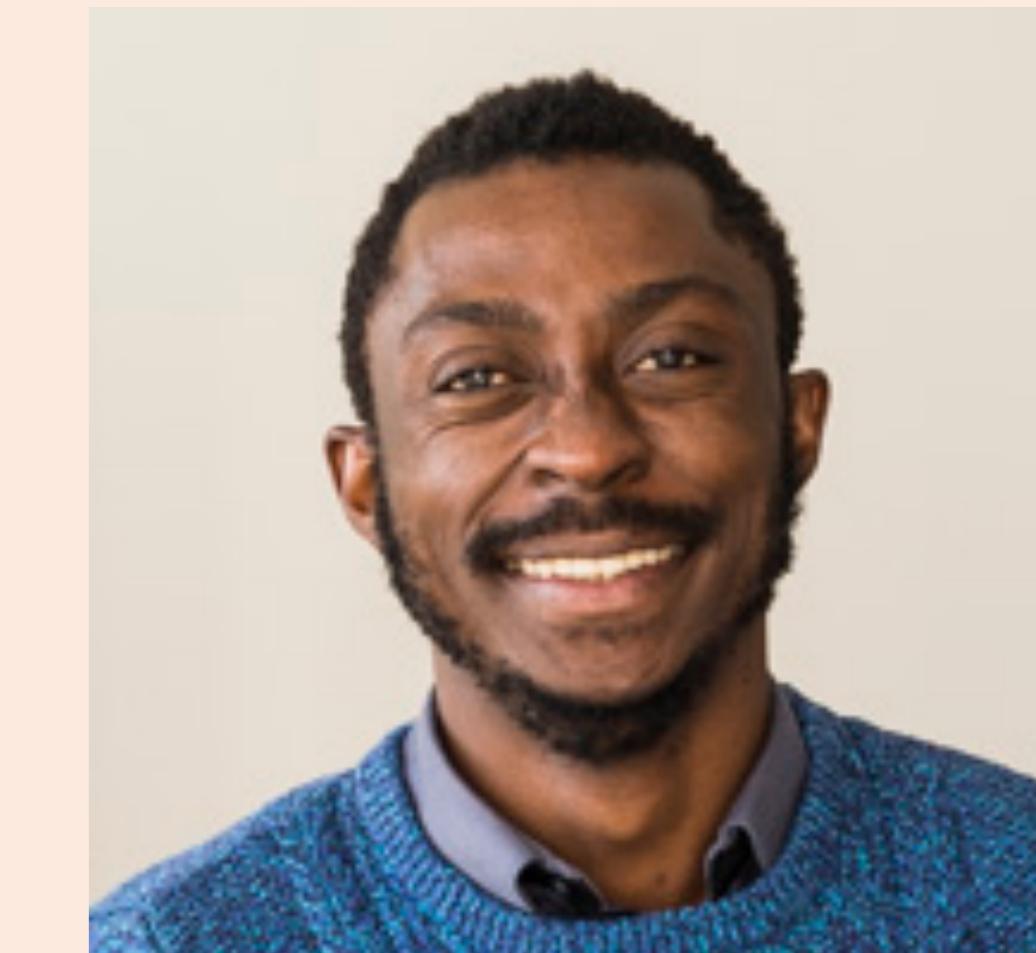


# Legal requirements for environmental integration in Marine Spatial Planning (MSP): case studies from the EU, Senegal, Cabo-Verde and Brazil



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## Context and objectives

MSP is a process for ensuring the consistency of uses at sea in a context of diversification of maritime activities (Fig.1). This public process took shape in the European Union with the adoption of the Directive 2014/89/EU of 23 July 2014, establishing a framework for maritime spatial planning. MSP is spreading in all regions of the world (Ehler, 2017) with differentiated approaches and objectives (S. Jay, 2013). Considered as the "maritime counterpart" to land planning (De Cacqueray 2014), the elaboration of plans for the organization of activities at sea is however not without risk. "Ocean grabbing", is one of the major risks that the MSP could induce or increase (Bennett, 2015). Planning at sea takes place in a common space, dominated by the principle of freedom, unlike terrestrial planning which is based on the organization of ownership of the spaces. The MSP will therefore have to combine both environmental protection requirements and the rights of coastal States in maritime areas as provided by the UNCLOS of 1982. These requirements constitute the main substantive rules of the MSP. For the tropical Atlantic countries such as Senegal, Cabo Verde and Brazil, the implementation of MSP can be an opportunity to ensure a more rational management of marine resources and a relevant tool for an integrated protection of the marine biodiversity. However, these countries must remain vigilant with regard to the above risk. The creation of dedicated areas as a result of the planning process can create operating areas that evolve outside the global framework of the integrated planning. Thus, in the light of European experience, this research aims to consider that the legal prerequisites are necessary to the elaboration of a MSP more adapted to the interests of these countries in matters of the protection of the marine environment.

