

THE FRENCH ISLANDS OF SAINT-PIERRE ET MIQUELON: A CASE FOR THE CONSTRUCTION OF A DISCONTINUOUS JURIDICAL CONTINENTAL SHELF?

Marc Plantegenest, Conseil Général de Saint-Pierre et Miquelon, Saint Pierre et Miquelon, France, cgspm.president@wanadoo.fr

Michael Iosipescu, Legal Research Council, Halifax NS, Canada, iosipescu@eastlink.ca

Ron Macnab, Watermark Geoscience Inc. Dartmouth NS, Canada, ron.macnab@ns.sympatico.ca

Abstract

The Islands of Saint-Pierre et Miquelon (SPM) exemplify the situation of a shelf-locked coastal state that is situated on a wide continental margin, but with an Exclusive Economic Zone (EEZ) that does not extend to the high seas. This paper assesses the prospects for implementing UNCLOS Article 76 in the local region, and presents hypothetical outer limits of an outer continental shelf that might appertain to the Islands. Article 76 does not address specifically the issue of the disconnect between the outer continental shelf so derived, and the Exclusive Economic Zone of Saint-Pierre et Miquelon. This is a question that remains to be resolved not only for Saint-Pierre et Miquelon, but for other shelf-locked states that might wish to invoke Article 76 in order to claim their share of the common heritage of mankind.

1. Introduction

The Archipelago of Saint-Pierre et Miquelon (SPM) is a *département* of the Republic of France, situated a short distance from the south coast of Canada's Province of Newfoundland and Labrador, as shown in Figure 1. Awarded to France in 1763 by the Treaty of Paris, the Islands are occupied by about 7000 residents on a land area of 242 square kilometres, of which only thirteen percent is arable. The primary economy of SPM is based on fishing and vessel repair, but these activities have been severely impacted by the overall collapse of the fishing industry in the region.

As part of a coastal state that is situated on a wide continental margin, the territory is arguably entitled to an extended or juridical continental shelf beyond 200 nautical miles, in accordance with the provisions of UNCLOS Article 76. This paper discusses the issues that would figure in the establishment of an extended continental shelf by France.

2. Present maritime boundaries

Figure 2 illustrates the present EEZ limits of France and Canada in the region. Canada's limit consists of a series of arcs centred upon the Territorial Seas Baseline and constructed with a radius of 200 nautical miles. France's limit is a composite: an equidistant line between SPM and the Province of Newfoundland and Labrador, a 24-mile limit to the west, and a narrow

(about 10.5 miles) zone that extends 200 nautical miles due south from the Islands= south coast.

The unusual configuration of the SPM boundary was determined in 1992 by a special Court of Arbitration, in an adjudication that had been requested to resolve a dispute between France and Canada concerning the partitioning of the Exclusive Economic Zone south of the Islands (Charney and Alexander, 1998). The main arguments in this dispute are illustrated in Figure 3. France claimed a polygonal zone that extended seaward from the Islands to encompass a portion of the physiographic continental shelf, slope, and rise. Canada, for its part, maintained that the Islands were entitled at most to a 12-mile territorial sea.

In its decision, the Court awarded exclusive economic rights to France in the area circumscribed by the boundary described above, in a configuration that has been variously described as a *keyhole* or *baguette*. This was presumably intended to provide Saint-Pierre et Miquelon with a corridor to the high seas, but in the final analysis, the zone appears to fall totally within an area claimed by Canada as an EEZ, in effect creating a French enclave that is surrounded entirely by the sovereign territory of a foreign country. This may have been an unintentional effect, and has since attracted comment (e.g. de la Fayette, 1993; Charney and Alexander, 1998).

The Court was also asked to consider France's contention that it was entitled to certain sovereign rights beyond 200 nautical miles, in keeping with the provisions of Article 76 of UNCLOS. However, the Tribunal declined to consider the French case for an extended continental shelf, explaining that the competence for such a determination lay with the Commission on the Limits of the Continental Shelf, which had yet to be established.

3. Resource aspects of the extended continental shelf

In recognition of the resource potential of the seabed south of the Islands and beyond 200 miles, an investigation was launched in 2002 to evaluate the possible economic benefit of an extended continental shelf, and to assess the prospects for the exercise of French sovereign rights within that zone.

