

ARTIFICIAL ISLANDS AND STRUCTURES AS A MEANS OF SAFEGUARDING STATE SOVEREIGNTY AGAINST SEA LEVEL RISE. A LAW OF THE SEA PERSPECTIVE

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6th ABLOS CONFERENCE 2010
CONTENTIOUS ISSUES IN UNCLOS – SURELY NOT?
MONACO, OCTOBER 26th 2010



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Presentation Outline

1. Introduction - The Problem of Sea Level Rise
2. Contemporary Theory and Practice for the use of AIS as Climate Change Adaptation Measures regarding National Sovereignty
3. AIS Legal Standing in International Law and LOS
4. Regime Suggestions and Perspectives

Introduction - The Problem of Sea Level Rise

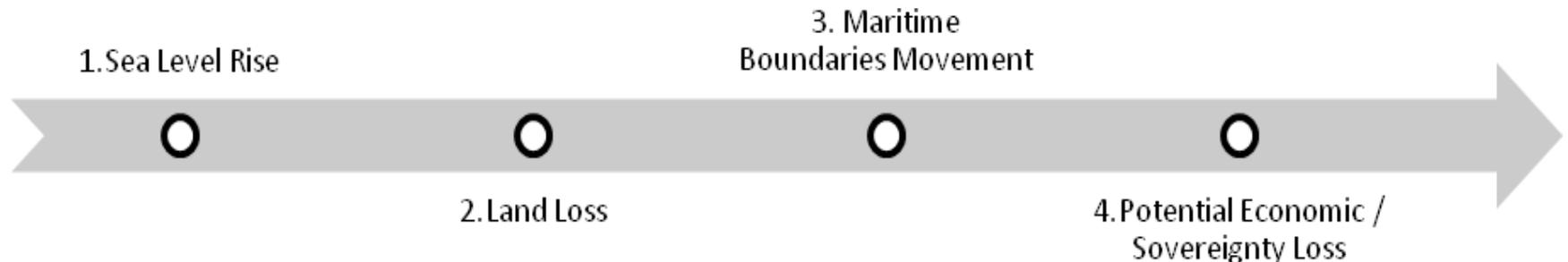
The Problem of Sea Level Rise

- ▶ It is beyond scientific doubt that climate change-caused sea level rise is a problem to be faced in the immediate future
- ▶ The rise can be expected to vary between 0,18 and 0,58 meters (IPCC Report 2007)

Sea Level Rise – Consequences (1)

- ▶ Local Population
 - Economic Instability of Coastal Zones
 - Natural Disasters
 - Population Displacement
- ▶ State Level
 - Higher Cost of Civil Protection
 - Inevitable Loss of Land Areas
 - Possible Conflicts with Other States

Sea Level Rise – Consequences (2)



Stages 1 & 2: Physical Procedures

Stages 3 & 4: State Intervention

Paper Proposal: Deployment of Artificial Islands and Structures as part of a Legal - Institutional Adaptation

**Contemporary Theory and Practice for the use of
AIS as Climate Change Adaptation Measures
Regarding National Sovereignty**

AIS as Potential Part Of Climate Change And Sea Level Rise Adaptation Measures

- i. **Artificial Islands and Structures (AIS) used
for Land Preservation/ Reclamation**
- ii. **AIS as Human Habitats and and Venues of
Economic Activities**
- iii. **AIS as *Sovereignty Markers***

AIS Used for Land Preservation/ Reclamation

- ▶ The use of artificial islands and structures is a popular method for land preservation and reclamation, especially in South Asia
- ▶ Preservation of low lying areas and islands through artificial structures usually includes large protection works of high cost and dubious results
- ▶ Okinotorishima islets

AIS as Human Habitats and Venues of Economic Activities

▶ 1950's

- Offshore AIS used as radio stations

▶ 1970's

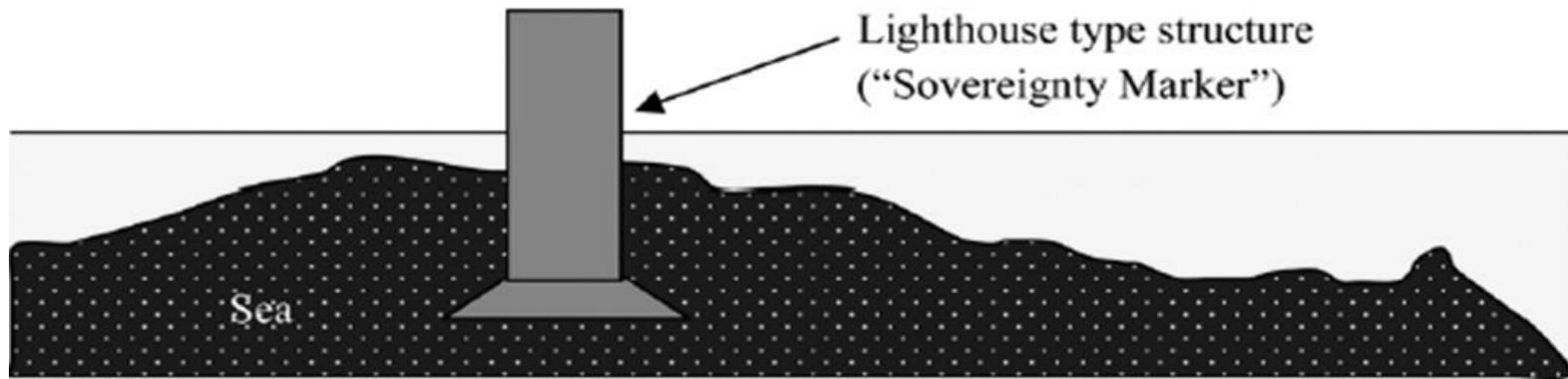
- Appearance of famous private owned “states” (Sealand, Minerva)

