

Update on Marine Scientific Research (MSR) Diplomatic Authorizations

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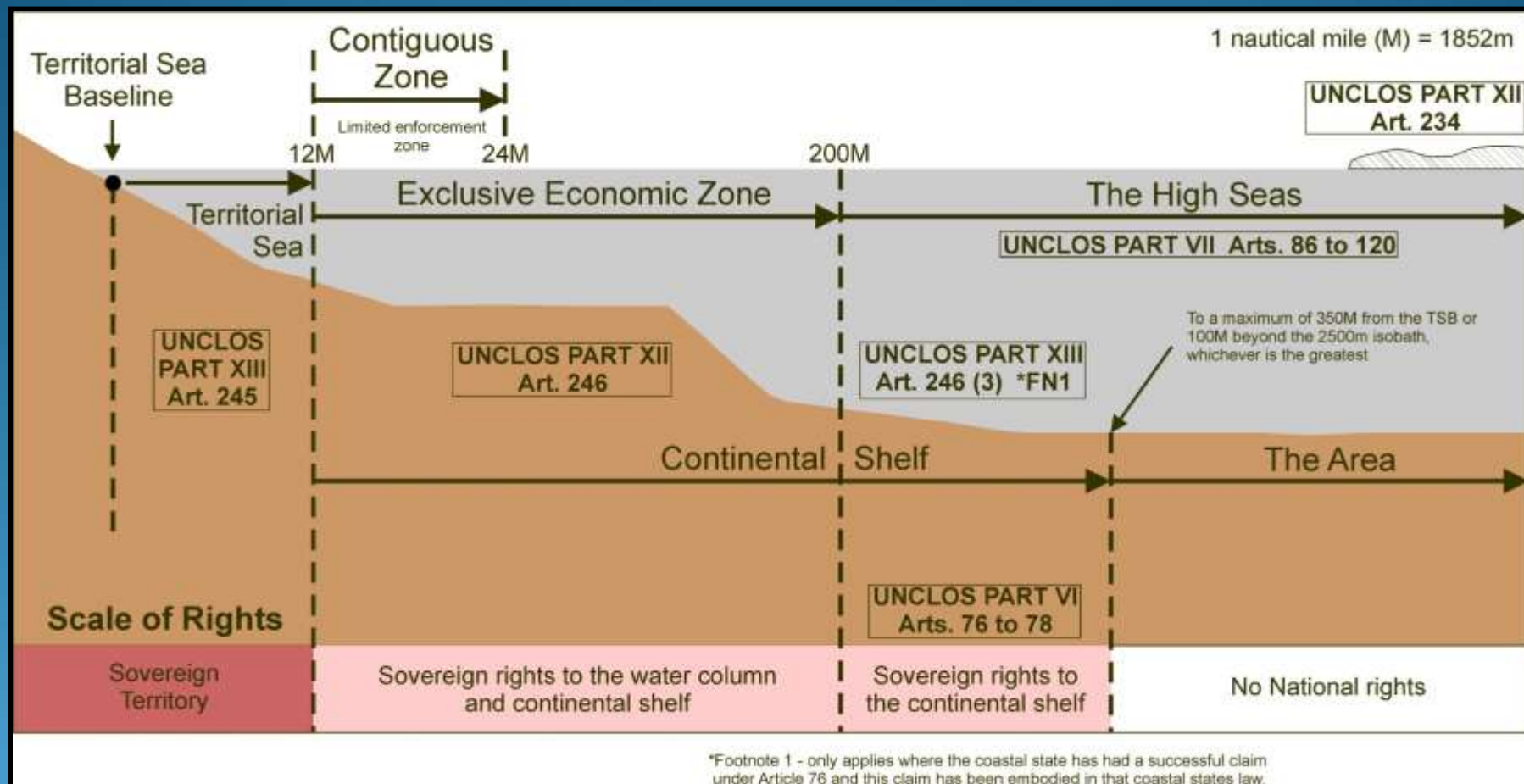
Quick Refresher: Marine Scientific Research (MSR) and Articles 76-78