Gas and oil

In a study published by the Geological Survey of Canada (Wade, 1994) four regions beyond 200 nautical miles off eastern Canada were ranked according to their hydrocarbon potential. It was concluded that the region with the second-highest ranking lay south of SPM, encompassing the juridical continental shelf in that area. Water depths here range roughly from 2000 to 5000 metres, placing some parts of the shelf within, or at least close to, current limits of exploitability - assuming, of course, that conditions are favourable for the identification and extraction of the resource.

While gas and oil prospects beyond 200 nautical miles might appear promising, it is unlikely that these resources would be pursued in the near future, in light of the perceived potential of the

Laurentian Sub-Basin that is located farther north in shallower water, within the Exclusive Economic Zones (EEZs) of both France and Canada (Figure 4). For the time being, the current economics of oil production will no doubt result in a concentration of effort in the Laurentian Sub-Basin, where conditions are much more favourable to exploration and exploitation, and where jurisdiction is not a question. In the future, however, four developments could draw attention to the resource beyond 200 nautical miles: (a) the more accessible EEZ resources will be exhausted; (b) exploration could confirm the presence and locations of hydrocarbons beyond 200 nautical miles; (c) continuing improvements to drilling technology will support operations in ever deeper water; and (d) the escalating price of oil could justify the increased cost and complexity of operating in this area. Therefore if hydrocarbons do exist beyond 200 nautical miles, they should be seen as tomorrow=s reserves, and not as today=s assets.

Gas hydrates

Gas hydrates are ice-like crystalline solids formed by the entrapment of gas molecules in a hydrogen-bonded cage of water molecules. Methane is the gas that is most commonly entrapped, and its flammable nature suggests that hydrates could serve as a potential source of energy - once problems related to its commercial extraction are resolved. In a study published by the Geological Survey of Canada (Grant, 1994) gas hydrate prospects were investigated off Canada's East Coast, including the deep-water area south of Newfoundland. Extrapolating from estimates in comparable continental margin settings, it was concluded that a significant potential exists in the extended continental shelf in this region. It should be mentioned, however, that much remains to be learned about gas hydrates, and that their exploitation as a source of energy will require significant research and development. There is no doubt, however, that hydrates are perceived as a successor to gas and oil once supplies of the latter run out, or once they become too costly to produce.

Living resources

UNCLOS Article 77 entitles a coastal state to exploit the living resources of the seabed and subsoil within the limits of the extended continental shelf; these resources are referred to specifically as *sedentary species*. Typically, these areas are in deep water where little is known about the ecosystems and the organisms that populate them. It seems clear, however that sedentary species have an economic dimension, either as food stocks (at the bottom end of the food chain as well as the higher levels) or as raw materials for manufacturing pharmaceutical and industrial compounds. As benthic ecosystems and their associated organisms become better known and understood through future research, it can be expected that new and economically important biological resources will be identified on the seabeds of extended continental shelves.

4. Hypothetical limits of the outer continental shelf

At least two studies have assessed the prospect of developing an extended continental shelf in the area south of SPM and Newfoundland. In 1994, the Geological Survey of Canada published the results of a preliminary investigation (Macnab, 1994), and for the past several years, CARIS

has used the region as a training model for a proprietary software package that was developed specifically for implementers of Article 76. Both studies were based on public domain data: a bathymetric grid that is currently available on the GEBCO Digital Atlas (BODC, 2003), and a depth to basement grid for the North Atlantic (Oakey and Stark, 1995). It should be emphasized that these studies were not definitive, nor were they indicative of the official position of any government. However, they leave no doubt concerning the technical feasibility of developing an extended continental shelf in the region, and they could serve as starting points for future work to construct outer continental shelf limits in the region.

An analysis was undertaken to determine and compare the hypothetical configurations of the extended continental shelves of SPM and Canada. This work was based on the studies referred to above, with supplementary calculations to account for the configuration of the SPM territorial seas baseline. Figure 5 illustrates the outcome of this analysis by portraying conjectural outer limits for France and Canada. It can be seen that the SPM outer limit is not as extensive as the Canadian limit, and that the two limits share common segments where the formula and cutoff lines of Article 79 (i.e. the Gardiner Line and the 2500 metre isobath projected by 100 nautical miles, respectively) have identical effects for each country. This is further illustrated in Figure 6, which outlines a speculative zone of French economic interest that would overlap an analogous zone of Canadian interest.

