







Gliders for Research, Ocean Observation & Management

Legal Aspects of Glider Operations

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Legal Aspects of Glider Operations

- As any other ocean activity, glider operations must be analyzed vis-à-vis their compatibility with the international law of the sea
- As no treaty has been concluded that is specifically dedicated to the operation of gliders, the legal assessment ought to be done on the basis of the 1982 UN Convention on the Law of the Sea (UNCLOS) and customary international law
- This issue has been comprehensively addressed in the framework of the GROOM project.





Precedents

- Not a completely new issue!
 - Argo floats:
 - Resolution XX-6 of the IOC Assembly regarding the deployment of profiling floats in the high seas within the framework of the Argo programme
 - 2008 Guidelines for the legal regulation of Argo Profiling Float Deployments on the High Seas (Resolution EC-XLI.4)
 - Notification regime applicable upon request



Precedents

ODAS Convention:

 1993 Draft Convention on the Legal Status of Ocean Data Acquisition Systems, Aids and Devices (not in force, second revision)

- Duty to cooperate with coastal State (inter alia, right to participate in research, access to data and samples)
- Deployment only in accordance with international law



Legal Aspects of Glider Operations

- Central questions:
 - How are glider activities to be classified under the international law of the sea?
 - Is it marine scientific research (MSR), deployment of ocean analysis and forecasting systems (aka operational oceanography), hydrographic surveying or something else? And does this matter?





Legal Aspects of Glider Operations

- Yes, legal classification matters!
 - Under <u>what conditions</u> and <u>where</u> may gliders be lawfully operated?
 - Is <u>consent</u> of other States necessary?
- Not all of the aforementioned categories are expressly mentioned in the UNCLOS \rightarrow matter of interpretation!





Legal Classification (1)

- All aforementioned categories have the <u>collection of data</u> in common, but they differ with regard to the <u>intent</u> of the respective operators
 - data collection for the purpose of <u>MSR</u> is conducted in order to enhance knowledge on the marine environment
 - objective of data collection for the purpose of <u>hydrographic surveying</u> ought to be seen in the production of maritime charts that serve to enhance safety at sea
 - Ocean analysis and forecasting systems (aka operational oceanography) are operated for the purpose of monitoring and forecasting



Legal Classification (2)

- According to the prevailing view in legal doctrine, glider operations conducted for sustained observations can most likely be ascribed to the category of operational oceanography (but this depends on the specific objective of deployment!)
- However, a strong tendency amongst States exists to apply <u>the MSR regime</u> also to the operation of <u>ocean</u> <u>analysis and forecasting systems</u> (although they do not constitute MSR sensu stricto!)
 - → Application of the stricter MSR criteria helps to avoid the risk of future disputes resulting from glider deployment





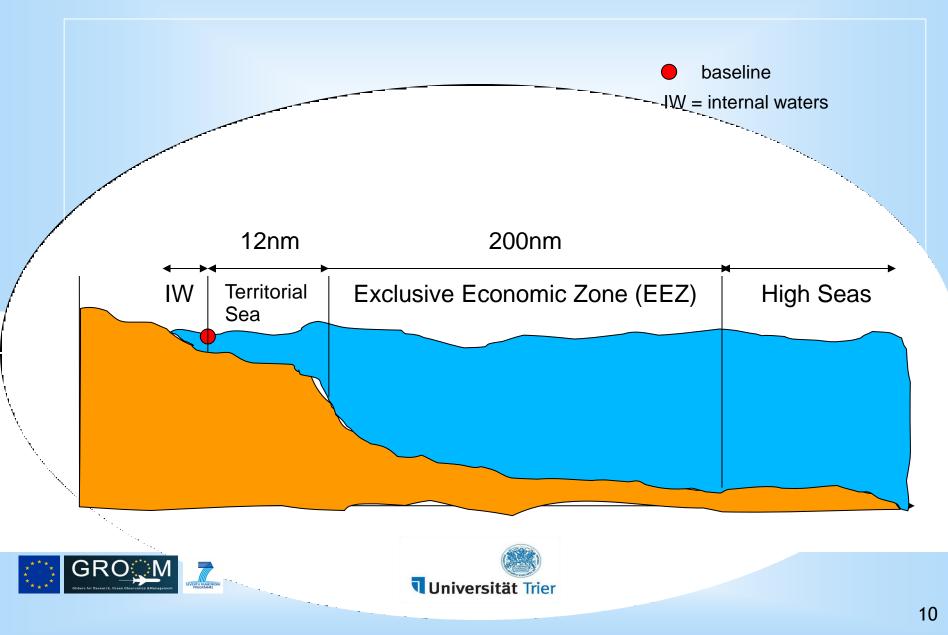
Legal Classification (3)