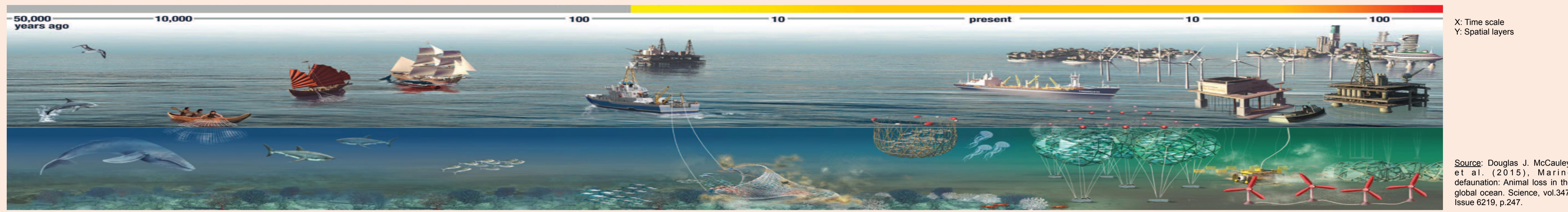


Fig.1. Spatial and temporal scale of the evolution of maritime uses

## Material and Method

- ❖ Legal texts applicable to the marine environment: UNCLOS, national sectoral laws applicable to marine uses (conservation, fisheries, transport, mining and gas), legal text concerning integrated and coastal management zone (Fig. 2)
- ❖ Identification of several marine uses
- ❖ Representation of the spatial influence of legal texts and uses: example with the coastal and marine area of the State of Pernambuco (Fig.3)
- ❖ Synthesis of potential scenario (Fig.4)

Potential conflicts	Area	Activities/Plan concerned	Administration concerned	
			Federal union	Federal states
Conflicts between human uses	Maritime area from 12 to 20 miles	Artisanal fishing and industrial fishing	Ministry of environment (IBAMA) / Secretary of Agriculture and fishing (SAP-MAPA) / Navy	Secretary of environment and sustainable development (SEMAS) / State environmental agency (CPRH) • Navy
Conflicts with environment	Costal zones (12 miles)	Cumulative impact of all activities	Ministry of environment (IBAMA) / Institute for conservation of Biodiversity (ICMBIO)	Secretary of environment and sustainable development (SEMAS) / State environmental agency (CPRH) • Navy
Conflicts between management plans	Costal zones (0-12 miles)	Integrated Costal Management Plan (ICMP)	National policy for marine resources - National management plan (Ministry of environment IBAMA)	Secretary of environment and sustainable development (SEMAS)
	Costal zones (12 up to 200 miles)	Marine Spatial Management Plan (MSMP)		National plan (Ministry of environment IBAMA)

Fig.4 Scenario of potential conflicts

form/level of regulation	EU					Senegal					Cabo-Verde					Brazil							
	fishing	conservation	energy	transport	tourism	pollution	SEA	PP	fishing	conservation	energy	transport	tourism	pollution	SEA	PP	fishing	conservation	energy	transport	tourism	pollution	SEA
General rules																							
Specific Rules																							
Regulatory texts																							

Legend: SEA: Strategic Environmental Assessment TR: Transversal Rules UE: European Union PP: Public Participation Existing text Text in the process of adoption Non existing text

