37, 42, 51 Hike!: Status Quo Bias in the Commission on the Limits of the Continental Shelf

Abstract

Is the Commission on the Limits of the Continental Shelf (CLCS), biased towards the status quo due to the institutional rules? This paper tackles this question by making a preliminary estimate of the impact of the internal rules that have governed the CLCS since its founding in 1996. To test this argument, data on the time to CLCS final approval is analyzed, to estimate the impact of the rules on submission wait times. This paper finds that the rules do impact the average time a state’s submission is under review by the CLCS, with an anticipated wait time of 66 years on average. This finding is very provocative, and merits further work on the CLCS.1

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Introduction

In 1986, diplomats gathered together to sign a new United Nations (UN) convention. This new convention on the law of the sea (UNCLOS III), created a new international institution; the Commission on the Limits of the Continental Shelf (CLCS). This new international institution was charged with expanding the continental shelf of its member states beyond 200 nautical miles, if the signatory can prove that their shelf extends past the current end point (UNCLOS 1982; CLCS 1997a).2

Charged with its mission to make binding rulings on whether states have scientific evidence to extend their continental shelf beyond the UNCLOS baseline, to the maximum of

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2 Legally speaking, the CLCS extends the legal continental shelf, which entitles the state to a larger EEZ, because the EEZ is based on the length of the legal continental shelf. For example, if the legal continental shelf is 200 nautical miles, then so is the EEZ and vice-versa. A figure from the CLCS website, that explains this is contained in the appendix.
350-nautical miles, the CLCS began reviewing submissions in 2001. Since 2001, the CLCS has received a total of 78 submissions, and has reviewed a total of 26, leaving 51 remaining (CLCS 2017b; Jares 2009; UNCLOS 1982).

Since the birth of the CLCS in 1996, until today, there has been little social science inquiry that examines the CLCS, despite its important role as an institutional player in international maritime politics (UNCLOS 1982; CLCS 1997c). What work there has been done is mainly theoretical in nature, and generally views the drafting of CLCS submissions as a process characterized by cooperation, and are restricted to the Circumpolar region. This work seeks to expand upon these claims, making use of newly available data (Riddell-Dixon 2008).

What new data is there to merit this theoretical refinement? Evidence from internal documents shows that the CLCS is struggling to achieve its stated institutional goal. These documents reveal that the CLCS is unable to handle its current workload, which is preventing state actors from receiving full access to their continental shelves. The documents point to an increasing backlog of submissions, which is problematic (CLCS 2017; “Presentation of the Commission on the Limits of the Continental Shelf to the Bureau of the MSP, Concerning the Workload of the Commission” 2009).

These claims are subject to empirical testing in this work. Based on a cursory analysis of the ‘Rules of Procedure of the Commission on the Limits of the Continental Shelf’ (hereafter referred to as ‘the rules’) it appears that the internal rules may impact the average time to final approval, and thus be contributing to the backlog. This work seeks to test this assertion, by

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3 There are two limits a state can select on determining its extension of the continental shelf. The 350-nautical miles standard is showcased here for simplicity sake. See David Colson’s work for a more in-depth discussion of the second method (Colson 2003).

4 The work of Elizabeth Riddell-Dixon (2008) is a rare exception.
estimating the impact of the rules on the average time to final approval by the CLCS. This will allow for a preliminary test to determine the size of the backlog, which will affect how long a state submitting after Oman must wait until its submission is completed (“CLCS 40.1” 2008, for example).5

To determine the size of the backlog, this paper examines each iteration of the rules since the CLCS was founded.6 This work finds that the impact of the rules is quite extensive and consistent across time. The rules impact the average time a state’s submission is backlogged, if other factors are held constant (no new submission, no denials, no resubmittals, etc.). A state submitting today, should expect to wait on average, 66 years for their submission to begin the review process. These findings are particularly interesting, and indicate that the CLCS is a very slow-moving institution, which appears to be biased towards the status quo. This is somewhat contrary to previous findings (Riddell-Dixon 2008; CLCS 1997b; CLCS 1997a; CLCS 2008; CLCS 2004; CLCS 2001c; CLCS 1998b; CLCS 2001a; CLCS 1998a; SPLOS/CLCS/WP.1 1996; CLCS 2001b).

In the following sections, immediately preceding this introduction, the scant literature on the CLCS will be examined, along with other theoretically relevant works. The third section will discuss the data employed in the analysis of the backlog. The fourth section discusses the results of these analyses, and discusses their implications for the CLCS and its member states. Following this, will be a short conclusion that summarizes the main findings, and points to avenues for future research on the CLCS.

5 Oman is the most recent state to submit to the CLCS (CLCS 2017b).
6 Along with other supporting documents (“CLCS L.12” 2001, for example).
Literature Review

Elizabeth Riddell-Dixon, claims three things regarding the CLCS. First, the submission process is orderly. Second, that the process is characterized by cooperation. And, third that the process is not sensitive to time constraints (Riddell-Dixon 2008).

