiction in both the central Malacca Strait and the southwestern part of the South China Sea. Indonesia is clearly of the view that seabed and water column boundaries need not coincide, as illustrated by its national mapping.[26] While such practice runs counter to the general preference in state practice and jurisprudence towards the use of "single," all-purpose maritime boundaries coincident for both the continental shelf and EEZ, it illustrates that even where a maritime boundary of some type is agreed, overlapping maritime claims and disputes can persist.

A good example of the second scenario is provided by Indonesia and Singapore. Having reached agreement on a short portion of their territorial sea boundary in the central part of the strait lying between their coasts in 1973,[27] an extension to the west was agreed in 2009[28] and a further extension to the east in 2014.[29] Further negotiations will be necessary between the two states with respect to a tripoint with Malaysia to the west. Additionally, further potentially complex trilateral delimitation issues arise between Indonesia, Malaysia and Singapore in the eastern part of the Singapore Strait and into the extreme southwest of the South China Sea following resolution of the sovereignty dispute between Malaysia and Singapore over certain insular features by the International Court of Justice (ICJ),[30] as the ICJ determined that Singapore has sovereignty over Pedra Branca (a.k.a. Pulau Batu Puteh), while sovereignty over Middle Rocks rests with Malaysia.[31] This results in a delimitation scenario involving a small and uninhabited (save for government personnel) island belonging to one state (Singapore) that is located between the coasts of two other states (Indonesia and Malaysia) within their overlapping 12-M territorial sea claims.[32] It seems likely that Indonesia and Malaysia will argue that the role of Pedra Branca constitutes a "special circumstance" under Article 15 of the Convention, justifying a departure from the median line, while Singapore is likely to be resistant to any such departure entailing a reduction in the scope of its maritime claims around Pedra Branca.[33] While this type of step-by-step approach reduces or eliminates the opportunities for trade-offs between different parts of the boundary line where the interests of the states concerned may differ, it can serve to narrow differences and build trust and was arguably appropriate to Indonesia and Singapore, given the close proximity of their coasts to one another and thus the limited scope of overlapping claims and maritime space at stake.

Further, these figures do not include boundaries in the Caspian Sea or potential maritime delimitations with respect to extended continental shelf rights. Submissions to the relevant UN scientific and technical body, the Commission on the Limits of the Continental Shelf (CLCS), regarding delineation of outer continental shelf limits seawards of 200-M EEZ areas, are estimated to encompass vast areas of continental shelf, of the order of 37 million km^2,[34] of which an area of around 3.3 million km^2 is subject to overlapping submissions and therefore encompasses large overlapping claims areas located seawards of 200-M limits.[35]

V. Options for the Resolution of Competing Claims to Maritime Space

Coastal states, in common with other members of the international community, are bound to settle disputes, including those with respect to competing maritime claims, through peaceful means. Article 2, paragraph 3 of the United Nations Charter states, "All members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered."[36]

The primary means of dispute settlement are set out in Chapter VI of the UN Charter sets out means at Article 33(1) as being "negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement," although this list is not exclusive. Among these options, by far the most popular method of achieving maritime boundary delimitations is through negotiations.[37] Negotiations also represent an essential precursor to the application of any other form of peaceful dispute resolution and must be conducted in good faith.[38]

Where negotiations between the parties to an international dispute fail to yield a settlement, the intervention of a third party may prevent a further deterioration in relations, breaking the deadlock and providing a way forward towards the peaceful resolution of the dispute. Such involvement by a third party—be it an individual, another state or an organization—may be termed an offer of its "good offices" or mediation. The "good offices" of the UN Secretary-General or their Special Representative have frequently taken on the role of mediator with a view to de-escalating and ideally assisting in the resolution of contentious disputes. Alternatively, a trusted third party to a dispute may play this role. In the maritime (and territorial) context, France served as mediator in the dispute between Eritrea and Yemen concerning sovereignty over islands in the southern Red Sea and their related maritime entitlements, which ultimately led to an arbitration case.[39]

A further means of dispute settlement, which may be binding or non-binding, is conciliation, although it has been only rarely used in a maritime context. Non-binding conciliation was used to resolve a maritime delimitation dispute between Iceland and Norway in the early 1980s. Agreement was reached to appoint a conciliation commission in August 1980 to make unanimous recommendations on the question of the continental shelf boundary between Iceland and the Norwegian island of Jan Mayen. On the basis of the commission's recommendations, a coincident continental shelf boundary and EEZ boundary was agreed in 1981, in conjunction with a 45,470-km² joint zone that unevenly straddles the maritime boundary line, with 61 percent on the Norwegian side and 39 percent on the Icelandic side.[40]

Compulsory conciliation under the LOSC has only been used in maritime dispute resolution on one occasion to date, between Australia and Timor-Leste.[41] Conciliation proceedings were initiated by Timor-Leste on April 11, 2016.[42] Although Australia initially challenged the competence of the conciliation commission, once the commission concluded that it had competence,[43] the conciliation process proceeded in good faith. The positive engagement of the parties in the process was a critical factor in the success of the conciliation process. This is because while the conciliation process was compulsory, the conciliation commission could only facilitate and seek to enable negotiations coupled with providing non-binding recommendations. The conciliation process was assisted through an integrated package of

confidence-building mechanisms.[44] Ultimately, the conciliation process led, on March 6, 2018, to Australia and Timor-Leste's signing a treaty establishing their maritime boundaries in the Timor Sea.[45]

While the delimitation of the EEZ boundary in the central part of the Timor Sea is relatively straightforward in that it broadly reflects the median line between opposite coasts (Australia-Timor-Leste, 2018, Article 4), the lateral continental shelf boundary lines are more favorable to Timor-Leste (Australia-Timor-Leste, 2018, Article 2). These boundary segments depart significantly from the limits of the JPDA that they replace in the western, mature oil and gas fields such as the Buffalo field fall on the Timor-Leste side of the line. Of greater potential economic significance, the eastern lateral departs significantly from equidistance in a distinct "dog-leg" configuration, placing around 70 percent of the Greater Sunrise complex of fields on Timor-Leste's side of the line (fig. 3).

