METHOD AND PRINCIPLE OF MARITIME BOUNDARY DELIMITATION BETWEEN STATES WITH OPPOSITE OR ADJACENT COASTS (CASE OF INDONESIA AND TIMOR-LESTE)

1Belardo Prasetya Mega Jaya, 2Ferina Ardhi Cahyani, 3Idris, 4Rika Ratna Permata
1Faculty of Law, Universitas Sultan Ageng Tirtayasa, belardoprasetya@untirta.ac.id
2Faculty of Law, Universitas Sultan Ageng Tirtayasa, ferinaac@untirta.ac.id
3Faculty of Law, Universitas Padjadjaran, idris@unpad.ac.id
4Faculty of Law, Universitas Padjadjaran, permata_rika@yahoo.com

Abstract

In the practice the maritime boundary delimitations can cause the overlap of claims between states with opposite or adjacent coasts. Regarding the maritime boundary between Indonesia and Timor-Leste, there was never a maritime boundary between both States, so it needs a settlement of disputes of maritime boundary delimitation between both parties. Therefore, these research aims to explain the methods and principles that could be used in resolving maritime boundary delimitation dispute between state with opposite or adjacent coasts based on international law and analyze how obstacles and solution to solve maritime boundary delimitation dispute between Indonesia and Timor-Leste (East Timor). This research uses normative legal research and Empirical Research Methods. The results of the research show that: (1) the maritime boundary delimitation between Indonesia and Timor-Leste uses enclaving, equidistant, and three-step approach method. (2), Indonesia and Timor Leste have the potential to determine maritime boundaries in the three areas, namely the area to the north of the Oecusse (Ombai Strait), to the north of Timor Island (Wetar Strait) and to the south of Timor Island (Timor Sea). Timor-Leste will still get a maritime territory in District Oecusse but the extent would be negotiated with Indonesia first, while in the Wetar Strait, the territorial sea division of the two countries would consider the outer islands of both countries.

Keywords: Maritime Boundary; Delimitation; Opposite or Adjacent Coast

1. Introduction

The international law of the sea has a long progress, until the international community through the United Nations (UN) organized the International Conference on the Law of the Sea III. The third law of the sea conference produced the United Nations Convention on the Law of the Sea 1982 (UNCLOS 1982). This convention was the most comprehensive arrangement of the previous marine law conventions so it can be called "A Constitution of the Ocean”. One of them, UNCLOS 1982 has recognized the concept of "Archipelagic State". Compared with previous law of the sea conventions, UNCLOS 1982 gave the territorial limits clearly because the convention has set the limits or distance that any coastal state can claim. The border areas of a country are a major manifestation of state sovereignty that have strategic value in supporting national development and become a sign of the integrity of a sovereign state and has clear territory. The maritime border was a boundary that separated the territory of one country and another in the sea. Maritime boundaries include: territorial sea boundary, Exclusive Economic Zone boundary and continental shelf boundary.
In the practice, the maritime boundary delimitations that governed by UNCLOS may cause problems when a country was opposite or adjacent to another country, in this case the two countries have a close proximity so those countries can not apply the maritime boundary as predetermined by UNCLOS 1982, for example in Indonesia. The Republic of Indonesia has constraints in determining its maritime boundaries in accordance with the provisions of UNCLOS because of the position of the Indonesian state opposite or adjacent to several other countries. A map of the maritime border with these countries can be seen in Figure 1.

Based on Figure 1, there are 10 countries which are opposite or adjacent to the Republic of Indonesia, such as : India, Thailand, Malaysia, Singapore, Vietnam, Philippines, Papua New Guinea, Palau, Timor-Leste and Australia. In this paper, the author will only discuss between Indonesia and Timor-Leste. Timor-Leste's independence in 1999 changed the territory of Indonesia and had to be redefined the maritime territory and its maritime boundaries. Picture 2 is a map between Indonesia and Timor-Leste.

Between Indonesia and Timor-Leste in the Wetar Strait, and the Ombai Strait, having a opposite territory and the width of the strait of the two territory were less than 24 miles, so they can not set up the territorial sea boundary (BLT) based on UNCLOS 1982, because there will be a disputed boundary or overlapping maritime boundary claims between the two countries when setting up the territorial sea in accordance with UNCLOS 1982 that was 12 miles. In that area there was also a need to negotiate in determining the delimitation of its territory because there was a special circumstances which was an enclave named Oekusi District which was the territory of Timor-Leste that was in NTT region. Maritime boundaries must be settled to the north of the mainland coast of Timor-Leste (Wetar Strait) and around the Oecusi District. Timor Leste's claim to its maritime territory in the Wetar Strait and Ombai Strait (Oekusi District) can be seen in Figure 3.

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1 Direktorat Jenderal Strategi Pertahanan, *Optimizing the Handling of Maritime Border Area RI-RTDL in the Framework of Maintaining the Unitary State of the Republic of Indonesia (NKRI)* (Jakarta, 2007); S.S. Hadiwijoyo, *State Border, in International Legal Dimension* (Yogyakarta: Graha Ilmu, 2011); Sumaryo and I Made Arsana, *Managing Indonesia’s Border in a Boundless World: Geo-Spatial Aspect of Indonesia’s International Maritime Border In Border Area Management* (Yogyakarta: Graha Ilmu, 2010); I Made Andi Arsana, *Batas Maritim Antarnegara: Sebuah Tinjauan Teknis Dan Turidis* (Yogyakarta: Gadjah Mada University Press, 2007).

2 Muhammad Risal, “Tantangan Kedaulatan Maritim Indonesia Di Kemerdekaan Timor Leste,” *eJournal Ilmu Hubungan Internasional* 3, no. 2 (2015): 329–344.