Of the three claims made in her work, I agree wholeheartedly with her first claim. The submission process is indeed orderly. Per the rules of the CLCS, submissions are on a first come first serve basis. In addition, all submissions are cataloged in the order they are received, and considered in that order. Thus, it seems fair to concede that the process is in fact, orderly (Riddell-Dixon 2008; CLCS 2008).

Her second and third claims however, I take issue with. By limiting her work to only consider the Circumpolar North, her argument fails to capture the large macro processes at work. According to her own argument, it is highly costly to collect the information necessary for a CLCS submission in the Arctic Ocean. To collect the data on the continental shelf in the Arctic Ocean requires two ice breakers (regardless of season, or a shrinking ice cap), one of which is required to be nuclear powered. Looking at the United States Coast Guard Report on the Major Ice Breakers of the World, the only state with a nuclear icebreaker is Russia (they have a total of 6). Thus, if any of the other Arctic 5 seek to collect data on the sea floor of the Arctic region, they are required to cooperate, or build their own nuclear icebreaker, which is costly (an estimated 791 to 983 million in 2019 dollars by the National Academy of Sciences)\(^7\). Thus, Riddell-Dixon’s claim regarding cooperation is correct, but only within the context of the Circumpolar North, as the material and non-material incentives to cooperate are extremely high.

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\(^7\) The Arctic 5 consists of the 5 coastal arctic states, they are; Russia, Canada, the United States, Norway, and Denmark (via Greenland) (“Political Map Regions Arctic Ocean” 1999).
Outside of this region, however, the incentive structure varies. Also of note, the CLCS has yet to rule definitively on any submission dealing with the Arctic, despite several submissions dealing with the Circumpolar Region, which does not bode well for any claim regarding cooperation (Riddell-Dixon 2008; “Political Map Regions Arctic Ocean” 1999; United States Coast Guard 2015; West 2017; CLCS 2017b).

It is the third claim that is the focus of this paper however, which contends that time is not a factor for CLCS submissions. Riddell-Dixon claims that the rights of states are enshrined in international law, and time cannot erode these ‘rights.’ This is against practically all of the large theoretical paradigms in the IR discipline, including: (Neo)realism, Neoliberalism, Constructivism, and Rational Choice (Gilpin 1983; R. O. Keohane 2005; Wendt 1999; Abbott and Snidal 1998, among others). To discount power and state preferences is to court defeat. To reject such a widely held theoretical concepts is incorrect. As Martin Luther King Jr. stated, “…justice too long delayed is justice denied.” (King Jr. 1963). This point is particularly relevant in a world of rational strategic actors who design institutions with a purpose (Koremenos 2001; Koremenos et al. 2001; Koremenos 2005; Koremenos 2013; Koremenos 2016). In fact, I intend to argue the exact opposite, time is the most powerful factor that can and does deny states access to their continental shelves.

If we reject Riddell-Dixon’s conceptualization of the CLCS as not impacted by time, that leaves us with several possible theoretical alternatives, the most applicable being Historical Institutionalism. I argue that it is this perspective that can best explain theoretically, the state of the CLCS. If we accept that structures, in this case the rules, shape outcomes by offers increasing returns to a subset of possible outcomes, then it becomes possible to test an argument that is not
conceivable under Riddell-Dixon’s framework.\(^8\) This insight is relevant here, given the claims of CLCS bureaucrats (noted above), who note an extensive backlog (Pierson 2004; CLCS 2017; North 1990; Pierson 2000).

One of the key items of Institutionalist theory (historical or not) is the status quo. Frequently applied to domestic settings, this outcome has profound significance in works that involve institutional veto players and in government formation (Tsebelis 1994; Tsebelis 2002; Laver and Shepsle 1996; Jensen and Slapin 2009). In the context of the CLCS, the status quo can provide a basic reference point with which to analyze its internal rules, and see how effective they are at altering the ‘stickiness’ of the status quo.

But what is the status quo for the CLCS? In works on government formation, it is easy to pick out the status quo; the previous government (Laver and Shepsle 1996). For the CLCS, the status quo can be derived from its stated organizational goal, which is:

>“The purpose of the Commission on the Limits of the Continental Shelf (the Commission or CLCS) is to facilitate the implementation of the United Nations Convention on the Law of the Sea (the Convention) in respect of the establishment of the outer limits of the continental shelf beyond 200 nautical miles (M) from the baselines from which the breadth of the territorial sea is measured.” (“CLCS L.3” 1997)

Given the stated goal, the status quo that the CLCS is altering is the previous length of the continental shelf, established under the 1982 UNCLOS, or previously established limits via an international agreement [this depends, as the proximity to other coastal states needs to be considered, for example, the distance between the United States and Russia in the Bering Strait is 2.5 miles at its narrowest point] (McDorman 2002; Macnab 2004; Alaska Center 2018).\(^9\) As states submit to the CLCS, they seek to change their individual status quo, by (re)negotiating the

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\(^8\) To be fair, she does note this possible criticism in the concluding sections of her work (Riddell-Dixon 2008).