- Are gliders ships (in terms of law)?
 - For the purpose of UNCLOS, a ship is a self-propelled device capable of being used for maritime navigation and as a means of transportation on water of goods and/or people
 - Measured against this definition, gliders are not ships, as they are (1) not meant to be used as means of transportation (carrying its own sensors etc. does not suffice) and (2) are not navigated in real-time
- → gliders are <u>scientific research equipment</u> in terms of Articles
 258 UNCLOS





Maritime Zones



Sovereignty/Jurisdiction in Maritime Zones

- UNCLOS is based on a zonal approach:
 - Internal waters (full sovereignty)
 - Territorial Sea (sovereignty subject to the right of innocent passage), up to 12 nm measured from baselines
 - EEZ (no sovereignty, but only limited sovereign rights and jurisdiction), up to 200 nm measured from the baselines
 - High Seas (only flag State jurisdiction), seaward the EEZ
 - \rightarrow Coastal States' jurisdiction decreases with growing distance from the coast





Consequences

Maritime Zone	Extent of Jurisdiction of Coastal State	Coastal State Consent?
internal waters	full sovereignty	express consent needed
territorial sea	sovereignty	express consent needed
Exclusive Economic Zone (EEZ)	jurisdiction of coastal States concerning marine scientific research (MSR) no jurisdiction of coastal States concerning	consent to MSR (→ after 6 months UNCLOS implies coastal State consent) no consent of coastal State for operational
	operational oceanography	oceanography needed
High Seas	no jurisdiction of coastal States	no coastal State consent is needed
	Universität Trier	

Consent Regime (1)

 Regime of MSR is designed in a way that the researching State can usually not lawfully undertake MSR activities within maritime zones over which another coastal State exercises sovereignty, or jurisdiction respectively, without the prior consent of that State.

 However, if a researching State seeks to conduct a MSR project in the EEZ of a foreign coastal State, the <u>coastal</u> <u>State is, in normal circumstances and subject to the special</u> <u>rule contained in Article 246 (5) UNCLOS, obliged to grant</u> <u>its consent</u> to that project





Consent Regime (2)

- Note that up to now gliders have been deployed mainly in the territorial sea of "owner States" in accordance with domestic law, or on the high seas respectively
- Note also that if gliders were deployed in foreign maritime zones, this was always done in the framework of international collaboration with a scientist of the concerned State, and in accordance with the legal requirements of the coastal State





Consent Regime (3)

 According to Articles 248 and 250 UNCLOS, the State intending to undertake MSR within the maritime zones of a foreign coastal State has to ask for its consent <u>six months in</u> <u>advance</u> of the expected starting date of the project, and it must communicate the application to the coastal State via official channels.

 notification of six months in advance does not seem to sufficiently take into account that <u>sustained</u> <u>observations</u> (broader scope!) need a more flexible approach





Outlook

- States are free, though, to agree on a <u>short-term notification</u> regime following the model of the Argo float guidelines!
- Such a regime could contain an international commitment to make glider activities public and transparent.
- JCOMM as appropriate forum



• If accepted by JCOMM, the Glider Steering Team (GST) and Glider Data Management Team (GDMT) could set up a system to monitor the glider network (planning, real time activities, status against objectives), thereby contributing to the development of a governance regime such as the one in place for Argo floats.













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Thank you for your attention!