Scrutinizing Legal Complexities Arising during Delineation and Delimitation of Extended Continental Shelves in the Arctic Ocean

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ABSTRACT

Commercial investments require stability, thus the delimitation and delineation of extended continental shelves is of major importance to Arctic littoral states which all hold that they have large entitlements in the Arctic Ocean. However, both delineation and delimitation require valid entitlements. Since the entitlement to the continental shelf arises from sovereignty over land, the coastal states should be entitled to ipso facto and ab initio right without proclamation, occupation or delineation of its outer limits. But things are not this simple and the contemporary continental shelf regime seems to establish limitations to this inherent right and raise complex legal issues, some of them unforeseen by UNCLOS and the CLCS Guidelines. This complexity exists particularly due to an ambiguous relationship between delineation, delimitation and valid entitlement. Furthermore, there is tension between jurisdiction of adjudicative bodies and the mandate of the Commission. The focus of this research work is the area of overlapping entitlements between Russia, Canada and Denmark in the Arctic Ocean. This article aims to deepen and add to research already conducted on the topic of extended continental shelves as well as propose some novel solutions and perspectives.

KEYWORDS: Extended continental shelves, UNCLOS, Arctic Ocean, CLCS, overlapping entitlements, maritime delimitation, legal regime.

POVZETEK

Komercialne naložbe zahtevajo stabilnost, zato sta določitev in razmejitev razširjenih epikontinentalnih pasov izrednega pomena za arktične obalne države, ki vse menijo, da imajo v Arktičnem oceanu obsežne pravice. Vendar pa tako določitev kot razmejitev zahtevata veljavno upravičenje do epikontinentalnega pasu izhaja iz suverenosti nad kopnim, bi morale imeti obalne države pravico ipso facto in ab initio – brez razglasitve, zasedbe ali določitve zunanjih meja. A stvari niso tako preproste saj sodobni režim epikontinentalnega pasu vzpostavlja omejitve te pravice in odpira zapletena pravna vprašanja, ki niso bila predvidena niti v UNCLOS-u niti v smernicah CLCS. Ta kompleksnost obstaja zlasti zaradi nejasnega razmerja med določitvijo, razmejitvijo in upravičenostjo. Poleg tega obstaja dvom med pristojnostmi sodnih organov in mandatom Komisije CLCS. Članek se osredotoča na prekrivajoče se epikontinentalne pasove Rusije, Kanade in Danske v Arktičnem oceanu. Namen članka je poglobiti in nadgraditi znanje o razširjenih epikontinentalnih pasovih ter predlagati nekatere nove rešitve in perspektive.

KLJUČNE BESEDE: Razširjene celinske police, UNCLOS, Arktični ocean, CLCS, prekrivanje upravičenj, razmejitev pomorskih območij, pravni režim.

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Introduction

FRAMING THE PROBLEM

As the Arctic warms three times faster than the global average, the ice cover is melting rapidly. Although some parts of the Arctic Ocean (AO) stay frozen all year round, declining amounts survive the summer season, while the whole ice cover is getting thinner each year. The changing arctic environment is attracting new commercial interests in the region. Previously inaccessible shipping routes are opening up and would shorten a trip from Rottendam to Japan from 30 to 18 days (LePan, 2020). The thinning ice is making the scientific exploration of the seabed and subsoil easier and with that the possibility of updated claims over extended continental shelves (ECSs) based on newly gathered evidence. Moreover, the US Geological Survey showed that the Arctic holds 13% of the world's undiscovered oil resources and 30% of the world's undiscovered natural gas resources (Gautier et al., 2009). The coastal state has exclusive sovereign rights over the continental shelf (CS) for the purpose of exploring and exploiting natural resources. While the ice cover is making the resources inaccessible, the prediction of an ice free Arctic by 2040 is giving the dispute over ECS a new complicated layer. At stake are not only sovereign rights over gas and oil reserves located in the disputed area, but also mineral deposits, including cobalt, nickel and manganese. Commercial investments require stability, thus the delimitation and delineation of ECSs is of a major importance to Arctic littoral states who all hold that they have large entitlements over the ECS. However, both, delineation and delimitation require the existence of a valid entitlement. Since the entitlement to the CS arises from sovereignty over land, Arctic littoral states should be entitled to *ipso facto* and *ab initio* right without proclamation, occupation or delineation of its outer limits, as entitlement does not depend on procedural requirements (Árnadóttir, 2021). But things are not this simple, and the contemporary CS regime seems to establish limitations to this inherent right.

The focus of this article will be Russia's, Denmark's and Canada's alleged overlapping entitlements in the AO. All of the states have lodged submissions with the Commission on the Limits of Continental Shelf (CLCS or the Commission), in 2015, 2014 and 2019 respectively. Additionally, Russia has submitted two addenda that additionally enlarged the overlapping area. According to Article 5(a) of Annex I to the Com-

mission's Rules of Procedure (2008), all states have to give their prior consent so the Commission can consider and issue recommendations regarding the areas of maritime dispute.

Russia, Denmark and Canada, who are also part of the Arctic Five, have signed the *Ilulissat Declaration (2008)* in which they restate their commitment to the orderly settlement of any possible overlapping claims through application of international law, especially relevant provisions of the law of the sea. However, the overlapping claims in the AO raise complex legal issues, some of them unforeseen byUnited Nations Convention on the Law of the Sea (UNCLOS) and the CLCS Guidelines. The map 1 in Annex illustrates the overlap of claims over the ECS, with the area where all three countries' submissions overlap surrounded with a blue line.

This complexity exists particularly due to an ambiguous relationship between delineation, delimitation and valid entitlement. Furthermore, there is tension between jurisdiction of adjudicative bodies and the mandate of the Commission. Moreover, the presence of ridges and other seafloor elevations which Macnab describes as "wild cards in the Poker Game of UNCLOS Article 76" (Macnab, 2008, p.225) adds another layer of uncertainty. The Arctic Ocean floor consists of three major ridge systems, namely the Lomonosov Ridge and the Alpha-Mendeleev Ridge which pass through the ocean from the Russian continental margin to the continental margins of Greenland and Canada. The problem is that both Russia, Canada and Denmark consider a part or an entire scope of the ridges to be a natural prolongation of their land territory and thus subject to sovereign rights over natural resources in the ECS (Baker, 2020). Recent scientific studies and expeditions done in the AO indicate that the ridges have a geomorphologically shared structure, more specifically, that the ridges represent fragments of "an ancient continent named Arctida which formed a tectonic bridge between Eurasia and North America" (Byers, 2013, p.118). The Ridges thus form a connection between the American and Eurasian landmass and are geologically indistinct. Furthermore, they are connected to two continental margins, instead of one, and could be considered a natural prolongation of multiple states' land masses at the same time. Map 2 in Annex illustrates the location of Ridges in AO.

RESEARCH QUESTIONS, METHODOLOGY AND STRUCTURE OF THE ARTICLE

The focus of this research work is the area of overlapping entitlements between Russia, Canada and Denmark in the AO. It concerns the areas where entitlements of all three states overlap as well as the areas where the overlap is present only between two of these states. The reason why research questions apply only to these states, and not all five littoral Arctic states, is that Norway already delineated its borders based on Commission's recommendation while the USA is not a state party to UNCLOS and has not lodged a submission with the Commission. Thus, the extent of potential overlap of entitlements with other states is currently not clear.

The article will address the following questions:

How can states delineate and delimitate ECSs in order to ensure stability for future commercial investments into exploitation of natural resources in the AO?

How does the ambiguous relationship between the existence of valid entitlement, delineation and delimitation affect *ipso facto* and *ab initio* rights to ECS?

How does the Commission's work limit or legitimize the entitlement to ECS and when, if ever, does it preclude delineation and delimitation due to encroachment into its work? And what are the consequences of the Commission's expanding mandate?