\(^9\) This length varies by state, as some had previously negotiated treaties with other states, no limits established at all, and everything in-between (McDorman 2002; Macnab 2004)
length of their continental shelves (UNCLOS 1982; CLCS 1997a). In this work, what is of interest here is not the magnitude of change in the continental shelf, but how long one must wait for any change to occurred at all. This leads to the main hypothesis of this work:

_Hypothesis #1: The institutional rules of the CLCS increase the time necessary to alter the individual status quo of the submitting state, by generating an extensive backlog of submissions._

Before one can answer the above hypothesis, it is important to understand what exactly the rules do. Looking at the text of CLCS 40.1, rule 51 states that:

“4 bis. Unless the Commission decides otherwise, only three [emphasis added] subcommissions shall function simultaneously while considering submissions.

4 ter. The submissions shall be queued in the order they are received. The submission next in line shall be taken for consideration by a subcommission only after one of the three working subcommissions presents its recommendations to the Commission [emphasis added]” (“CLCS 40.1” 2008).

Based on an examination of this rule, it appears that it may affect the time a state may expect to wait by making the CLCS slow, in the face of many submissions, and therefore bias the CLCS towards the states status quo. However, when considered in conjunction with rule 37, which states that:

“…decisions of the Commission, subcommission or subsidiary body on all matters of substance shall be taken by a two-thirds majority of the members present and voting [emphasis added]. For the Commission, this shall include the establishment of subcommissions [emphasis added]…” (“CLCS 40.1” 2008)

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10 Although this is an avenue for future research.
11 It was originally hypothesized that the four submissions considered prior to the implementation of rule 51 in 2008 (Russia, Brazil, Australia, and Ireland) were systematically different from the other submissions considered after this period. However, multiple tests show this to not be the case. Neither the t-test nor the Chi Squared test were significant at any level (not even .01). These analyses however are plagued by small N problems, and this has likely contributed to the non-significance of both the t-test and the Chi Squared. The results of the t-test and the Chi Squared test are included in the Appendix. I would argue that this result is not problematic, as it is due to the fact that two institutional rules combined to form an equivalent to rule 51, and that both of these rules were in place prior to any submissions being received by the CLCS (1996). The first rule was established in 1982, when the size of the CLCS was set at 21 members. The second was established in 1996, when rule 40 established the size of subcommissions at 7 members (UNCLOS 1982; SPLOS/CLCS/WP.1 1996).
Given rule 51 and 37, it becomes clear that the number of subcommissions is limited to three, and it requires a two-thirds majority vote to create a new one. To put this in perspective, the same number of votes is needed to alter the rules that govern the entire institution, as is needed to establish a new subcommission. This places a heavy institutional burden on the CLCS when it is creating new subcommissions, and appears to further bias the CLCS towards the submitting states status quo, by creating an institutional choke point at the subcommission level (CLCS 2008). This effect is summarized graphically in Figure 1 below.

However, it is important to note here that rule 51 did not always exist in its CLCS 40.1 form. In fact, prior to 2008, rule 51 did not contain the provisions noted above that limits the number of subcommissions to three. However, while not defined de jure in the rules, if we consider a passage from the UNCLOS treaty (Annex 2, Article 2, Section 1) that states that, “The Commission (the CLCS) shall consist of 21 members…” (UNCLOS 1982) and CLCS L.12 rule 3, which states that, “…the Commission shall receive nominations from among its members and
shall select seven of them to serve in the subcommission…” (CLCS 2001a), it becomes apparent that a *de facto* version of rule 51 was in effect from at least 2001 (21 divided by 7 is equal to 3, thus a *de facto* limit existed), meaning that *all* submissions to the CLCS were considered under some form of rule 51 or an equivalent rule, as the CLCS received its first submission in 2001 (Macnab 2007). This appears to be in support of hypothesis #1.

**Show Me The Data**

The bulk of the data for this work is drawn from the various versions of the internal rules of the CLCS. Additional data is drawn from the UNCLOS treaty itself, the rules that govern the CLCS’s subcommissions,¹² as well as the submittal and ruling dates obtained from the CLCS website (CLCS 1997b; CLCS 2001c; CLCS 1998a; CLCS 2004; SPLOS/CLCS/WP.1 1996; CLCS 2008; CLCS 1997a; CLCS 2001b; CLCS 1998b; CLCS 2001a; CLCS 2017b). A summary table of the data sources is presented in Table 1 (below).

