## BUILDING A SOLID FOUNDATION – A CASE FOR ADOPTING FIXED MARITIME ZONES

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## Abstract

A revolution in the complexity of regulation and intensity of enforcement of the marine jurisdiction is occurring. This transformation coincides with unprecedented advances in the technologies by which the location of the coastline can be examined using primary sources of information. As a result, the territorial sea baselines of a coastal State are now open to general scrutiny that will, in turn, necessitate that governments consider critical review of their baselines.

High resolution imagery coupled with more precise control data, combine to create a superior rendition of the coastline, breaking the monopoly of conventional cartographic products as definitive depictions of the coastline and their relevance to baseline determination. In addition, the establishment of spatially complex marine regulatory zones is driving the need for the development of digital management systems that can more easily accommodate the complexity of these zones and their rapid evolution.

Collectively, these changes place demands on the infrastructure that supports the spatial management of the oceans that traditional paper charts are no longer capable of satisfying.

In responding to these complications, coastal States such as Australia are moving significantly towards a more digital approach. Through ongoing collaboration that commenced 15 years ago, Geoscience Australia, the Australian Hydrographic Service and State mapping agencies have developed an evolving digital representation of Australia's baselines and maritime zones. Initially, this was based on the best

available cartographic data augmented by remotely-sensed data. However, improvements in technology have made it simpler and more effective to utilise primary source material, rather than relying on material that is scale dependant.

Initiatives such as this open the door to the next generation of maritime boundary management – the establishment of a national maritime boundaries register/information system. A pre-requisite to this is the establishment of a stable spatial framework on which this system can be built, one option available to achieve this goal is for States to consider implementing fixed baselines and maritime zones. The benefits of such a move will be to provide future certainty and repeatability of location for the various offshore limits and administrative zones.

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