3 The Ombai Strait was a part of Alor District in East Nusa Tenggara Province (NTT) bordering on the Oekusi District which was the territory of Timor-Leste.

4 M. R.C. Wila, *Konsepsi Hukum Dalam Pengaturan & Pengelolaan Wilayah Perbatasan Antarnegara* (Bandung: Alumni, 2006).
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Figure 1. Map of the Maritime Border
Source: Navy Hydro-Oceanographic Service (dishidros.go.id/).

Figure 2. Map of the Maritime Border Between Indonesia and Timor-Leste
Source: I Made Andi Arsana (dishidros.go.id/).
Maritime Boundary Office of Timor Leste stated that the map was made by international law and shows the equidistant line. Timor-Leste and Indonesia need to agree on whether the equidistance line is an appropriate and equal outcome for the two countries, or whether it needs to be adjusted to the relevant circumstances or disproportionality.5

The absence of boundary determination between the Indonesian government and the state that was opposite with Indonesia, one of them with Timor-Leste and the ignorance of the people, especially the fishermen on the sea border, has resulted in violations of the law and leads to the political and security affairs of both countries.6 The maritime boundary delimitation between the two parties must be done based on methods and principles that are governed by international law, so there is an agreement and no one party is harmed by the delimitation of the maritime boundary. It needs a clear state’s boundaries on land and maritime borders, seabed, and the air, and the increased ability of law enforcement and state’s defense that is widened.7 In previous research, the

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5 Maritime Boundary Office of Timor Leste, Timor-Leste’s Maritime Boundaries, Maritime Boundary Office of the Council for the Final Delimitation of Maritime Boundaries (TimorLeste, 2016), http://www.gfm.tl.
6 Decentralisation Support Facility, Master Plan Draft for the Management of Boundaries of Countries and Border Areas., 2011.
7 Hasjim Djalal, “Maritime Boundary Management and Border Area to Increase Sovereignty Indonesian,” Jurnal Pertahanan Vol 1, no. 1 (2018): 27–38, http://jurnal.idu.ac.id/files/journals/16/articles/252/public/252-1047-1-PB.pdf.
management cooperation arrangement concluded by the two states is a provisional one because it does not contain an agreement regarding boundary lines of the continental shelf overlapping parts of the Timor Sea in 1971.\(^8\) Oil and gas investments in the area of overlapping maritime claims, as well as the terms for the development of the Sunrise and Troubadour deposits that straddled the ‘provisional’ delimitation line.\(^9\) Also in previous research, based on geographical factors, geographical factors, the coasts of the two countries on the border that have not been delimited are facing each other or not, so it is relevant to apply the center line or equidistant line.\(^10\)

Based on the description, this research aim to explain and analyze the methods and principles that was used in resolving maritime boundary disputes to state with opposite or adjacent coasts to other countries and how Indonesia resolved maritime boundary disputes with Timor-Leste. This research novelty is the solution or the boundary dispute settlement between Indonesia and Timor-Leste based on international law of the sea. This research will give a recommendation of maritime boundary delimitation between Indonesia and Timor Leste.

2. **Method**

This research uses normative legal research and empirical research methods. Normative legal research is library materials, namely data that refers to legal norms in international law or conventions, legal theories related to research and also supported by using field research through interviews with the Ministry of Foreign Affairs of Indonesia, Damos Damoli Agusman and International Law of the Sea Expert, Etty R. Agoes. This research includes analytical descriptive research that describes and analyzes problems related to what methods and principles are used in resolving maritime boundary disputes with Timor Leste based on international law and how the obstacles and solutions in resolving maritime boundary disputes with Timor Leste.

\(^8\) Marcel Hendrapati, “Maritime Expansion and Delimitation After the Timor Gap Treaty,” *Indonesia Law Review* 5, no. 1 (2015): 69–87.

\(^9\) Nigel Bankes, “Settling the Maritime Boundaries between Timor-Leste and Australia in the Timor Sea,” *The Journal of World Energy Law & Business* 11, no. 5 (2018): 387–409.

\(^10\) Seguito Monteiro, “Yurisdiksi Negara Pantai Di Wilayah Delimitasi Maritim Zona Ekonomi Eksklusif Yang Belum Ditetapkan Berdasarkan Ketentuan Hukum Laut Internasional (Study Di Timor Leste-Indonesia),” *Jurnal Komunikasi Hukum (JKH)* 6, no. 1 (2020): 303–334.
3. Results and Discussion

3.1. Method and Principle in Maritime Boundary Delimitation Between States With Opposite or Adjacent Coast

3.1.1. Maritime Boundary Delimitation Methods Between States With Opposite or Adjacent Coast

In Boundary Maritime Delimitation, there were some methods that can be used, namely: equidistant line method; enclaving method; perpendicular method; parallel line method; parallel and meridian method; natural boundary method; two stage approach method and three stage approach method. Those methods will be described as follows.\textsuperscript{11}

3.1.1.1. Equidistant Line Method

There were three equidistant line methods, namely: natural equidistant, simplified equidistance, and modified equidistance. Natural equidistant, as discussed in the Geneva Convention on territorial sea and contiguous zones 1958 was a line as a place of equal points of distance from the coastline (or baseline) as reference points for the country's territorial sea measurement. A similar definition was also found in the 1958 Continental Shelf Convention and UNCLOS 1982 (Article 15), but the term was "median line" for the case of the opposite country and not “equidistant line”.\textsuperscript{12} Actually, there was no difference between the median line and equidistance line terms but some opinions said that the term "median line" was usually used for the case of opposite/ conflicting countries. While the term "equidistance line" was used for the case of adjacent countries. Although there were different terms. Both actually refer to the same expression of mathematical geometry that was used for the center line obtained by the same equidistant line method. Figure 4 and 5 each illustrate the equidistance line between States With Opposite or Adjacent Coasts.\textsuperscript{13}

\textsuperscript{11} Arsana, \textit{Batas Maritim Antarnegara: Sebuah Tinjauan Teknis Dan Yuridis}.