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Year</th>
<th>Description</th>
<th>Presence of Rule 51 or equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNCLOS Treaty</td>
<td>1982</td>
<td>Treaty establishing the CLCS</td>
<td>Yes</td>
</tr>
<tr>
<td>SPLOS/CLCS WP.1</td>
<td>1996</td>
<td>Initial rules drafted by UN Secretariat</td>
<td>No</td>
</tr>
<tr>
<td>CLCS 1</td>
<td>June 1997</td>
<td>Statement by the Chairperson</td>
<td>No</td>
</tr>
<tr>
<td>CLCS L.3</td>
<td>September 12, 1997</td>
<td>Modus Operandi</td>
<td>No</td>
</tr>
<tr>
<td>CLCS 3</td>
<td>September 12, 1997</td>
<td>Version 3 of the rules</td>
<td>No</td>
</tr>
<tr>
<td>CLCS 3.1</td>
<td>May 1998</td>
<td>Version 3.1 drafted</td>
<td>No</td>
</tr>
<tr>
<td>CLCS 3.2</td>
<td>September 1998</td>
<td>Version 3.2 drafted</td>
<td>No</td>
</tr>
<tr>
<td>CLCS 3.3</td>
<td>February 2001</td>
<td>Version 3.3 drafted</td>
<td>No</td>
</tr>
<tr>
<td>CLCS 3.3.1</td>
<td>May 22, 2001</td>
<td>Version 3.3.1 drafted</td>
<td>No</td>
</tr>
<tr>
<td>CLCS L.12</td>
<td>May 25, 2001</td>
<td>Rules for Subcommission’s drafted</td>
<td>Yes</td>
</tr>
<tr>
<td>CLCS 40</td>
<td>2004</td>
<td>Version 4 drafted</td>
<td>Yes</td>
</tr>
<tr>
<td>CLCS 40.1*</td>
<td>2008</td>
<td>Version 4.1 drafted</td>
<td>Yes</td>
</tr>
<tr>
<td>CLCS Website</td>
<td></td>
<td>Submissions and Recommendations page</td>
<td>Dates for all submissions and final approval (if any)</td>
</tr>
</tbody>
</table>

¹² Subcommissions are one of several types of organs created by the CLCS, but they are the only one that substantively impacts the member states (CLCS 2008; CLCS 2001a).
As Table 1 shows, the rules that govern the CLCS have been relatively stable since 2004. In fact, after the alterations made in CLCS 40.1, there has been no new version of the CLCS rules to date, and no revisions have been made (CLCS 2017a).

According to the data provided by the CLCS website, as of the writing of this work, there have been a total of 78 state submissions as of 2018. Twenty-six of these submissions have been ruled on by the CLCS, and 51 are currently backlogged, to be dealt with once a subcommission becomes available. Table 2 summarizes the list of all 26 state submissions that have been ruled on by the CLCS in detail, and Table 3 showcases the overall count of submissions, including; reviewed, backlogged, and total (CLCS 2017b).\textsuperscript{13}

\begin{table}
\centering
\caption{List of All Submission Ruled on by the CLCS}
\begin{tabular}{l|c|c|c}
\hline
CLCS Submitting State & Submission Date & Approval Date & Reviewed Under Rule 51 or equivalent \\
\hline
Russia & December 2001 & June 2002 & Yes \\
Brazil & May 2004 & April 2007 & Yes \\
Australia & Nov. 2004 & April 9, 2008 & Yes \\
Ireland & May 2005 & April 2007 & Yes \\
New Zealand & 2006 & 2008 & Yes \\
Norway & 2006 & 2009 & Yes \\
France, Ireland, Spain, UK & 2006 & 2009 & Yes \\
France & 2007 & 2009 & Yes \\
Mexico & 2007 & 2009 & Yes \\
Barbados & 2008 & 2010 & Yes \\
UK & 2008 & 2010 & Yes \\
Indonesia & 2008 & 2011 & Yes \\
Japan & 2008 & 2012 & Yes \\
Mauritius and Seychelles & 2008 & 2011 & Yes \\
Suriname & 2008 & 2011 & Yes \\
France & 2009 & 2012 & Yes \\
Uruguay & 2009 & 2016 & Yes \\
\hline
\end{tabular}
\end{table}

\textsuperscript{13} This does not include the six submissions that were redrafted by the states after the CLCS denied a portion of their original submission. These states submissions are as follows; Russia, Russia, Brazil, Brazil, Barbados, and Argentina.
<table>
<thead>
<tr>
<th>Country</th>
<th>Start Year</th>
<th>End Year</th>
<th>Reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippines</td>
<td>2009</td>
<td>2012</td>
<td>Yes</td>
</tr>
<tr>
<td>Cook Islands</td>
<td>2009</td>
<td>2016</td>
<td>Yes</td>
</tr>
<tr>
<td>Argentina</td>
<td>2009</td>
<td>2016</td>
<td>Yes</td>
</tr>
<tr>
<td>Ghana</td>
<td>2009</td>
<td>2014</td>
<td>Yes</td>
</tr>
<tr>
<td>Iceland</td>
<td>2009</td>
<td>2016</td>
<td>Yes</td>
</tr>
<tr>
<td>Denmark</td>
<td>2009</td>
<td>2014</td>
<td>Yes</td>
</tr>
<tr>
<td>Pakistan</td>
<td>2009</td>
<td>2015</td>
<td>Yes</td>
</tr>
<tr>
<td>South Africa</td>
<td>2009</td>
<td>2017</td>
<td>Yes</td>
</tr>
<tr>
<td>Micronesia, Papua New Guinea, and Solomon Islands</td>
<td>2009</td>
<td>2017</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: un.org/depts/los/clcs_new/commission_submissions.htm