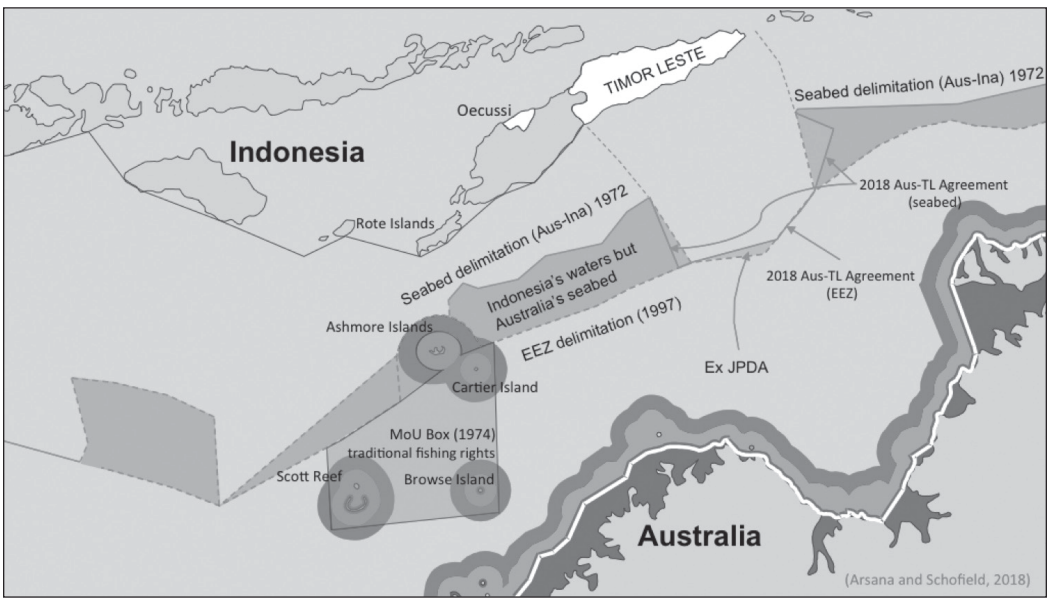

Figure 3: Timor Sea Maritime Arrangements. Source: Author[46]

It is important to note, however, that the final part of the boundary line defined by the 2018 treaty that divides Greater Sunrise is only effective once the seabed resources involved are depleted or Indonesia and Timor-Leste conclude a continental shelf boundary agreement, whichever event comes later.[47] Realizing the potential benefits of Greater Sunrise also depends on agreement over the split in revenues between Australia and Timor-Leste and the linked, the destination for the pipeline taking the resources to shore. The Australia-Timor-Leste treaty deals with this by establishing the Greater Sunrise Special Regime,[48] under which two "development concepts" are provided for. Should the pipeline go to Australia, Timor-Leste would receive 80 percent of the government revenues arising from the development. Alternatively, if the pipeline is directed to Timor-Leste, 70 percent of such revenues would go to Timor-Leste.[49] This adjustment in the revenue sharing split is designed to recognize the downstream processing benefits that would be associated with

the pipeline coming on shore in either country. At the time of writing, the ultimate destination of the pipeline and thus the location of the downstream processing remained unclear.[50]

International maritime boundary delimitation disputes can also be settled through international arbitration or judicial decisions of the International Tribunal for the Law of the Sea (ITLOS) or the International Court of Justice (ICJ). While less than 1 percent of settled international maritime boundaries have been achieved through judicial decisions, the international jurisprudence on maritime boundary delimitation has proved to be influential in shaping approaches to maritime delimitation, as demonstrated, for instance, by the ICJ's introduction of the three-stage process, noted above. It can be anticipated that such approaches will also be applied in the context of maritime boundary delimitation negotiations.

VI. Maritime Spaces Subject to Competing Claims

It is clear from the foregoing that while considerable progress has been achieved, nonetheless the maritime political map of the world remains profoundly incomplete. Indeed, the number and scope of overlapping claims to maritime space has proliferated in recent decades. Further, given the relatively slow progress in dividing such areas of maritime claims through maritime boundary delimitation, competing claims to maritime jurisdiction have persisted. Problematically, while such overlapping claims areas are known to be large, they are ill-defined both in terms of their spatial extent and with regard to the rights and responsibilities of claimant and other states within them.

Maritime areas subject to competing claims provoke multiple concerns. Their existence, often coupled with the maritime disputes associated with them, serve to undermine good ocean governance and compromise maritime security. Overlapping maritime claims can lead to effectively unpoliced zones of overlapping claims, allowing illegal activities at sea to flourish. For example, the so-called "Triborder sea area," located in the Sulawesi (or Celebes) Sea between the intersecting maritime claims of Indonesia, Malaysia and the Philippes, has been characterized as an "ungoverned space" and thus a "haven for transnational criminals, including terrorists."[51]

More alarmingly, disputes over maritime areas subject to competing claims can serve as a point of friction and tension between states with the potential for incidents and confrontation on the water to turn into outright conflict. While this represents an extreme scenario, it is one that cannot be dismissed lightly. For example, the myriad incidents in the East China Sea and South China Sea where overlapping maritime claims are a salient feature of the maritime disputes in those waters provide ample evidence of such tensions which appear to possess significant potential to escalate.

It is also apparent that lack of maritime jurisdictional clarity is anathema to the proper development and management of marine resources. With regard to potentially valuable seabed energy resources, for instance, extensive areas of overlapping maritime claims forestall access to these valuable resources. Indeed, disputed waters tend to represent no-go areas for the international oil and gas industry because of the absence of fiscal and legal certainty that is fundamental to their decision to commit the hundreds of millions of dollars necessary to undertake offshore exploration and development projects. Numerous examples exist where

the issuing of overlapping petroleum exploration acreages on the part of rival neighboring states has led to diplomatic (and not so diplomatic) tensions.

Analogously, with respect to marine living resources, rational exploitation and preservation of important living resources is similarly undermined by failure to address jurisdictional issues comprehensively and cooperatively. Uncertainty over maritime limits and the scope of overlapping maritime claims tends to lead to uncoordinated policies which, in turn, can result in destructive competition for vulnerable fisheries resources, serious degradation of the marine environment, attendant threats to marine biodiversity and ultimately to serious geopolitical tensions between neighboring coastal states. With world fish stocks facing increasing pressure and more stocks being overfished or under stress, addressing unmanaged areas subject to competing maritime claims is of increasingly critical importance.