5. Discussion

While the technical possibilities for defining an extended continental shelf for SPM are fairly straightforward, the situation is complicated by the fact that the baguette lies entirely within Canada's claimed 200-mile limit. Therefore a French juridical continental shelf would not be contiguous to the Islands= present EEZ. UNCLOS makes no provision for such a situation, and at this early stage, there appears to be no applicable precedent in international law concerning the admissibility of an extended continental shelf that is not directly connected to a given coastal state=s EEZ, or the exercise of sovereign rights therein.

Where EEZs are concerned, there are instances where the concept of shared jurisdiction has been given some credence in regions of overlapping interests. For instance, in the Jan Mayen maritime boundary case between Norway and Denmark, the International Court of Justice (ICJ) noted in 1993 that there was no reason in principle why separate boundaries could not be defined for fishing zones that applied to the water column, and for the continental shelf that applied to the seabed. In essence, it would be possible for one state to hold fisheries jurisdiction over a given area while another controlled the seabed. The ICJ made a similar observation in 1984, in the Gulf of Maine case between Canada and the USA. In actual state practice, there is at least one agreement where a coastal state (Indonesia) has agreed to share jurisdiction over its EEZ with another (Australia). It is not clear whether similar considerations would apply to sovereign rights within extended continental shelves, but in any case this question is beyond the scope of this paper.

6. Conclusion

A straightforward technical implementation of UNCLOS Article 76 indicates that an extended continental shelf could be constructed south of the Islands of Saint Pierre et Miquelon, but that under present circumstances, such an extension would lie south of Canada's claimed 200 mile limit with no direct connection to the Islands' EEZ. This raises questions concerning the projection of sovereign rights that would in effect leapfrog over zones where other states exercised exclusive jurisdiction, and concerning the sharing of jurisdiction in extended continental shelves where neighbouring states had competing interests.

These questions could be harbingers of a new category of boundary-making issues, not only in the vicinity of Saint-Pierre et Miquelon, but in other regions where similar circumstances prevailed. In this particular situation, Article 76 does not address the question of establishing a linkage between the present French EEZ and a potential extended continental shelf.

Bibliography

British Oceanographic Data Centre, 2003. *GEBCO Digital Atlas - Centenary Edition of the IHO/IOC General Bathymetric Chart of the Oceans*. Issued on CD-ROM, British Oceanographic Data Centre, Liverpool.

Charney, J.I., and L.M. Alexander, 1998. *Delimitation of maritime areas between Canada and France (St. Pierre and Miquelon) Award of June 10 1992*. in *International Maritime Boundaries*, pages 2141-2158. The American Society of International Law.

de la Fayette, L., 1993. *The Award in the Canada-France Maritime Boundary Arbitration*. The International Journal of Marine and Coastal Law, vol 8, no 1, pages 77-103.

Grant, A.C., 1994. *Gas Hydrates*. Section J, Technical Annex, Geological Survey of Canada Open File Number 3209, Geological Survey of Canada, Dartmouth NS.

Macnab, R. (editor), 1994. *Canada and Article 76 of the Law of the Sea*. Geological Survey of Canada Open File Number 3209, Geological Survey of Canada, Dartmouth NS.

Oakey, G.N. and A. Stark, 1995. *A digital compilation of depth to basement and sediment thickness for the North Atlantic and adjacent coastal land areas*. Geological Survey of Canada Open File Number 3039, Geological Survey of Canada, Dartmouth NS.

Wade, J.A., 1994. *East coast hydrocarbon potential*. Section H, Technical Annex, Geological Survey of Canada Open File Number 3209, Geological Survey of Canada, Dartmouth NS.



