Marine Boundary Delimitation for Ocean Governance

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ABSTRACT

There is a Canadian project entitled "Good governance of Canada's Oceans: the Use and Value of Marine Boundary Information" which involves research investigating three case studies to represent typical coastal and offshore boundary issues: the delimitation of the extended continental shelf; the creation of boundaries for a Marine Protected Area (MPA); and a provincial marine administrative boundary. In each case study the research objectives include understanding information requirements for governance, modeling boundary uncertainty, and using ocean mapping technologies to illustrate the delimitation issues.

This paper outlines the progress of the research to date and highlights the significance of taking a multi-disciplinary approach in boundary delimitation. Surveyors generally assume that good boundaries make good neighbours yet a case can be made that sometimes more precise boundaries may not be the best solution. For example, social scientists have expanded the original concept of "clarifying" ocean boundaries to include the possibility of leaving boundaries undefined in order to promote co-management arrangements. The legal interpretations of jurisdiction, administration, and title have also broadened the concept of a 3-D marine parcel to a complex series of overlapping interests offshore. Ocean mapping technology is being used to create and communicate alternative boundary solutions, including ecological boundaries defined by bottom type. The challenges in creating a marine cadastre for Canada is also discussed.

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