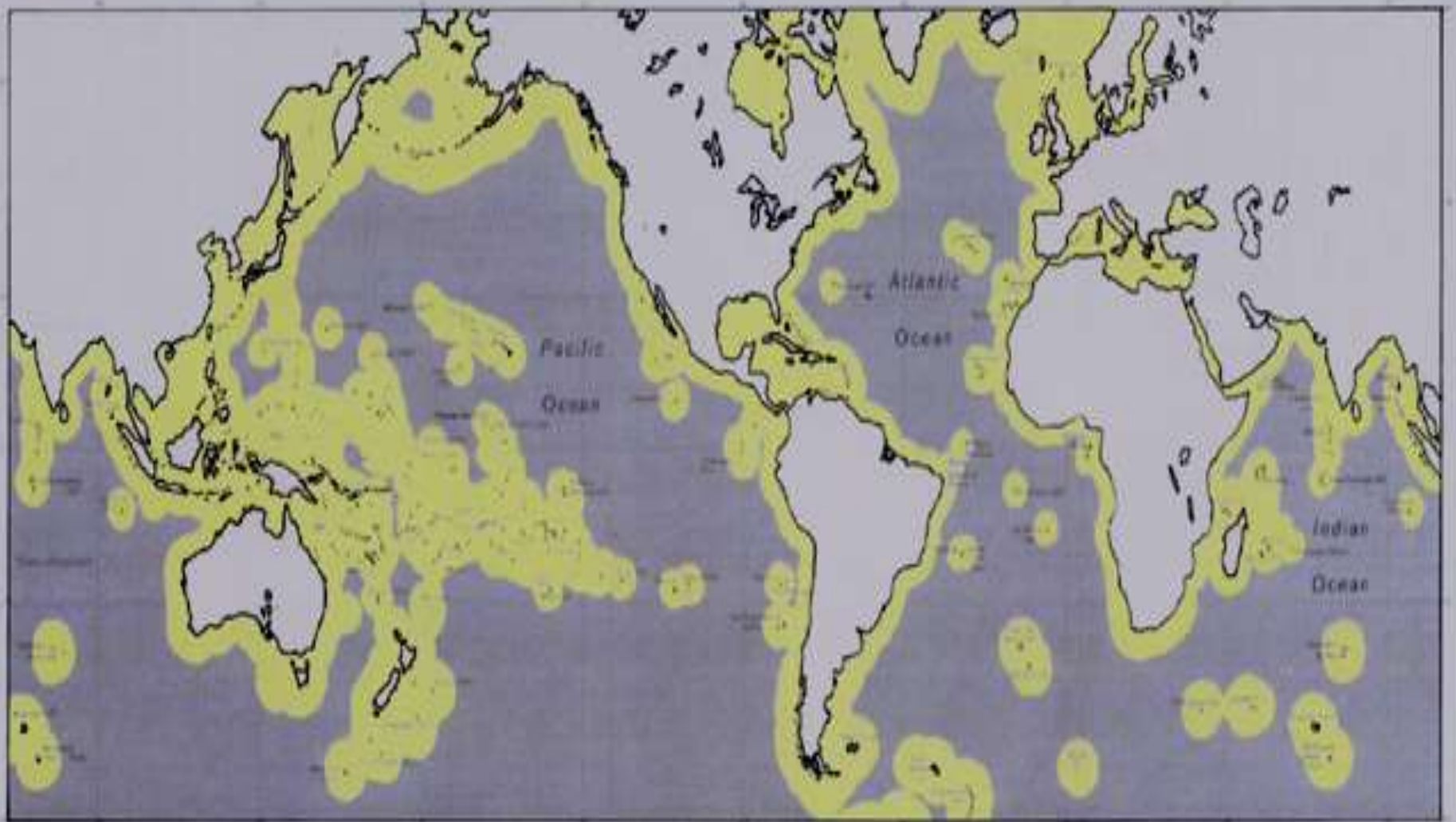
Article 78

Legal status of the superjacent waters and air space and the rights and freedoms of other States