In order to answer these questions, the research will analyze primary and secondary resources concerning the topic. This article aims to deepen and add to research already conducted on the ECS in the AO as well as propose some novel solutions and perspectives. The first part of the article will address the legal history of the contemporary ECS regime and how commercial exploitation drove its development. This will be followed by consideration of the relevant articles of the UNCLOS. Afterwards, concepts of entitlement, delineation and delimitation will be discussed with the focus on the Commission's work and relevant jurisprudence. Lastly, the arguments will be discussed and applied on the area of overlap.

HISTORY

In order to fully grasp the intricacies of the international legal rules and their shortcomings in regard to the ECS, it is imperative to fully understand the emergence of these rules and the motives behind them.

People have been exploring the seabed and utilizing its resources, in particular pearls or sedentary species such as crustaceans, for centuries. The first international legal agreement addressing CS rules was the 1942 treaty between the United Kingdom and Venezuela relating to the Submarine Areas of the Gulf of Paria. Shortly after, these submarine areas were identified as ECS. Since the CS as a legal or scientific concept had not existed at the time, the treaty referred to these areas as a 'seabed and subsoil' or 'submarine areas' (Treaty between the United Kingdom and Venezuela, 1942). Although the treaty did not specifically mention CS, it was nevertheless the first international legal agreement that delimited a CS in order to effectively divide areas utilized by both countries for exploitation of natural resources.

The International Court of Justice (ICJ) has noted that CS "has attracted the attention first of geographers and hydrographers and then of jurists" (North Sea Continental Shelf Cases, 1969, para.95). Due to the fact that the driving forces behind the emergence of the contemporary legal regime for CS were commercial, legal, geological and geomorphological in nature, they consequently created multilayered rules where different meanings are locked in a power struggle. Consequently, it is not always clear what the natural meaning of words is and how these should be interpreted, which causes opposing elucidations by different international legal institutions as well as academics.

The core of the contemporary CS law emerged after World War II due to the "the enhancement of the technology to search for and exploit offshore hydrocarbon resources wedded to the strategic knowledge of states' that oil was critical to their economies and militaries" (McDorman, 2015, p.184). The process started with the Truman Proclamation (the Proclamation) in 1945 after the USA claimed that all coastal states have the exclusive jurisdiction over the natural resources of the subsoil and seabed of the CS offshore their territory. This led many coastal states to extend their own exclusive jurisdiction over the CS within just a few years which resulted in an instant emergence of the CS regime in customary international law. However, notable differences were observed in those proclamations. Some states claimed jurisdiction over the entire CS and did not define the scope of it, which reflected geographical understanding of the maritime zone. On the

other hand, some states claimed the jurisdiction of the CS only to a certain limit which reflected a legal understanding of the concept that does not need to reflect geographical reality. Due to these discrepancies "the legal definition of the CS, in particular, its seaward limits, was subject to great uncertainty" (Liao, 2021, p.1).

As a result of the uncertainty, states sought to clarify the customary international law with a written agreement. The International Law Commission (ILC) was due to prepare draft articles and the members decided to use an 'exploitation-oriented approach' which separated CS as a legal concept from CS as a geographical reality and created a 'legal fiction' (Liao, 2021, p. 17). Article 1 of the Geneva Convention on the Continental Shelf (CCS), adopted in 1958, defined the scope of the jurisdiction and the seaward limits as a "to a depth of 200 meters or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas". By setting a limit of CS up to the point where exploitation of natural resources is possible, the definition of the seaward limit soon became incompatible with reality due to the development of the new technology. This effectively meant that states could constantly extend the scope of their jurisdiction and made the possibility of all submarine areas being subject to coastal states' jurisdiction in the foreseeable future. Land-locked states were also interested in the natural resources in the seabed thus unhappy with the new development of the law. This culminated in the adoption of the General Assembly Resolution 2749 (XXV) which declared that "(t)he sea-bed and ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction /.../ as well as the resources of the area, are the common heritage of mankind "(1970).

Thus it became essential for the states to decide where the CS ends and the Area begins. The seward limits of the CS as we know them today were eventually agreed by in the UNCLOS, which was adopted in 1982 and entered into force in 1994, and is to this day considered the constitution of the international law of the sea.

Unclos

The legal regime for CS is presently codified in the Part VI of UNCLOS which consists of ten articles that define states' rights, obligations as well as most importantly the outer limits of the CS. While the ECS is the outmost maritime limit, if the coastal state possesses one, it is im-

portant to understand its relationship with the other maritime limits in particular continental shelf up to 200 nautical miles (nm).

MARITIME ZONES

Entitlement to maritime zones is one of the main principles of the law of the sea, holding that "maritime territory is an essential appurtenance of land territory" (Grisb darna Arbitration, 1909, p.1, p. 4). Maritime limits are delimited based on the coastal states' geography since "(t)he juridical link between the State's territorial sovereignty and its rights to certain adjacent maritime expanses is established by means of its coast" (Continental Shelf (Libya/Malta), 1985, para. 49). Marston (1994, p.144, p.154) has vividly described how maritime limits mirror states' coastlines in the same way as shadows imitates objects that created them which reflects the principium that "the land dominates the sea" (Fisheries Case (United Kingdom v. Norway) ICJ Rep., 1951, p. 116). Coastal states thus possess different maritime zones, with every zone conferring on them distinct rights and obligations.

The outer limits of the maritime zones are measured from the baseline which is defined as 'the low-water line along the coast' (UNCLOS, 1982, art 5). However, in special circumstances, baselines are determined in a different manner. For coasts with a fringing reef or for islands situated on atolls, the baseline will be the 'seaward low-water line of the reef' (UNCLOS, 1982, art 6). Furthermore, in cases where a coastline is deeply indented, there is a fringe of islands along the coast, or the coast is unstable such as in the presence of delta, a straight baseline will be established. Straight baselines do not reflect the low-water line along the coast but rather connect the points on the fringing coast and create a straight line(s) mirroring the general direction of the coast (UNCLOS, 1982).

Coastal states are entitled to a territorial sea, contiguous zone, exclusive economic zone (EEZ) and CS, although the scope and extent of some of these maritime zones is dependant on the coastal geography and vicinity of the coasts of adjacent states, since a state cannot extend its maritime zones in a way that it will infringe adjacent states' maritime zones. A coastal state can establish a territorial sea up to 12 nm from its baseline. The zone adjoining the territorial sea is a contiguous zone and it extends up to 24 nm from the coastal state's baselines. EEZ can be proclaimed up to 200 nm from the baseline and is adjacent to

the territorial sea which in practice means that it can encompass the contiguous and CS up to its seaward limit. It is worth mentioning that the rights over the continental shelf do not affect the legal status of the superjacent waters or of the air space above those waters. This means that the CS can overlap with the contiguous zone, EEZ or be present under the water column of the high seas without interference with navigation or other rights applicable in those areas.

CONTEMPORARY CONTINENTAL SHELF REGIME

Article 76 in UNCLOS is perhaps the most complicated and technical Article in the Convention. It puts in place a complex formula for establishing the outer limit of a state's CS. Compared to CCS, UNCLOS differentiates between the concept of a CS up to 200 nm and ECS. Although most coastal states inherently possess a CS, not all states are able to claim an ECS which extends beyond 200 nm. UNCLOS holds that a CS is comprised of "the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines /.../where the outer edge of the continental margin does not extend up to that distance" (UNCLOS, 1982, art 78). This definition clearly shows that any coastal state can have a CS up to 200 nm even if, as a matter of geographical reality, it does not exist. CS is a purely legal concept that reflects the commercial background of the development of the CS regime and geopolitical importance of maintaining control over the natural resources. However when the continental margin, defined as comprising "the submerged prolongation of the landmass of the coastal State" and consisting of "the seabed and subsoil of the shelf, the slope and the rise", extends beyond 200nm a state is entitled to ECS (UNCLOS, 1982, art 76).

