Abstract

In many cases, the continental shelf of a coastal State beyond 200M overlaps with that of another or the boundaries between them are unresolved. As coastal States are obliged to comply with the 10 year deadline set out in Annex II of the United Nations Convention on the Law of the Sea (UNCLOS), which for all States who ratified prior to 1999 has been extended to 2009, the possibility of submissions to the Commission on the Limits of the Continental Shelf (CLCS) in areas of disputed extended continental shelf presents a real and urgent challenge. This paper will assess some of the various methods two or more States, in cases of unresolved or disputed continental shelf boundaries, may use to make a submission to the CLCS.

The range of submission options from single overlapping areas through to joint submissions are examined with respect to the technical exercise of analysing and assembling a submission, the working method for coastal States through to the presentation to the CLCS. These submission options are consistent with UNCLOS and in some cases have been prescribed in the Rules of Procedure of the CLCS. Each of these options presents specific challenges with respect to the application of Article 76 of UNCLOS and have advantages and disadvantages depending on the coastal States involved. The natural prolongation, foot of slope determination and the construction of the outer limit of the continental shelf among other technical aspects can be influenced by the format of a submission. Examples from recent submissions and potential scenarios are examined and may provide some guidance for future submissions.

Introduction

With coastal States obliged to comply with the ten year deadline imposed by Annex II of the United Nations Convention on the Law of the Sea, there is an urgency to prepare submissions to the Commission on the Limits of the Continental Shelf in time. A significant obstacle in the preparation of these submissions is the status of continental shelf boundaries beyond 200M. A great many coastal States have, or potentially have, overlapping claims and/or unresolved boundaries with their neighbours. Notwithstanding the decision of States Parties to the
Convention to allow some coastal States flexibility in meeting it (SPLOS/183)\(^1\), the deadline for all coastal States who ratified prior to 1999 is now May 13, 2009. For many coastal States concluding their maritime boundary disputes, as well as preparing the submission to the CLCS is challenging due to logistical and time constraints.

As prescribed in Article 9 of Annex II of the Convention, the actions of the CLCS are without prejudice to the question of delimitation between neighbouring coastal States. In practice, the CLCS will not consider submissions in cases of a dispute where a neighbouring coastal State objects to the examination of a submission in its entirety by the CLCS.

Given the urge to meet the deadline and the time involved in both preparing a submission to the CLCS and concluding maritime boundaries, a number of options are explored in this paper for submissions by a coastal State. They are partial submissions, overlapping submissions with prior agreement, coordinated submissions, harmonised submissions and joint submissions. These options are all predicated on the notion that the recommendations of the CLCS are without prejudice to future delimitation between coastal States. Each option would attempt to address concerns regarding overlapping claims and unresolved boundaries and therefore allow the Commission to consider the submission of the coastal State(s).

**Partial Submissions**

Coastal States may make partial submissions, for that portion of their continental shelf which does not overlap with that of another coastal State. A partial submission may be made in order not to prejudice questions relating to the delimitation of boundaries between States. The CLCS explicitly provided for partial submission in Annex I of the Rules of Procedure which states:

3. *A submission may be made by a coastal State for a portion of its continental shelf in order not to prejudice questions relating to the delimitation of boundaries between States in any other portion or portions of the continental shelf for which a submission may be made later, notwithstanding the provisions regarding the ten-year period established by article 4 of Annex II to the Convention. (CLCS/40/Rev.1)*\(^2\).

\(^1\) SPLOS/183, Meeting of States Parties (2008) Decision regarding the workload of the Commission on the Limits of the Continental Shelf and the ability of States, particularly developing States, to fulfil the requirements of article 4 of Annex II to the Convention, as well as the decision contained in SPLOS/72, paragraph (a)

In order not to prejudice unresolved questions relating to the delimitation of boundaries between a coastal State and its neighbours in other portions of the extended continental shelf claimed by it, submissions in respect of those other portions may be made at a later date. A partial submission is typically made for a region where there is an absence of disputes. To be sure this is the case, communication with neighbouring coastal States is required. Coordinates of the bounding area defining the partial submission would be circulated to neighbouring State(s) which would allow the submission to be made without objection. A partial submission essentially defers the consideration of the disputed area by the CLCS until a later stage.

Ireland made the first partial submission to the CLCS in May, 2005 in the region of the Porcupine Abyssal Plain\(^3\). The partial submission was bounded by a northern and a southern limit each connecting a fixed point to a foot of slope position (Fig. 1). As Stated in the Executive Summary of Ireland (2005), the bounding limits of the partial submission were communicated to the governments of the Faroe Islands/Denmark, France, Iceland, Spain and the UK. Ireland also stated in its Executive Summary that it was of the view that the consideration of this partial submission by the CLCS will not prejudice the question of delimitation. Notes verbale were received from the Faroe Islands/Denmark and Iceland essentially reinforcing the view that the recommendations of the CLCS on the Irish partial submission will not prejudice the question of delimitation.

