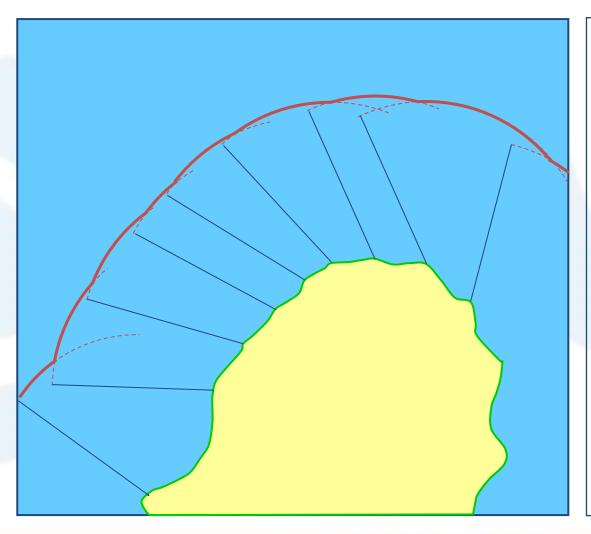
Sea Level Rise

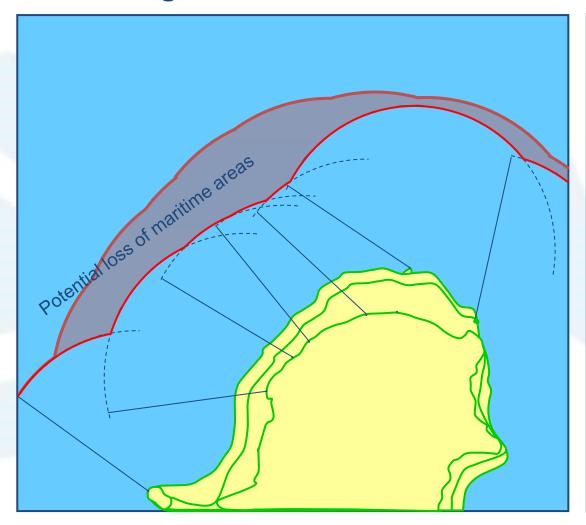
Bjørn Kunoy Professor of International Law 30 October 2023

UNCLOS Art. 5: Normal Baseline



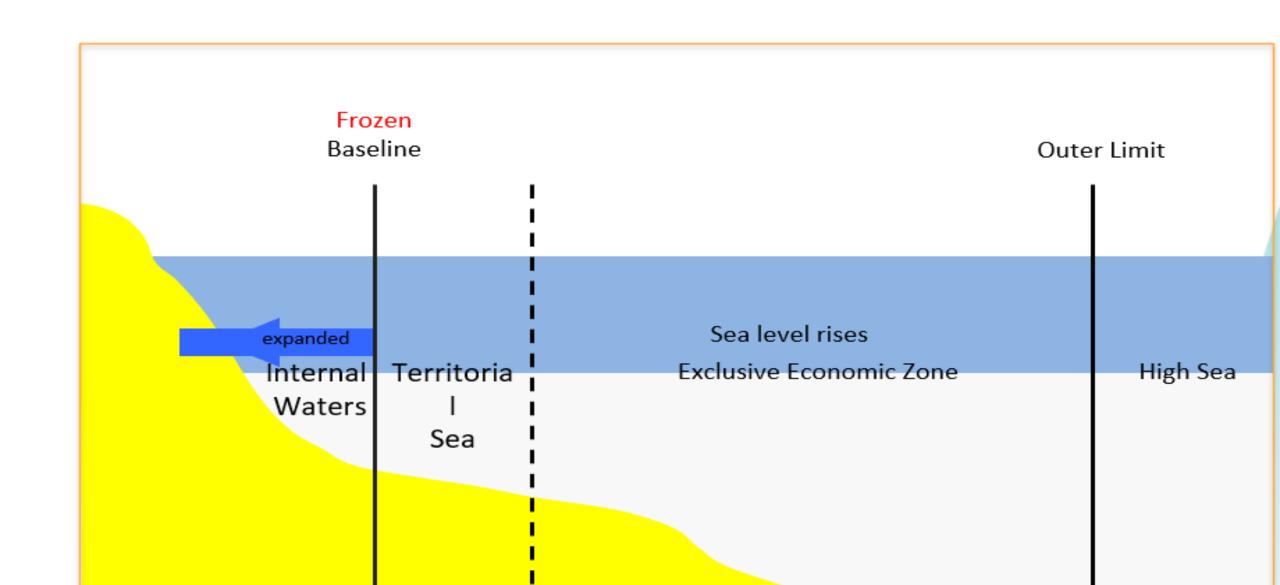
- Normal baseline is the low water line along the coast
- Select salient basepoints along the coast
- Use the envelope of arcs method to establish maritime limits (e.g., 12NM territorial sea)