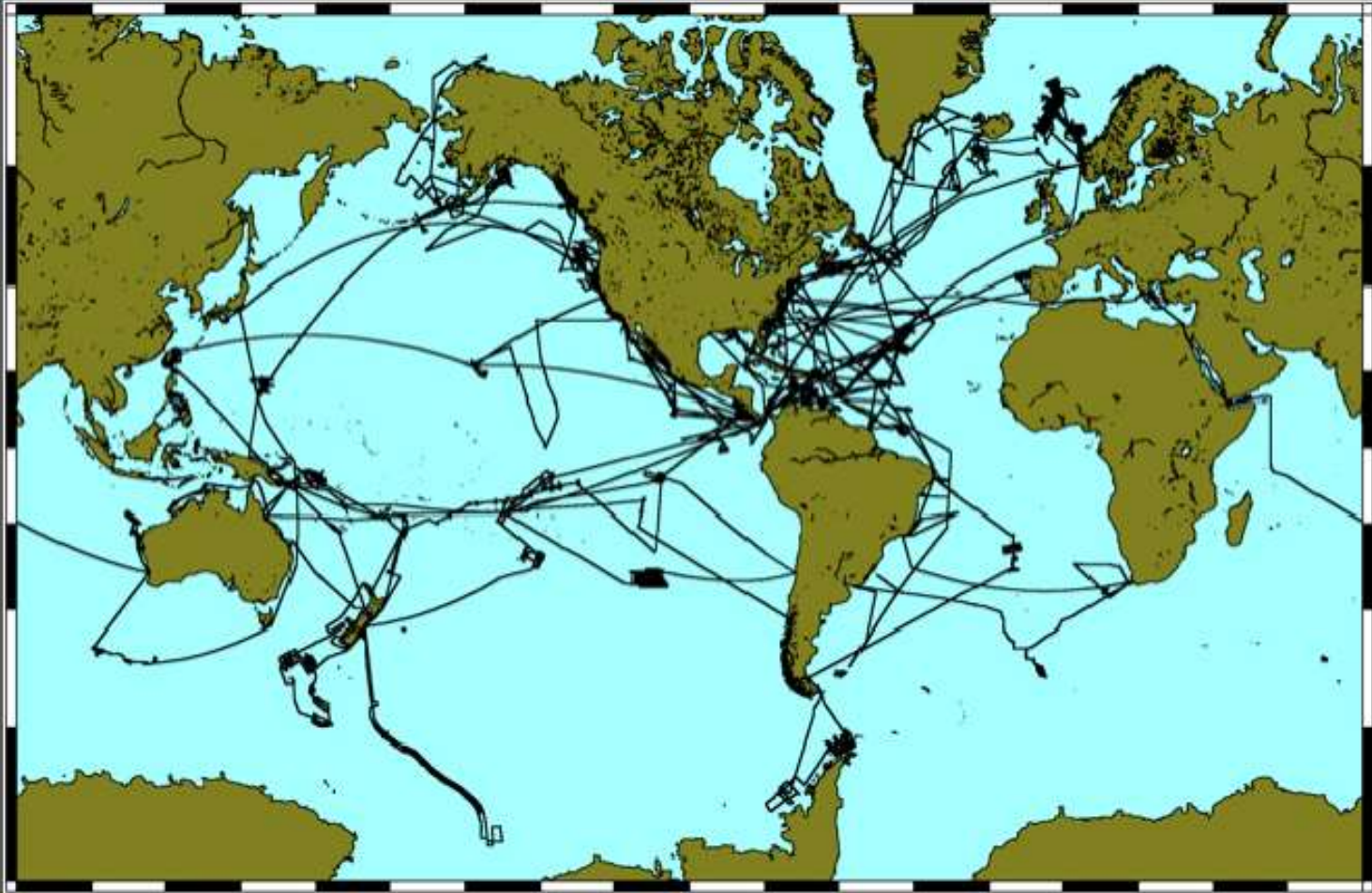
1. The rights of the coastal State over the continental shelf do not affect the legal status of the superjacent waters or of the air space above those waters.
2. The exercise of the rights of the coastal State over the continental shelf must not infringe or result in any unjustifiable interference with navigation and other rights and freedoms of other States as provided for in this Convention.