\textsuperscript{12} Blair Hankey and Leonard Legault, “Method, Oppositeness and Adjacency, and Proportionality in Maritime Boundary Delimitation,” in \textit{International Maritime Boundaries}, The American Society of International Law, 2022.

\textsuperscript{13} Arsana, \textit{Batas Maritim Antarnegara: Sebuah Tinjauan Teknis Dan Yuridis}.
The geometric explanation of the Equidistant line was given by Legault and Hankey as follows:¹⁴ A line can be said to be an equidistant between any two points that was a perpendicular bisector to the line connected to the nearest two-point. Because almost all coastlines are irregular, 

¹⁴ Hankey and Leonard Legault, “Method, Oppositeness and Adjacency, and Proportionality in Maritime Boundary Delimitation.”
a straight line will not meet the requirements of equidistant at long distances. In order to maintain the properties of equidistant and perpendicularly so the equidistant which was originally a perpendicular bisector must change its course at a certain point (having inflection point) to conform to the geographical reality of the coastline represented by the nearest base on the coastline of the countries involved.

Figure 5 illustrates an Equidistant Line that illustrates the adjacent two-state maritime border. Similar to the case of the opposite state (Figure 5), the equidistant line consists of straight-line segments connecting points spaced equally from the base-point points along the baseline as a reference measurement of the territorial sea width of the two countries concerned. The condition of the natural equidistant line requires a lot of turning points to keep the line properties to remain equidistant along the line. This matter resulting a very complex line because it consists of a lot of straight line segments. As a result, this can cause difficulties for sailors, managers and users of marine resources. To reduce this complexity, this simplified equidistant line should be simplified. This simplification was done by reducing the turning point whose consequence was to increase the length of the maritime boundary segment. The natural ekuidistan line (dashed line) between Country A and B produces a number of turning points that make the line shape quite complex. To avoid this complexity, the line was simplified by reducing the turning point.

The simplification of the equidistant line results in no loss of overall maritime rights and the simplified line is called an “area compensated line”. By using this method there will be an exchange or compensation of maritime territory between the two parties involved. The territorial sea that was originally under the jurisdiction of country A when using the natural equidistant line, could be transformed into state B authority after the simplified application of the oc-curious line. This change was certainly compensated by a similar change that caused the authority of the state to become state authority.

The third type of equidistant line was the modified equidistance, which was principally based on the concept of a natural equidistant line. This formed line was the result of modification or shifting of the natural equidistant line so as to benefit one of the parties involved in maritime boundary delimitation. Modifications were usually required because of geographical features such as islands, corals, or low-tide elevations whose role was neglected or because their weight was reduced in maritime boundary delimitation. A modified ekuidistan can be realized for example, by

15 Arsana, Batas Maritim Antarnegara: Sebuah Tinjauan Teknis Dan Yuridis.
16 Ibid.
17 Ibid.
changing the selection of the starting point. By giving partial effects for certain elements, make additional modifications due to non-Systemic considerations. Modifications, for one thing, can be done by diverting the direction of the ecumenical equidistant line to accommodate territorial sea claims.

3.1.1.2. Enclaving Method

The enclaving method can be applied if there was a coastal state that had an island located on the "wrong side" seen from the midline between the mainland coastline (separated from the offshore zone of the mainland area). This enclaving method was a way of giving the sea belt (maritime zone) to the enclave island a tangible boundary line in the form of a circular arc measured from the base of the outermost. The same publication from the United Nations states that there are two types of enclave methods: full enclave and partial enclave or semi-enclave, see Figure 6.

![Figure 6. Full Enclave & Semi Enclave](animation.png)

Source: I Made Andi Arsana, 2012

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18 Hankey and Leonard Legault, “Method, Oppositeness and Adjacency, and Proportionality in Maritime Boundary Delimitation.”

19 Arsana, Batas Maritim Antarnegaran: Sebuah Tinjauan Teknis Dan Yuridis.
Full enclave was applied when the maritime area that was assigned to an enclave island separated in its entirety with a maritime area owned by the mainland coastal state. Meanwhile, semi-enclave was applied if the maritime area given to the enclave was connected located in a maritime area that was still the jurisdiction or sovereignty of the island-owner country. The semi-enclave method was often used when a group of islands was located near or right in the middle of a maritime area that required delimitation between the two coastal lines. Looking from the technical application, enclaving may also be referred to as a equidistant modified form because this method gives the effect of non-full weight to the enclave island which was part of the sovereignty of one of the disputing states.

3.1.1.3. Perpendicular Method

The perpendicular method used a line perpendicular to the general direction of the coast as a maritime boundary. This method requires that the coastline should be generalized to be a simple straight line. It might be assumed that such a method is not commonly used since it is not easy to determine the general direction of the shoreline and is very difficult to represent with a simple straight line.\(^\text{20}\) Another disadvantage with this method was that coastlines depicted on large-scale maps may differ in direction from the same coastline depicted on maps with smaller scales especially in map-based delimitation. However, this method was once applied in the Gulf of Maine and Brazil-Uruguay agreement case on July 21\(^{st}\), 1972, in which case a single line approaching the straight line is used as a maritime boundary.\(^\text{21}\)

3.1.1.4. Parallel Line Method

The parallel line method was a method that used a parallel straight line to generate maritime area bands. This method also rarely applied, but it was applied in the agreement between France and Monaco on February 16\(^{th}\), 1984 and the agreement between Dominica and France on May 5\(^{th}\), 1987.\(^\text{22}\)

\(^{20}\) Hankey and Leonard Legault, “Method, Oppositeness and Adjacency, and Proportionality in Maritime Boundary Delimitation.”