Rising Sea-Level Moves the Baselines Inland

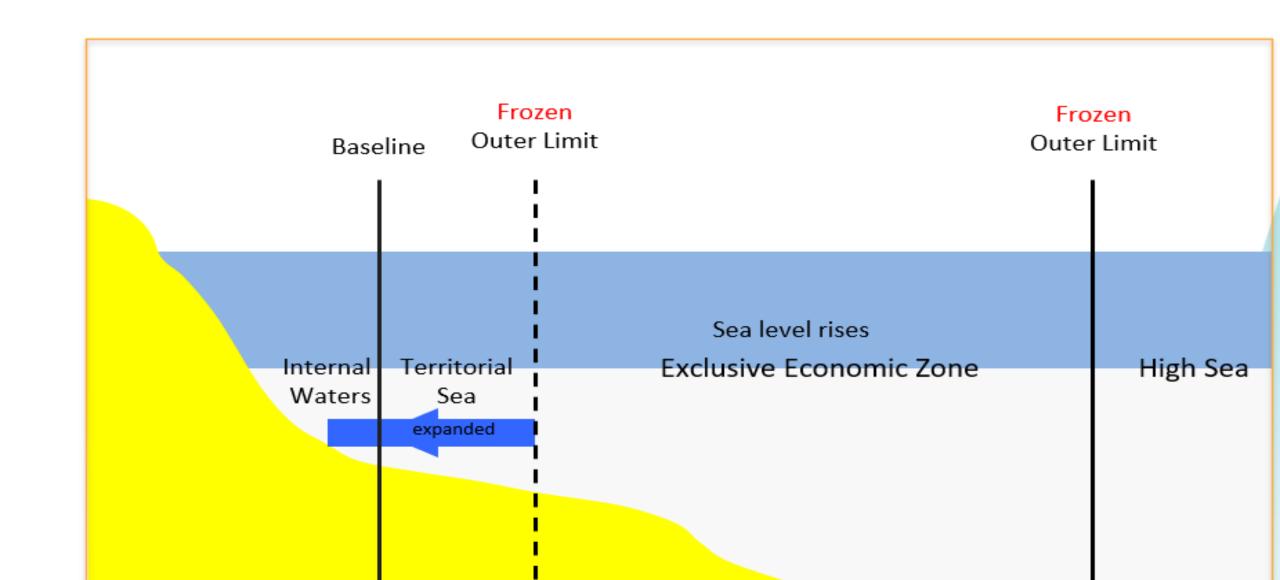


- As sea level rises, the low-water line along the coast regresses
- Basepoints also regress
- Hence, in principle, maritime zones built from the baseline also regress
- Same is true for "straight baselines" per UNCLOS Art. 7

