The principles governing maritime boundary delimitation have been developed sufficiently by the International Court of Justice and other tribunals to provide some predictability regarding the resolution of the remaining disputes. The complicated geography of the Aegean presents a challenge, but even this conflict should be resolvable. The median line is usually a starting point, adjusted by the proportionality of the coastlines. Islands have only a limited role in maritime boundary disputes, and in the Aegean the islands should probably be considered in clusters rather than individually. The principles of non-encroachment and maximum reach are particularly important in the Aegean, because they are designed to protect the security interests of each state and to ensure that each country is allocated some maritime area. As applied to the Aegean, Greece is entitled to a majority of the maritime space, but Turkey is also entitled to an equitable share in the Eastern Aegean. Using the proportionality of the coastlines as a guideline, Turkey would be entitled to a share of the Aegean's maritime space perhaps halfway between 20% (its percentage of the coastlines if all islands are included) and 41% (its percentage if no islands are included). Another important unresolved issue is the breadth of the territorial sea, which is presently 6 nautical miles in the Aegean. One possible compromise might be to allow a 12-nautical-mile territorial sea to be claimed from the continental coasts but not from the islands, or from the islands in the Western Aegean but not those in the Eastern Aegean. Copyright © 1996 Elsevier Science Ltd

The geographical configuration of the islands in the Aegean Sea, particularly when combined with the historical tension between Greece and Turkey, presents an extremely difficult challenge to those searching for an equitable solution to the maritime boundary dispute of this region. Nonetheless, recent judicial and arbitral decisions have adopted a common approach, confirmed certain principles, and identified certain relevant factors that have the promise to provide the pathway to resolve this controversy.

**Delimiting the maritime boundary**

**The common approach**

The International Court of Justice (ICJ) and arbitral tribunals adjudicating maritime boundary disputes now follow a standard sequence in approaching the controversy. Professor Charney has recently described this common approach as follows:

First, they define the relevant geographical area and the area in dispute. Second, they identify the relevant areas and coastlines. Third, they spell out all the relevant considerations. Fourth, they develop a provisional line based upon an analysis of the relevant considerations. Fifth, they check that line against some of the considerations to determine whether the line is 'radically inequitable' and if so, they adjust it accordingly.

The first difficult step in applying this analysis to the Aegean situation is to define the 'relevant area'. What is the 'relevant area' that needs to be examined in order to determine whether the maritime boundary solution is 'equitable'? Should it contain all the Southern Dodecanese group? Should it extend even farther down to Crete? Or should it be limited to the northern and central Aegean? The choice that is made will have a substantial impact on the final result of delimitation process.

Because of the complicated geography of the Aegean, it is probably necessary and sensible to divide it into sectors in order to address the appropriate maritime boundary. The Northern Aegean—extending...
The Aegean sea dispute: Jon M Van Dyke

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3Articles 74 on the exclusive economic zone and 83 on the continental shelf of the UN Convention on the Law of the Sea, Dec 10 1982, UN Doc A/CONF.62/122, 1982, reprinted in The Law of the Sea: Official Text of the United Nations Convention on the Law of the Sea with Annexes and Index, UN Sales No E.83.V.5, 1983 and ILM 1982, Vol 21, p 1261, both state that boundary delimitations are to be effected "by agreement on the basis of international law, as referred to in Article 38 of the Statute of the International Court of Justice, in order to achieve an equitable solution". Professor Charney has stated that the requirement that boundaries "be delimit ed in accordance with equitable principles" is now a requirement of customary international law. Jonathan I. Charney, 'Progress in International Maritime Boundary Delimitation Law', 88 American Journal of International Law, 1994, Vol 88, p 230, citing several recent decisions of the International Court of Justice. See also id at p 244, where Professor Charney cites the Case Concerning Maritime Delimitation in the Area Between Greenland and Jan Mayen, Denmark vs Norway, ICJ 1993, p 38, hereafter cited as the Jan Mayen case, for the proposition that an analysis [of a maritime boundary] based on the Convention will be identical to the general international law analysis.