Figure 1. The French archipelago of Saint Pierre et Miquelon (arrow) is situated near the coast of the Canadian Province of Newfoundland and Labrador. (Figure from Geological Survey of Canada Open File Number 4302)

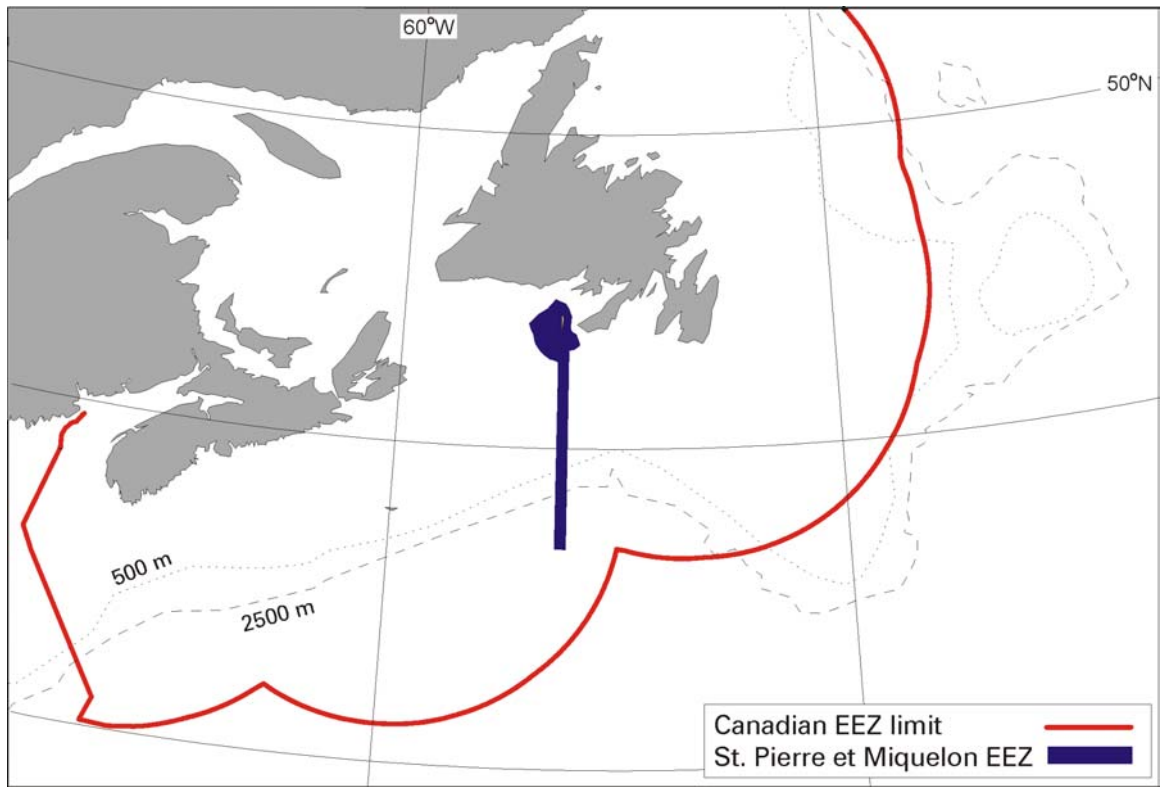


Figure 2. Current Exclusive Economic Zones (EEZ) of France and Canada. The French EEZ (commonly referred to as the *baguette*) was awarded by the International Court of Justice in a 1992 judgement.

