

IMPROVING YOUR UNCLOS SUBMISSION – SOME THOUGHTS ON TEXT AND FIGURES

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(The views in this paper are the authors' personal observations and do not necessarily reflect the official views of the New Zealand government.)

Abstract

The purpose of an UNCLOS Article 76 submission is to describe the outer limits of the continental shelf convincingly and efficiently. From New Zealand's experience, attention to the organisation and presentation of the submission can make it easier for Commissioners to use and understand, and facilitate a smooth and rapid consideration by the Commission on the Limits of the Continental Shelf (CLCS). This is particularly important if a digital version of the submission is likely to be the primary source for the Commissioners.

Techniques for writing good scientific papers and legal documents are not necessarily appropriate for writing a submission. In the submission, clarity and simplicity are the goals of both text and figures. The text should be organized to make it easy for Commissioners to extract information and understand the technical issues behind the interpretation of the outer limits of the continental shelf. Figures should be simplified and carefully drafted to support the points made in the text.

We show examples of how text and figures can be tailored to meet the particular goals of the submission, and how the linking of data in a geographic information system (GIS) can influence how they are viewed and how they should be presented.

1. New Zealand's experience before the CLCS

New Zealand lodged its continental shelf submission with the United Nations Commission on the Limits of the Continental Shelf (CLCS) in April 2006, and consideration of it has so far taken over two years. The Sub-commission that examined the New Zealand submission was established in August 2006, and worked on the submission through the next three sessions and at two inter-sessional meetings. The Sub-commission presented its recommendations to the full CLCS at the 21st session in April 2008. The recommendations may be adopted by the full CLCS at the 22nd session in August 2008.

New Zealand approached the interaction with the CLCS as a collaborative process rather than an adversarial one, reflecting the CLCS' role and the form of expertise on both

sides. The delegation worked with the Commissioners to explain the complexities of the margin and persuade them that the analysis and interpretations in the submission were technically correct. The authors of the submission explored new ways to present the material when queried by the Commissioners, and were ready to discuss other interpretations if the data and analysis were equivocal.

The New Zealand delegation attended each CLCS session at which its submission was considered, but not the inter-sessional meetings. We restricted our visits to one week, even if the Sub-commission worked on the submission for two weeks, to allow the Commissioners time to make progress on their technical review. The New Zealand delegation usually had seven or eight people – two or three lawyers from the Ministry of Foreign Affairs and Trade (MFAT), four scientists (two geologists and two geophysicists) and one geographic information specialist.

The opening presentation to the full CLCS was made by head of MFAT Legal Division, a senior diplomat. It provided an overview of the technical and legal aspects of the submission, covering procedural matters, key features of the New Zealand continental margin, a summary of the approach to preparation of the submission, the situation with respect to outstanding boundaries with neighbouring states, and a brief description of the outer limits contained in the submission. The presentation was followed by several questions from Commissioners, which were answered briefly by the appropriate experts.

At the first meeting with the Sub-commission, scientists in the delegation gave detailed presentations outlining the geological history of New Zealand, how the formulae and procedures described in article 76 were applied, and key features around the continental margin. These presentations took about 2 ½ hours in total, and were followed by a brief discussion with the Sub-commission.

Subsequent meetings were quite formal and usually involved providing answers to questions from the Sub-commission, and discussion of the Sub-commission's progress on the submission and the forthcoming work programme. Both written answers to questions and Powerpoint presentations were provided to the Sub-commission. Written responses were provided early enough to allow Commissioners time to read them before each session.

2. Implications for the submission

Based on this experience, it is apparent that attention to organisation and presentation can make the submission easier for Commissioners to use and understand, and facilitate a smooth and rapid consideration by the CLCS.

Three observations about the submission provide suggestions about how it should be organised and presented:

- The submission describes an existing entitlement, not a claim. The tone should therefore be positive, not defensive.

- The submission is neither a technical paper nor a legal brief. Techniques for writing good papers or briefs are not necessarily ideal for a submission.
- The submission is unlikely to be read like a book or a paper in a journal. It needs to be self-explanatory throughout, with each section relatively self-sufficient and not relying on others for clarity or completeness.

Observations about our interactions with the Sub-commission suggest strategies for presenting analyses of the data, and likely sensitive areas in the submission:

- The commissioners have a strong preference for morphological evidence. Morphological data and analysis should be discussed first, and other data used to support this interpretation.
- The commissioners are scientists and prefer technical discussions. In both the submission and in the responses to questions it is most productive to focus analysis and discussion on the data and not on legal arguments concerning the interpretation of article 76.
- The Sub-commission focused on
 - areas beyond 350 nautical miles - be prepared for careful scrutiny of these areas;
 - the use of geological and geophysical data to determine the region of the base of the slope - be prepared for discussions about whether this is ‘evidence to the contrary’; and
 - morphological and other evidence to support an interpretation of continental prolongation - be prepared for careful scrutiny of these data.
- The Sub-commission had no queries on
 - sediment thickness calculations,
 - isolated 2,500 m isobaths, and
 - use of 60 M straight “bridging” lines.