While according to science the CS will end with a slope, UNCLOS additionally includes a part of the rise beyond the continental slope in the formula in order to ensure the states will have control over all the areas that are most likely to contain natural resources. According to UNCLOS Article 76(4) one must first determine the foot of the continental slope and then draw a line connecting outmost points where the sedimentary thickness is equal to 1% of the maximum change of gradient in order to establish the outer limit of the ECS. The other option is to draw a line connecting the points located 60 nm from the

foot of continental slope. It is worth mentioning that both the gradient formula and the 60 nm formula are a combination of physical reality and the interest in encompassing those areas where natural resources are most likely to be found, thus once again following states' commercial interests. This was criticized by Hedberg as being "based more on factors of economic advantage to certain coastal countries than on impartial considerations of where a boundary should most naturally, most logically and most rightfully be" (Hedberg, 1976, p.17).

In order to secure the largest entitlement to the ECS possible, states can use a combination of these lines to always secure the outmost available limit. However, these lines are subject to two constraints to prevent coastal states from claiming overly extensive areas of the seabed and subsoil. The ECS cannot exceed 350 nm from the baseline or be extended further than 100nm from the 2,500 meter (m) isobath (UNCLOS, 1982, art 76). Again a state can use a combination of these lines to establish the largest scope of ECS possible. However, to complicate things further, even the latter two rules are subject to a constraint in case of a submarine ridge. Since a ridge is an elevated area in the water column, a state could extend a CS much further in the sea if it was using the line joining the points that are 100 nm from the 2,500 m isobath. For that reason, a state can only apply a line not exceeding 350 nm from the baseline in the case of ridges on the CS. On the other hand, this constraint does not apply to "submarine elevations that are natural components of the continental margin, such as its plateaux, rises, caps, banks and spurs" (UNCLOS, 1982, art 76). Submarine elevations thus have the ability to indefinitely extend the ECS.

Once the outer limit of the ECS is established, it is final and binding thus no longer dependent on the baseline. In this way, the ECS limits are the exception among other maritime limits since they do not fluctuate when the coastline recedes and can thus grow larger than permissible under the constraints explained above. Árnadóttir (2021) argues that the continental margin is stable and contains immobile resources while the water column and its living resources are more susceptible to a changing environment, and therefore it makes sense to establish fixed limits. Furthermore, the CS regime emerged with commercial interests in mind. It makes sense to make the limits permanent since the investments that make exploitation of natural resources possible require stability. Although Árnadóttir (2021) suggests that the argument seems less persuasive when it comes to the limits of the CS

up to 200 nm which is still fluctuating based on the baseline, I would argue the opposite since it in my view strengthens it. The CS up to 200 nm is a legal fiction, like the rest of the maritime zones, and does not necessarily reflect the physical reality. Thus, it makes sense for it to have the same fluctuating maritime limits. On the other hand, the ECS does reflect a physical reality and inherent right similar to the state's territory and should be permanently established when agreed on in accordance with UNCLOS.

On the other hand, O'Connell has argued that the reason the CS doctrine is subject to a different regime than other maritime zones is to 'annul any priority of claim in time or nature over the rights' that some coastal states might have based on acquisition or historic rights (O'Connell, 1982, p. 482). In this way the CS is automatically attributed to the coastal state from which the continental margin stems from. In the *North Sea Continental Shelf* cases the ICJ has explained that "(w) hat confers the *ipso jure* title which international law attributes to the coastal State in respect of its CS, is the fact, that submarine areas concerned may be deemed to be actually part of the territory over which the coastal State already has dominion, in the sense that, although covered with water, they are a prolongation or continuation of that territory, an extension of it under the sea" (North Sea Continental Shelf Cases, 1969, para. 43). UNCLOS based its Article 77(3) on ICJ's reasoning and firmly established *ipso facto* and *ab initio* right to the CS.

ENTITLEMENT

ITLOS has confirmed that entitlement does not depend "on any procedural requirements" and that "no special legal process has to be gone through, nor have any special legal acts to be performed (North Sea Continental Shelf Cases, 1969, para. 19)" in order to establish it since it "exists by the sole fact that the basis of entitlement, namely sovereignty over the land territory, is present" (Delimitation of the Maritime Boundary in the Bay of Bengal, 2012, para. 409). A coastal state thus has an entitlement to an ECS regardless of whether it has established its outer limits. Therefore, it is vital to differentiate between an entitlement and delineation. Entitlement to ECS gives a state the right to exercise jurisdiction over the area beyond 200 nm where the continental margin is physically present and when the constraints of the Article 76 are applied accordingly, even before it delineated its limits, which is supported by state practice. For example, before it made the

submission to the CLCS, Canada had been exercising jurisdiction over its natural resources on the CS beyond 200 nm (McDorman, 2015).

Nevertheless, there seems to be tension between the entitlement to the ECS and the delineation of its outer limits. It is not impossible for the Commission to deny the existence of entitlement to ECS during the delineation process, meaning that a state could be exercising jurisdiction over the common heritage of mankind for years before the entitlement is contested by the Commission. Furthermore, it seems that the state parties to UNCLOS voluntarily limit their ipso facto and ab initio right to the CS by accepting the obligatory submission to the Commission in order to establish outer limits of an ECS. However, Árnadóttir holds that "the procedure of establishing the outer limits of the CS is not a procedure of proclamation. Rather, it is a procedure of proof" (Árnadóttir, 2021, p.45). The Commission simply gives the coastal states a procedural opportunity to delineate the outer limits of the ECS and gives the limits established based on their recommendation legitimacy vis-à-vis other states. Still, entitlement has to be proved by scientific evidence, meaning neither scope nor existence of the ECS can be presumed. While the outer limits of the ECS can be easily established in certain circumstances such as in the Atlantic Ocean, other situations such as the AO present a complex legal challenge. Therefore, in practice, the existence of an entitlement and its delineation can be challenging to establish, not only for states but even for the Commission, which sometimes requests additional evidence or agrees that a state is entitled to ECS but cannot yet establish its outer limits, like in the case of the Cook Islands (Liao, 2021). These examples and argumentation try to demonstrate that although the state has inherent right to the ECS, the existence of entitlement or its potential scope is hard to establish, especially when dealing with a complex area like the AO that raises complex scientific questions and legal uncertainties.

DELINEATION V. DELIMITATION

It is also imperative to differentiate between the concepts of delineation and delimitation. Delineation process results in establishing the outmost possible limits of an ECS. If the scope of entitlement legitimized by delineation is not overlapping the entitlement of another state, the outer limits of the ECS can be established *vis-à-vis* the international community in the Area. On the other hand, the process of delimitation determines where the limits of national sovereign rights

will be drawn on the ECS in situations when states have overlapping entitlements. Overfield uses an analogy to showcase the distinction between the concepts: "(t)o put it in terms of pie, delineation establishes how big the pie is, while delimitation decides how to cut each claimant's slice" (Overfield, 2021).

In order to delineate its outer limits coastal states who are parties to the convention, according to Article 76(8) of UNCLOS, have the obligation to submit "(i)information on the limits of the continental shelf beyond 200 nautical miles" to the CLCS which will then make recommendations on the establishment of "the outer limits of their continental shelf" (1982). The CLCS is a sui generis body which is composed of 21 technical specialists that must have expertise in the field of geology, hydrography and geophysics (McDorman, 2015). The core duty of the CLCS is to consider submissions sent to them by the coastal states and subsequently provide recommendations on the limits of the ECS. The Commission is able to indicate the maximum possible claim to the ECS based on the data submitted to them by coastal states in good faith. It is important to mention that according to Article 76(10) delineation is "without prejudice to the question of delimitation of the CS between States with opposite or adjacent coasts" (UNCLOS, 1982). The Commission does not have the mandate to delimitate the bilateral maritime limits but solely to indicate where the states' limits of entitlement are.