\(^{21}\) Arsana, Batas Maritim Antarnegara: Sebuah Tinjauan Teknis Dan Yuridis.

\(^{22}\) Ibid.
3.1.1.5. Parallel and Meridian Methods

Parallel and Meridian methods are methods of maritime boundary elimination besides enclaving, perpendicular line method, and parallel lines. The parallel and Meridian methods were the way of delimitation that used parallel lines of latitude and / or longitude meridian, which was one of the popular methods beside equidistant. This method was usually applied to the case of adjacent states to avoid cutting effects or cut-offs that may occur if using the equidistant method. This method was very useful, especially if there is a concave so that the maritime region will tend to converge. However, this method would be effective if the coastline of the country involved was generally north-south oriented (same as the meridians) or east-west (following the direction of latitude). For the same method, in TALOS 1993 is called by the term arbitray lines.23

3.1.1.6. Natural Bound Maritime

One of the delimitation methods was to use natural features as a maritime boundary called the natural boundary. Thalweg was one of the natural examples. Prescott and Schofield argue that this old thalweg concept was applied to land boundaries by means of rivers now has been applied in offshore areas and adopted for canals and submarine basins. Prescott and Schofield also claimed that the geomorphology of the seafloor and its geological conditions, in some cases the division of a particular maritime region, was considered a beneficial factor. This concept has been applied successfully in the case of the North Sea Continental Shelf which in this case natural prolongation played a significant role.24

In deeper water areas such as rivers that enter the sea or estuaries, justification of the use of thalweg was very difficult because it was uncertain. According to Evans, this was due to the fact that natural elements such as thalweg usually represented by a zone of transitions, so it will be difficult to establish an accurate boundary. The ICJ Chamber also rejects the idea of using a natural limit based on environmental factors proposed by the United States in relation to the delimitation of the water boundary in the case of Gul of Maine. This was because the Chamber was unsure, how to distinguish definite and stable natural boundaries in the marine environment that were so volatile, as well as the flora and fauna.25

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23 Ibid.
24 Ibid.
25 J. Schneider, “The First ICJ Chamber Experiment: The Gulf of Maine Case: The Nature of an Equitable Result,” The American journal of International Law 79 (1985).
3.1.1.7. Two-stage approach

UNCLOS 1982 does not explicitly mention the used of a particular method in the delimitation of maritime boundaries. In practice, maritime boundary negotiations will also not be bound by any of the methods proposed in the literature. The essence of delimitation was the achievement of a fair and acceptable solution for both parties. Nevertheless there was a tendency that showed the use of the equidistant line as the initial position in doing the maritime boundary delimitation. The negotiations will determine whether or not to change the position of the equidistant line on the basis of reasonable considerations accepted by all parties. This approach was called a two-stage approach to maritime boundary delimitation.26

3.1.1.8. Three-Stage Approach

In the practice of maritime boundary delimitation implemented by the International Court of Justice was used a three-stage approach in the process of delimitation to get the final outline. The method of delimiting the three-stage approach involves three stages.

3.1.1.8.1. Construction of Temporary Boundary Lines

The provision of the temporary boundary line was done by the bisector method to obtain a temporary equidistant line by considering the starting point of each country. The bisector method was the construction of the equidistant line with respect to the same distance and angle.

3.1.1.8.2. Modified Temporary Boundary Line

Modification of temporary boundary lines was done because there were relevant factors that affected a boundary. In the decision of the International Court of Justice set forth in some cases of maritime boundary disputes, influential relevant factors may be the presence of maritime features such as the island, the length of the coast from each country, as well as the ease of transportation in the region.

3.1.1.8.3. Disproportionality Test

The disproportionality test was the third stage in the Three-Stage Approach method. The disproportionality test can also be called the Justice Test. At this stage the relevant coastal length of each country and the maritime boundary that has been obtained from the delimitation were compared. The disproportionality test was used to ensure that the maritime boundary generated at

26 Arsana, Batas Maritim Antarnegara: Sebuah Tinjauan Teknis Dan Yuridis.
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earlier stages was fair and does not violate the principle of proportionality, especially on the relevant coastal ratios and relevant areas of delimitation results. The disproportionality test can give changes to the resulting maritime boundary, but may also not give any effect if in that case the relevant coastal ratio and the delimitation result area were not significant. The disproportionality test was a fairness test for the determination of the maritime zone. Fair in this test states that the zone maritime was conducted using the international legal rules of UNCLOS 1982.

Thus, the steps that passed on this method include: creating a temporary border between opposite or adjacent states; considering some relevant factors that change the midline configuration; and then testing proportionality. Suppose there were two adjacent states, then in the first stage was the median line by using a baseline that was inline with the geographical condition of each country. After the median line was formed, if there was a maritime feature, such as an island or LTE, a country located close to the median line, calculated its effect on the median line and then the line would change. After the relevant factor changes were made, then tested proportionality to see the final line formed for each country.

3.1.2. Maritime Boundary Delimitation Principle Between States With Opposite or Adjacent Coast

As explained before, if there was maritime overlapping claim between States with opposite or adjacent coasts, so it needs a maritime boundary delimitation between them. Maritime overlapping claim can happen in territorial seas, exclusive economic zones, and continental shelf. Each must be completed in accordance with applicable law. The process of delimiting the maritime boundary between two or more coastal states was governed by the principles and rules of public international law. The international law provides a provision explaining how maritime boundary delimitation should be done. The provisions were set out in UNCLOS 1982. The beginning of the boundary delimitation between States With Opposite or Adjacent Coasts was related to the boundary delimitation of the territorial sea of both countries.