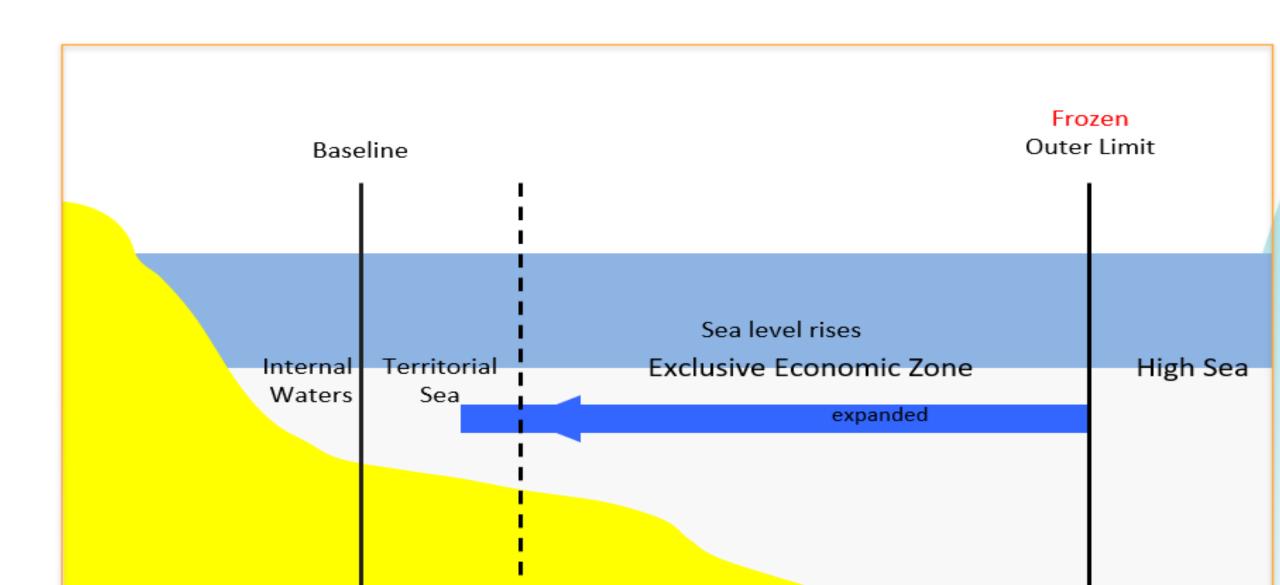
Freezing Baselines



Freezing Outer limits: Territorial Sea



Freezing Outer limits: EEZ



Outline

- Introductory Remarks
- Predictions by the IPCC
- Causes and Impacts of Sea-Level Rise
- Effects on the Normal, Straight and Archipelagic Baselines
- Effects on Continental Shelf Rights
- Possible Solutions
- Effects on Existing Maritime Boundaries
- What if a State's entire territory disappears?

Must Baselines be claimed?

- Normal baselines is the default baseline. No need to be claimed
- Other baselines and closing lines need to be claimed
- Straight baselines and closing lines must be publicized under Art
 16

Deposit

- "The baselines for measuring the breadth of the [TS] determined in accordance with articles 7, 9 and 10, or the limits derived therefrom [TS delimitations] shall be shown on charts of a scale or scales adequate for ascertaining their position. Alternatively, a list of geographical coordinates of points, specifying the geodetic datum, may be substituted" (Art 16.1)
- "The coastal State shall give due publicity to such charts or lists of geographical coordinates and shall deposit a copy of each such chart or list with the [UN] Secretary-General" (Art 16.2)
- Deposit of charts or coordinates is thus the fulfilment of an international obligation
- Charts or list of coordinates

A Claimed Default Procedure

- Article 5 of UNCLOS reflects customary international law (NICOL)
- No obligation to claim normal baselines
- In the event of SLR, the "default procedure" will have to be claimed to the extent the current baselines are to be maintained
- Obligation to update charts/coordinates?
- Baselines are ambulatory
- Where baselines change the seaward limits will also change, except limits vis-à-vis the Area

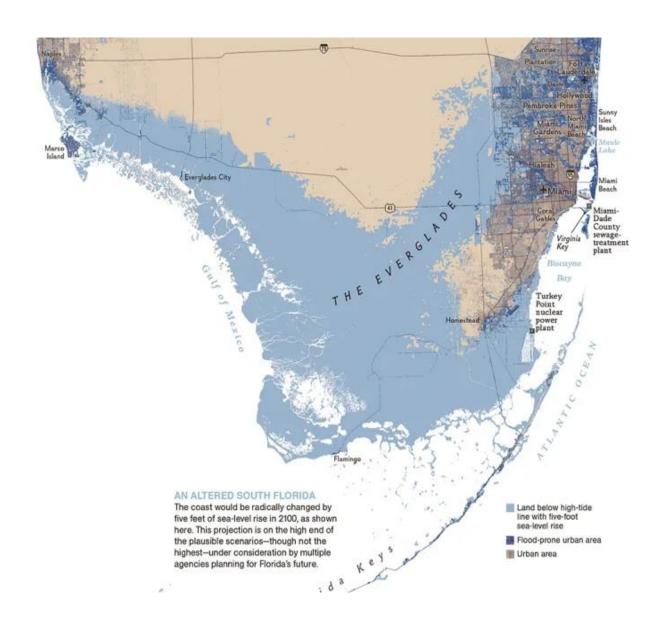
Predictions by Intergovernmental Panel on Climate Change (IPCC)