4For such attempted solutions, see for example the papers in The Aegean Sea, supra note 1, and Donald E. Karl, Islands and the Delimitation of the Continental Shelf: A Framework for Analysis, American Journal of International Law, 1977, Vol 71, p 642. See also Aegean Sea Continental Shelf Case (Greece/Turkey). ICJ 1978 p 3.


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down to about the 38th parallel—has relatively few islands, so that fairly standard maritime delimitation tools can be used.

As one moves south, the number of Greek islands increases with the Dodecanese chain, and the maritime boundary line challenge becomes more daunting. This region—from the 38th parallel down to perhaps the 36.5 parallel—should probably be viewed as a separate sector, and then a final sector would be the region between the Dodecanese and Crete—roughly between the 36.5 parallel and the 35.5 parallel.

The governing principles

Among the governing principles of particular relevance to the Aegean are:

A single maritime line should be drawn to divide the continental shelves and the exclusive economic zones. All recent maritime boundary disputes have been resolved with the drawing of a single line. In the Jan Mayen dispute, the parties did not request a single zone, and the Court addressed the continental shelf and exclusive economic zone issues separately, but nonetheless found the analysis to be identical and came up with a single line for both issues.

The equidistance approach can be used as an aid to analysis, but it is not to be used as a binding or mandatory principle. In the Libya/Malta case, the Gulf of Maine case, and most recently the Jan Mayen case, the ICJ examined the equidistance line as an aid to its preliminary analysis, but then adjusted the line in light of the differences in the length of the coastlines of the contending parties. The Court has made it clear in all these cases that the equidistance line is not mandatory or binding.

The proportionality of coasts must be examined to determine if a maritime boundary delimitation is 'equitable'. It has now become well established that an essential element of a boundary delimitation is the calculation of the relative lengths of the relevant coastlines. If this ratio is not roughly comparable to the ratio of the provisionally delimited relevant water areas, then the tribunal will generally make an adjustment to bring the ratios into line with each other. In the recent Jan Mayen case, the ICJ determined that the ratio of the relevant coasts of Jan Mayen (Norway) to Greenland (Denmark) was 1:9, and ruled that this dramatic difference required a departure from reliance on the equidistance line. The final result was perhaps a compromise between an equidistance approach and a proportionality-of-the-coasts approach, with Denmark (Greenland) receiving three times as much maritime space as Norway (Jan Mayen).

Geographical considerations will govern maritime boundary delimitations and nongeographic considerations will only rarely have any relevance. The Gulf of Maine case was perhaps the most dramatic example of the Court rejecting submissions made by the parties regarding nongeographic considerations, such as the economic dependence of coastal communities on a fishery, fisheries management issues, and ecological data.

The concept of the continental shelf as a 'natural prolongation' of the adjacent continent is a geographical notion, but it has not received prominence in recent decisions. But it is used in Article 76 of the 1982
Law of the Sea Convention, and thus may continue to be of some relevance in the Aegean dispute. To some extent, the Principle of Non-Encroachment, discussed below, has taken the place of the natural-prolongation idea.

The Principle of Non-Encroachment. This principle is stated explicitly in Article 7(6) of the 1982 UN Law of the Sea Convention, which says that no state can use a system of straight baselines “in such a manner as to cut off the territorial sea of another State from the high seas or an exclusive economic zone”. It has recently been relied upon more expansively in the Jan Mayen case, where the Court emphasized the importance of avoiding cutting-off the extension of a coastal state’s entry into the sea. Even though Norway’s tiny Jan Mayen island was minuscule in comparison with Denmark’s Greenland, Norway was allocated a maritime zone sufficient to give it equitable access to the important capelin fishery that lies between the two land features.14

The unusual 16-nautical-mile-wide and 200-nautical-mile-long corridor drawn in the St Pierre and Miquelon case also appears to have been based on a desire to avoid cutting off these islands’ coastal fronts into the sea. But, at the same time, the arbitral tribunal accepted Canada’s argument that the French islands should not be permitted to cut off the access of Canada’s Newfoundland coast to the open ocean.