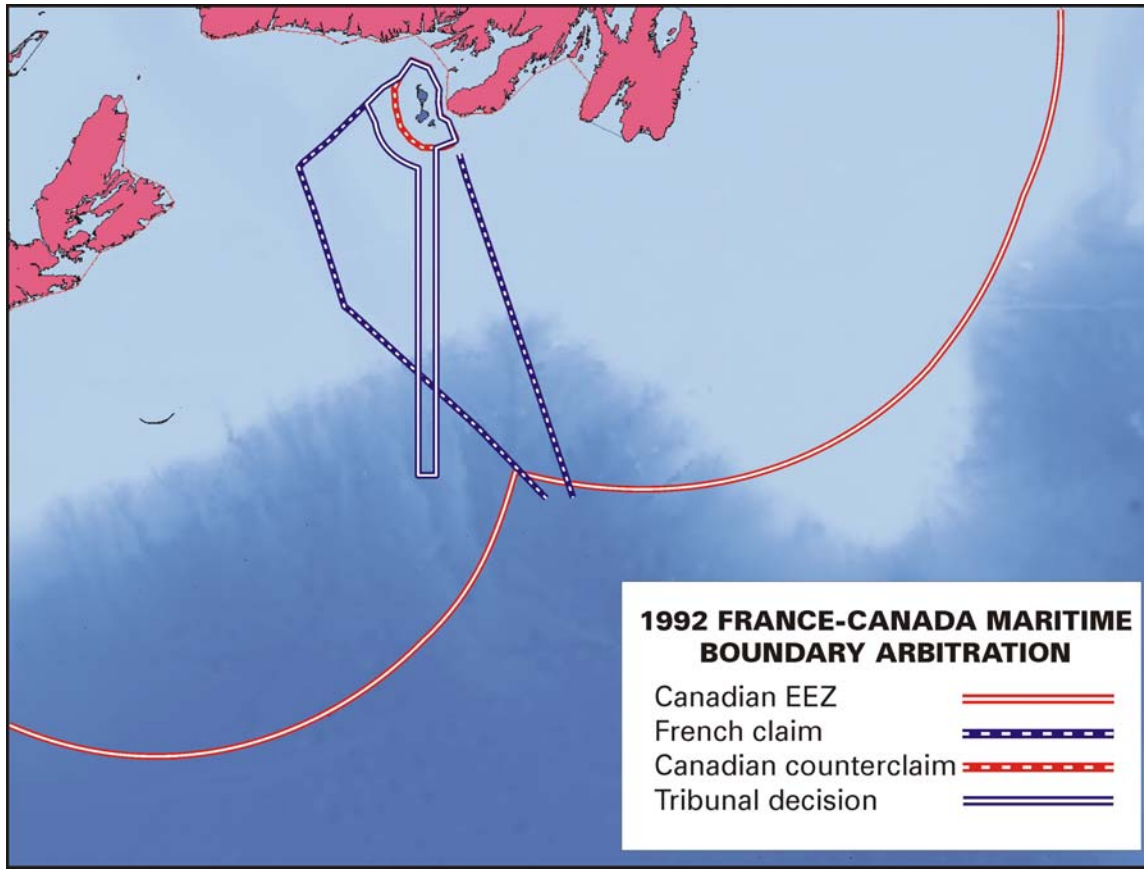


Figure 3. The 1992 Canada-France Maritime Boundary Arbitration: initial positions of France and Canada (dashed blue and red lines, respectively), and the Tribunal's decision (blue and white line).