Table 3: Overall Submission Record to Date

<table>
<thead>
<tr>
<th>CLCS Submissions as of 2018</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Submissions Reviewed</td>
<td>26</td>
</tr>
<tr>
<td>Submissions Remaining</td>
<td>51</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
</tr>
</tbody>
</table>

Source: un.org/depts/los/clcs_new/commission_submissions.htm

To put these numbers in perspective, according to Victor Prescott, a leading scholar of ocean geography, there are a total of 29 areas of overlapping claims to continental shelves that meet the criteria necessary for a submission to the CLCS (see Colson 2003 for a detailed discussion of these criteria). In addition, these overlapping areas involve a total of 55 states. The current number is rapidly approaching these initial estimates, and is likely to exceed them (the CLCS averages 6 new submissions a year). This is believed to be caused by a trend for states to piecemeal their submissions after the all-encompassing submission by Russia was struck down in 2001. This seems to indicate that institutional learning is occurring (Prescott 1998; Colson 2003; United Nations General Assembly 2002; CLCS 2002; CLCS 2017b; Koremenos 2001).

Testing For Status Quo Bias

Given the data, it is possible to calculate the average number of days that a state can expect to wait for the CLCS to review its submission. If a state were to submit a proposed continental shelf extension, and a subcommission was available to begin consideration
immediately, it is estimated that a state can expect to wait, on average, a total of 1,418 days, or a total of 3.9 years (CLCS 2017b).

Four years is not an incredibly long time to wait to have a continental shelf extension proposal ruled on by the CLCS. However, if this average is combined with other information from the CLCS website and the rules, the wait time of 4 years begins to become problematic (CLCS 2008; CLCS 2017b).

It will be illustrative to construct three scenarios to showcase exactly how the average expected wait time for a state combines with other data to extend the wait time to absurd lengths. The first scenario that is constructed is a naïve scenario, that assumes five conditions are held constant across time. These conditions are as follows; all submissions 1) take the average number of days to reach final approval (1,418 days), 2) no new submissions (or revised submissions) are submitted (average of 6 per year), 3) no submissions are denied final approval by the CLCS (like Russia in 2001), 4) the backlog is assumed to be 51 submissions (this is the current number of backlogged submissions), and lastly 5) the subcommittee is created and begins consideration immediately (no lag time). The assumptions of the above scenario are listed in Table 4 below (CLCS 2017b; Parson and Macnab 2006).

<table>
<thead>
<tr>
<th>Scenario #1</th>
<th>Assumption #1: All submissions take approximately 1,418 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumption #2</td>
<td>No new submissions are accepted</td>
</tr>
<tr>
<td>Assumption #3</td>
<td>No submissions are denied final approval</td>
</tr>
<tr>
<td>Assumption #4</td>
<td>The backlog is a total of 51 submissions</td>
</tr>
<tr>
<td>Assumption #5</td>
<td>The subcommittee is created and begins consideration immediately</td>
</tr>
</tbody>
</table>

Table 4: Assumptions of Scenario #1
Looking at the first scenario, if we assume all the above items are constant, then it becomes simple to calculate the total number of days that a state can expect to wait *before its submission is even forwarded to a subcommission for consideration*. This equation is noted below in Equation 1.

**Equation 1**

\[
\frac{\text{Average Number of Days a Submission is Under Review} \times \text{Total Number of Submissions in the Backlog}}{\text{Total Number of Subcommissions Allowed}} = x
\]

In this equation, X is equal to the number of days a state can expect to wait until its submission is forwarded to a subcommission (*not* final approval). Using the equation constructed above and assuming all five items listed above in Table 3, on average, a state can expect to wait a total of 38,131 days, or approximately 108 years before its submission even *begins* to be considered. For example, a state submitting in 2018, under this scenario, can expect to have its continental shelf submission *begin* the review process in the year 2126, with an expected final approval date sometime in the year 2130 (CLCS 2017b)!

A second scenario begins to incorporate other real-world factors, and relaxes some of the naïve assumptions made in scenario one. Scenario two assumes the following; 1) the average number of days a submission is under review increases by one standard deviation to 2,243 days (the standard deviation is 825), 2) the average number of new submissions per year remains constant at 6, 3) no submissions are denied final approval, 4) the backlog remains constant at 56, and 5) the subcommittee is created and begins consideration immediately. This scenario and its assumptions is summarized in Table 5.
### Table 5: Assumptions of Scenario #2

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>All submissions take approximately 2,243 days</td>
</tr>
<tr>
<td>#2</td>
<td>6 new submissions are accepted</td>
</tr>
<tr>
<td>#3</td>
<td>No submissions are denied final approval</td>
</tr>
<tr>
<td>#4</td>
<td>The backlog is a total of 56 submissions</td>
</tr>
<tr>
<td>#5</td>
<td>The subcommittee is created and begins consideration immediately</td>
</tr>
</tbody>
</table>

The equation used to calculate the expected wait time for a state under scenario two is noted in Equation 2, below.

\[
\text{Equation 2} \\
\frac{\text{Average Number of Days to Final Approval} + 1 \times \text{SD \times (Total Number in Backlog + 6)}}{\text{Total Number of Subcommissions Allowed}} = x
\]

Using this equation, a state in scenario two can expect to wait a total of 42,617 days, or 116.8 years, until its submission is forwarded to a subcommission to begin being reviewed. In total, a state can expect to wait a grand total of 120.8 years for its submission to reach final approval. To put this into context, if a state were to submit in 2018, it can expect final approval by approximately the year 2138.8 (CLCS 2017b).