UNCLOS 1982 stated that Every State has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from baselines determined in

27 Ibid.
28 V and C. Schofield Prescott and Schofield, The Maritime Political Boundaries of the World, Second Edi. (London: Martinus Nijhoff Publishers., 2005).
29 M.D. Evans, Maritime Boundary Delimitation, Oxford Handbook of The Law of The Sea (Oxford: Oxford University Press, 2005).
accordance with this Convention. The outer limit of the territorial sea is the line every point of which is at a distance from the nearest point of the baseline equal to the breadth of the territorial sea.\textsuperscript{30} Those provisions grant each country the right and authority to determine its territorial territory 12 miles from the baseline of its country, but the problem is when a country has geographic location that is opposite area adjacent to other countries. In this case the distance between the two countries does not reach 24 miles, so the two countries can not determine the territorial territory of the country as far as 12 miles because the distance between those two countries was not sufficient to determine the distance and if both countries still determine its territorial sea as far as 12 miles it will arise overlapping claims.

In relation to these circumstances, international law provides a rule that explains how delimitation should be done. It was governed by UNCLOS 1982. Article 15 UNCLOS 1982 state that:

“Where the coasts of two States are opposite or adjacent to each other, neither of the two States is entitled, failing agreement between them to the contrary, to extend its territorial sea beyond the median line every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial seas of each of the two States is measured. The above provision does not apply, however, where it is necessary by reason of historic title or other special circumstances to delimit the territorial seas of the two States in a way which is at variance therewith”.

According to that Article, then there are two ways in determining the territorial boundary sea of states with opposite or adjacent coasts. First, in determining the territorial boundary sea used the median line and equidistant principle.\textsuperscript{31} the median line principle was a principle which states that in solving the problem of the maritime boundary between the adjacent sea, both of them shall determine a media line whose points are equal to the distance from the nearest points on the baseline from which the width of the territorial sea of each state was measured, while the equidistant principle was the determination of a line with the same distance thus dividing the two adjacent maritime states.\textsuperscript{32}

State practice showed that the median line, which was an equal distance from the nearest points in both countries, has been accepted as a maritime boundary.\textsuperscript{33} To determine the median line, the first thing to do is to draw a straight line from each base point of the two countries. After the withdrawal of the straight line from each base point. After the withdrawal of the straight line

\begin{itemize}
  \item \textsuperscript{30} Article 3 and Article 4 United Nations Convention on The Law of The Sea 1982.
  \item \textsuperscript{31} Article 15 United Nations Convention on The Law of The Sea 1982.
  \item \textsuperscript{32} Evans, Maritime Boundary Delimitation, Oxford Handbook of The Law of The Sea.
  \item \textsuperscript{33} R. R and A.V. Lowe Churchill, The Law of The Sea, Rev. ed. (Manchester: Manchester University Press., 1999).
\end{itemize}
from each base point then determined the middle point which is then drawn perpendicular line which divides the straight line between the base points into two equal sizes (bisector). The intersection between the perpendicular lines of any predetermined straight line is a form of the turning point, i.e. the equidistant to the distance of the three nearest base points. Those will form the median line.  

Second, the median line principle does not apply, however, where it is necessary by reason of historic title or other special circumstances to delimit the territorial seas of the two States in a way which is at variance therewith (median line principle). The provisions reflect Article 12 Geneva Convention on the Territorial Sea and the Contiguous Zone 1958 which was later adopted by UNCLOS as an international customary law. This indicates that the existence of special conditions may affect the maritime boundary other than the commonly applied, namely median line, and may result in the election of other methods according to the agreement. Those special conditions may include large or small islands offshore, shorelines, or special claims to waters based on historical considerations. A State may claim historical or special circumstances to make it possible not to use the median line or equidistant line but State B may also disagree with what Country A states. As a result, between country A and B there will be a necessary dispute completion.

3.2. Maritime Boundary Settlement Disputes Between Indonesia and Timor-Leste

The Democratic Republic of Timor-Leste (Timor-Leste) proclaimed its independence on May 20th, 2002. As a newly independent country, Timor-Leste faced several strategic international issues, including the determination and delimitation of maritime boundaries with its neighbors. Related to maritime boundaries, there has been no negotiation to determine maritime boundaries between Indonesia and Timor-Leste or between the colonial governments of the two countries, the Netherlands and Portugal. Consequently, no agreement or treaty is agreed between the Netherlands and Portugal, or between Indonesia and Timor-Leste, with regard to maritime boundaries.

34 ITB Digital Library, “Indonesian Maritime Boundary Delimitation On the Eastern Segment of Singapore Using Equidistant Principles,” ITB Digital Library, last modified 2015, http://digilib.itb.ac.id/files/disk1/454/jbptitbpp-gdl-muhammadha-22692-4-2012ta-3.pdf.
35 Article 15 United Nations Convention on The Law of The Sea 1982.
36 Churchill, The Law of The Sea.
37 Arsana, Batas Maritim Antarnegara: Sebuah Tinjauan Teknis Dan Yuridis.
38 N. Deeley, “The International Boundary of East Timor,” Boundary and Territory Briefing 3, no. 5 (2001).
Indonesia and RDTL have agreed to establish cooperation in handling border issues known as JBC (Joint Border Committee), 4 sub-committees and Border Liaison Committee (BLC), such as:  

39a) Technical Sub-Committee on Border, Demarcation and Regulation (TSC-BDR) coordinated by Bakosurtanal and Ditwilhan Dephan. In this case, they still focused on the land delineation problem. Delimitation of new maritime boundaries will be discussed and negotiated, if the issue of land border affirmation has been completed; b) Technical Sub-Committee on Cross-Border Movement of Persons Goods and Crossings (TSC-CBMPGC) coordinated by Deperdag; c) Technical Sub-Committee on police Cooperation (TSC-PC) coordinated by Mabes Polri and Polda NTT; d) Technical Sub-Committee on Border Security (TSC-BS) coordinated by Mabes TNI and Pangdam IX Udayana; and, e) Border Liaison Committee (BLC) coordinated by Vice Governor Nusa Tenggara Timur with their members consisting of the District Government of the adjacent Regency and several technical agencies at the central level as observers.  