The South China Sea again provides numerous examples, with efforts to access or manage marine resources being a recurring source of confrontations and tension. In the latter part of 2020 alone, the South China Sea featured fisheries-related confrontations between China and Indonesia off the Natuna Islands[52] as well as oil and gas exploration-related incidents between China and other South China Sea coastal states in waters proximate to Brunei Darussalam and Malaysia[53] as well as Vietnam.[54]

It can also be observed that coastal states may not only make efforts to assert their claimed jurisdiction over disputed maritime spaces through the more traditional means of marine resource exploitation and management and related maritime surveillance and enforcement efforts. China's unilateral naming of 80 geographical features, including 55 submerged ones, located in the South China Sea in April 2020, apparently in order to assert its "sovereignty and sovereign rights," can be viewed in this light.[55] The designation of marine protected areas (MPAs) is also an act of administration on the part of the designating state. The creation of multiple large-scale MPAs around remote external territories of France, the United Kingdom and the United States is, in principle, to be welcomed as the marine spaces subject to these conservation measures are often pristine and biodiversity rich. However, this has led to concerns that the MPAs may also have a more sinister, geopolitical character, underscoring the sovereignty claims of these states over possessions acquired in colonial times as well as their often broad maritime claims associated with them.[56]

There are, however, means to overcome these issues through maritime delimitation and dispute settlement via an array of avenues or, alternatively, through provisional arrangements of a practical nature. Additionally, international jurisprudence has provided some guidance as to what activities and enforcement actions are permissible in maritime spaces that are subject to overlapping jurisdictional claims.

VII. Alternatives to Delimitation: Provisional Arrangements of a Practical Nature

As an alternative to maritime boundary delimitation, or to use during periods when delimitation negotiations are ongoing or, indeed, deadlocked, a number of coastal states that

assert overlapping maritime claims have agreed to establish frameworks to manage the relevant area of overlapping maritime claims on a provisional and joint basis. The international legal basis for this is provided by Articles 74(3) and 83(3) dealing with the delimitation of the exclusive economic zone and continental shelf, respectively. These articles state, in identical terms:

> Pending agreement as provided for in paragraph 1, 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 jeopardize or hamper the reaching of the final agreement. Such arrangements shall be without prejudice to the final delimitation.[57]

Such provisional arrangements could take the form of a provisional maritime boundary line, although these are relatively rare, as states are often concerned that a provisional line has the potential to take on more permanent characteristics. Instead, the majority of provisional arrangements of a practical nature take the form of maritime joint development zones (as they tend to be referred to) oriented towards cooperative resource, and particularly seabed energy resource, development and management.[58] However, such arrangements can involve other marine resources such as fisheries,[59] and can also involve agreements *not* to develop resources or undertake certain activities. For example, the Torres Strait agreement between Australia and Papua New Guinea defines a protection zone within which there is a moratorium on the development of seabed hydrocarbon resources (fig. 4).

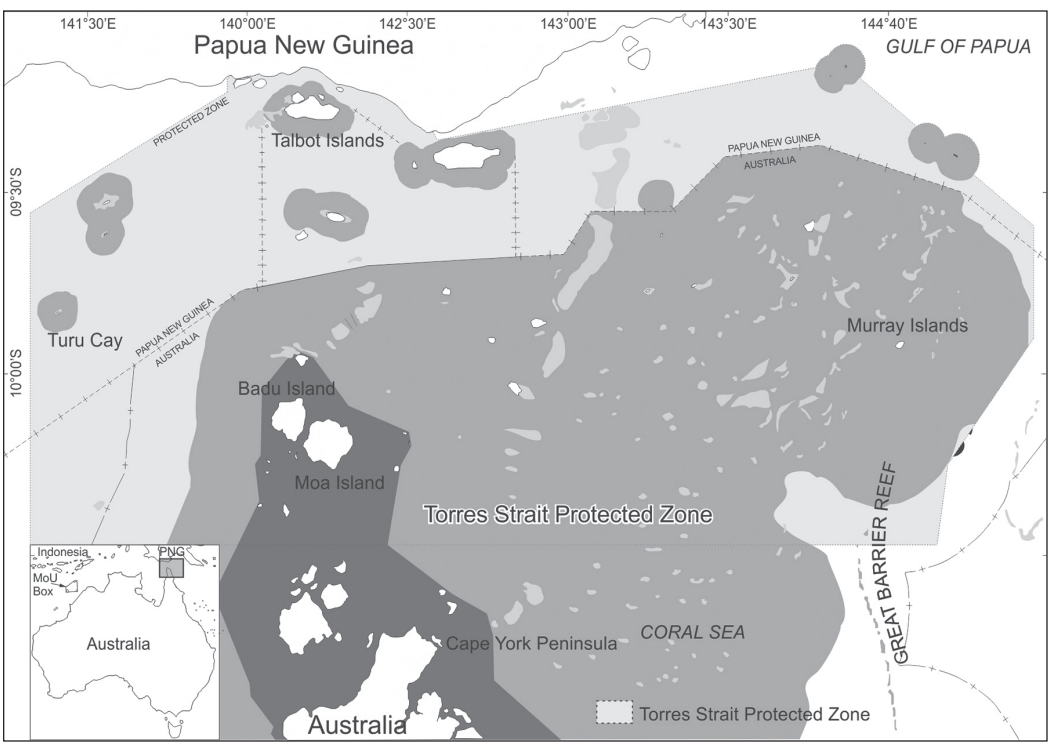

Figure 4: Maritime Delimitation and Joint Zone Between Australia and Papua New Guinea. Source: Author

It is also worth noting that such provisional joint arrangements can also be applied to non-resource issues, including maritime security. Examples include the 2001 treaty between Nigeria and Sao Tomé and Príncipe establishing a joint zone between them,[60] and the 2003 EEZ Cooperation Treaty between Barbados and Guyana.[61] Agreements on cooperative arrangements regarding maritime law enforcement have also been reached regarding areas of overlapping maritime claims between Indonesia and the Philippines in the Sulu Sea.[62]