Relaxing the assumptions of scenario two even further, allows for the creation of a third scenario. This scenario most closely approximates the likely empirical reality of any state that will submit to the CLCS in 2018 and beyond. Scenario three assumes the following; 1) The average number of days to final approval remains constant at one standard deviation above the mean at a total of 2,243, 2) the average total number of new submissions is 6 per year, 3) the number of revised submissions also remains constant at an average of 6 per year, 4) the backlog
is 63, and 5) the subcommission is created and begins consideration immediately. This scenario’s assumptions are summarized in Table 6, and expressed in equation form in Equation 3, below.

### Table 6: Assumptions of Scenario #3

<table>
<thead>
<tr>
<th>Scenario #3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumption #1:</td>
<td>All submissions take approximately 2,243 days</td>
</tr>
<tr>
<td>Assumption #2</td>
<td>6 new submissions are accepted</td>
</tr>
<tr>
<td>Assumption #3</td>
<td>6 submissions are denied final approval</td>
</tr>
<tr>
<td>Assumption #4</td>
<td>The backlog is a total of 63 submissions</td>
</tr>
<tr>
<td>Assumption #5</td>
<td>The subcommittee is created and begins consideration immediately</td>
</tr>
</tbody>
</table>

### Equation 3

\[
\text{Average Number of Days to Final Approval} + 1 \text{ SD} \times (\text{Total Number in Backlog} + 12 \text{ new or redrafts}) = x \cdot \frac{\text{Total Number of Allowed Subcommissions}}{x}
\]

Given this scenario, the total number of days a state can expect to wait until its submission begins being reviewed is a total of 47,103 days, or approximately 129 years. A state can expect final approval in about 133 years, under this scenario. This means that a submission submitted in 2018 can expect to begin consideration by 2147, and can expect final approval by approximately 2151 (CLCS 2017b).

To summarize the three scenarios noted above, discussed in both in equation and table form, a table is warranted to compare their associated wait times. This is presented in Table 7, below.

### Table 7: Summary of All Scenarios

<table>
<thead>
<tr>
<th>Scenario #1</th>
<th>Scenario #2</th>
<th>Scenario #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days to final approval: 38,131</td>
<td>Days to final approval: 42,617</td>
<td>Days to final approval: 47,103</td>
</tr>
<tr>
<td>Years to final approval: 108</td>
<td>Years to final approval: 120.8</td>
<td>Years to final approval: 133</td>
</tr>
</tbody>
</table>

Source: un.org/depts/los/clcs_new/commission_submissions.htm
Looking at these three scenarios gives some indication of exactly how slow moving the CLCS is as an institution. It goes without saying that the three hypothetical scenarios outlined above are not reflective of the empirical reality, but approximate it. If one where to relax the assumptions by incorporating the lag time between when a submission is received, transmitted to the CLCS, and then begins being considered, the number of days in any of the three scenarios would likely increase, and markedly so. I would estimate this lag time at about 1 year, perhaps a bit less. It is also entirely possible for several submissions to be reviewed much faster or slower than the average of 4 years. Thus, the scenarios outlined above are approximations and should be viewed as such (CLCS 2017b).

Based on the relatively simple calculations in each of the three scenarios, it seems quite fair to conclude that the claim put forth by Riddell-Dixon that time does not play a factor, or will only exert itself as a minor factor for the CLCS needs revision. As this work clearly shows, the CLCS is extremely slow moving, and arguably, biased towards the status quo thanks to its own institutional rules (Riddell-Dixon 2008; CLCS 2008; UNCLOS 1982).

These findings thoroughly call into question another claim of Riddell-Dixon, who argued that regardless of time, the CLCS will still honor a state’s rights enshrined in international law. A 108 to 133 year long waiting period, seems to effectively prevent a state from exercising its rights enshrined in international law. If a state’s legal rights are too long delayed, are they de facto denied? The answer to this question seems to be yes, as the Historical Institutional analysis conducted here clearly shows. This work presents further evidence that time can have a negative impact on an institutions ability to provide its institutional goods to state actors (Riddell-Dixon 2008; King Jr. 1963; CLCS 2017b; Pierson 2000; Pierson 2004).
The question that remains, given the evidence, is; who is responsible for biasing the CLCS towards the status quo? The literature on the CLCS seems to indicate that Western European states, for economic reasons may object to the institutional goal of the CLCS, and its founding treaty the UNCLOS. However, most of these states (with a few exceptions) cannot join, let alone vote in the CLCS, as they are not signatories to the UNCLOS [which precludes them from submitting and electing representatives to the CLCS, although some legal scholars contest this point (Nelson 2009)]. One scholar, Ted McDorman, even point to a specific state (the U.S.) for preferring a heavily status quo biased CLCS. The argument that the CLCS is moving away from the ideal point of the United States and other Western European powers, is intriguing (Mcdorman 1995; McDorman 2002; Nandan and Rosenne 1993; Miles 1998; Ratiner 1982).