- 2007 Intergovernmental Panel on Climate Change Fourth Assessment Report AR4
 - <mark>18-59 cm</mark> by 2100
- 2013 IPCC Fifth Assessment Report AR5
 - Up to 98 cm by 2100 under 2°C temperature rise
 - With "a strong regional pattern, with some places experiencing significant deviations of local and regional sea level change from the global mean change."
 - Antarctic ice shelf melt could double this
- 2018 IPCC Special 1.5°C Rise report
 - Max of 1.10 meters by 2100

Main Impacts

- Regressing coastlines
- Inundation of reefs, low-tide elevations and islands, affecting base points and baselines
- Forced migration from coastal areas

Florida With 1.5 Meter Sea-Level Rise



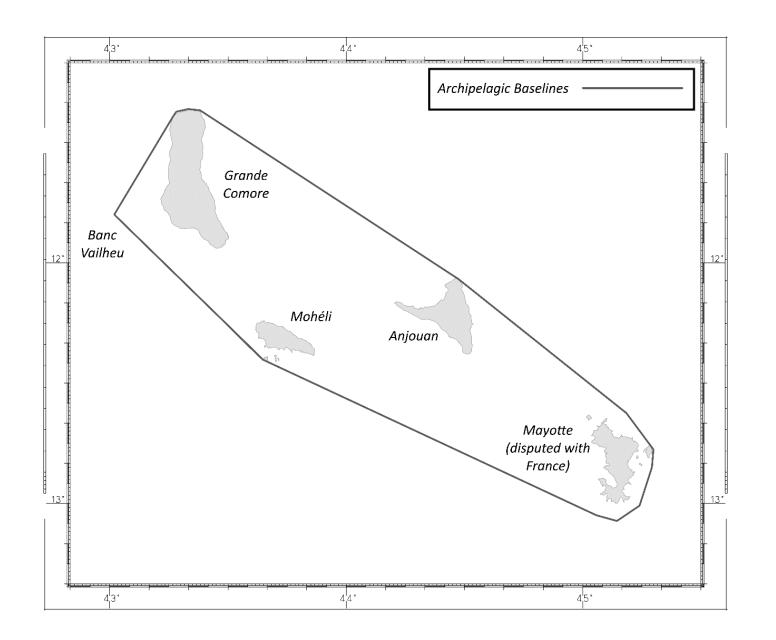
Especially Problematic for Archipelagic States

- Codified in UNCLOS Part IV
- Archipelagic States are those composed entirely of islands or parts of islands
- An archipelagic State may draw
 - "straight archipelagic baselines joining the outermost points of the outermost islands and drying reefs of the archipelago provided that within such baselines are included the main islands"

Archipelagic Baselines

- "An archipelagic State may draw straight archipelagic baselines joining the outermost points of the outermost islands and drying reefs of the archipelago provided that within such baselines are included the main islands and an area in which the ratio of the area of the water to the area of the land, including atolls, is between 1 to 1 and 9 to 1" (Art 47.1)
- "The length of such baselines shall not exceed 100 [M], except that up to 3 per cent of the total number of baselines enclosing any archipelago may exceed that length, up to a maximum length of 125 [M]" (Art 47.2)

Comoros Archipelago



Effects on Continental Shelf Rights

- UNCLOS Art. 76(1): Distance criterion for "inner" continental shelf is 200 NM from the baselines if baseline regresses, this outer limit in principle regresses as well
- UNCLOS Art. 76(5)
- "The coastal State shall give due publicity to such charts or lists of geographical coordinates and shall deposit a copy of each such chart or list with the Secretary-General of the United Nations and, in the case of those showing the outer limit lines of the continental shelf, with the Secretary-General of the Authority" (Art 84.2)
- Coastal State shall deposit with UN information "permanently describing the outer limits of the continental shelf" (Art 76.9)

Possible Solution # 1

- Coastal State should complete its submission to CLCS and obtain recommendation(s) as soon as possible
- UNCLOS Art. 76(8): "The limits of the shelf established by a coastal State on the basis of these recommendations shall be final and binding."
- UNCLOS Art. 76(9): Coastal State shall deposit with UN information "permanently describing the outer limits of the continental shelf."
- Thereafter, coastal State argues that it does not matter if the coastline/baselines change. *Problem: CLCS process is slow!*
- In any event, it would not resolve the problems for all the maritime zones

Possible Solution # 2?