France and the United Kingdom illustrate another example of the use of partial submissions. Both of those coastal States have significant overseas territory in addition to their mainland. France made a submission in respect of French Guiana and New Caledonia (2007)\(^4\) while the UK made a submission in respect of Ascension Island (2008)\(^5\). The note verbale received from Suriname in response pointed out that negotiations are ongoing and that the submission of France would not prejudice any future submission by Suriname.

---

\(^3\) Ireland (2005) Submission to the Commission on the Limits of the Continental Shelf pursuant to Article 76, paragraph 8 of the United Nations Convention on the Law of the Sea 1982 in respect of the area abutting the Porcupine Abyssal Plain, Executive Summary.


The partial submission is an effective means of beginning the process of making a submission for the entire continental shelf of a coastal State. It allows some breathing room for negotiations on disputed areas while a portion of the continental shelf is being considered by the CLCS. It is unclear as to whether the lodging of a partial submission satisfies the obligation of the ten year deadline. It appears that some coastal States have made, or are in the process of making, partial submissions in conjunction with a joint submission, as was done by France, Ireland and the United Kingdom.

**Overlapping Submissions**

Coastal States may of course make overlapping submissions which the CLCS may consider if prior agreement between the coastal States has been reached. This would involve no technical cooperation and no sharing of data or analyses. The diplomatic agreement between the coastal States would allow the CLCS to consider the submission and any recommendations arising from the overlapping submissions would be without prejudice to any future delimitation between them.

The CLCS have provided for this in Annex I of their Rules of Procedure:
“5. (a) In 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. However, the Commission may consider one or more submissions in the areas under dispute with prior consent given by all States that are parties to such a dispute.” (CLCS/40/Rev.1).

Given that the recommendations of the CLCS will not prejudice the question of delimitation, it would seem that significant overlapping area may be included in submissions by two or more coastal States and would be considered by the CLCS on its merits.

Norway, Iceland and Denmark/the Faroe Islands have adopted this approach in the north east Atlantic, in a region known as “the Banana Hole”, through an agreement (2006)⁶ which states:

“Each State will, when submitting its documentation concerning the outer limits of its continental shelf in the area, request that the Commission consider it and make its recommendations on this basis, without prejudice to the submission of documentation by the other States at a later stage or to delimitation of the continental shelf between the three States. The State concerned will in this connection declare that such a request is agreed between the three States.”

Norway has already made their submission and in their executive summary (2006)⁷ state:

“It is expected that Iceland and Denmark/the Faroe Islands will document continental shelf extending beyond 200 nautical miles in the southern part of the Banana Hole and that these two States and Norway will have overlapping claims in this area.”

The agreement provides for the method of delimiting the region through a series of bilateral lines (Fig. 2) once the submissions to the CLCS are concluded. It furthermore provides for a redistribution of continental shelf beyond 200M in the event that:

“...[i]f, after consideration by the Commission, one or more of the States has not documented that the area of its continental shelf beyond 200 nautical miles corresponds in size, as a minimum, to the area that falls to the same State...”


⁷ Norway (2006) Continental Shelf Submission of Norway in respect of areas in the Arctic Ocean, the Barents Sea, and the Norwegian Sea, Executive Summary.
In the example above, the coastal States involved concluded a comprehensive delimitation agreement prior to their respective submissions to the CLCS. There is, however, no obligation to do so if agreement is reached on submitting to the CLCS. In such an agreement, each coastal State would agree not to object to each other’s submissions to the CLCS. The issue of delimitation can be dealt with once the CLCS has concluded its examination of each coastal States’ submissions.

**Coordinated Submissions**

Coastal States with overlapping extended continental shelves may choose to make coordinated submissions. This is beneficial in areas of relatively small overlaps and would involve technical cooperation on small areas of mutual interest (e.g. FOS Point, Sediment Thickness Point). Each coastal State would have its own technical team and the amount of data shared would be limited to the mutual area of interest. Coordinated submissions ensure a level of consistency between neighbouring coastal States in the application of Article 76 and may prevent discrepancies between the locations of the outer limit of the continental shelf from one coastal State to the next.
A limited diplomatic agreement is possible in this scenario since data will likely be exchanged and points within a disputed area or on the other side of a maritime boundary may be presented in a submission to the CLCS.

The datasets that would be exchanged could possibly be limited to the region of mutual interest and in order to coordinate the submissions an exchange of views, and hopefully a consensus, would occur on the selection of various Article 76 criteria. In this respect, in the analysis of the data, a workshop or other forum would be beneficial to agree on a shared strategy for the region of shared interest. A single submission by a coastal State may in fact be coordinated with a number of neighbouring coastal States.