Maritime joint development or other cooperative mechanisms undoubtedly have major attractions. In particular, when states are faced with a seemingly intractable dispute, provisional cooperative arrangements that provide an alternative management option, enabling the pragmatic development or management of the resources or environment in the area of overlapping claims, can proceed without delay. That said, such arrangements are not without potential drawbacks, for instance in terms of the inevitable challenge to existing maritime claims—generally robust non-prejudice clauses notwithstanding—and the potential that they have of, in a sense, rewarding coastal states for advancing excessive maritime claims. It is also worth observing that ensuring the success of a joint maritime development and management endeavor demands close bilateral relations and ongoing investment in both resources and political will to realize and, crucially, sustain over the long term. Here it can be observed that these arrangements often require political, institutional and financial commitments over substantial time periods, even decades, for example where a seabed oil and gas field is subject to joint development. It is also unfortunately the case that the mere existence of a joint development agreement does not dictate the discovery of valuable marine resources.[63]

VIII. Obligations Pending Delimitation of the EEZ and Continental Shelf

The final wording that was eventually incorporated into LOSC Article 74(3) establishes a general framework for the provisional management of maritime spaces subject to overlapping EEZ claims. It was drafted in an attempt to fulfill two aims: the first to encourage efforts aimed at the management of areas of overlapping maritime claims on an interim basis; and the second to limit activity within an area of overlapping maritime claims to avoid a detrimental impact on negotiation of a final delimitation agreement.[64] Thus, in accordance with Articles 74(3) and 83(3) of the LOSC, pending agreement on a continental shelf or EEZ boundary respectively, the states concerned

> shall make every effort to enter into provisional arrangements of a practical nature and, during this transitional period, not to jeopardize or hamper the reaching of a final agreement.

While there is a clear obligation to "make every effort" to seek such provisional arrangements of a practical nature, there is no obligation to actually reach agreement on them, making this an obligation regarding the *conduct* of states rather than one of *result*. These provisions do not prescribe what form of provisional arrangement of a practical nature might be involved. While the word "provisional" indicates that the arrangement in question is not final in character, nonetheless, no particular timeframe is imposed, nor, indeed, is any restriction created on the arrangement's level of formality or binding nature.

The provision contained in Articles 74(3) and 83(3) of the LOSC "not to jeopardize or hamper the reaching of a final agreement" can be viewed as an obligation of restraint and applies to areas of overlapping maritime claims. Two international cases are of particular interest with respect to discerning both the meaning of this phrase and its implications for activities taking place within maritime areas subject to overlapping claims. These are the cases between Guyana and Suriname[65] and between Ghana and Côte d'Ivoire.[66]

In the former example, the catalyst for the arbitration case was competition over suspected seabed oil and gas resources and, particularly, a June 2000 incident, the "CGX incident," in the area of overlapping maritime claims where a mobile drilling rig operated by an oil company licensed by Guyana was confronted by Suriname naval vessels and ordered to leave the disputed area.[67] With respect to the "every effort not to jeopardize or hamper the reaching of a final agreement" contained in Articles 74(3) and 83(3) of the LOSC, the tribunal observed that this "imposes on the Parties a duty to negotiate in good faith" and that the phrase "in a spirit of understanding and cooperation" indicated "the drafters' intent to require of the parties a conciliatory approach to negotiations, pursuant to which they would be prepared to make concessions in the pursuit of a provisional arrangement."[68]

Consequently, the tribunal found that both Guyana and Suriname had breached their respective obligations to negotiate in good faith concerning the establishment of provisional arrangements of a practical nature. Suriname for failing to negotiate in good faith with regard to the overlapping claim area and Guyana's planned exploratory activities, as well as by failing to engage in a last-minute dialogue proposed by Guyana prior the CGX incident.[69] Guyana was likewise found to have breached its obligation by failing to directly inform and notify Suriname directly of the planned exploratory drilling in the area of overlapping maritime claims, by failing to seek Suriname's cooperation in undertaking these activities, and by failing to offer a share the results of the exploration activities or the financial benefits resulting from them.[70]

Concerning the second obligation set out in LOSC Articles 74(3) and 83(3), concerning actions that may jeopardize or hamper the reaching of the final agreement, it is notable that the tribunal sought to distinguish between unilateral acts likely to cause permanent damage and those that did not, in order to strike a balance between the desirability of enabling economic development and the preservation of states' rights. Thus, seismic surveys were viewed as potentially permissible, whereas drilling was not.[71] The tribunal likewise concluded that Suriname violated its obligation not to jeopardize or hamper the reaching of a final delimitation agreement when it expelled the concession holder from the disputed area, which constituted an unlawful threat of force.[72]

In the subsequent Ghana and Côte d'Ivoire case, which was settled through the Award of a Special Chamber of the ITLOS of September 23, 2017, oil and gas operations were already underway on Ghana's side of the theoretically equidistant line between the parties, and substantial discoveries had been made. Ghana argued that there was a tacit agreement between the parties on the use of equidistance to delimit the EEZ and continental shelf boundary.[73] In contrast, Côte d'Ivoire sought provisional measures to stop ongoing activities and alleges a breach of both obligations reflected in Article 83(3).

The Special Chamber found that, with respect to the first obligation reflected in Article 83(3), Côte d'Ivoire's failure to request provisional arrangements of a practical nature "bars [it] from claiming that Ghana has violated its obligation to negotiate on such

arrangements."[74] This is particularly true because Ghana's activities had been ongoing for a number of years.[75]

In the Special Chamber's view, the "transitional period" referred to in Article 83(3) "means the period after the maritime delimitation dispute has been established until the final delimitation by agreement or adjudication has been achieved."[76] The obligation not to jeopardize or hamper was viewed as applying in this transitional period whether provisional arrangements had been agreed on or not.[77]

Concerning Ghana's activities to develop seabed hydrocarbons, the Special Chamber found that Ghana had not breached its obligation to make every effort not to jeopardize or hamper the reaching of the final agreement for two reasons. Firstly, Ghana suspended all new drilling activities in accordance with the Special Chamber's provisional measures order.[78] Secondly, the area in which the drilling occurred ultimately fell on Ghana's side of the maritime boundary as determined by the Special Chamber.[79]

IX. Conclusions

The extension of claims to maritime jurisdiction seaward has created numerous "new" international maritime boundaries, only a little over half of which have been even partially settled. Consequently, there are numerous undelimited maritime boundaries and a proliferation of overlapping claims to maritime space. The geographic scope of these overlapping claims, while understood to be broad, are often by no means well defined. The existence of substantial portions of the global ocean being subject to competing jurisdictional claims can be considered to be inimical to good ocean governance.