- Allow States to "Freeze" Their Baselines by Issuing and Not Updating Charts or Coordinates
- UNCLOS Art. 5: "Except where otherwise provided in this Convention, the normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal State"
- UNCLOS Art. 16: Straight baselines "determined in accordance with article 7, 9 and 10 ... shall be shown on charts" or "a list of geographical coordinates"
- Some State practice is now emerging in support of this solution

Problems with Solution # 2

- "Interpretation" or "amendment" of UNCLOS?
- Legal fiction that detaches maritime zones from the reality of coastline (breaches ambulatory concept)
- Potentially creates large areas of internal waters
- Offshore areas of territorial sea and EEZ may exist without any nearby land to justify them
- Accurate Coastal State charts are critical for navigation and safety
- Adverse effects/benefits on rights of other States

Possible Solution # 3?

- Allow States to "Freeze" Not the Baselines, But the Outer Limits of Current Maritime Zones
- Avoids the problem of excessive internal waters problems
- Results in a breadth of the EEZ and CS exceeding the limits as specified in UNCLOS
- No textual basis for this in UNCLOS
- Therefore, probably requires an amendment of UNCLOS, as it is not just an "interpretation"

August 2021 South Pacific Islands Decl on Preserving Maritime Zones in the Face of Sea-Level Rise

- Affirming that the text of the Convention does not impose any obligation to "keep baselines and outer limits of maritime zones under review" nor to "update charts or list of geographical coordinates" once they have been deposited with the UN
- Recording for the future their position that having "established and notified our maritime zones to the [UNSG], we intend to maintain these zones without reduction, notwithstanding climate change-related sea-level rise."
- And that further they "do not intend to review and update the baselines and outer limits of our maritime zones as a consequence of climate change-related sea-level rise."
- ➤ Builds on the past statements and practice of the Pacific SIDS but it marks a distinct and major step in the development of State practice in the South Pacific on the maintenance of maritime entitlements in the face of SLR.

Declaration by Alliance of Small Island States (AOSIS) 22 September 2021

Affirm that there is no obligation under the United Nations Convention on the Law of the Sea to keep baselines and outer limits of maritime zones under review nor to update charts or lists of geographical coordinates once deposited with the Secretary-General of the United Nations,

and that such maritime zones and the rights and entitlements that flow from them shall continue to apply without reduction, notwithstanding any physical changes connected to climate change-related sea-level rise.

Impact of CIL

- "[Treaty] interpretation cannot remain unaffected by the subsequent development of law" (Legal Consequences for States of the Continued Presence of South Africa in Namibia)
- "The ICJ noted that "newly developed norms of environmental law are relevant for the implementation of the Treaty" (Gabčíkovo-Nagymaros Project (Hungary/Slovakia)

LTE's

- May be used as basepoint
- By virtue of their near low-tide level status and because they are often composed of soft depositional material, which may change over time, may appear on one survey but not on the next
- Is it reasonable to "freeze" baselines relying on ephemeral LTE's?

Historical title

- "Historic waters" are "waters which are treated as internal waters but which would not have that character were it not for the existence of an historic title" (Fisheries Case, 1951)
- "waters which are treated as internal waters but which would not have that character were it not for the existence of an historic title" Land, Island and Maritime Frontier Dispute (El Salvador/Honduras: Nicaragua intervening)
- "[h]istoric titles must enjoy respect and be preserved as they have always been by long usage" (Tunisa / Libya)
- Activities that did not lead to "the recognition of an exclusive quasi-territorial right" are not to be considered historical title (Qatar/Bahrain)

Three Factors

- I. The State must exercise quasi territorial authority over the area in question in order to acquire [an] historic title to it
- Such exercise of authority must have continued for a considerable time
- 3. The position which the foreign States may have taken towards this exercise of authority

Application of Historic Title to SLR

• "A coastal State could maintain the outer limits of its [TS & EEZ] where they were originally located before significant sea level rise occurred. As a consequence, the breadth of its [TS] would gradually become more than 12 [M] (or a TS enclave would exist where a former island had disappeared), and the outer limit of its [EEZ] would be located ever further than 200 [nautical miles] from the baseline" (A. Soons)