Coastal states with overlapping entitlements do not need to delineate their ECSs according to the recommendations issued to them by the CLCS since delineation is a unilateral act (Antsygina, 2021). That is as long as they delineate only the area where they have rightful entitlement to the ECS and do not encroach on the rights all states have in the Area. That indicates that although the CLCS does not have the legal authority to enforce the location of the outer or bilateral limits in the case of overlapping entitlements, "its recommendations are highly influential in helping to determine their final location in practice" (Gavrilov, 2022). Although delineation and delimitation are two separate processes, they are nevertheless pertinent, especially in the areas with scientific and legal uncertainty.

Furthermore, it is also worth mentioning that the extent of the submission to CLCS is a political decision and does not need to include the whole scope of entitlement of the coastal state. States can choose to restrictive submission in order to "keep good relations with neighbor-

ing States, simplify future delimitation, or to reduce expenses on the collection of data in the areas that, while could be asserted, will likely not belong to a State after the delimitation" (Antsygina, 2021, p.393). On the other hand, a submission could also be excessive in order for a state to prove the maximum scope of entitlement and better its negotiating options during the delimitation process. The Arctic states have so far submitted both restrictive as well as excessive submissions, as well as a combination of both in relation to different overlapping entitlements. However, they can still submit Addenda or resubmit data in order to change the proposed scope of entitlement.

THE CLCS'S MANDATE

Since the information submitted to CLCS is scientific, the experts are not educated in the area of law. Thus, the Commission frequently obtains legal advice from the United Nations Office of Legal Affairs. Nevertheless, the CLCS has been inclined to favor geological reality over legal rules, which has proven to be controversial since the concept of ECS is as much based in reality as it is a legal construct. It has been argued by Guilfoye (2017) that the Commission is expanding its mandate by legislating and interpreting what the legal provisions should say instead of solely issuing recommendations. The Commission's decision to interpret legal provisions is problematic because it defines "what constitutes compliance" with the Convention, when UNCLOS "recognizes multiple sources of valid legal interpretation" (Graben, 2015). In practice, this results in the Commission prioritizing geological requirements over legal ones when they are in fact equal. Furthermore, there is a problem with interpretation of scientific concepts that are used in the Convention in "legal context, which can depart significantly from accepted scientific definitions and terminology" therefore causing discrepancy between science and law (Graben, 2015). For example, concepts imperative for the delineation and delimitation of ECSs in the AO are 'oceanic ridge', 'submarine ridge', and a 'submarine elevation'. However, the scientific definition of a 'spur' in the Convention is defined as a type of 'submarine elevation' that is indistinguishable from the scientific definition of a 'submarine ridge' (Byers, 2016).

Since all these concepts imply different constraints for the delineation of the CS, it is imperative to be able to distinguish them without confusion. In order to deal with this problem, the Commission has adopted the CLCS Guidelines with a goal of clarifying the interpretation of the

scientific concepts used in the Convention and harmonizing the interpretations throughout all recommendations they provide and in turn offer legal certainty. Consequently it widened its mandate from evaluation to legislation. Although the CLCS Guidelines were adopted by a treaty body and should not be considered binding on the state parties to the convention, it is however hard to disregard the fact that they ultimately endorse or condemn the state's scope of entitlement vis-à-vis the international community. Graben and Harrison (2015) argue that "when science is uncertain in an account of authority that relies on scientific agreement, law can cease to have determinative or predictive value" which will possibly result in coastal states opposing each other and the CLCS, while still complying with the international law. This situation could arise in the case of ECSs in the Arctic if the Commission does not endorse Gakkel, Lomonosov and Alpha-Mendeleev Ridges as natural prolongations of the coastal states' land territory. On the other hand, Kunov (2017) even goes so far as to argue the state parties were given the opportunity to comment on the CLCS Guidelines before their adoption and they tend to align themselves with the reasoning expressed in the Guidelines thus they "could accordingly reflect a subsequent practice within the meaning of Article 31(3)(b) of the Vienna Convention." (Kunoy, 2018, p.396).

The Commission's expansion of mandate also presents a problem since its recommendations have a legal dimension due to the Article 76(8) which holds that limits established according to the CLCS's recommendations will be 'final and binding' (UNCLOS, 1982). However, no consensus exists among academics or courts for who are the limits binding and when they become binding. According to McRae (2008), the Commission has the legal authority that makes its recommendations binding for the whole international community including the coastal state whose limits are the subject of recommendation. While Antsygina (2021) agrees that the ordinary meaning of the word 'final' is that it 'cannot be argued with or changed' thus binding on all international community and the submitting state but only after the coastal state deposited the limits with the Secretary-General of the United Nations and the limits were given due publicity. On the other hand, ITLOS held in Bangladesh v. Myanmar (2012) that the limits are made final and binding for the international community, including third states, but not for the submitting state. However, in Nicaragua v. Colombia (2012), ICJ explained that "(w)hen the CLCS addresses its recommendations on questions concerning the outer limits of its CS to coastal

States, those States establish, on that basis, limits which, pursuant to paragraph 8 of Article 76 of UNCLOS, are "final and binding" upon the States parties to that instrument" (Nicaragua v. Colombia, 2016, para. 108). This suggests that the limits are then only final and binding for the state parties of the Convention, including the submitting state, but not for the states that did not ratify UNCLOS. The International Law Association's Baselines Committee (the Committee) agreed that the limits are final and binding on submitting states and could only be changed if they are successfully challenged by other states (Árnadóttir, 2021). However, it is not clear if the Committee meant they can be challenged only by third states or all states. However, the second option would defy the purpose of final and binding limits. Furthermore, paragraphs 8, 9, and 10 of Article 76 are not part of customary international law and therefore cannot create obligations for third states, which would confirm that the limits are only final and binding for the state parties to the Convention.

Since the above mentioned paragraphs are not a part of customary law, it thus follows that third states can delineate the outer limits of the ECS without the CLCS's recommendations. Furthermore, if there is disagreement between the state party to the convention and the Commission and if the disagreements persist even after the state submits a revised submission, then the submitting state can presumably establish its limits even without the Commission's endorsement. However, Árnadóttir (2021) argues that since paragraphs 8 and 9 need to be read together, the outer limits of the CS cannot be permanently established vis-à-vis the international community if they first do not become final and binding with the endorsement of the CLCS. That means that the limits of third states as well as limits of state parties established without the Commission's endorsement would thus "be subject to scrutiny and possible non-acceptance by other states" (Baumer, 2017). This might be especially true in the case of AO where the scope of entitlement and consequently delineation of the ECS limits are complex and uncertain, and could therefore benefit from an independent scientific review provided by the Commission.

JURISPRUDENCE

Although international courts and tribunals have dealt with maritime boundary delimitation for decades, the jurisprudence on delimitation of the ECS with opposing or adjacent coastlines is very limited and new. Cases were dealt by ICJ, ITLOS and arbitral tribunals that needed to evaluate whether the delimitation of ECS falls within their jurisdiction and if they should refrain from exercising it when the Commission have not yet recommended the outer limits of the ECS. Furthermore, the technical complexity of Article 76 also raised the question if a judicial body has the expertise to take on the case. And lastly, it was not clear if ECS and CS up to 200 nm should be considered as one or two separate concepts since that has the implications for applications of previous jurisprudence concerning delimitation of CS up to 200 nm. In the following section I will scrutinize the most notable cases, their significance and what they mean for the delimitation of ECSs in the AO.