The Principle of Maximum Reach. This principle first emerged in the North Sea Continental Shelf case,15 where Germany received a pie-shaped wedge to the equidistant point even though this wedge cut into the claimed zones of Denmark and the Netherlands. Professor Charney reports that this approach has been followed in all the later cases: “No subsequent award or judgment has had the effect of fully cutting off a disputant’s access to the seaward limit of any zone”.16 The recent cases have reaffirmed this trend. In the Gulf of Fonseca case, the Court recognized the existence of an undivided condominium regime in order to give all parties access to the maritime zone and its resources,17 and in the St Pierre and Miquelon case France was given a narrow corridor connecting its territorial sea with the outlying high seas.18

The geographical configuration in the Jan Mayen case presented different issues, but even then the Court gave Norway more than it ‘deserved’ given the small coastline and tiny size of Jan Mayen island, apparently to enable it to have at least ‘limited geographical access to the middle of the disputed area’,19 which contained a valuable fishery.

Professor Charney identifies several interests that are served by the Maximum Reach Principle—‘status’ (by recognizing that even geographically disadvantaged countries have rights to maritime resources), the right ‘to participate in international arrangements as an equal’, navigational freedoms, and ‘security interests in transportation and mobility’.20

Similarly, in the Libya/Malta Continental Shelf case, the ICJ started with the median lines between the countries, but then adjusted the line northward through 18° of latitude to take account of the “very marked difference in coastal lengths”21 between the two countries. The Court then confirmed the appropriateness of this solution by examining the “proportionality” of the length of the coastlines of the two countries22 and the “equitableness of the result”.23
Each competing country is allocated some maritime area. This principle is similar to the Non-Encroachment and Maximum-Reach Principles, but must be restated in this form to emphasize how the ICJ has operated in recent years. Although the Court has attempted to articulate consistent governing principles, its approach to each dispute submitted to it has, in fact, been more akin to the approach of an arbitrator than that of a judge. Instead of applying principles uniformly without regard to the result they produce, the Court has tried to find a solution that gives each competing country some of what it has sought, and that each country can live with. Perhaps such an approach is inevitable, and even desirable, given that the goal of a maritime boundary delimitation is to reach an 'equitable solution'.

Islands have a limited role in resolving maritime boundary disputes. Islands can generate maritime zones, but they do not generate full zones when they are competing directly against continental land areas. This conclusion has been reached consistently by the Court and arbitral tribunals in the North Sea Continental Shelf case, the Anglo-French arbitration, the Libyan/Tunisia Continental Shelf case, the Libyan/Malta Continental Shelf case, the Gulf of Maine case, the Guinea-Guinea-Bissau case, the Jan Mayen case, and the St Pierre and Miquelon arbitration.

The vital security interests of each nation must be protected. This principle was also recognized in the Jan Mayen case, where the Court refused to allow the maritime boundary to be too close to Jan Mayen island, and it can be found in the background of all the recent decisions. The refusal of tribunals to adopt an 'all-or-nothing' solution in any of these cases illustrates their sensitivity to the need to protect the vital security interests of each nation.

Turkey's security interests include the right of unimpeded navigation and the right of overflight. Turkey is also concerned about limiting the militarization of the Greek islands adjacent to its shores. Greece also has important security interests that need to be considered.

With regard to navigation, the right of innocent passage of course exists through the territorial seas of other nations, but for Turkey this right does not provide sufficient protection for its ships. Turkey needs a right of unimpeded passage to gain access to the Mediterranean and the open ocean. In addition, airplanes do not share the right of innocent passage, and Turkey needs rights of passage for its aircraft.

Turkey now engages in naval and aerial maneuvers in the Aegean in order to maintain defense preparedness. Turkey's concern is that if Greece expands its territorial sea to 12 nautical miles or establishes continental shelf and exclusive economic zone rights to the bulk of the Aegean, Turkey will lose its right to move its ships and aircraft freely. The right of transit passage through international straits (articles 34.45 of the UN Law of the Sea Convention) would protect some of Turkey's navigational interests, but would not permit complete freedom of movement.