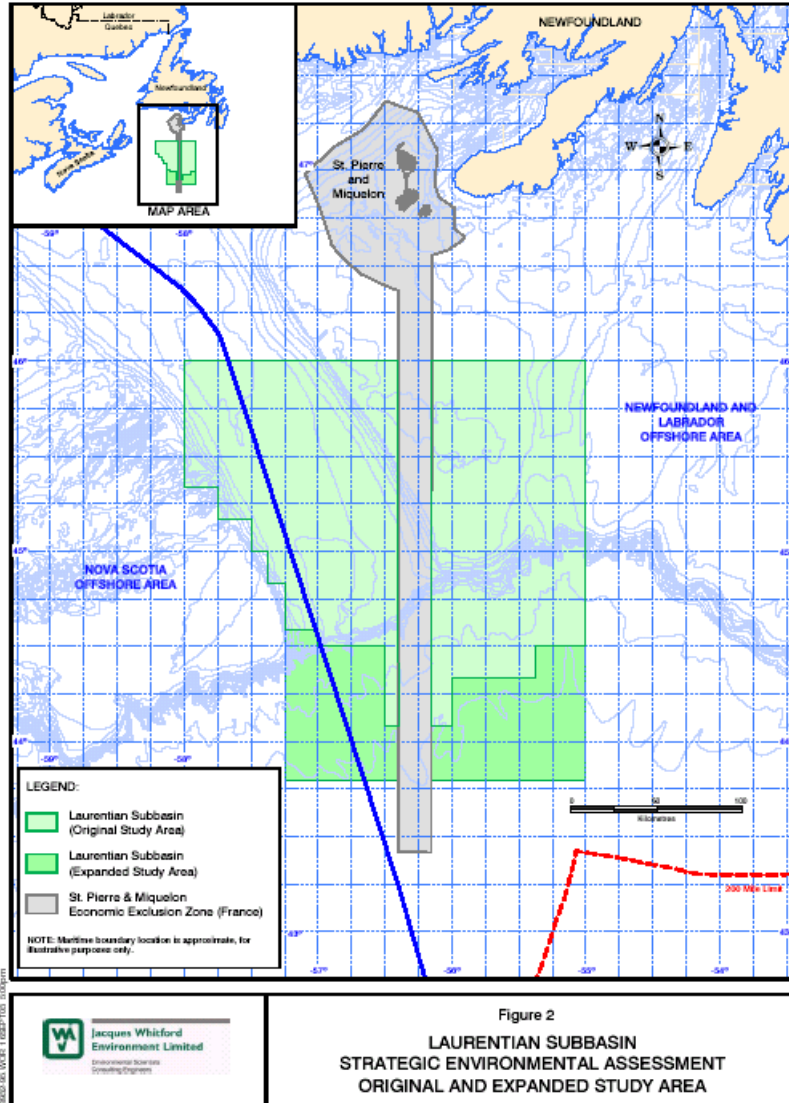


Figure 4. Area shown in light green is designated for petroleum exploration in the vicinity of the French Exclusive Economic Zone, under the management of the Canada-Newfoundland Offshore Petroleum Board (CNOBP). The darker green segment at the south of the area represents a recently-announced extension into deeper waters. (Figure extracted from the CNOBP website)