The 1992 case concerning the delimitation of maritime areas between Canada and France is significant for two reasons. Since the court only had the jurisdiction to delimit the maritime areas between Canada and France, it worried that delimitation of an ECS could affect the international community. Therefore, the arbitration tribunal decided that it "is not competent to carry out a delimitation affecting the rights of a party who is not present before it" and that a "commission /.../ is to be set up to examine the claims" which will only become final and binding after the state delineated its limits based on the Commissions recommendations (Canada v. France, 1992, para. 79). The court ultimately decided that it only has jurisdiction and expertise to delimited maritime areas up to 200 nm. Similarly, the arbitral tribunal in the case of Newfoundland v. Labrador/Nova Scotia (2000), two Canadian provinces, noted that it did not have the 'competence or mandate' to delineate and delimit the ECS. This reasoning was again confirmed by ICI in the 2007 case concerning maritime delimitation between Nicaragua and Honduras (Nicaragua v. Honduras, 2007). ICJ maintained that "any claim of CS rights beyond 200 miles must be in accordance with Article 76 of UNCLOS and reviewed by the (CLCS) established thereunder" (Bangladesh/Myanmar, 2012, para. 185) and held that "it will not rule on an issue when in order to do so the rights of a third party that is not before it, have first to be determined" (Nicaragua v. Honduras, 2007, para. 220). On the other hand, neither party asked ICJ to delimit the outer limits of the ECS, thus both Nguyen (2018) and Busch (2018) argue that the reasoning should be considered obiter dictum therefore not establishing a relationship between the Commission and the ICJ. In their view ICJ was only expressing hesitation to delimit ECS without the Commission's recommendations.

BANGLADESH V. MYANMAR

However, the 2012 case concerning delimitation of the maritime boundary between Bangladesh and Myanmar in the Bay of Bengal departed from this reasoning. The ITLOS judgment is considered a milestone for the contemporary CS regime since it broke new legal ground by delimiting an ECS. Furthermore, ITLOS was also the first adjudicative institution that deliberated in depth on its relationship to the Commission, however this did not come without controversies.

First, ITLOS reasoned that: "Article 76 of the Convention embodies the concept of a single continental shelf. In accordance with article 77 /.../ the coastal State exercises exclusive sovereign rights over the continental shelf in its entirety without any distinction being made between the shelf within 200 nm and the shelf beyond that limit. Article 83 of the Convention, concerning the delimitation of the continental shelf between States with opposite or adjacent coasts, likewise does not make any such distinction" (Bangladesh v. Myanmar, 2012, para. 361). This was also in line with the preceding arbitration between Barbados and Trinidad and Tobago that held "there is in law only a single 'continental shelf' rather than an inner continental shelf and a separate extended or outer continental shelf" (Barbados v. Trinidad and Tobago, 2006, para. 315).

It is clear that the Convention does not establish an order in which states should implement Articles 76, 77 and 83 but this, in turn, casts a doubt on who has the mandate and competence to decide on the existence of the entitlement to an ECS. Since the delimitation 'presupposes entitlement' it is vital to know if both the Commission and court both have the mandate to determine the existence of the entitlement or "or is it rather a situation where one of them has the competence to deal with entitlement, and the other to deal with outer limits" (Busch, 2018). According to the Commission's test of appurtenance the existence of entitlement must first be proven in order to be able to proceed with delineation which means that the entitlement does not depend on the delineation of outer limits of the ECS (Nguyen, 2018).

Based on the arguments discussed above, ITLOS decided that it possesses jurisdiction to delimit the ECS in its entirety since there is in law only a single CS and because there is in the convention no prescribed order on what comes first delimitation or delineation. Although the es-

tablishment of entitlement fell in the courts jurisdiction, the mandate for endorsing the outer limits of the ECS still belongs to the commission. Furthermore, ITLOS acknowledged that although the entitlement exists *ipso facto*, it also pointed out that not every state with a coastline will generate an ECS. However, this begs the question of what constitutes adequate evidence that a coastal state needs to present to the court in order to prove the existence of such entitlement in instances when such entitlement is disputed or doubted, which still has not been clearly discussed by any adjudicative body (Nguyen, 2018).

On top of that, ITLOS pointed out that there are no paragraphs in the Convention or in the Commission's Rules of Procedure that would "indicate that delimitation of the CS constitutes an impediment to the performance by the Commission of its functions" (Bangladesh/Myanmar, 2012, para. 377). There is a clear distinction between the Article 83 that concerns delimitation of the CS and Article 76 which indicates how to delineate the outer limits of the ECS. Since the recommendations of the CLCS are without prejudice to the delimitation of an ECS between states with opposite or adjacent coasts, it thus follows that if ITLOS exercises its jurisdiction in order to delimitate ECS, that will be without prejudice to the Commission's functions on the matters relating to delineation.

Before the *Myanmar v. Bangladesh* scholars had argued that courts should not and could not delimit ECS before the Commission has issued its recommendations. Kunoy (2017), for example, argued that entitlement without endorsement of the CLCS is not final and binding thus courts cannot rule on something that is only hypothetical. Nguyen (2018) agreed with this view and added that in this kind of situation states should only be given advisory opinion and not a binding judgment. Elferink (2004) also argued that delimitation requires the existence of a valid claim of more than one state to the same area. However, in some cases it is possible to establish an overlapping valid claim/entitlement without the recommendation of CLCS. As ITLOS pointed out, the decision to exercise jurisdiction should be determined based on substantive and procedural circumstances of each individual case.

The circumstances in the Bay of Bengal were unique because the area in question is covered with a thick layer of sediment, 14 to 22 km deep, that without a doubt meets the UNCLOS criteria for thickness of sedimentary rocks, thus confirming the presence of an ECS (Jesen, 2022).

Therefore, there was no uncertainty over overlapping entitlements in the Bay of Bengal. Additionally, due to the location of the Bay of Bengal, where the overlapping claims were removed from the Area, there was no potential risk of encroachment of rights of the international community. ITLOS followed the same reasoning in the subsequent *India v. Bangladesh* in Bay of Bengal and *Ghana v. Côte d'Ivoire* thus these cases will not be discussed. However, the practices of the ICJ have been less coherent.

NICARAGUA V. COLOMBIA

In the 2012 maritime delimitation case between Nicaragua and Colombia, the ICJ declined to delimit the ECS. Although the ICJ acknowledged the ITLOS judgment in Myanmar v. Bangladesh it held that the situation in Nicaragua v. Colombia was different because it would require the ICJ to delineate the outer limits of the ECS in order to be able to delimit it. Furthermore, in this case Nicaragua only submitted preliminary information to the Commission and not a full submission indicating the outer limits of its ECS. Whereas in Bangladesh v. Myanmar both parties made full submissions to the Commission despite the CLCS not being able to issue recommendations as both states objected and blocked the process (Nguyen, 2018). The ICJ argued that Nicaragua "falls short of meeting the requirements" (Nicaragua v. Colombia, 2016, para. 35) under Article 76(8) and "has not established that it has a continental margin that extends far enough to overlap with Colombia's 200-nautical-mile entitlement to the continental shelf, /.../ the Court is not in a position to delimit the continental shelf boundary" (Nicaragua v. Colombia, 2016, para. 82). This decision was controversial because it made it seem Nicaragua was obliged to make a full submission to the Commission as a prerequisite for the Court exercising its jurisdiction and delimiting the ECS. On top of that, it created the impression that solely a partial submission to the Commission does not suffice to prove entitlement when entitlement should exist ipso facto by the virtue of sovereignty over land. Furthermore, Colombia is not a party to the Convention and does not have the obligation to submit information to the CLCS, yet it objected to consideration of Nicaragua's submission. However, the ICJ found that this does not relieve Nicaragua of its obligations under Article 76 of that Convention. Although, in the case of Myanmar v. Bangladesh, ITLOS did not prejudice the work of CLCS, the ICJ in this case feared it would do that by determining the outer limits of the ECS (Busch, 2018). Based on this reasoning the ICJ declined to exercise jurisdiction and in turn also reiterated the *obiter dictum* from Nicaragua v. Honduras. However, Busch (2018, p. 340) argues that because the ICJ did not offer any nuance as to how the *obiter dictum* should be interpreted, it "contributes to blur the predictability and transparency in maritime delimitation beyond 200 nm." Furthermore, the ICJ's reasoning is contradictory to the reasoning of ITLOS which, in turn, contributes to a confusing jurisprudence applicable in the cases delimiting ECS.