Coordinated submissions may be considered useful between coastal States that already have an agreed continental shelf boundary as they ensure some consistency in the location of the proposed outer limit of the continental shelf. They would also be useful in regions where the dispute or unresolved boundary is relatively minor (for example along a median line or in an area of extended continental shelf where an agreed maritime boundary does not extend far enough).

**Harmonised Submissions**

Coastal States may make a harmonised submission to the CLCS which would consist of individual submissions to the CLCS with technical cooperation on multiple facets. Unlike a coordinated submission, full disclosure of data and analyses would occur between coastal States; however each coastal State would have their individual technical teams. A data exchange and/or a diplomatic agreement would likely be required for this option.

A harmonised submission may be a desirable option for a coastal State which shares many technical aspects of a submission with its neighbour. For example, intricacies in developing a natural prolongation argument along a shared continental margin, or a shared approach to the issue of determining sediment thickness for the purposes of determining the sediment thickness point.

The analyses and interpretation of technical aspects of the Submission may be conducted by a joint technical team and the submissions for the two or more coastal States may be prepared in tandem. In many respects, a harmonised submission resembles a joint submission as described below. There are, however, reasons to make a harmonised versus a joint submission. Firstly, the logistical coordination is greatly reduced, particularly when presentation to the CLCS and examination by the Subcommission is considered. Secondly, it allows for greater flexibility in the coastal State’s position during examination by the Subcommission.
Joint Submissions

A Joint Submission represents the most integrated form of submission made by two or more coastal States. The CLCS have provided for this in Annex I of their Rules of Procedure:

“4. Joint or separate submissions to the Commission requesting the Commission to make recommendations with respect to delineation may be made by two or more coastal States by agreement:

(a) Without regard to the delimitation of boundaries between those States; or
(b) With an indication, by means of geodetic coordinates, of the extent to which a submission is without prejudice to the matters relating to the delimitation of boundaries with another or other States Parties to this Agreement.” (CLCS/40/Rev.1)

In general, considerable pre-submission work will have been carried out collectively, with possible joint data acquisition programmes. There would normally be full disclosure of submission data and materials between the coastal States and the technical team preparing the submission would operate as a single technical team cooperating on all facets of the submission. A joint submission has the advantage of pooling the collective expertise of the multiple coastal States involved. It is presented as a single submission and its examination by the CLCS is through a single joint delegation. So far, only four coastal States has availed of the option of a joint submission. France, Ireland, Spain and the UK lodged a submission in the region of the Celtic Shelf/Bay of Biscay (2006)8.

A joint submission can offer considerable advantages to two or more coastal States, chiefly among them the overcoming of unresolved boundaries in order to make a submission to the Commission. As well as this main advantage there are a number of technical advantages that can be gained by lodging a joint submission. These can include:

- Combined Datasets: If two or more coastal States have different and proprietary datasets in a region of unresolved boundaries, a joint submission allows for the pooling of this data thereby strengthening the technical support of the submission. Figure 3 below shows the bathymetric dataset used in the joint submission of France, Ireland, Spain and the UK. The image on the left highlights the different multibeam bathymetric surveys supplied by each coastal State, while the image on the right shows the resulting bathymetric grid generated from these datasets.

---

• Pooled Expertise: The merging of technical teams from different coastal States allows for the transfer of skill sets that might not otherwise be available to a single coastal State in its submission
• Division of Labour: Obviously, greater numbers working on the preparation of the submission can mean that effort is spread out. However one aspect to consider is the potential delay in reaching a shared strategy or agreement on specific points of analysis and interpretation that may arise
• Provides experience for States who have other submissions to make: In some cases where one of the coastal States has already lodged a partial submission, the experience gained by that coastal State is transferred to its partners in a joint submission.

Figure 3: Merged bathymetric datasets used in a joint submission (from the joint submission of France, Ireland, Spain and the UK, 2006).

A typical working method for the preparation of a joint submission is summarised in Figure 4. In the case of the joint submission of France, Ireland, Spain and the UK, the technical teams from each coastal State were assigned to working groups based on their areas of expertise and interest. Therefore each component of the submission had representatives from each coastal State. The four technical working groups consisted of: a natural prolongation group who prepared the geological and morphological contexts for the submission; a bathymetry/foot of slope group who prepared and analysed the bathymetric data; a sediment thickness/seismic group who analysed and interpreted the seismic data for the determination of the 1% sediment
thickness point and finally the GIS group who prepared all the digital material for the submission. The four technical working groups, through an editorial board worked through a series of workshops to prepare the technical component of the submission. The legal input was then finalised and the entire submission assembled.