What types of MSR will require diplomatic clearance?





Complex: Science has no boundaries



.....and has many different faces



MSR Challenges and Recent Trends

Challenges and Trends

- Timeliness
- Differing Coastal State internal processes
- Maritime Boundaries
 - South China Sea
- Optics
 - Type of ship, nature of science
- Changes once consent is granted
- Not MSR?
 - Routine ocean observation, military survey, port calls, equipment testing
- Citizen Science
- Marine Animals fitted with Oceanographic Sensors

Coastal State Processes

- No system/Unfamiliarity
- Complicated systems
 - Recent trend: increasing bureaucracy, evolving requirements
 - Recent trend: firm 6 month timeline
- Differing processes: example UK and US trigger
 - UK: Flag State of Vessel
 - US: Nationality of Chief Scientist
 - Does it matter?

Maritime Boundaries



Citizen Science

- Growth of citizen science in recent years
- e.g. Secchi Disk Foundation
- Should this science come under Part XIII?

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Marine Animals as Science Platforms



- Growth of scientists using marine animals fitted with sensors to collect marine data; argument that this is not subject to UNCLOS [Kraska Paper]
- Should this science come under Part XIII?



ELSEVIER

Contents lists available at ScienceDirect

Marine Policy

journal homepage: www.elsevier.com/locate/marpol



Bio-logging of marine migratory species in the law of the sea

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Central and Northern California Ocean Observing System



CeNCOOS

Spring 2004 | www.cencoos.org



Animals as Ocean Sensors

Seeing the ocean through their eyes

Multiple institutions, researchers, educators, and oceanographers are tagging animals in the CeNCOOS region. Tagging is one of 17 projects that are part of the Center of Marine Life (CoML). Following is a list of some of the important players...

- Tagging of Pacific Predators (TPPP)
- Hopkins Marine Lab (Stanford)
- UC Santa Cruz - Long Marine Lab
- Pacific Ocean Shelf Tracking project (POST)
- Suisun Bay Aquatics Site (Other Research and Conservation (SOMAC) program)
- Ross River Bird Observatory
- Moss Landing Marine Labs
- NOAA

Animals are used as platforms for ocean sensors to help understand the organisms and the ocean environment. Animals can travel to regions and depths of the ocean we can't necessarily get to, either physically or with equipment. By using animals to collect data, we can see their behaviors through their eyes and get a more accurate picture about an animal's behavior, foraging 'hotspots', key migration routes, and how these organisms interact with their ocean habitat. These insights allow for improved decision-making in managing and protecting animals and their environments.

A variety of animals are tagged. Therefore, a variety of environments and ecosystems are developed at different depths and timescales depending on the movement patterns and/or migratory routes of that specific animal. We are collecting environmental and behavioral data across a large geographical range, from the colder Alaskan waters to the tropical coasts of South America. If we want to learn about a coastal or pelagic (open ocean) environment or a certain location

Emerging Issue:
Biodiversity in Areas
Beyond National
Jurisdiction (BBNJ)

United Nations Preparatory Committee on BBNJ

What is the Preparatory Committee?

- United Nations General Assembly established a preparatory committee to meet in 2016/2017
- Developing substantive recommendations relating to the **conservation and sustainable use of marine biological diversity** in areas **beyond** national jurisdiction

What is the Committee addressing?

- Marine genetic resources, including questions on sharing of benefits
- Measures such as area-based management tools, including marine protected areas
- Environmental impact assessments
- Capacity building and transfer of marine technology

BBNJ and MSR related issues

- Use of marine genetic resources/sharing of benefits
- How to facilitate MSR and research and development
- Best practices of science community
- Marine scientific research vs. bio-prospecting
- Environmental impact assessments; which activities?
- Capacity building and transfer of marine technology; how to implement
- Differentiation between science relating to exploitation of marine resources, and marine scientific research undertaken in areas of marine resources using similar science capability

Thank you!