Soon after the judgment, Nicaragua sent a full submission to the Commission and once again instituted proceedings against Colombia. Colombia objected that Nicaragua cannot establish a valid entitlement without recommendation of CLCS, since the Commission is the institution that transforms "an inherent but inchoate right into an entitlement whose external limits is 'final and binding' under Article 76(8) and opposable erga omnes," as confirmed by the ICJ ruling and obiter dictum in the earlier case since (Busch, 2018, p. 344). However, in this case the ICJ held that it can exercise jurisdiction and delimitate the CS between the states, since CLCS work relates to delineation which is distinct from delimitation. Furthermore, the ICI stated that it declined to delimit CS beyond 200 nm in the previous case between Colombia and Nicaragua due to procedural requirements which were now fulfilled by Nicaragua. At first glance it also seems that the ICI established the full submission to the CLCS as 'evidentiary threshold' for valid entitlement to the ECS. However, seven judges dissented to this opinion and held that this is a "procedural requirement that did not – and does not – exist" (Nicaragua v. Colombia, 2016, Joint Dissenting Opinion, para. 2) and "(i)t should be noted that information submitted to the CLCS pursuant to Article 76 (8) of UNCLOS will not necessarily be regarded as sufficient to establish the existence of an extended continental shelf" (Nicaragua v. Colombia, 2016, Joint Dissenting Opinion, para. 56). On top of this, Nicaragua should not have been able to start proceedings again after the court had already decided that it does not have jurisdiction to delimit an ECS, since this goes against principle res judicata. It is clear that with this case ICJ abandoned its reasoning in previous cases concerning delimitation of the ECS and clearly also departed from the obiter dictum stated in Nicaragua v. Honduras and reiterated in Colombia v. Nicaragua (2012).

Although, it seems that by exercising jurisdiction the ICJ was taking the same approach as ITLOS and ensuring the judicial continuity, this is not the case. In Colombia v. Nicaragua or in the subsequent case Somalia v. Kenya, there was no uncontested scientific evidence that would without doubt demonstrate the existence of ECS and validate an entitlement (Ioannides & Yiallourides, 2021). However, this was the case in Bangladesh v. Myanmar, since the sediment thickness requirement was introduced to UNCLOS based on the circumstances in the Bay of Bengal. ITLOS itself acknowledged that "the Tribunal would have been hesitant to proceed with the delimitation of the area bevond 200 nm had it concluded that there was significant uncertainty as to the existence of a continental margin in the area in question" (Bangladesh v. Myanmar, 2012, para. 443). It can be assumed that IT-LOS would not have exercised jurisdiction in Colombia v. Nicaragua and Somalia v. Kenya where such evidence did not exist. Similarly, in Canada v. France, the arbitral tribunal held that it cannot delimitate the CS due to factual uncertainty in regard to the existence and scope of entitlement. Therefore, ICI should exercise caution when it tries to apply the ITLOS's conclusions in the Bay of Bengal cases to other cases with different circumstances, especially when significant uncertainty exists in regard to the states' entitlement.

It can be concluded that delimitation does not preclude delineation in cases with factual certainty and when the adjudicating body does not need to delineate the outer limit of the ECS such as in the case of states with adjacent coastlines. In these circumstances delimitation and delineation may proceed in parallel (Busch, 2018). However, jurisdiction is uncertain in cases where the existence and scope of entitlement are not without doubt, especially in cases where states have opposing coastlines. In these situations a court would be determining the outer limits of ECS just by defining the area of overlapping entitlement. In this way an adjudicating body could encroach on the work of the Commission. It is not clear what would happen if the CLCS issued recommendations that entail that one or both do not have an entitlement to an ECS or their entitlements are not big enough to cause an overlap. This would mean that a decision made by court which is binding on the upon parties to dispute but not on third states would be in conflict with the CLCS's non-binding recommendations that legitimize the outer limits vis-à-vis all states in the Area. In this way the Commission's role would be diminished and would not be in accordance with the Convention as its recommendations would only have declarative value. The Convention's purpose is to establish "legal order for the seas and oceans which /.../ will promote the peaceful uses of the seas and oceans, the equitable and efficient utilization of their resources" (UNCLOS, 1982, Art. 46) and Nguven argues that "(d)discrepancies in the advice given to States by different treaty institutions on the same matter clearly do not serve this purpose" (2018, p. 46). In his separate opinion, Judge Ndiaye suggested the court should refer the matter to CLCS in circumstances of scientific uncertainty as to not encroach on the CLCS's mandate. However, this is not currently possible according to Article 5(a) of Annex I to CLCS Guidelines, that states that "(i)n cases where a land or maritime dispute exists, the Commission shall not consider and qualify a submission made by any of the States concerned in the dispute" ((CLCS, 1998, art. 5(a)). In this case submission(s) can only be considered if consent is given by all parties. Judge Gaja has suggested that the Commission's Rules of Procedure should be changed so the Commission could make recommendations even in the event of a maritime dispute, since the recommendations are without prejudice to delimitation (Nicaragua v. Colombia, 2016, Declaration of Judge Gaja, p.106).

DISCUSSION

Since the entitlement to the CS arises from states' sovereignty over land, Canada, Denmark, and Russia should be entitled to ipso facto and ab initio right without proclamation, occupation or delineation of its outer limits since entitlement does not depend on procedural requirements. But as demonstrated above, in cases with no scientific certainty like in the AO, there is tension between having inherent right to ECS and the existence of entitlement as well as delineation and delimitation. In such circumstances, entitlement has to be proven by scientific evidence submitted to the CLCS and cannot be presumed to exist thus UNCLOS establishes limitations to inherent right. However, this goes against the nature of inherent right and the fact that it exists without any procedural requirements. On the contrary, without the procedure to legitimize the entitlement, Arctic littoral states could be exercising jurisdiction in the Area without the existence of an inherent right which does depend on the actual existence of continental margin beyond 200 nm. Importantly, it is not unknown for the Commission to deny the existence, in part or in whole, of the CS beyond 200 nm. However, as there are discrepancies between the scientific and legal definitions of parts of the ocean floor that are considered to be components of ECS, and as the CLCS favors scientific definitions. The Commission is very likely not to endorse the whole scope of Can-

ada's, Russia's and Denmark's entitlements. For example, the CLCS's recommendation that Alpha-Mendeleev, Gakkel Ridge and Lomonosov Ridges are not submarine elevations, but rather oceanic ridges or submarine ridges would delegitimize the existence of overlapping entitlements. Although these states could still delineate limits in the Arctic without the Commission's legitimization, they would not be final and binding, thus possibly disputed by other states. This could happen even if their delineation was in line with legal constraints of Article 76 that are equally important as geological. This would mean that even if their limits would comply with international law, they would not be final and binding since the CLCS did not endorse them. For example, non littoral Arctic states have shown to have an interest in the exploitation of natural resources in the AO. Thus, if a third state would bring a case to ITLOS or ICJ against any of the Arctic states, in order to dispute their ECS limits that are not final and binding, the court would very likely take CLCS's recommendations into account and see them as an authoritative scientific interpretation. Although CLCS does not have the power to preclude Arctic States to delineate their ECSs against its recommendations, it is very likely its recommendations would be able to do just that when used by an adjudicative body whose judgment is binding on the states involved in the proceedings. Thus indirectly, CLCS's endorsement or opposition to the existence of entitlements in the AO can result in limitation of the states' inherent rights.