Substantial progress has, however, been made in terms of approaches to maritime delimitation, especially through the advent of the three-stage approach to maritime delimitation. The emphasis on equidistance-based provisional delimitation lines at the first stage of this process means that coastal geography plays a fundamental role in maritime delimitation. That said, judicial discretion in the choice of base points injects uncertainty at this first stage of the process. Aspects of coastal geography have the potential to play a significant role in the adjustment of the provisional delimitation line in order to deliver an equitable result. Additionally, it is clear that coastal states involved in competing claims to maritime space have an array of dispute resolution options and mechanisms under general international law, and in particular under the international law of the sea. It is also evident that negotiations provide the primary means of resolving overlapping claims to maritime space. Additionally, there are dispute management options available when a definitive resolution of such competing claims to maritime areas cannot be reached through maritime delimitation.

In particular, provisional arrangements of a practical nature, as provided for under Articles 74(3) and 83(3) of the LOSC, offer a path towards cooperative mechanisms to manage and exploit resources, protect the marine environment or to address maritime security concerns. Such maritime joint development mechanisms inevitably carry with them both opportunities and potential drawbacks and should not be entered into lightly. These provisions also have implications for the activities coastal states may undertake in maritime spaces subject to overlapping claims. From the foregoing discussion it is clear that states party to the LOSC have an obligation to negotiate provisional arrangements in good faith,

though not one to reach agreement. Moreover, as noted above, as there is often uncertainty as to the exact geographic scope of areas of overlapping claims, so also there may be uncertainty as to the scope of this obligation as well as to exactly where provisional arrangements of a practical nature should apply.

It can be observed here that in the cases between Guyana and Suriname and between Ghana and Côte d'Ivoire discussed above, the coastal states involved clearly articulated the extent of their respective maritime claims so that the maritime area in dispute was clear. This is certainly not always the case with respect to other undelimited maritime boundary situations, giving rise to overlapping maritime claims. These cases have also made it clear that certain activities, including resource, environmental protection and maritime security-related ones, can occur in maritime areas subject to overlapping maritime claims in keeping with such provisional arrangements. Further, certain activities, such as seismic exploration, can also occur unilaterally in an undelimited area if it does not cause permanent physical change to the marine environment. However, other activities, such as exploratory drilling, may breach the obligation to "make every effort … not to jeopardize or hamper the reaching of the final agreement." A significant caveat here is that, pursuant to the Ghana–Cote d'Ivoire case, ongoing drilling in an area that is ultimately allocated to the party carrying out that activity does not *necessarily* constitute a breach. A key difficulty here, of course, is that it is difficult for a coastal state to be certain whether a given maritime area subject to completing claims will ultimately end up on its side of the line. Additionally, each case or situation needs to be assessed in light of its unique set of facts.

With respect to enforcement activities in maritime areas subject to competing claims, caution is highly advisable. In addition to the obligation to "make every effort … not to jeopardize or hamper the reaching of the final agreement" under Articles 74(3) and 83(3) of the LOSC, states also have obligations under general international law not to aggravate or extend a dispute. There is, therefore, risk that overly assertive enforcement actions, analogous for example to those of Suriname maritime enforcement forces in the CGX incident, would lead to a finding that the enforcing state would have violated its obligation not to jeopardize or hamper the reaching of a final delimitation agreement.

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Notes

1. United Nations Convention on the Law of the Sea, Montego Bay, Jamaica, December 10, 1982 (in force, November 16, 1994), 1833 UNTS 396 [hereinafter LOSC].

2. J. Ashley Roach and Robert W. Smith, *Excessive Maritime Claims* (3rd ed., Leiden/Boston: Martinus Nijhoff Publishers, 2012), p. 15.

3. IHO [International Hydrographic Organization], *A Manual on Technical Aspects of the United Nations Convention on the Law of the Sea—1982 (TALOS)*. Special Publication No. 51 (5th ed., Monaco: International Hydrographic Bureau, 2014), chapter 5, p. 3 (hereinafter, TALOS Manual).

4. *Convention on the Continental Shelf*, opened for signature April 29, 1958, entered into force June 10, 1964, 499 UNTS 311, Article 6.

5. *Arbitration Between Eritrea and Yemen*, *Award of the Arbitral Tribunal in the First Stage (Territorial Sovereignty and Scope of Dispute)* of October 9, 1998 and *Award of the Arbitral Tribunal in the Second Stage of the Proceedings (Maritime Delimitation)*, Award of December 17, 1999, both awards available at http://www.pca-cpa.org/showpage.asp?pag_id=1160, para. 116.

6. J.R. Victor Prescott and Clive H. Schofield, *The Maritime Political Boundaries of the World* (Leiden/Boston: Martinus Nijhoff Publishers, 2005), pp. 221–222.

7. Christopher M. Carleton and Clive H. Schofield, *Developments in the Technical Determination of Maritime Space: Delimitation, Dispute Resolution, Geographical Information Systems and the Role of the Technical Expert*, Maritime Briefing, 3, 4, (Durham: International Boundaries Research Unit, 2002), pp. 7–31.

8. Prescott and Schofield, above n 13, pp. 238–239; Léonard Legault, L. and Blair Hankey, "Method, Oppositeness and Adjacency, and Proportionality in Maritime Boundary Delimitation," in *International Maritime Boundaries*, ed. Jonathan I. Charney and Lewis M. Alexander, vols. 1 and 2 (Dordrecht: Martinus Nijhoff, 1993), pp. 203–242, at pp. 233 and 214.

9. *Case Concerning Maritime Delimitation in the Black Sea* (Romania v. Ukraine), Judgment of February 3, 2009, [2009] ICJ Rep 61 [hereinafter the Black Sea case].

10. *Ibid.*, para.116 (emphasis added).