3. Examples

a. Choice of Words

The choice of words in the submission text can colour the message. Words like *suggest*, *may*, *could*, *should*, *perhaps*, and *indicate* are defensive and convey a measure of uncertainty. Words like *is*, *show*, *confirm*, *none*, *all*, and *must* are positive and convey a sense of confidence. Honour the uncertainty of the data, but don’t hesitate to present the data in the best manner.

Defensive language in a submission could appear as

Geophysical data, including seismicity and gravity anomalies, suggest that Samurai Trough is not a true plate boundary between Sake Ridge and the land mass of Japan.

A more positive way to say the same thing could be

Geophysical data, including seismicity and gravity anomalies, show that Samurai Trough is not a true plate boundary between Sake Ridge and the land mass of Japan.

Or better still

There is no morphological, geological or geophysical evidence for a plate boundary between Sake Ridge and the land mass of Japan.

b. Structure and Organisation of Information

The organisation of the submission and of the information in each section can make it easier for the Commissioners to extract information and understand the technical issues behind the interpretation of the outer limits of the continental shelf. If the Commissioners are efficient then they can focus on areas of concern, ask more direct questions, and probably complete their considerations more quickly.

Scientists tend to write papers like a detective story. Evidence is introduced and analysed, a chain of logic established, and finally a conclusion is reached. This is effective because the reader is lead through the line of reasoning to the conclusion, but is not the most efficient way to write if the reader is primarily concerned with the conclusion, not the reasoning behind it. If the submission is organized so that the Commissioners read the conclusions first, then they can skip to the next section if they don't require the underlying information, or read on to find more details if they want them.

The authors of the submission know which areas may attract the interest of the Commissioners, but it is impossible to be certain about which areas will be a focus of their attention and therefore studied in detail. For that reason it is desirable to structure every part of the document to make it easy to find the conclusions, and straightforward to uncover the underlying data and analysis if required.

Analysis of data might be presented in a scientific paper like this

Seismic reflection data show rift graben extend to the western edge of Sake Ridge (Figure A.1). Sea floor spreading magnetic anomalies 10-22 (29-49 Ma) are interpreted in the Geisha Basin (Figure A.2). Two-dimensional gravity modelling shows that the crust is 11 km thick beneath Geisha Basin, and thickens to 22 km beneath Sake Ridge (Figure A.3). The continent-ocean transition therefore lies at the western edge of Sake Ridge.

In a submission it might be presented like this

All of the morphological, geological and geophysical data show that Sake Ridge is a natural prolongation of the land mass of Japan. There is a continuous morphological connection between Sake Ridge and the land mass of Japan, and a

clear boundary between the ridge and the deep ocean floor of the Geisha Basin (Figure A.1).

Seismic reflection data show that basement half graben, formed by continental rifting prior to the onset of sea floor spreading in Geisha Basin, extend to the western margin of Sake Ridge (Figure A.2). Magnetic anomaly 22 has been identified in Geisha Basin, along the margin with Saki Ridge (Figure A.3). Sea floor spreading therefore began along this part of the basin margin 49 million years ago. Two-dimensional gravity modelling shows that the crust is 11 km thick beneath Geisha Basin, typical of oceanic crust, and thickens to 22 km beneath Sake Ridge (Figure A.4).

d. Figures

Figures should be used to support the text and to provide alternative, quick access to the main points in the submission. Figures must be simple and clear, and they should not raise other questions. Figures do not need to be constrained by standard colour palettes, scales, projections or other conventions. For each figure ask

- What is the single, most important message in this figure?
- How can this message be portrayed most convincingly?
- How can this figure support the underlying principles and conclusions of the submission?
- Is the figure going to raise other questions?