Although ITLOS decided to exercise jurisdiction in Bangladesh v. Myanmar, and stated it would not encroach on the work of the Commission, that would not be the true in the case of AO. Since the existence of ECS in the Bay of Bengal was without doubt, Myanmar and Bangladesh have adjacent coastlines, and delineation and delimitation would not encroach on the rights of the international community. However, this would not be the case in the case of AO. The existence and scope of entitlements to the ECS is not without doubt but rather highly contested. ITLOS itself said that it would be hesitant to exercise jurisdiction in cases with significant uncertainty (Bangladesh v. Myanmar, 2012, para. 443). Furthermore, due to opposite coastlines, the adjudicating body would need to determine the outer limits of ECSs just by defining the area of overlapping entitlement which would encroach on the work of the Commission. Although ITLOS would not exercise jurisdiction, the ICJ could do the opposite according to Nicaragua v. Colombia (2022). Despite the dissenting opinion of seven judges, it seems that the ICJ did establish full submission to CLCS as an 'evidentiary threshold' for the valid entitlement or at least as a procedural requirement. Since Russia, Canada and Denmark already submitted submissions to CLCS, the ICJ could decide to exercise jurisdiction. However, the ICJ's jurisprudence is not coherent, but rather conflicting. Additionally, it is not in line with ITLOS cases and the other arbitration cases discussed above thus the jurisprudence on ECS does not offer legal certainty and continuity. It rather seems that each of the relevant adjudicating bodies would come to a different conclusion.

Inherent right to CS encompasses the sovereign rights to exclusive exploitation of natural resources. This means it is vital for the Arctic states to delineate and delimitate the entitlement since investments into exploitation and exploration require stability. It should also be in the states' interest to do that in line with the Commission's recommendations in order to establish stable circumstances for commercial investments with final and binding outer limits of the ECSs. Since Arctic states have opposing coastlines and the existence and scope of entitlements is not without doubt, delineation and delimitation, although separate processes are linked together in these circumstances. Moreover, both of them require the existence of entitlement. Since, Canada, Denmark and Russia have all sent submissions to the Commission as well as note verbale stating they consent to CLCS's consideration of submissions and issuing recommendations. Thus they are all signaling they wish to delimit their ECSs according to its recommendations. However, this might change if CLCS's does not issue recommendations that are in line with the states' proposals.

There are numerous ways the states could go about the delimitation. Ideally, states will wait for the Commission's recommendations which would legitimize their entitlements. The states would then be able to delimitate the overlapping areas through diplomacy and negotiations. Most likely the states will delimite the ECSs by signing bilateral or trilateral agreements. If they could not reach an agreement in this way, the states could also refer the dispute to ICJ, ITLOS or arbitration tribunal and ask them to delimit the ECS based on the recommendations. The Commission will need approximately 10 to 15 years to issue recommendations to Canada, Denmark and Russia. After this, states could spend years negotiating delimitation or waiting for the court's judgment. However, states would, in the meantime, not be precluded to exploit the natural resources in the ECS since both ITLOS in *Ghana v. Côte-d'Ivoire* and the ICJ in *Somalia v. Kenya* held that "(w)hen mar-

itime claims of States overlap, maritime activities undertaken by a State in an area which is subsequently attributed to another State by a judgment cannot be considered to be in violation of the sovereign rights of the latter if those activities were carried out before the judgment was delivered and if the area concerned was the subject of claims made in good faith by both States" (Ioannides & Yiallourides, 2021). Thus, it would be in states' best interest to delimitate the overlapping area as soon as possible, especially if they think the part of the ECS that contains valuable natural resources will after delimitation fall under their jurisdiction. On the other hand, states could also decide to embrace an innovative solution that has not yet been proposed by the literature and would take less time to negotiate.

The Arctic is a region of cooperation where states have repeatedly shown commitment to international law and innovation when dealing with boundary disputes and sovereignty. Considering the Arctic as an innovative region and the fact that commercial exploitation in the AO would demand enormous investments into technology and explorations, states could decide for an innovative approach in the area with overlapping entitlements. Thus, I want to propose a new approach on shared sovereign rights over the ECS in the area of overlap. Shared sovereignty between Denmark and Canada in the form of condominium was already proposed for Hans Island. Similarly, Canada, Denmark and Russia could decide to share sovereign rights in the area of overlap. States could benefit from shared cost of exploration and investment into development of exploitation technology appropriate for usage in the Arctic environment, thus ensuring quicker start of commercial exploitation while sharing the profits. However, there are also numerous disadvantages to this solution. While the condominium would ensure stability of borders and ample investments, it could be a problem if states would pass different environmental protection laws or have different environmental standards for exploitation of maritime resources. It is also very unlikely states would be willing to agree on establishment of condominium since the claim over ECS in the AO, especially under the North Pole, is of symbolic and political significance. Furthermore, shared sovereignty would be harder to sustain in the changing geopolitical environment. Thus, this might be a better option for the Area of overlap between Canada and Denmark since they have similar values and political ideologies.

CONCLUSION

This article dealt with ECSs in the AO and the legal complexities that their delineation, delimitation and legitimization of entitlement bring. Since the entitlement to the CS arises from states' sovereignty over land, Canada, Denmark, and Russia should be entitled to *ipso facto* and *ab initio* right without proclamation, occupation or delineation of its outer limits since entitlement does not depend on procedural requirements. But as demonstrated above, in cases with no scientific certainty, there is tension between having inherent right to ECS and the existence of entitlement as well as delineation and delimitation. In such circumstances, entitlement has to be proven by scientific evidence submitted to the CLCS and cannot be presumed to exist thus UNCLOS establishes limitations to inherent right. However, this goes against the nature of inherent right and the fact that it exists without any procedural requirements.

There is always a chance that the Commission will not endorse the existence of ECS, in part or in full, especially if the Commission finds that Lomonosov, Gakkel and Alpha-Mendeleev Ridges are not submarine elevations but rather oceanic or submarine ridges which would delegitimize the state's claims. Since delineation is a unilateral act, states could decide to delineate and subsequently delimitate their ECSs not based on the CLCS's recommendations. These borders would not be final and binding and could be disputed by the international community. Consequently, this scenario would not offer the stability that commercial investments into exploitation in the AO need. This could happen even if their delineation was in line with legal constraints of Article 76 that are equally important as geological. Thus, even if their limits would comply with international law, they would not be final and binding if the CLCS did not endorse them.

Ideally, states will wait for the Commission's recommendations, which would legitimize their entitlements. The states would then be able to delimitate the overlapping areas through negotiations or refer the dispute to the ICJ, ITLOS or arbitration tribunal. The states could also choose an innovative solution in which they could share sovereign rights in the area of overlap.

REFERENCES

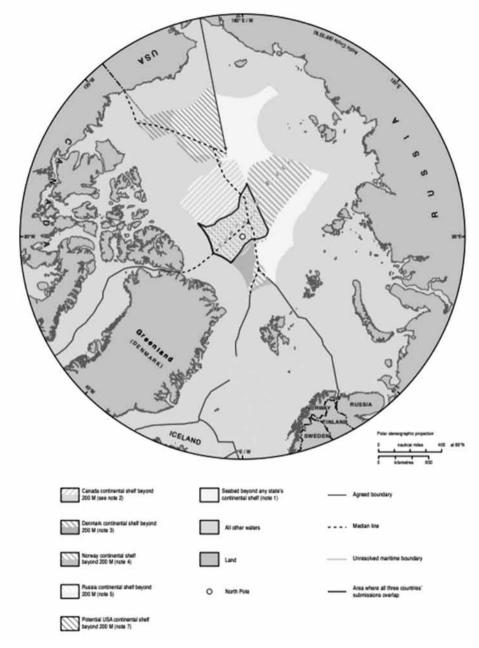
- Árnadóttir, S., 2021. Climate change and maritime boundaries: Legal consequences of sea level rise. Cambridge University Press.
- Antsygina, E., 2021 April 23. The delimitation of extended continental shelves in the Arctic Ocean. East-West Center. https://www.eastwestcenter.org/node/39811
- Antsygina, E., 2022. The interplay between delineation and delimitation in the Arctic Ocean.