Equity

- "considerations of equity and fairness require that [small island developing States'] maritime entitlements are protected, especially given the particular vulnerability of [those States] to climate change" (Barbados)
- "any change in lines shall be based on principles of equity and fairness" (Iran)
- "[e]cological equity as a principle is key: no State should suffer disproportionately from effects of climate change affecting all" (Philippines)
- "considerations of equity and fairness require that [small island developing States'] maritime entitlements are protected, especially given the particular vulnerability of [those States] to climate change" (Maldives)

Infra Legem

- Not the same as Ex Aquo et Bono
- "the function of equity is precisely to qualify rules of law when their application in particular circumstances would produce extraordinary, unnatural or unreasonable results" (Robert Y. Jennings)
- "legal concept of equity is a general principle directly applicable as law" (*Tun/Lib*)
- "When the Court applies the principle of equitable considerations, it is applying equity intra legem, equity within the law ... the elements of the principle of equitable considerations are reasonableness, flexibility, judgment, approximation and fairness. Consequently, the Court's finding that it may form an appreciation of the extent of damage is nothing but an illustration of the principle of equitable considerations, which allows for reasonableness and judgment ... and flexibility" (Armed Activities on the Territory of the Congo, Sep Op Robinson)

Art 76(9)

- "If the baseline moves landward, the boundaries of the continental shelf should therefore be affected. However, if the required conditions are met, as provided for under article 76, a landward shift of the baseline would have no impact on the **boundaries of the continental shelf**, which remain fixed or permanent. This shows that the principle that "the land dominates the sea" is not absolute and, under certain circumstances, is not always applied" (ILC, study group)
- "The coastal State shall deposit with the Secretary-General of the [UN]charts and relevant information, including geodetic data, permanently describing the outer limits of its [CS]. The Secretary-General shall give due publicity thereto" (Art 76.9)

Effects Where Boundary Delimitation of Continental Shelf Already Exists

- If coastlines/basepoints change, is a continental shelf delimitation between two States (by agreement or by international judgment) permanent?
- International law generally favors the stability of established boundaries (e.g., VCLT Art. 62(2))
- Yet other agreements do provide for possible changes:
 - 1. Where equidistance was agreed in the agreement, but without coordinates (e.g. 1985 Tuvalu/France provisional agreement)
 - 2. Where renegotiation is contemplated in the light of any change to basepoints (e.g., 1990 Cook Islands/France agreement)
- Further, agreements and judgments are only binding upon those States Parties, not third States
- Erga omnes effect?

rebus sic stantibus

- "A fundamental change of circumstances may not be invoked as a ground for terminating or withdrawing from a treaty if the treaty establishes a boundary" (Art 62.2.a)
- "boundaries between States, including maritime boundaries, are aimed at providing permanency and stability" (Som v Ken)
- "The Tribunal notes that maritime delimitations, like land boundaries, must be stable and definitive to ensure a peaceful relationship [..] in the long term" (BoB Arbitration)
- "neither the prospect of climate change nor its possible effects can jeopardize the large number of settled maritime boundaries throughout the world" (id)
- No State has expressed the view that the rebus sic stantibus would apply to maritime boundaries
- "the attribution of maritime areas to the territory of a State, which, by its nature, is destined to be permanent, is a legal process based solely on the possession by the territory concerned of a coastline" (Jan Mayen)

Uti Possidetis to Maritime Boundaries

- "j'estime que les délimitations maritimes donnent lieu à l'existence de 'frontières' véritables. L'étendue des compétences de l'Etat est sans doute différente pour les limites maritimes par rapport aux frontières terrestres. Mais cette différence est de degré non de nature " (Sep Op, Bedjaoui, Guinea-Bissau / Senegal)
- a general principle that "has kept its place among the most important legal principles" (Frontier Dispute)
- It "freezes the territorial title; it stops the clock, but does not put back the hands" (id)

Territory

- Land dominates sea
- Constitutive criteria of Statehood
- "[a] coastal State's entitlement to the continental shelf exists by the sole fact that the basis of entitlement, namely, sovereignty over the land territory, is present" (Black Sea)
- "Maritime States"
- Allegedly, this does not mean that "maritime entitlements are contingent on the presence or on the integrity of the land territory in perpetuity. The legal conception of maritime entitlements may well need to adapt to modern challenges" (DissOp, Charlesworth, NICOL II)
- Lease agreements

Concluding Remarks