Fig.2 Categorization of sectoral and cross-sectoral instruments

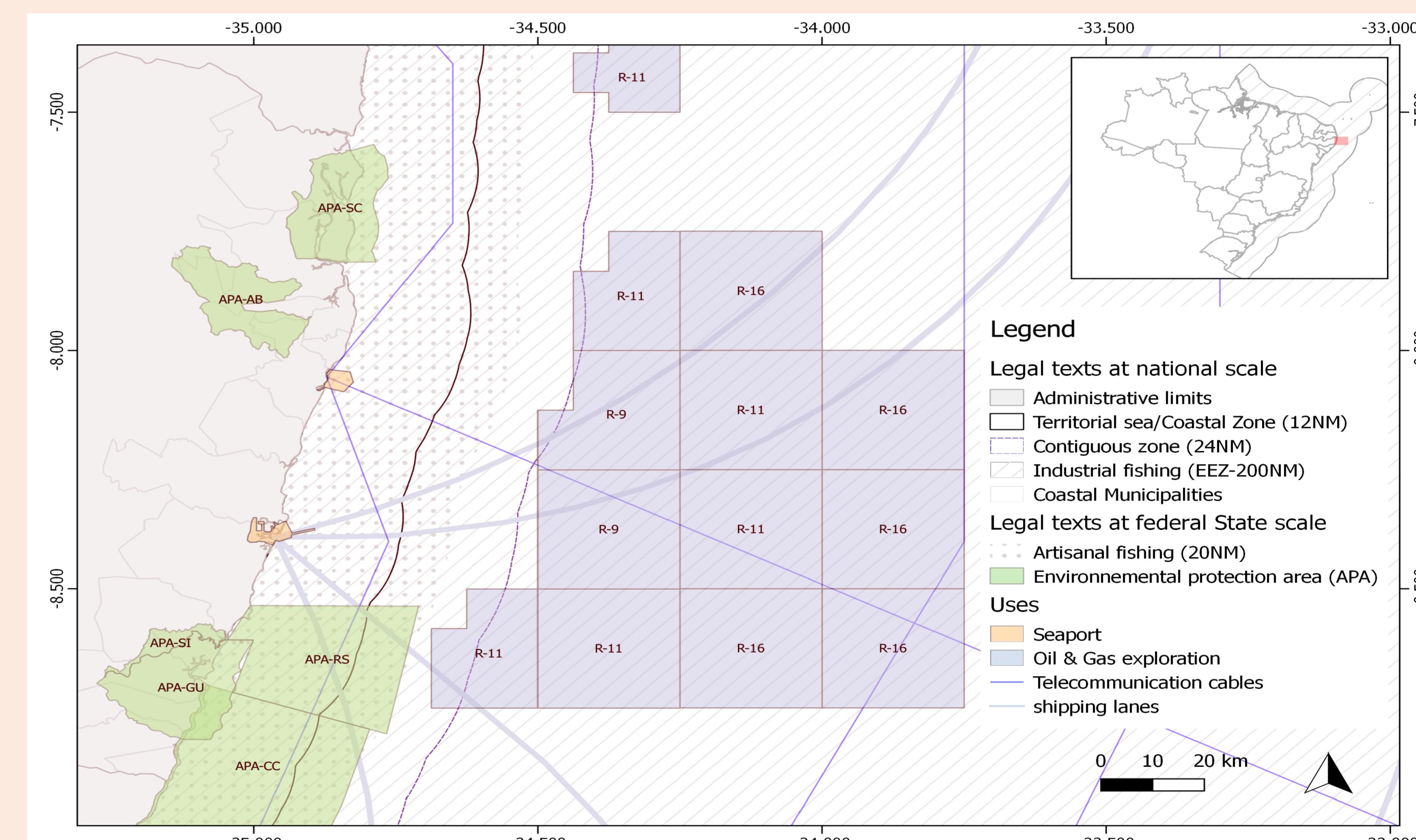


Fig.3 Map of legal texts and several uses

## Conclusion

### On the consistency of sectoral legal instruments with instruments for the delimitation of spatial competence

The 2015 Pernambuco Law on Artisanal Fishing defines a 20-mile fishing zone, yet the State of Pernambuco has jurisdiction over only 12 miles in accordance with the 1995 and 2010 Law

### On conflicts between uses (artisanal and industrial fishing)

### On conflicts with environment (cumulative impacts)

### On procedural instruments for environmental protection

Lack of procedural environmental instruments (SEA, Public Participation for Plans and Programs)

## Recommendations

### Measures needed

Articulation between the 2015 law on artisanal fishing and the 2010 laws on the Management of the Coastal Zone of Pernambuco and the 1995 law on the distribution of competences in Brazilian waters

### Measures needed

To compensate for the reduction in fishing areas (example : small-scale fishing)  
To compensate for the imbalance in gear and catch methods in shared areas (artisanal and industrial fishing)  
To compensate for the ecological impact of the concentration of activities

### Measures needed

Take into account the cumulative impacts upstream  
Involving participation in the planning process  
Enable information, participation and access to justice in environmental matters

Data sources for the map

spatial mapping of legal instruments: Official texts <http://www4.plenalto.gov.br/legisacao/>

Marine uses: Official institutions, [www.icmbio.gov.br/](http://www.icmbio.gov.br/)

www.semobs.gov.br

Marine cables and oil exploration blocks: IBGE/CPRM/ICMBIO/APN/Marineres/Regions/MarinePlan/TeleGeography/DivaGIS

Maritime traffic: MMA-SIGERCOM