 Ocean Yearbook, 36.
- Baker, B., 2020. Arctic overlaps: The surprising story of continental shelf diplomacy. *The Polar Perspectives, 13*(1). https://www.wilsoncenter.org/publication/polar-perspectives-no-3-arctic-overlaps-surprising-story-continental-shelf-diplomacy
- Baumert, K. A., 2017. The outer limits of the continental shelf under customary international law. *American Journal of International Law, 111*.
- Busch, S. V., 2018. The delimitation of the continental shelf beyond 200 Nm: Procedural issues. In: A. G. Oude Elferink, T. Henriksen, & S. V. Busch (Eds.), *Maritime boundary delimitation: The case law: Is it consistent and predictable?* Cambridge University Press.
- Byers, M., 2013. International law and the Arctic. Cambridge University Press.
- Byers, M., 2016. The law and politics of the Lomonosov Ridge. In: M. H. Nordquist, J. N. Moore, & R. Long (Eds.), *Challenges of the changing Arctic: Continental shelf, navigation, and fisheries*. Brill Nijhoff.
- Continental Shelf (Libya/Malta), ICJ Rep. 13 (1985).
- Declaration of Judge Gaja in Questions of the Delimitation of the Continental Shelf Between Nicaragua and Colombia Beyond 200 Nautical Miles from the Nicaraguan Coast (Nicaragua v. Colombia), ICJ Rep. 100 (2016).
- Delimitation of maritime areas between Canada and France (Canada v. France), Vol. XXI (1992).
- Delimitation of the Maritime Boundary in the Bay of Bengal (Bangladesh/Myanmar), ITLOS Rep. 4 (2012).
- Fisheries Case (United Kingdom v. Norway), ICJ Rep. 116 (1951).
- Gautier, L. D., et al., 2009. Assessment of undiscovered oil and gas in the Arctic. Science, 324.
- Graben, S., Harrison, P., 2015. Arctic networks and legal interpretations of the UN Commission on the Limits of the Continental Shelf. *Leiden Journal of International Law, 28*.
- Guilfoyle, D. (2017). *The law of the continental shelf* [Video lecture]. Monash University. https://www.youtube.com/watch?v=SIMXsBKU2Bw&list=WL&index=2
- Grisbådarna Arbitration (Norway v. Sweden), XI RIAA 147 (1909).

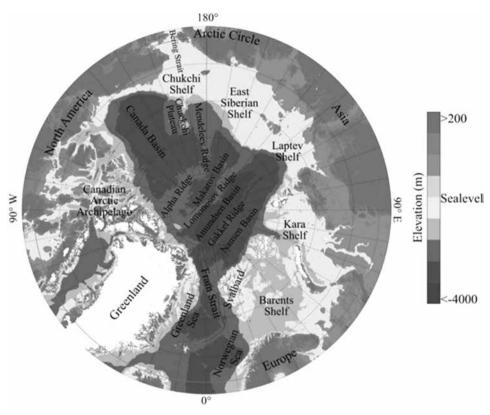
- Hedberg, H. D., 1976. Relation of political boundaries on the ocean floor to the continental margin. *Virginia Journal of International Law, 17*.
- loannides, N. A., Yiallourides, C., 2021. A commentary on the dispute concerning the maritime delimitation in the Indian Ocean (Somalia v Kenya). *European Journal of International Law*. https://www.ejiltalk.org/a-commentary-on-the-dispute-concerning-the-maritime-delimitation-in-the-indian-ocean-somalia-v-kenya/
- Jensen, Ø., 2018. The delimitation of the continental shelf beyond 200 Nm: Substantive issues. In: A. G. Oude Elferink, T. Henriksen, & S. V. Busch (Eds.), *Maritime boundary delimitation: The case law: Is it consistent and predictable?* Cambridge University Press.
- Jensen, Ø., 2022. End of the common Arctic seabed: Recent state practice in the establishment of continental shelf limits beyond 200 nm. *The Polar Journal*, 121.
- Kunoy, B., 2010. The admissibility of a plea to an international adjudicative forum to delimit the outer continental shelf prior to the adoption of final recommendations by the Commission on the Limits of the Continental Shelf. *The International Journal of Marine and Coastal Law*, 25.
- Kunoy, B., 2017. Assertions of entitlement to the outer continental shelf in the central Arctic Ocean. *International and Comparative Law Quarterly, 66*.
- Liao, X., 2021. The continental shelf delimitation beyond 200 nautical miles: Towards a common approach to maritime boundary-making. Cambridge University Press.
- Macnab, R., 2008. Submarine elevations and ridges: Wild card in the poker game of UNCLOS Article 76. Ocean Development and International Law, 39.
- Maritime boundary delimitation (Barbados v. Trinidad and Tobago), RIAA Vol. XXVII (2006).
- Marston, G., 1994. The stability of land and sea boundary delimitations. In G. Blake (Ed.), Maritime boundaries: World boundaries. Routledge.
- McDorman, T., 2015. The continental shelf. In: D. Rothwell et al. (Eds.), *The Oxford handbook of the law of the sea*. Oxford University Press.
- McRae, M. D., 2008. Selected issues relating to the Arctic [Audio-visual library of international law]. United Nations. https://legal.un.org/avl/ls/McRae_A.html
- Nguyen, L. N., 2018. UNCLOS tribunals and the development of the outer continental shelf regime. *International and Comparative Law Quarterly, 67*.
- Nicolas, L., 2020, February 13. The final frontier: How Arctic ice melting is opening up trade opportunities. World Economic Forum. https://www.weforum.org/agenda/2020/02/ice-melting-arctic-transport-route-industry/
- North Sea Continental Shelf Cases (Federal Republic of Germany/Denmark; Federal Republic of Germany/Netherlands), ICJ Rep. 3 (1969).
- O'Connell, D. P., 1982. The international law of the sea. Clarendon Press.

- Oude Elferink, A. G., 2004. Submissions of coastal states to the CLCS in cases of unresolved land or maritime disputes. In: M. H. Nordquist, J. N. Moore, T. Heidar (Eds.), *Legal and scientific aspects of continental shelf limits*. Brill Nijhoff.
- Overfield, C., 2021, April 21. An off-the-shelf guide to extended continental shelves and the Arctic. Lawfare. https://www.lawfareblog.com/shelf-guide-extended-continental-shelves-and-arctic
- Sperate Opinion of Judge Tafsir M. Ndiaye in Delimitation of the Maritime Boundary in the Bay of Bengal (Bangladesh/Myanmar) (Judgment), ITLOS Rep. 4 (2012).
- Steffen, W. (n.d.). Map of the Arctic Ocean showcasing the major basins, ridges, and shelves [Map]. https://www.researchgate.net/figure/Map-of-the-Arctic-Ocean-showcasing-the-major-basins-ridges-and-shelves-Elevation-is_fig7_341618017
- Territorial and Maritime Dispute between Nicaragua and Colombia (Nicaragua v. Colombia), ICJ Rep. 624 (2012).
- Territorial and Maritime Dispute between Nicaragua and Honduras in the Caribbean Sea (Nicaragua v. Honduras), ICJ Rep. 659 (2007).
- United Nations. (1982). *United Nations Convention on the Law of the Sea* (1833 UNTS 397; entered into force November 16, 1994).
- Arbitration between Newfoundland and Labrador and Nova Scotia concerning Portions of the Limits of their Offshore Areas (Newfoundland v. Labrador/Nova Scotia), Ad hoc Arbitration (2000).
- Annex I to Rules of Procedure of the Commission on the Limits of the Continental Shelf (4 September 1998) CLCS/40/Rev.1.
- Rules of Procedure of the Commission on the Limits of the Continental Shelf (4 September 1998) CLCS/40/Rev.1.
- Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf (adopted 3 September 1999) CLCS/11/Add.1.

ANNEX I: MAPS



Map 1: IBRU



Map 2: Steffen Wiers

ANNEX: ABBREVIATIONS

AO Arctic Ocean

CCS Geneva Convention on Continental Shelf

CLCS Commission on the Limits of the Continental Shelf

CS Continental shelf

EEZ Exclusive Economic Zone

ECS Extended continental shelf

ICJ International Court of Justice

ILC International Law Commission

ITLOS International Tribunal for the Law of the Sea

m metres

The Committee The International Law Association's Baselines Committee

nm nautical miles

Proclamation Truman Proclamation

UNCLOS United Nations Convention on the Law of the Sea