▶ Present Day

- Island of Hulhurmale designed to house the increasing population of the Maldives capital of Male
- AIS on Persian Gulf to host recreational installations (The World, The Palm Islands, the Burj al-Arab in Dubai and the Lulu Island in Abu Dhabi)

AIS as Sovereignty Markers

- ▶ Potential use, focusing on the use of AIS as “markers” in case of sea level rise that would inundate parts of or whole low lying States



Yamamoto, L. & Esteban, M. (2010)

AIS Legal Standing in International Law and LOS

Categories of AIS

- ▶ AIS used for exploration and exploitation of natural resources e.g. oil, gas and minerals extraction, wind, tidal and current energy production, maritime fisheries etc.
- ▶ AIS used for economic activities other than exploration and exploitation of natural resources, e.g. recreation, human habitats, ports etc.
- ▶ AIS used for military and state activities e.g. military installations and devices, land reclamation projects, prisons etc.
- ▶ AIS used for scientific research e.g. meteorological devices, biodiversity observatories, research platforms etc.

Terminology

- ▶ “*Artificial Island* refers to constructions created by man’s dumping of natural substances like sand, rocks and gravel on the seabed”
- ▶ “*Installation* refers to constructions resting upon the seafloor and fixed there by means of piles or tubes driven into the seafloor, and/ or to concrete structures which become fixed there by their own weight”

(Soons 1973)

AIS: Construction, Jurisdiction and International Responsibility

| | Construction & Right to Authorize Construction | Jurisdiction | International Responsibility |
|-----------------------------------|--|---------------|------------------------------|
| INTERNAL WATERS / TERRITORIAL SEA | COASTAL STATE | COASTAL STATE | COASTAL STATE |
| CONTINENTAL SHELF | COASTAL STATE | COASTAL STATE | COASTAL STATE |
| EEZ | COASTAL STATE | COASTAL STATE | COASTAL STATE |
| HIGH SEAS | <ol style="list-style-type: none"> 1. ISA FOR APPLIED USES 2. FREE FOR PEACEFUL USES | “FLAG STATE” | “FLAG STATE” |

AIS: Impact on Maritime Zones

▶ Can affect drawing of Baselines

- Low Tide Elevations
- Permanent Harbor Works
- Land Preservation Techniques
- Atoll Islands and Islands with Fringing Reefs

AIS: Regulated Activity

- ▶ AIS used for exploration and exploitation of natural resources
- ▶ Marine Pollution (Operational, Accidental & Decommissioning)
- ▶ AIS Safety & Security

Possible Practice Problems and Legal Issues

- ▶ Abuse of Legal Framework
 - Land Expansion
 - Rock Status Upgrade Efforts
- ▶ Insufficiency of Legal Framework
 - Exploration & Exploitation use only!
- ▶ Lack of Appropriate Legal Framework
 - Cannot deal with complex / hybrid AIS uses (e.g. human habitats)
 - Vanishing States

Regime Suggestions and Perspectives

Conclusions – Suggestions (1)

- ▶ *Hardcore* adaptation is the prevailing option of states against sea level rise despite being costly and of ambiguous results
- ▶ Adaptation of *institutions* and *laws* must be incorporated in a global adaptation strategy for the post-Kyoto era. Need identified by prominent scholars (Carron, Soons, Kwiatkowska) as part of the sea level rise problem
- ▶ The *freezing* of baselines can be regarded as an option, but though effective and problem-solving, it cannot always be enough or appropriate
- ▶ AIS could serve as solutions in situations that loss of land is of critical importance for the coastal state

Conclusions – Suggestions (2)

- ▶ Today's A.I.S. legal framework, serving mainly exploration and exploitation purposes, must be widened and reinforced, to provide safe grounds for other uses, to counter both sea level rise and natural phenomena
- ▶ Such provisions could deal with a potential role of AIS as “safeguards” or as human habitats, before the creation of de facto conditions by state practice
- ▶ AIS of critical value for the preservation of a state should be regarded as integral part of that state
- ▶ It is also essential to incorporate the rights of the people of a possible submerged state (economic rights, maritime rights or habitat) to a legal framework for AIS

Thank you very much for your
attention