Regarding the maritime boundary between Indonesia and Timor-Leste, there was never a maritime boundary between both States. After Timor-Leste gained independence in 2002, both States’ efforts were prioritized in demarcating their land boundaries.  

Reviewing geographical position and distance measurement from normal baseline, Indonesia and Timor-Leste have the potential to delimitate in three maritime areas with maritime resource potential and security-related issues for Indonesia and Timor-Leste. These three areas were in the north of Oekussi (Ombai Strait), in the north of Timor Island (Wetar Strait) and in the south of Timor Island (Timor Sea). The author will analyze how the solution in determining the delimitation in all three locations is to use the methods and principles of maritime boundary delimitation. The process of maritime boundary delimitation between two or more coastal States is governed by the principles and rules of public international law.  

In determining the delimitation of the boundary territorial sea between RI and RTDL, it will refer to the principles contained in Articles 15, 74, and 83 of UNCLOS 1982 govern the delimitation of, respectively, the territorial sea, the exclusive economic zone (EEZ), and the continental shelf. They do not, however, specify the precise method by which States, courts, or

39 Direktorat Jenderal Strategi Pertahanan, Optimizing the Handling of Maritime Border Area RI-RTDL in the Framework of Maintaining the Unitary State of the Republic of Indonesia (NKRI).
40 Adrianus Adityo Vito Ramon, “Completing the Jigsaw: The Recent Development of the Maritime Boundaries in the Timor Sea,” Indonesian Journal of International Law 15, no. 4 (2018): 484.
41 I Made Andi Arsana, “Good Fences Make Good Neighbours: Challenges and Opportunities in Finalising Maritime Boundary Delimitation in the Malacca Strait Between Indonesia and Malaysia,” Indonesian Journal of International Law 12, no. 1 (2014).
tribunals should delimit maritime boundaries. Article 15 provides that “neither of the two States is entitled to extend its territorial sea beyond the median line”.42

Although Timor-Leste is not a member state that ratified the UNCLOS 1982 provision, state practice showed that the median line, which was an equidistant distance from the nearest points in both countries, has been accepted as a maritime boundary method to create a fair settlement (equitable). Although that article states that an equitable solution shall be the goal of maritime boundary agreements, it does not dictate a specific method of delimitation to achieve an equitable result.43

The principle of the median line and the equidistant principle may not be applied if there is a reason for historical rights or other special circumstances that cause the need to establish the territorial sea boundary between the two States in a way different from the provisions of the median line principle and the equidistant principle. This indicates that the existence of special conditions may affect the maritime boundary other than the commonly applied namely median line and may result in the election of other methods according to the agreement. Those special conditions may include large or small islands offshore, shorelines or special claims to waters based on historical considerations. In this case we will see that there were special situations between Indonesia and Timor-Leste, so the principles and methods used do not only use the median line and equidistant principles and methods.

3.2.1. Maritime Boundary Delimitation in Oekusi District, Ombai Strait

The division of the maritime zone in the Ombai strait was very complex, because Oekusi was an "enclave" located in the western part of Timor Island, about 70 km west of Timor-Leste. In the north area opposite with the Ombai Strait. The existence of Oekussi was surrounded by Indonesian-owned (land) and also the Ombai Strait (sea). Oekussi was also opposite with Pantar Island, Treweg Island, and Alor Island (Indonesia). The existence of Batek Island (Indonesia) also affected the maritime boundary between Oekusi and Indonesia. Proper maritime boundary utilization was using enclaving method. The enclaving method was applied because there was a coastal state that has an island located on the "wrong side" seen from the median line between the mainland coastline (separated from the mainland's zone) in this case Oekusi District is an island

42 Peter Tzeng, “Moving Maritime Boundaries: Changes in Coastal Land Sovereignty, River Courses, Sea Levels, and Maritime Delimitation Law,” Indonesian Journal of International Law 15, no. 2 (2018).
43 Coalter Lathrop, “The Technical Aspects of International Maritime Boundary Delimitation, Depiction, And Recovery,” Ocean Development & International Law 28, no. 2 (1997).
separated from the mainland from Timor-Leste. The type of enclave method applied was a full-enclave method because Oekusi District is an entirely separate enclave island with a maritime area owned by the mainland area of Timor-Leste.

This enclaving method was a way of giving the sea belt (maritime zone) to the enclave island a tangible boundary line in the form of a circular arc measured from the base of the outermost. Oekussi opposite with Pantar Island, Treweg Island and Alor Island. The distance between Oekussi and the islands is approximately 46 miles. The maritime border withdrawal will used the modified equidistant method. Referring to the expression of the same mathematical geometry, ie for the median line that obtained by modified equidistant method. The geometry will produce an equidistant line. The equidistant line was derived from the withdrawal of two points perpendicular to the line connecting the two closest base points. To obtain an equidistant line that inline with coastal shape of a country requires a turning point. This delimitation boundary can be seen in Picture 4 & 5.

3.2.2. Maritime Boundary Delimitation in The Wetar Strait

Maritime boundary delimitation in the Wetar Strait used the Three-Stage Approach as a method of delimitation. Thus, the steps that passed on this method include: creating a temporary border between opposite or adjacent states; considering some relevant factors that change the midline configuration; and then tested proportionality.\(^{44}\) Suppose there were two adjacent states, then in the first stage was the median line by using baseline that inline with the geographical condition of each Country. After the median line was formed, if there was a maritime feature, such as an island or LTE, a country located close to the median line, calculated its effect on the median line and then the line will be change. After the relevant factor changes were made, then tested proportionality to see the final line formed for each country.