Despite this claim that the U.S. is to blame for the CLCS being biased towards the status quo, the evidence in support this is quite thin. Even if the central theme of their argument is accepted, that the UNCLOS was a large victory for the developing world, there is still a gap in our understanding of which state, if any, is responsible for the CLCS’s institutional problems. This work offers two possible explanations that may point to who is responsible for biasing the CLCS towards the status quo; 1) a 2/3’s coalition on the CLCS board (as they have the power to alter the current rules but have refused), 2) the United States and other external Western powers were able to control the moment of institutional design, by being heavily involved in the drafting of the UNCLOS, which still influences the CLCS today. The examination of these two coalitions merits further work on the CLCS’s, to better understand the institutional dynamics at play, and see how they fit established theories (Mcdorman 1995; McDorman 2002; Parson and Macnab 2006; Ratiner 1982; Nandan and Rosenne 1993; Miles 1998; Koremenos 2013; Koremenos 2016; Pierson 2000; Pierson 2004).
Conclusion

Looking at the CLCS, and the relative infancy of the scholarship on this institution, this work begins building the foundation for future work. It examines the internal rules that govern the CLCS and data on the submissions it has received. Looking at these rules and other data, has become clear that the CLCS is in a real pickle. Based on simple mathematics, it will take the CLCS approximately 108 years to complete all 51 remaining submissions, assuming no new submissions of any kind. This is due to the fact that the rules require each submission to be reviewed by a subcommission, which are limited to three (Riddell-Dixon 2008; CLCS 2017b; CLCS 2004; CLCS 2008; CLCS 1997b; CLCS 1998a; CLCS 2001c; CLCS 2001b; CLCS 1997a; CLCS 1998b; CLCS 2001a; McDorman 1995; McDorman 2002; Colson 2003; Nandan and Rosenne 1993; UNCLOS 1982).

This institutional reality, as noted in the three scenarios in the above section, clearly shows that the claims put forth by Riddell-Dixon can be revised in accordance with previously established scholarship on institutions. The evidence presented here clearly shows the merit of just such scholarship. The theories of institutional scholars can also be applied to further examine the CLCS and test this case, among others, against the most recent and path breaking work on international institutions and cooperation (Koremenos 2013; Koremenos 2016; Riddell-Dixon 2008).

While some legal scholars argue that the Western powers are to blame for the status quo bias of the CLCS, as of now, there appears to be little concrete evidence in support of this. This remains a puzzle for future work on the CLCS to unravel. Future work on the CLCS will need to tackle several important items. First, given the claims that the Western world may be responsible, can it be concluded that a coalition exists that may have imposed their preferences
from outside the institution? Second, and perhaps, and what seems more likely, is there an internal coalition that exercises some form of control over either the CLCS or its subcommissions? This might explain why some submissions such as those of Russia and Brazil have been revised more than any other states submissions to date, and the Australian submission was unmolested (CLCS 2017b; Mcdorman 1995; McDorman 2002; Parson and Macnab 2006).


Keohane, Robert O. 2005. *After Hegemony: Cooperation and Discord in the World Political
King Jr., Martin Luther. 1963. “Letter from Birmingham City Jail.”


Beyond 200 Nautical Miles.” In Boundaries and Energy: Problems and Prospects.


doi:10.1080/00908320802459052.


United States Coast Guard. 2015. “Major Icebreakers of the World.”

Full Text of all Procedural Rules Discussed (taken from CLCS 40.1, unless otherwise noted)

Rule 37 Majority required

1. Subject to rule 35, decisions of the Commission, subcommission or subsidiary body on all matters of substance shall be taken by a two-thirds majority of the members present and voting. For the Commission, this shall include the establishment of sub commissions, the approval of the recommendations prepared by a subcommission, requests for advice by specialists, cooperation with competent international organizations, as well as the amendment of the existing and the adoption of new Rules and other regulations, guidelines and annexes to these Rules.

2. Except as otherwise provided in these Rules, decisions of the Commission on all matters of procedure shall be taken by a majority of the members present and voting.

3. If the question arises whether a matter is one of procedure or of substance, the Chairperson of the Commission shall rule on the question. Any appeal against this ruling shall be put to the
vote immediately, and the Chairperson’s ruling shall stand unless overruled by a majority of
the members present and voting.

4. If a vote is equally divided on a matter other than the election of officers, which is regulated
by rule 40, paragraph 4, the proposal or motion shall be regarded as rejected.

5. For the purpose of these Rules, the phrase “members present and voting” means members
casting an affirmative or negative vote. Members who abstain from voting shall be regarded
as not voting.