11. *Ibid.*, para.120. At this point the Court cited its earlier Judgment in the *Cameroon/Nigeria Case* in support of its ruling. See *Land and Maritime Boundary Between Cameroon and Nigeria* (Cameroon v. Nigeria; Equatorial Guinea intervening, [2002]) *ICJ Reports* 303, at para. 288.

12. *Ibid.*, paras.122 and 210–216.

13. See, for example, Malcolm D. Evans, "Maritime Boundary Delimitation," in *Oxford Handbook of the Law of the Sea*, Rothwell et al. (eds.) (Oxford: Oxford University Press, 2015), pp. 254, 259–261.

14. The Black Sea case, para.117.

15. See, *Dispute Concerning Delimitation of the Maritime Boundary Between Bangladesh and Myanmar in the Bay of Bengal (Bangladesh/Myanmar)*, International Tribunal for the Law of the Sea (ITLOS), Case no. 16, Judgment, March 14, 2012.

16. *Case Concerning the Continental Shelf (Libya Arab Jamahiriya/Malta)*, Judgment of June 3, 1985, [1985] ICJ Reports, 13, available at www.icj-cij.org.

17. *Dispute Concerning Delimitation of the Maritime Boundary in the Bay of Bengal (Bangladesh V Myanmar)* (Judgment), International Tribunal for the Law of the Sea (ITLOS), Case no. 16, March 14, 2012, available at http://www.itlos.org/fileadmin/itlos/documents/cases/case_no_16/1-C16_Judgment_14_02_2012.pdf; *In the Matter of the Bay of Bengal Maritime Boundary Arbitration Between the People's Republic of Bangladesh and the Republic of India*, Award, July 7, 2014, available at https://pca-cpa.org/en/cases/18/.

18. Notably concerning treatment of the features Jabal al-Tayr and the Zubayr group. See *Award of the Arbitral Tribunal in the Second Stage of the Proceedings (Maritime Delimitation)*, Award of December 17, 1999, available at http://www.pca-cpa.org/showpage.asp?pag_id=1160.

19. *Ibid*., para.116 (emphasis added).

20. See *Case Concerning Territorial and Maritime Dispute Between Nicaragua and Honduras in the Caribbean Sea* (Nicaragua v. Honduras), Judgment of October 8, 2007, ICJ Reports 659.

21. Y. Lyons, L.Q. Hung and P. Tkalich, "Determining High-Tide Features (or Islands) in the South China Sea Under Article 121(1): A Legal and Oceanography Perspective," in *The South China Sea Arbitration: The Legal Dimension*, ed. S. Jayakumar, T. Koh, R. Beckman, T. Davenport and H.D. Phan (Cheltenham: Edward Elgar, 2018), pp. 128–153, at p. 132, https://doi.org/10.4337/9781788116275.00015.

22. Adapted from a dataset kindly provided by Andreas Østhagen. See also Andreas Østhagen, "Troubled Seas: The Changing Politics of Maritime Boundary Disputes," *Ocean and Coastal Management* 205 (2021), p. 105535, https://doi.org/10.1016/j.ocecoaman.2021.105535.

23. TALOS Manual, chapter 6, p. 3.

24. *Agreement Between the Government of Malaysia and the Government of the Republic of Indonesia on the Delimitation of the Continental Shelf Between the Two Countries,* October 27, 1969 (entered into force November 7, 1969).

25. *Agreement Between the Government of the Socialist Republic of Vietnam and the Government of the Republic of Indonesia Concerning the Delimitation of the Continental Shelf Boundary*, June 26, 2003 (entry into force May 29, 2007).

26. See, for example, *Peta Negara Kesatuan Republik Indonesia* [Map of the Unitary State of the Republic of Indonesia] (Cibinong: Badan Informasi Geospasial [Agency for Geospatial Information] (BIG), 2017).

27. *Agreement Stipulating the Territorial Sea Boundary Lines Between Indonesia and the Republic of Singapore in the Strait of Singapore*, March 25, 1973 (entry into force August 29, 1974).

28. Treaty Between the Republic of Indonesia and the Republic of Singapore relating to the Delimitation of the Territorial Seas of the Two Countries in the Western Part of the Strait of Singapore, signed March 10, 2009, in force August 30, 2010.

29. Treaty Between the Republic of Singapore and the Republic of Indonesia relating to the Delimitation of the Territorial Seas of the Two Countries in the Eastern Part of the Strait of Singapore, signed September 3, 2014.

30. *Sovereignty over Pedra Branca/Pulau Batu Puteh, Middle Rocks and South Ledge* (Malaysia/Singapore), Judgment of May 23, 2008, ICJ GL No 130, available at www.icj-cij.org/docket/files/130/14492.pdf.

31. *Ibid.*, para. 300. Sovereignty over South Ledge, a low-tide elevation located to the south of Middle Rocks, was not specifically determined by the Court, which found that South Ledge "belongs to the State in the Territorial Waters of Which It Is Located." The Court pointed out that international law is not clear on whether low-tide elevations can be considered territory from the viewpoint of acquisition of sovereignty.

32. Pedra Branca is located 7.7 m from the Malaysian coast, 7.6 m from the Indonesia island of Bintan and 0.6 m from Middle Rocks. See R. Beckman and C.H. Schofield, "Moving Beyond Disputes over Island Sovereignty: ICJ Decision Sets Stage for Maritime Boundary Delimitation in the Singapore Strait," *Ocean Development and International Law*, 40 (2009), no. 1, pp. 1, 19, https://doi.org/10.1080/00908320802631551.

33. *Ibid.*, p. 21.

34. Comprising both areas covered by full submissions to the CLCS and subject to submissions of preliminary information. It should be noted that four submissions of preliminary information to the CLCS give no indication as to the area beyond 200 m that they relate to and so are not included in this estimate. See Clive H. Schofield and Leonardo Bernard, "Disputes Concerning the Delimitation of the Continental Shelf Beyond 200 M," in *New Knowledge and Changing Circumstances in the Law of the Sea*, ed. Tomas Heidar (Leiden/Boston: Brill, 2020), pp. 157–182, at p. 162, https://doi.org/10.1163/9789004437753_010.

35. *Ibid.*, at p. 163.

36. Charter of the United Nations, available at https://www.un.org/en/charter-united-nations/. See also LOSC, Article 279.