In the case of maritime boundary between Indonesia and Timor-Leste in the Wetar Strait, the existence of small islands such as Atauro Island, Jaco Island belonging to Timor-Leste, and Leti Island, Liran Island, Wetar Island, Kisar Island, Moa Island and Lakor Island, Meatimiarang Island and Sermata Island can be considered as special circumstances which can be used as an excuse to change the median line for the common good.\(^{45}\) After considering these conditions then conducted a test disproportionality to see the final line formed according to each country.

\(^{44}\) Evans, *Maritime Boundary Delimitation, Oxford Handbook of The Law of The Sea*.
\(^{45}\) LPPM ITB, *Final Report Preliminary Assessment of Indonesia-Timor-Leste Sea Boundary Delimitation* (Bandung, 2002).
3.2.3. Maritime Boundary Delimitation in Timor Sea

Maritime boundary delimitation in the will be more complex than in the Strait of Ombai and the Wetar Straits, because there were several agreements on that area. Coupled with the existence of two small islands east of Timor Island, Leti Island (Indonesia) and Jako Island (Timor-Leste) were important considerations in the determination of maritime boundaries. There were two lateral boundary lines in the Timor Sea, the west segment drawn from the Mota Masin land terminal point and the eastern segment starting at the point between Jako Island and Leti Island to the south. Similar with Maritime boundary delimitation in the Wetar Strait, the delimitation of the maritime boundary between Indonesia and Timor-Leste in the Timor Sea also using the Three-Stage Approach as a method of delimitation.

The steps that passed on this method include: creating a temporary border between opposite or adjacent states; considering some relevant factors that change the midline configuration; and then testing proportionality. In the first stage was the median line by using a baseline that was inline with the geographical condition of each country. After the median line was formed, if there was a maritime feature, such as an island or LTE, a country located close to the median line, calculated its effect on the median line and then the line would change. After the relevant factor changes were made, then tested proportionality to see the final line formed for each country. In the case of the maritime boundary between Indonesia and Timor-Leste in the Timor Sea, the existence of two small islands such as Leti Island (Indonesia) and Jako Island (Timor-Leste) which was an important consideration in maritime boundary determination.

There were two lateral boundary lines in the Timor Sea, such as the west segment which was drawn from the Mota Masin land terminal point and the eastern segment that started at the point between Jako Island and Leti Island to the South. The maritime boundary boundary in the Timor Sea was also viewed based on historical and certain factors. The history of maritime boundary determination was the agreement between Indonesia and Australia on the seabed in 1972, the agreement between Indonesia and Australia on the Zone of Cooperation in 1989, the agreement between Indonesia and Australia on the Exclusive Economic Zone (EEZ) of 1997, Timor Sea Treaty between Timor-Leste and Australia in 2002, an agreement between Timor-Leste and Australia on the Sunrise and Troubadour block 2007, and the agreement between Timor-Leste and Australia on the Certain Maritime Arrangements in the Timor Sea (CMATS) 2007.

46 Evans, Maritime Boundary Delimitation, Oxford Handbook of The Law of The Sea.
Comparison of maritime zone resulted by differences in effect to small islands of Leti Island and Jako. Those islands can be considered special circumstances which can be used as a reason to change the center line for the common good. After considering these conditions then the disproportionality test was done to see the final line formed according to each country. Based on the analysis, it can be described delimitation of the maritime boundary between Indonesia and Timor-Leste as shown in Figure 7.

However, the setting of maritime borders was still unilateral by using the equidistant method. Almost every maritime border region and a special equitable principle especially on Atauro Island, Indonesia as an archipelagic country used the archipelagic baseline while Timor-Leste used the normal baseline as a country beach. Until now, the two countries have negotiated the determination of state land boundaries but have not fully completed, so there was no agreement on maritime boundary between Indonesia and Timor-Leste because the land limit was the determination of the starting point of the maritime boundary (land dominates the sea). The limit was the end point of the landline at the coastline which would be the starting point of the maritime boundary. Without the four boundary agreement, discussion of the maritime boundary can not begin.

Figure 7. Delimitation of maritime boundary between Indonesia and Timor-Leste
Source: Geospatial Information Agency
4. Conclusion

In Boundary Maritime Delimitation, there were some methods that can be used, namely: equidistant line method; enclaving method; perpendicular method; parallel line method; parallel and meridian method; natural boundary method; two stage approach method and three stage approach method. Principle of Boundary Maritime Delimitation was Governed in UNCLOS 1982. According to Article 15 UNCLOS 1982, there are two ways in determining the territorial boundary sea of states with opposite or adjacent coasts. Reviewing geographical position and distance measurement from normal baseline, Indonesia and Timor Leste have the potential to delimitate in three maritime areas with maritime resource potential and security-related issues for Indonesia and Timor Leste. These three areas were in the north of oekussi (Ombai Strait), in the north of Timor Island (Wetar Strait) and in the south of Timor Island (Timor Sea).

The division of the maritime zone in the Ombai strait was very complex, because Oekusi was an "enclave" located in the western part of Timor Island, about 70 km west of Timor Leste. In the north area opposite with the Ombai Strait. The existence of Oekussi was surrounded by Indonesian-owned (land) and also the Ombai Strait (sea). Oekussi was also opposite with Pantar Island, Treweg Island, and Alor Island (Indonesia). The existence of Batek Island (Indonesia) also affected the maritime boundary between Oekusi and Indonesia. Proper maritime boundary utilization was using enclaving method. The enclaving method was applied because there was a coastal state that has an island located on the "wrong side" seen from the median line between the mainland coastline (separated from the mainland's zone) in this case Oekusi District is an island separated from the mainland from Timor Leste. The type of enclave method applied was a full-enclave method because Oekusi District is an entirely separate enclave island with a maritime area owned by the mainland area of Timor-Leste.