Figure 4: Flow chart illustrating the working method of preparing the documentation for a joint submission to the CLCS.

A significant achievement of the joint submission team was the acquisition of seismic data specifically for the purposes of making the joint submission. The Breogham seismic survey was carried out in the Bay of Biscay (Fig. 5) between September and October 2005 by the Instituto Geológico y Minero de España (IGME) - Geological Survey of Spain. The survey was carried out collaboratively between all four technical teams with representatives from all four States onboard the vessel.
Presentation to the Commission and Interaction with the Subcommission

For the submission of France, Ireland, Spain and the UK, the delegation was lead by Four Heads of Delegation, one from each coastal State. The initial presentation to the Commission was prepared jointly and collaboratively by the legal and technical teams of the four Delegations. The presentation was delivered in four parts by the four Heads of Delegation in their respective languages (translation provided by UN) and the speaking notes for the entire presentation were approved by the four States. The four Delegations interacted with the Subcommission by means of a focal point through whom all correspondence and formal interactions with the Subcommission occurred. The questions received by the four Delegations were worked on collectively and an agreed text was presented through the focal point to the Subcommission (Fig. 6).
The exercise of preparing and presenting a joint submission to the CLCS can be rewarding and beneficial to the coastal States involved. As well as the reasons outlined above, the goodwill and working relationship developed during the process can be beneficial in future delimitation discussions. Although only one joint submission has been received to date, it is likely that a number more shall be received by the CLCS as coastal States both attempt to defer the delimitation issues and pool resources in making submissions. The CLCS has yet to issue recommendations on the sole joint submission under examination and there are issues that apply to joint submissions which do not apply to single State submissions so it will be interesting to note how this method of submission develops.

Discussion

This paper outlines a number of strategies that coastal States may use in making a submission to the CLCS in cases where disputes or unresolved boundaries may exist. This list of options is by no means exhaustive and a number of variations can be pursued. A coastal State must examine its own circumstances to determine to what extent it wants or needs to engage with its neighbour.
to make a submission to the CLCS in the event of overlapping claims and/or unresolved boundaries. Of course agreement of any type may not be possible, in which case a submission may be objected to and shelved by the CLCS until delimitation issues are resolved.

Partial and joint submissions represent viable alternatives to a single complete submission. Overlapping, coordinated and harmonised submissions are matters between the coastal States involved and in that respect are not specifically dealt with by the CLCS. Two or more coastal States may coordinate their submissions without any reference to having done so either to the CLCS or other coastal States.

For joint submissions, some questions have arisen as to how they are dealt with by the CLCS. The CLCS has suggested that natural prolongation and the test of appurtenance must be satisfied individually by each coastal State of a joint submission. Furthermore, the applicability of using a foot of slope position located on a margin of an adjacent coastal State was seemingly disallowed. This was reflected in the Statement of the Chair CLCS/56 in which it was stated that “…in any joint submission, each coastal State has to establish its own set of criteria for the feet of the continental slope, applied formulas, constraints and respective outer limits” [para. 28 of CLCS/56]. This has the effect of negating the reasons for a joint submission in the first place as such issues may indeed prejudice questions of delimitation between coastal States. Furthermore the logistical reasons for making a joint submission are not valid if each coastal State involved needs to demonstrate individual natural prolongation and foot of slope determination. The latest CLCS Rules of Procedure do not however reflect these views and it is likely that these questions may be dealt with on a case-by-case basis for future joint submissions.

Acknowledgements
Much of this paper is based on experience gained while working with the Department of Communications, Energy and Natural Resources, Ireland and the author is indebted to colleagues Mr. Peter Croker and Ms. Oonagh O’Loughlin. Declan Smyth of the Department of Foreign Affairs, Ireland is also thanked. Colleagues from EXTRAPLAC, France, Marine Geology Division of IGME, Marine Hydrographic Institute and Spanish Institute of Oceanography, Spain, the National Oceanography Centre and the UK Hydrographic Office, United Kingdom and the Foreign Ministries of France, Ireland, Spain and the UK are also thanked. The opinions expressed in this paper are solely those of the author.

Biography
Alain Murphy owns and operates GeoLimits Consulting out of Bedford, NS, Canada. GeoLimits Consulting provides advice and expertise in the application of Article 76 of the United Nations Convention on the Law of the Sea. He participated in Ireland’s two submissions to the CLCS. He helped prepare the 2005 partial submission of Ireland and was technical head of the Irish delegation to the CLCS. He also was the Irish Technical Lead in the 2006 joint submission of France, Ireland, Spain and the United Kingdom to the United Nations CLCS. GeoLimits
Consulting is currently engaged by a number of coastal States in the process of preparing their submissions to the Commission on the Limits of the Continental Shelf.