Rule 42 - Subcommissions

1. If, in accordance with article 5 of Annex II to the Convention, the Commission decides to
establish a subcommission for the consideration of a submission, it shall:

(a) Identify any members of the Commission who are defined as ineligible, in accordance with
article 5 of Annex II to the Convention, i.e. nationals of the coastal State making the
submission and members who have assisted the coastal State by providing scientific and
technical advice with respect to the delineation;

(b) Identify any members of the Commission who may, for other reasons, be perceived to have a
conflict of interest regarding the submission, e.g., members who are nationals of a State
which may have a dispute or unresolved border with the coastal State;

(c) Through informal consultations among the members of the Commission, nominate candidates
for the subcommission other than those identified in subparagraph (a), taking into account
the factors regarding the members identified in paragraph (b), and the specific elements of
the submission as well as, to the extent possible, the need to ensure a scientific and
geographical balance; and

(d) Appoint from among the nominated candidates seven members of the subcommission.

2. The term of a subcommission shall extend from the time of its appointment to the time that the
submitting coastal State deposits, in accordance with article 76, paragraph 9, of the
Convention, the charts and relevant information, including geodetic data, regarding the
outer limits for that part of the continental shelf for which the submission was originally
made.

3. A member of the Commission can be appointed to be a member of more than one
subcommission. Members of the Commission identified under subparagraph 1 (a) have the
right to participate as members in the proceedings of the Commission concerning the said
submission. Such members, by prior consultation and agreement within the subcommission,
may be invited to participate in the proceedings of the subcommission on specific issues
concerning the said submission without the right to vote.

RULE 51 - (taken from CLCS 40)

Rule 51 Consideration of the submission

1. Upon receipt of a submission by the Secretary-General, the consideration of that submission
shall be included in the provisional agenda of the next ordinary session of the Commission
prepared in accordance with rule 5 and paragraph 2 of Annex III, provided that that session,
as convened in accordance with rule 2, is held not earlier than three months after the date of
the publication by the Secretary-General of the executive summary including all charts and
coordinates referred to in rule 50.

2. If the next ordinary session of the Commission is not scheduled within a reasonable time, the
Chairperson of the Commission may, upon the notification by the Secretary-General of the
receipt of the submission in accordance with rule 50, request an additional session to be
convened in accordance with rule 2, within a suitable time for the purpose of considering
the submission.

3. The submission shall be considered in accordance with the rules on confidentiality contained
in Annex II to these Rules.

4. Unless it decides otherwise, the Commission shall establish a subcommission in accordance
with rule 42 for the consideration of each submission.

5. The recommendations prepared by the subcommission shall be submitted in writing to the
Chairperson of the Commission.

RULE 51 – CLCS 40.1
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the submission.

3. The submission shall be considered in accordance with the rules on confidentiality contained
in annex II to these Rules.

4. Unless it decides otherwise, the Commission shall establish a subcommission in accordance
with rule 42 for the consideration of each submission.

4 bis. Unless the Commission decides otherwise, only three subcommissions shall function
simultaneously while considering submissions.

4 ter. The submissions shall be queued in the order they are received. The submission next in line
shall be taken for consideration by a subcommission only after one of the three working
subcommissions presents its recommendations to the Commission.

5. The recommendations prepared by the subcommission shall be submitted in writing to the
Chairperson of the Commission.
### Political Map of the Arctic

![Arctic Map](https://example.com/arctic_map.png)

### T-test of Pre-and Post Rule 51 Averages

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>St. Err.</th>
<th>St. Dev.</th>
<th>Confidence</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-51</td>
<td>4</td>
<td>2.5</td>
<td>.65</td>
<td>1.29</td>
<td>.45</td>
<td>4.6</td>
</tr>
<tr>
<td>Post-51</td>
<td>20</td>
<td>3.95</td>
<td>.43</td>
<td>1.90</td>
<td>3.0</td>
<td>4.8</td>
</tr>
<tr>
<td>Combined</td>
<td>24</td>
<td>3.7</td>
<td>.38</td>
<td>1.88</td>
<td>2.91</td>
<td>4.5</td>
</tr>
<tr>
<td>Diff</td>
<td></td>
<td>-1.45</td>
<td>1.0</td>
<td>3.5</td>
<td>.63</td>
<td></td>
</tr>
</tbody>
</table>

Diff = mean(pre) - mean(post)

T = -1.44

Null: diff = 0

\[ Pr(T < t) \quad Pr(|T| > |t|) \quad Pr(T > t) \]

DF = 22

\[ 0.0814 \quad 0.1628 \quad 0.9186 \]

Source:

### Chi Square Test Results – Pre-and Post Rule 51

<table>
<thead>
<tr>
<th>Chi Squared Test</th>
<th>Chi Squared Value</th>
<th>Probability Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson’s Chi Squared</td>
<td>1.5157</td>
<td>1.000</td>
</tr>
<tr>
<td>Likelihood-ratio Chi2</td>
<td>2.5360</td>
<td>1.000</td>
</tr>
</tbody>
</table>