Maritime boundary delimitation in the Wetar Strait and Timor Sea used the Three-Stage Approach as a method of delimitation. In the case of the maritime boundary between Indonesia and Timor Leste in the Timor Sea, the existence of two small islands such as Leti Island (Indonesia) and Jako Island (Timor Leste) was an important consideration in maritime boundary determination. There were two lateral boundary lines in the Timor Sea, such as the west segment which was drawn from the Mota Masin land terminal point and the eastern segment that started at the point between Jako Island and Leti Island to the south. The maritime boundary in the Timor Sea were also viewed based on historical and certain factors.
References

Arsana, I Made Andi. *Batas Maritim Antar Negara: Sebuah Tinjauan Teknis Dan Yuridis*. Yogyakarta: Gadjah Mada University Press, 2007.

———. “Good Fences Make Good Neighbours: Challenges and Opportunities in Finalising Maritime Boundary Delimitation in the Malacca Strait Between Indonesia and Malaysia.” *Indonesian Journal of International Law* 12, no. 1 (2014).

Bankes, Nigel. “Settling the Maritime Boundaries between Timor-Leste and Australia in the Timor Sea.” *The Journal of World Energy Law & Business* 11, no. 5 (2018): 387–409.

Churchill, R. R and A.V. Lowe. *The Law of The Sea*. Rev. ed. Manchester: Manchester University Press., 1999.

Decentralisation Support Facility. *Master Plan Draft for the Management of Boundaries of Countries and Border Areas.*, 2011.

Deeley, N. “The International Boundary of East Timor.” *Boundary and Territory Briefing* 3, no. 5 (2001).

Direktorat Jenderal Strategi Pertahanan. *Optimizing the Handling of Maritime Border Area RI-RTDL in the Framework of Maintaining the Unitary State of the Republic of Indonesia (NKRI).* Jakarta, 2007.

Djalal, Hasjim. “Maritime Boundary Management and Border Area to Increase Sovereignty Indonesian.” *Jurnal Pertahanan* Vol 1, no. 1 (2018): 27–38. http://jurnal.idu.ac.id/files/journals/16/articles/252/public/252-1047-1-PB.pdf.

Evans, M.D. *Maritime Boundary Delimitation, Oxford Handbook of The Law of The Sea*. Oxford: Oxford University Press, 2005.

Hadiwijoyo, S.S. *State Border, in International Legal Dimension*. Yogyakarta: Graha Ilmu, 2011.

Hankey, Blair, and Leonard Legault. “Method, Oppositeness and Adjacency, and Proportionality in Maritime Boundary Delimitation.” In *International Maritime Boundaries, The American Society of International Law*, 2022.

Hendrapati, Marcel. “Maritime Expansion and Delimitation After the Timor Gap Treaty.” *Indonesia Law Review* 5, no. 1 (2015): 69–87.

ITB Digital Library. “Indonesian Maritime Boundary Delimitation On the Eastern Segment of Singapore Using Equidistant Principles.” *ITB Digital Library*. Last modified 2015. http://digilib.itb.ac.id/files/disk1/454/jbptitbpp-gdl-muhammadha-22692-4-2012ta-3.pdf.

Lathrop, Coalter. “The Technical Aspects of International Maritime Boundary Delimitation,
Depiction, And Recovery.” *Ocean Development & International Law* 28, no. 2 (1997).

LPPM ITB. *Final Report Preliminary Assessment of Indonesia-Timor-Leste Sea Boundary Delimitation*. Bandung, 2002.

Maritime Boundary Office of Timor Leste. *Timor-Leste’s Maritime Boundaries, Maritime Boundary Office of the Council for the Final Delimitation of Maritime Boundaries*. TimorLeste, 2016. http://www.gfm.tl.

Monteiro, Seguito. “Yurisdiksi Negara Pantai Di Wilayah Delimitasi Maritim Zona Ekonomi Eksklusif Yang Belum Ditetapkan Berdasarkan Ketentuan Hukum Laut Internasional (Study Di Timor Leste-Indonesia).” *Jurnal Komunikasi Hukum (JKH)* 6, no. 1 (2020): 303–334.

Prescott, V and C. Schofield, and Schofield. *The Maritime Political Boundaries of the World*. Second Edi. London: Martinus Nijhoff Publishers., 2005.

Ramon, Adrianus Adityo Vito. “Completing the Jigsaw: The Recent Development of the Maritime Boundaries in the Timor Sea.” *Indonesian Journal of International Law* 15, no. 4 (2018): 484.

Risol, Muhammad. “Tantangan Kedaulatan Maritim Indonesia Di Kemerdekaan Timor Leste.” *eJournal Ilmu Hubungan Internasional* 3, no. 2 (2015): 329–344.

Schneider, J. “The First ICJ Chamber Experiment: The Gulf of Maine Case: The Nature of an Equitable Result.” *The American journal of International Law* 79 (1985).

Sumaryo, and I Made Arsana. *Managing Indonesia’s Border in a Boundless World: Geo-Spatial Aspect of Indonesia’s International Maritime Border In Border Area Management*. Yogyakarta: Graha Ilmu, 2010.

Tzeng, Peter. “Moving Maritime Boundaries: Changes in Coastal Land Sovereignty, River Courses, Sea Levels, and Maritime Delimitation Law.” *Indonesian Journal of International Law* 15, no. 2 (2018).

Wila, M. R.C. *Konsepsi Hukum Dalam Pengaturan & Pengelolaan Wilayah Perbatasan Antarnegara*. Bandung: Alumni, 2006.