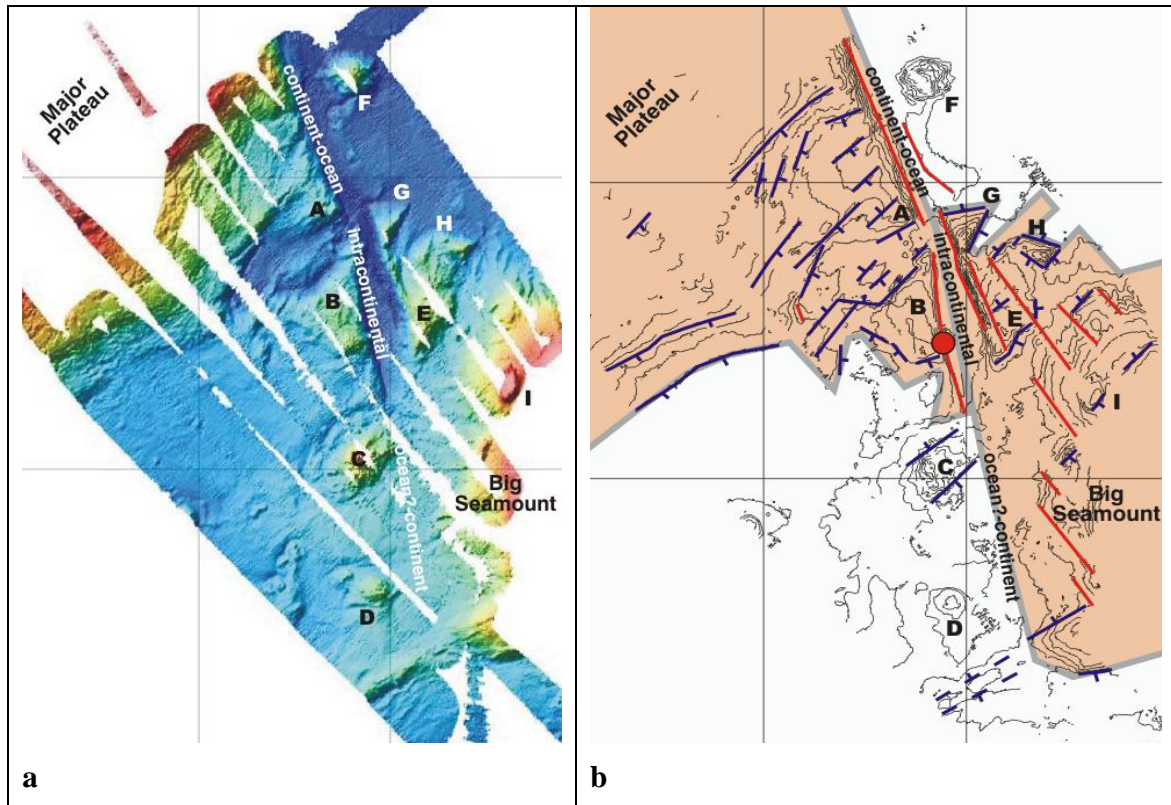


Figure 1. Multibeam swath bathymetry data as it might be presented in a) a scientific paper, and b) in a continental shelf submission.

Figure 1 shows multibeam swath bathymetry data across a saddle in the continental shelf. Figure 1a shows the data using a standard colour palette. This figure makes it hard to recognize the morphological connection between the plateau and seamount, and the use of dark blue colours suggests the saddle is part of the deep ocean floor. Figure 1b shows contours of the data overlaid with an interpretation of the major structural features and with the area of continental rocks shaded. This figure de-emphasizes details of the morphology and highlights the continuity of prolongation of continental rocks across the saddle from the plateau to the seamount.

4. Conclusions

The organization and content of the submission can make the Commissioners' job easier, speed up the analysis by the CLCS, and improve the chance of the desired outcome. The purpose of the submission is to as clearly as possible lead Commissioners through the State's conclusions and supporting data and reasoning. All aspects of the submission – structure, text, and figures – should be directed to that end.

However, the submission document is only the first step in the process. The delegation will have opportunities to present more data and analysis during the sessions with the Sub-commission. Effectively responding to the Sub-commission's questions is as important as the preparation of the submission itself, and the delegation should take all opportunities to present its views to the Sub-commission, both in writing and orally.

Interaction with the Sub-commission should not be an adversarial process. It is a dialogue between experts, and persuasion is likely to be more productive than confrontation. It is impossible to predict which aspects of the submission will be closely scrutinized and which will be immediately accepted. If the Sub-commission disagrees with the interpretation in the submission and if the data and analyses are equivocal, then it may be desirable to agree with their recommendations. However, the submission team are the world experts on the data in the submission, and where the data and analysis are robust they should be prepared to vigorously defend the interpretation by presenting the material in new ways.

The CLCS process is for the benefit of both the international community and coastal States. On the one hand it ensures that the outer limits of the continental shelf are credibly supported by scientific evidence. On the other it provides coastal States with certainty that such outer limits will be respected by the international community. Scientific credibility is therefore the touchstone of the submission process, and the ability to declare outer limits with certainty is the ultimate objective for the coastal State. Both of these principles should be kept in mind throughout the submission process.