37. This is in keeping with Article 283(1) of the LOSC, which states, "When a Dispute Arises Between States Parties Concerning the Interpretation or Application of This Convention, the Parties to the Dispute Shall Proceed Expeditiously to an Exchange of Views Regarding Its Settlement by Negotiation or Other Peaceful Means."

38. *North Sea Continental Shelf (Federal Republic of Germany/Denmark; Federal Republic of Germany/Netherlands) (1967–1969)*, Judgment of February 20, 1969, [1969] ICJ Reports, 3, at para. 85.

39. *Arbitration Between Eritrea and Yemen*, *Award of the Arbitral Tribunal in the First Stage (Territorial Sovereignty and Scope of Dispute)* of October 9, 1988 and *Award of the Arbitral Tribunal in the Second*

Stage of the Proceedings (Maritime Delimitation), Award of December 17, 1999, both awards available at http://www.pca-cpa.org/showpage.asp?pag_id=1160.

40. Report and Recommendations to the Governments of Iceland and Norway of the Conciliation Commission on the Continental Shelf Area Between Iceland and Jan Mayen, June 1981 (1981) ILM, pp. 797–842, at pp. 803–804. *Agreement on the Continental Shelf Between Iceland and Jan Mayen, October 22, 1981* (entered into force June 2, 1982). Treaty text available at www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/ISL-NOR1981CS.PDF. Under this arrangement each State is entitled to 25 percent of revenues deriving from the exploitation of oil and gas on the other side of boundary. Moreover, hydrocarbon fields straddling the joint zone and Icelandic waters are considered wholly Icelandic. See Agreement on the Continental Shelf between Iceland and Jan Mayen, Articles 5–6 and 8.

41. This section of the memorandum is adapted from Clive H. Schofield and I.M. Andi Arsana, "Settling Timor-Leste's International Limits and Boundaries," in *The Routledge Handbook of Contemporary East Timor*, ed. Andrew McWilliam and Michael Leach (London: Routledge, 2019), pp. 285–302.

42. This occurred through a Notification Instituting Conciliation pursuant to Article 298 and Section 2 of Annex V of LOSC. See Permanent Court of Arbitration (PCA), Conciliation Between the Democratic Republic of Timor-Leste and the Commonwealth of Australia, Press Release No. 1, July 29, 2016, available at www.pca-cpa.org.

43. PCA, Conciliation Between the Democratic Republic of Timor-Leste and the Commonwealth of Australia, Decision on Competence, September 19, 2016, available at www.pca-cpa.org.

44. In particular, these related to the termination of the CMATS agreement and the termination of two arbitration cases that Timor-Leste had brought against Australia.

45. Australia-Timor-Leste, *Treaty Between Australia and the Democratic Republic of Timor-Leste Establishing Their Maritime Boundaries in the Timor Sea*, March 6, 2018, available at http://dfat.gov.au/geo/timor-leste/Documents/treaty-maritime-arrangements-australia-timor-leste.pdf.

46. See C.H. Schofield and I.M.A. Arsana (2019), "Settling Timor-Leste's International Limits and Boundaries," in *The Routledge Handbook of Contemporary East Timor*, ed. Andrew McWilliam and Michael Leach (London: Routledge, 2019), pp. 285–302, at p. 295, https://doi.org/10.4324/9781315623177-21. See also Australian Department of Foreign Affairs and Trade (DFAT), "Timor-Leste," available at https://www.dfat.gov.au/geo/timor-leste/Pages/timor-leste.

47. Australia-Timor-Leste, 2018, Article 3(4).

48. Australia-Timor-Leste, Article 7 and Annex B.

49. *Ibid.*, Annex B, Article 2.

50. Clive H. Schofield and Rebecca Stating, "Sun Setting on Timor-Leste's Greater Sunrise Plan," *East Asia Forum*, March 30, 2018, available at http://www.eastasiaforum.org/2018/03/30/sun-setting-on-timor-lestes-greater-sunrise-plan/. See also, for example, Anne Barker and Michael Barnett, "Oil and Gas Is Timor-Leste's Ticket to Prosperity. Is This Impoverished Nation Blowing Its One Chance?" ABC News, July 21, 2019, available at https://www.abc.net.au/news/2019-07-22/timor-leste-builds-giant-infrastructure-to-process-gas-onshore/11318924.

51. See, for example, Ian Storey, "The Triborder Sea Area: Maritime Southeast Asia's Ungoverned Space," *Terrorism Monitor* 5(19) (October 24, 2007). It can be observed that in 2014 Indonesia and the Philippines agreed on a maritime boundary in this area, reducing some of this jurisdictional uncertainty. See *Agreement Between the Government of the Republic of the Philippines and the Government of the Republic Indonesia Concerning the Delimitation of the Exclusive Economic Zone Boundary*, May 23, 2014, available at http://www.gov.ph/2014/05/23/agreement-between-the-government-of-the-republic-of-the-philippines-and-the-government-of-the-republic-indonesia-concerning-the-delimitation-of-the-exclusive-economic-zone-boundary/.

52. See, for example, "Indonesia Rejects China's Claims over South China Sea," *Channel New Asia*, January 1, 2020, available at https://www.channelnewsasia.com/news/asia/indonesia-jakarta-rejects-claims-south-china-sea-natuna-islands-12225464; K. Siregar, "Indonesia Deploys 4 Additional Warships to Natuna Amid Standoff with Chinese Warships," *Channel News Asia*, January 6, 2020, available at https://www.channelnewsasia.com/news/asia/indonesia-china-natuna-islands-dispute-south-china-sea-12237456?cid=h3_referral_inarticlelinks_24082018_cna; D. Grossman, "Why Is China Pressing Indonesia Again over Its Maritime Claims," *World Politics Review*, January 16, 2020, available at https://www.worldpoliticsreview.com/articles/28476/why-is-china-pressing-indonesia-again-over-the-natuna-islands.

53. See "The South China Sea: Chinese Ship Haiyang Dizhi 8 Seen Near Malaysian Waters, Security Sources Say," *South China Morning Post*, April 18, 2020, available at https://www.scmp.com/news/

asia/southeast-asia/article/3080510/south-china-sea-chinese-ship-haiyang-dizhi-8-seen-near; "5-Nation Face-Off in High-Seas Energy Tussle Off Malaysia," *The Straits Times*, April 25, 2020, available at https://www.straitstimes.com/asia/se-asia/5-nation-face-off-in-high-seas-energy-tussle-off-malaysia.