Greece and Turkey also have environmental concerns, because if the waters of the Aegean are not managed properly, the coasts of Greece and Turkey and their coastal fisheries will be impacted negatively.
Ultimately, the interests of the two countries might be best served if a joint management or condominium arrangement were established, whereby Greece and Turkey would be able to continue their shared navigational uses of the region and would also be able to participate in management decisions affecting the environment and the resources.

In fact, it could be argued that Greece and Turkey have established a *de facto* joint use zone, particularly in the northern sector of the Aegean, where military exercises, navigation, and fishing, have been carried out by each country without interference by the other. The unusual decision of the ICJ Chamber in the El Salvador–Honduras *Maritime Frontier Dispute* concluding that El Salvador, Honduras, and Nicaragua hold undivided interests in the maritime zones seaward of the closing line across the Gulf of Fonseca may provide a useful precedent in the Aegean case. It has also become increasingly common for countries to establish joint development areas in disputed maritime regions, and such a joint zone may provide the logical solution in the northern part of the Aegean.

The territorial sea

A central question requiring resolution is whether Turkey can insist that Greece limit its territorial sea claims around the Aegean Islands to 6 nautical miles, instead of the 12 that has been claimed by most countries in other regions of the world. The 6-mile claim has been in place in the Aegean for many years, and Turkey has made it clear that any extension would be unacceptable to it.

The unique geography and history in the Aegean make this question a difficult one. The 1982 Law of the Sea Convention says that all states have the “right” to establish a territorial sea “up to a limit not exceeding 12 nautical miles” from their coasts. Turkey has not signed or ratified the Convention, however, and has done everything it possibly can do to establish itself as a “persistant objector”, resisting the establishment of this norm. It can thus claim that a “regional state practice” in the Aegean limits all territorial sea claims to 6 nautical miles.

Turkey can also point to Articles 122 and 123 of the Law of the Sea Convention that—although written in vague and general language—recognize that ‘semi-enclosed seas’, such as the Aegean, require special management measures and require states bordering on such seas to cooperate in co-ordinating their policies. It is also of interest that no Mediterranean nation has claimed an exclusive economic zone, thus indicating that unique and special understandings of the appropriate maritime zones exist in this region.

Finally, Turkey can cite Article 300 of the Convention, which says that states must exercise their rights under the Convention “in a manner which would not constitute an abuse of right”. If Greece were to establish a 12-nautical-mile territorial sea, especially around its islands in the Eastern Aegean, such a step would impinge upon Turkey’s right to have access to the open ocean. Imposing such a grave security threat and navigational burden on Turkey could constitute an ‘abuse’ of the right to declare territorial sea boundaries.

Examples can be found where states have agreed to establish territorial seas around islands of less than 12 nautical miles, when they are on the ‘wrong’ side of the median line. Hiran W. Jayewardene (1990), in his book, cites the cases of the Venezuelan island of Isla Patos.
(between Venezuela and Trinidad/Tobago), the Abu Dhabi island of Dayyinah (between Abu Dhabi and Qatar), and the Australian islands in the Torres Strait (between Australia and Papua New Guinea), all of which have been given only 3 nautical miles of territorial sea. Whether these provide a firm precedent for the Aegean is unclear, because these islands are all small and sparsely populated, and the agreements were entered into before the 1982 Convention came into force. Nonetheless, Ambassador Jayewardene cites these cases to support the view that "[s]imilar solutions may be considered with regard to" the Greek islands that are adjacent to Turkey's coast. Another intriguing example is found in the 1984 agreement between Argentina and Chile, where these two countries limited their territorial sea claim \textit{in relation to each other} to 3 nautical miles, but claimed 12-nautical-mile territorial seas with regard to all other countries.

Also of some significance is the fact that Greece, in its continental shelf delimitation agreement with Italy, accepted that in the north its island of Fanos would receive only a three-quarter effect and that in the south the Greek islands of Strophades would receive a semi-effect.