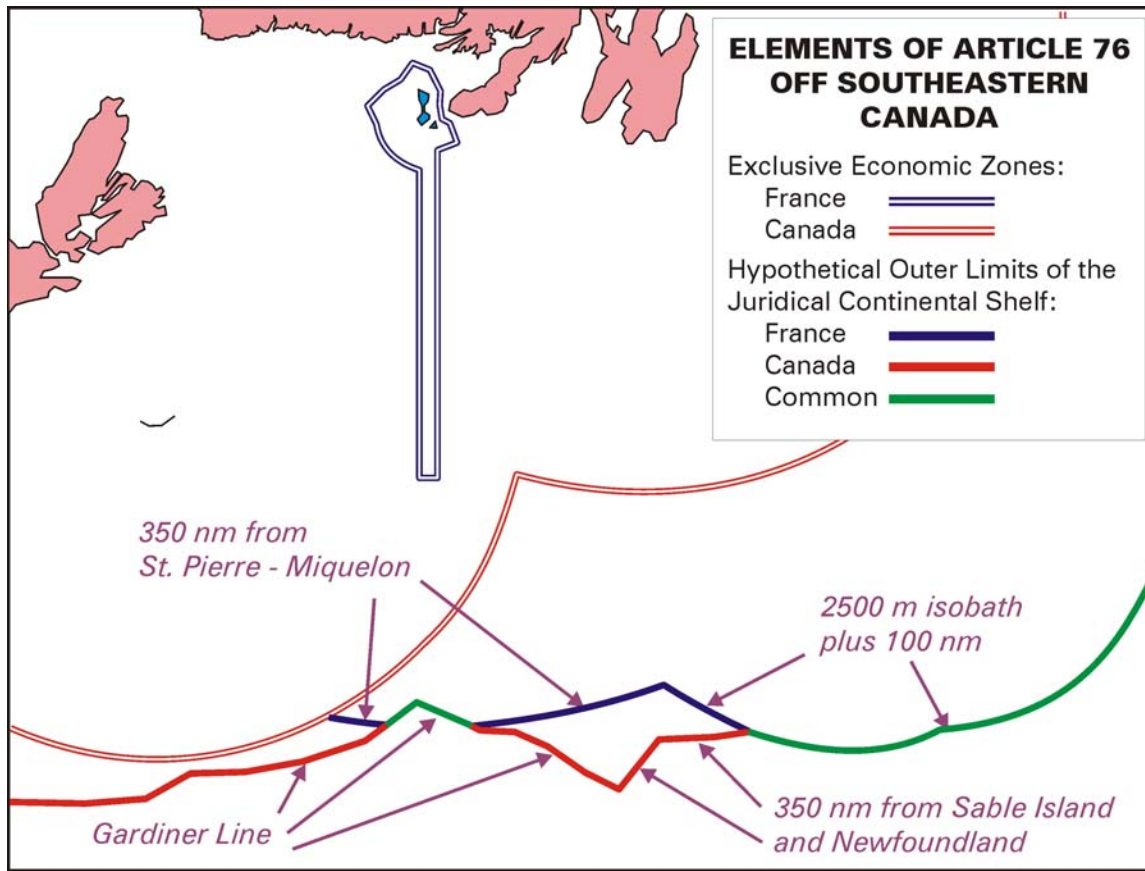


Figure 5. Hypothetical limits of the outer continental shelves of France and Canada in the study area, indicating which elements of Article 76 were used in their construction. Some portions of the two limits are common to both coastal states.

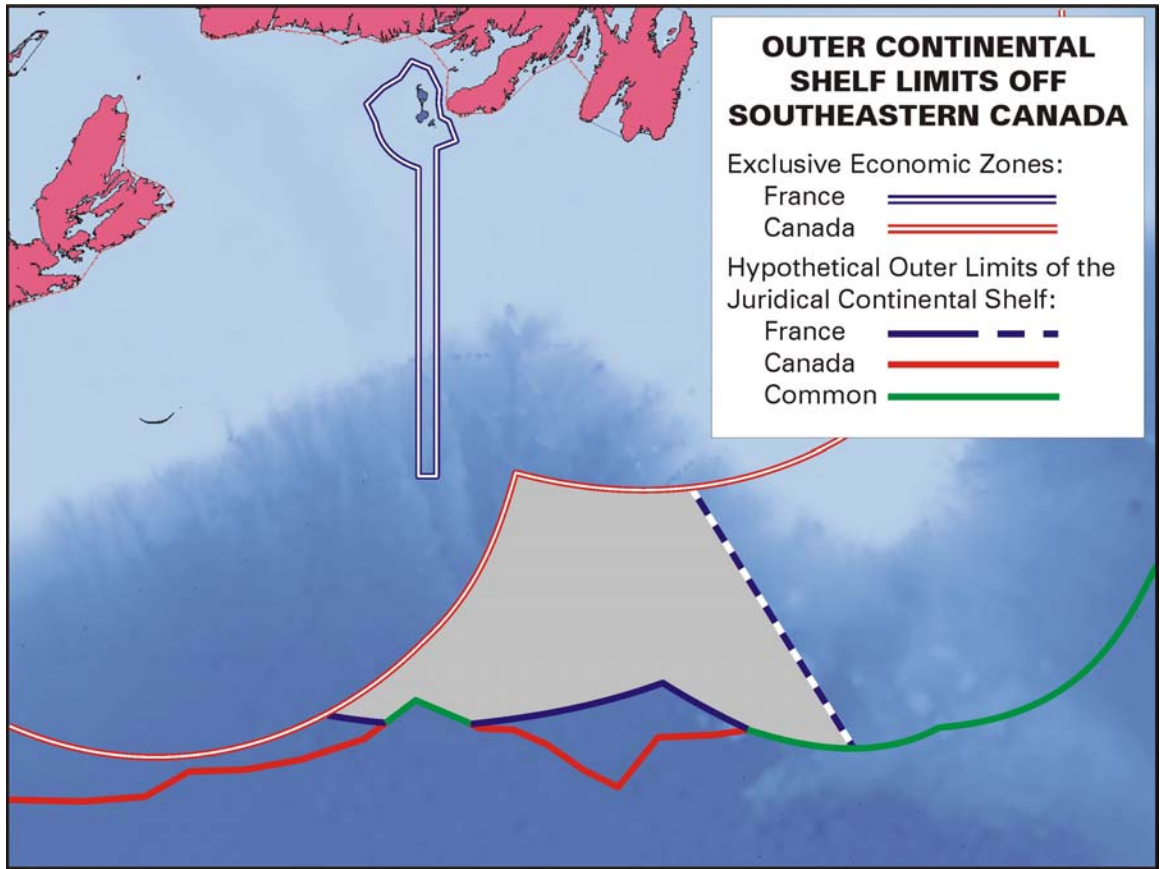


Figure 6. The grey-shaded area indicates the speculative dimensions of an extended continental shelf zone that might appertain to France, derived through a strictly technical implementation of UNCLOS Article 76.