54. See, for example, "Chinese Survey Vessel Returns to Disputed Vietnamese Waters," *The Maritime Executive*, April 15, 2020, available at https://www.maritime-executive.com/article/chinese-survey-vessel-returns-to-disputed-vietnamese-waters.

55. See K. Huang, "Beijing Marks Out Claims in South China Sea by Naming Geographical Features," *South China Morning Post*, April 20, 2020, available at https://www.scmp.com/news/china/diplomacy/article/3080721/beijing-marks-out-claims-south-china-sea-naming-geographical.

56. See, for example, Pierre Leenhardt, Bertrand Cazalet, Bernard Salvat, Joachim Claudet, François Feral, "The Rise of Large-Scale Marine Protected Areas: Conservation or Geopolitics?," *Ocean and Coastal Management*, 85 (2013), pp. 112–118, 1, https://doi.org/10.1016/j.ocecoaman.2013.08.013.

57. LOSC, Articles 74(3) and 83(3).

58. See, for example, David Ong, "Joint Exploitation Areas," entry in *Max Planck Encyclopaedia of Public International Law* (MEPIL), vol. 6, chief ed., Rudiger Wolfrum, Oxford: OUP (2011) 463–470; David Ong, "Joint Development of International Common Offshore Oil and Gas Deposits: 'Mere' State Practice or Customary International Law?," *American Journal of International Law*, 93(4) (1999), pp. 771–804. See also Clive H. Schofield, "Blurring the Lines: Maritime Joint Development and the Cooperative Management of Ocean Resources," *Issues in Legal Scholarship*, Berkeley Electronic Press, vol. 8, no. 1 (Frontier Issues in Ocean Law: Marine Resources, Maritime Boundaries, and the Law of the Sea, 2009), Article 3, https://doi.org/10.2307/2555344.

59. For example, multiple joint fishing zones have been instituted between China, Japan and Korea in the East China Sea; *ibid.*; see also See Sun Pyo Kim, "The UN Convention on the Law of the Sea and New Fisheries Agreements in North East Asia," *Marine Policy*, 27 (2003): 97–109, https://doi.org/10.1016/S0308-597X(02)00082-9.

60. *Treaty Between the Federal Republic of Nigeria and the Democratic Republic of Sao Tomé and Príncipe on the Joint Development of Petroleum and Other Resources, in Respect of Areas of the Exclusive Economic Zone of the Two States*, February 21, 2001 (entered into force January 16, 2003), Article 4, available at www.un.org/Depts/los/legislationandtreaties.htm; see also David A. Colson and Robert W. Smith (eds.), *International Maritime Boundaries*, vol. 5 (Leiden/Boston: Martinus Nijhoff Publishers, 2005), pp. 3638–3682.

61. Barbados-Guyana, *Treaty Between the Republic of Guyana and the State of Barbados Concerning the Exercise of Jurisdiction in Their Exclusive Economic Zones in the Area of Bilateral Overlap Within Each of Their Outer Limits and Beyond the Outer Limits of the Exclusive Economic Zones of Other States*, signed December 2, 2003 (entered into force May 5, 2004); United Nations, *Law of the Sea Bulletin* 55(2–4), pp. 36–39; see also Colson and Smith, *ibid.*, pp. 3578–3597.

62. See 2011 Joint Declaration Concerning Maritime Boundary Delimitation Between Indonesia and Philippines. This document includes commitments to exercise mutual restraint in the area to be delimited between the parties without prejudice to that delimitation and to encourage their maritime enforcement agencies to formulate standard operating procedures and rules of engagement and enhance communications between them with a view to avoiding bilateral incidents.

63. See, for example, Clive H. Schofield, "No Panacea?: Challenges in the Application of Provisional Arrangements of a Practical Nature," in *Maritime Border Diplomacy*, ed. M.H. Nordquist and J.N. Moore (Leiden/Boston: Martinus Nijhoff, 2012), pp. 151–169, https://doi.org/10.1163/9789004230941_012.

64. For discussion see Myron Nordquist, Neal Grandy, Satya Nandan and Shabti Rosenne (eds.), *United Nations Convention on the Law of the Sea: A Commentary* (Virginia Commentaries), vol. 2 (1993), at p. 815.

65. See Arbitral Tribunal Constituted Pursuant to Article 287, and in Accordance with Annex VII, of the United Nations Convention on the Law of the Sea in the Matter of an Arbitration Between Guyana and Suriname, Award of September 17, 2007 (*Guyana–Suriname* Award), available at the website of the Permanent Court of Arbitration at www.pca-cpa.org (hereinafter, Guyana-Suriname case).

66. *Case Concerning Delimitation of the Maritime Boundary Between Ghana and Côte d'Ivoire in the Atlantic Ocean (Ghana/Côte d'Ivoire)*, Case No. 23, Judgment of September 23, 2017, available at https://www.itlos.org/en/cases/list-of-cases/case-no-23/ (hereinafter Ghana–Côte d'Ivoire case).

67. The so-called "CGX Incident" involved the mobile drilling rig *C.E. Thornton*, operated by CGX Resources Inc. (CGX), a Canadian company operating in an oil exploration concession issued by Guyana in the area of overlapping claims and two Suriname navy vessels, which on June 3, 2000, approached the *C.E.*

Thornton and ordered the rig and its service vessels to leave "Suriname Waters" within twelve hours. The C.E. Thornton duly did so. *Ibid.*, paras. 137–156.

68. *Ibid.*, para. 461 (footnotes omitted).
69. *Ibid.*, para. 475–476.
70. *Ibid.*, para. 477.
71. *Ibid.*, paras. 479–481.
72. *Ibid.*, paras. 483–484.
73. Ghana-Côte d'Ivoire case., para. 102.
74. *Ibid.*, para. 628.
75. *Ibid.*
76. *Ibid.*, para. 630.
77. *Ibid.*
78. *Ibid.*, para. 632.
79. *Ibid.*, para. 633.

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