Turkey's position is strongest with regard to the islands in the Eastern Aegean, particularly those near its coast. Some of the islands in the Western Aegean are very close to Greece's continental coast, and thus are practically part of the Greek mainland. But those on the eastern half do not have the same geographical links with the Greek mainland and present security and navigational threats to Turkey. One possible compromise might be to accept a 12-nautical-mile territorial sea from Greece's coasts, but not from its islands. Another might be to permit at least some of Greece's islands in the Western Aegean to generate 12-nautical-mile zones, while continuing to conclude that the eastern Greek islands must limit their territorial seas to 6 nautical miles.

\section*{Conclusion}

The geography of the Aegean requires dividing it into sectors to delimit the maritime boundary. The northern boundary must logically begin at the land boundary between Greece and Turkey, but then would gradually move toward a median line between the two continental land masses.

Because the northern Aegean has relatively few islands, standard maritime delimitation principles can be used in that area. A decision-maker or group of negotiators should first draw a median line between the continental land masses of Greece and Turkey, and then adjust it somewhat in light of the location of the islands and the proportionality of coasts. This approach would give Greece somewhat more than half of the maritime space, but would also ensure that Turkey has a relatively substantial amount of maritime space. The Greek islands on the 'wrong' side (the eastern side) of this line would have 6-nautical-mile territorial sea enclaves around them.

As one moves south, the number of Greek islands increases, and so the maritime boundary line must move eastward toward Turkey. But Turkey should nonetheless be entitled to some ocean space, sufficient to protect its navigational access from Istanbul into the Mediterranean and its security needs. Again, the Greek islands on the 'wrong' (eastern) side of the line would be entitled to territorial sea enclaves around them, but these enclaves should be limited to 6 nautical miles.
Further south, in the Sea of Crete, the waters are almost completely surrounded by Greek islands, and the Greek claim to the waters appears to be strongest. The line would thus move eastward, closer to the Turkish coast.

Once a line is drawn based on a rough-hewn sense of equity, it must be analyzed in terms of the criteria used by the Court, particularly the length of the coastlines. If one does not consider the islands at all, even Crete, the length of the coastlines favors Greece over Turkey by a 59:41 ratio. If the islands are also included, the ratio favors Greece by a larger margin, 4:1. A ratio should be determined for each of the three geographical sectors described above.

As explained above, although islands are relevant when delimiting boundaries, they have not been given equal power with continental land masses to generate zones when they are in opposition to each other. An 'equitable' division of the Aegean would, therefore, be one that gives Turkey somewhere between 20 and 41% of the Aegean marine resources, and also protects its security and navigational interests (through The Principles of Non-Encroachment and Maximum Reach). It might be even more 'equitable' to all concerned, however, to have some sort of joint use or condominium arrangement over at least some of the waters, so that the history of shared uses could continue.

This dispute can be resolved through negotiations or through some third-party decision-making process—such as the International Court of Justice—or it can be allowed to continue to fester, causing difficulties and misunderstandings between Greece and Turkey. Although negotiations are the ideal solution, third-party decision-making may be the only practical approach in this situation because domestic political pressures make it hard for either side to make public concessions.

If such an approach were to be pursued, it might be best for Greece and Turkey to agree upon certain facts and principles that the tribunal would follow in reaching its decisions. These matters might include defining the 'relevant area' by agreement and identifying the 'relevant circumstances' for the tribunal to consider. The two nations could also inform the tribunal whether buffer zones or joint/condominium zones would be acceptable or desirable in those areas where geography presents particularly difficult challenges.

Once these agreements are reached, the tribunal can be expected to follow the approach and to apply the principles explained above. Each nation should then feel confident that the tribunal's judgment will protect its essential interests and concerns.
Figure 1. This map illustrates the present 6 mile territorial seas claimed by Greece and Turkey in the Aegean Sea and a possible line dividing the remaining waters based on the principles that have emerged from recent decisions of the International Court of Justice and arbitral tribunals.