INTERNATIONAL LEGAL FRAMEWORK TO MANAGE MARINE PLASTICS IN SOUTHEAST ASIA: Status and prospects

7 December 2018
ICPME 2018, NUS, Singapore
Youna Lyons, Centre for International Law, NUS (younalyons@nus.edu.sg)
Outline

Background - Public International Law 101
Part 1 – What is an ocean law and policy approach to this issue?
Part 2 – The international legal framework
Part 3 – Applicable international law in Southeast Asia
Part 4 – Challenges
Part 5 – On-going initiatives and what to look out for?
Challenges
Conclusion
Concerns obligation of States (not private entities)

States are all sovereign and benefit from immunities except if waived

Hierarchy of rules – Treaties are generally considered independently from one another but United Nations Convention on the Law of the Sea (UNCLOS) has preeminence over other treaties that deal with the protection of the marine environment

Hard Law is binding: e.g. UNCLOS, Convention on Biological Diversity, etc.

Breach of a treaty obligation = State responsibility

However,

Assessment of existence of a breach requires careful consideration as it depends on the type and content of the obligation and whether it is an obligation of result or not
Soft Law is not directly binding: e.g. resolution of United Nations General Assembly or United Nations Environmental Assembly, resolutions of Conference of Parties, Declarations from intergovernmental meetings, etc

However,

- It demonstrates a political consensus
- It can become binding if it is referred to as such in a binding instrument
- It can inform the content of a binding obligation

By contrast,

- Reports established by experts groups nominated by intergovernmental panels but not endorsed by intergovernmental meeting is not soft law
- IUCN red list for example is not soft law although it is a credible scientific source with generally more legitimacy than a single peer-reviewed article
Part 1 – An Ocean Law and Policy Approach

Questions to identify the relevant set of rules

- Regulation of disposal at source
  - Land-based or Sea-based?
  - If sea-based, which activity: Fisheries, Shipping operational discharge, Deep seabed mining, offshore platforms, etc?
- Transboundary movement & specific waste disposal
  - Which type of Waste?
  - Potential impact on a sensitive areas
- Regulation of clean-up activity
  - Internal water
    - Within 12NM
    - Within EEZ
  - On the Continental Shelf
  - Beyond National Jurisdiction
  - What interference?
Part 1 – An Ocean Law and Policy Approach

Possible stages for regulation

- Production - e.g. toxicity with study of toxicity to the marine environment and recycling environmental impact and possible ban if certain criteria are met
- Use or prohibition in certain products
- Distribution / Trade
- Waste / disposal at sea
- Transport at Sea
- Clean-up / removal from the seabed/watercolumn
- Control / remediation if impact on sensitive marine areas / threatened species
Part 2 – The International Legal Framework

- Numerous soft law declarations on marine plastic at global level
- Many treaties include provisions applicable to pollution from plastic without specific reference to plastic
- Relevant globally binding Agreements:

**UN CONVENTION ON THE LAW OF THE SEA**

18 international instruments
36 regional instruments
Overview of relevant global and regional instruments

LAND

- UN Convention on the Law of the Sea (168)
- UN Watercourses Convention (36)

OCEAN

- Within National Jurisdiction
  - MARPOL Annex V (152)
  - London Convention (87)
  - London Protocol (48)
- Beyond National Jurisdiction
  - Global Program of Action (*)
  - Regional Seas Conventions
  - Regional Seas LBS/A Protocols
  - Marine Litter Action Plans (*)

Biodiversity & Species

- Convention on Biological Diversity (196)
- Convention on Migratory Species (124)

- UN Fish Stocks Agreement (82)
- FAO Code of Conduct for Responsible Fisheries (*)

Chemicals & Waste

- Stockholm Convention on Persistent Organic Pollutants (181)
- Basel Convention – hazardous waste (186)
- Bamako Convention (17)
- Waigani Convention (13)

- SAICM – Strategic Approach to International Chemicals Management (*)

Extract from UNEP/EA3/INF5 – Courtesy of Karen Raubenheimer, ANCORS, University of Wollongong
Regional instruments

Courtesy of Karen Raubenheimer, ANCORS, University of Wollongong
A global problem with regional hotspots

Global map with each country shaded according to the estimated mass of mismanaged plastic waste [millions of metric tons (MT)] generated in 2010 by populations living within 50 km of the coast. 192 countries considered. From Jenna R. Jambeck et al. Science 2015; 347:768-771

Courtesy of David Santillo - Greenpeace
Many relevant treaties have been adopted in Southeast Asia

Especially the UNITED NATIONS CONVENTION ON THE LAW OF THE SEA (UNCLOS or LOS),

UNCLOS is comprehensive: it seeks to regulate all the uses of the sea and pollution of the marine environment and contains substantive provisions.

UNCLOS is near universal: 168 parties and many of its provisions are commonly referred to as customary international (whether they were before or have become since).

UNCLOS uses intertemporal language and mechanisms to operate like a framework with sub-regimes.
Pollution of the marine environment means...

...the introduction by man, directly or indirectly, of substances or energy into the marine environment (...) which result or is likely to result in such deleterious effects as

- harm to living resources and marine life,
- hazards to human health,
- hindrance to marine activities, including fishing and other legitimate uses of the sea,
- impairment of quality for use of sea water and
- reduction of amenities (art.1(4))
UNCLOS Key provisions

- Obligation to protect and preserve the marine environment

- States must take all measures that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities (Art 194(1))

- States shall take all measures necessary to ensure that activities under their jurisdiction and control are so conducted as not to cause pollution to other States and their environment (Art 194(2))

- It is an obligation to act with due diligence, ‘to deploy adequate means to exercise best possible efforts, to do the utmost to obtain this result’
The obligation of due diligence is a ‘variable concept’ that ‘may change over time as measures considered sufficiently diligent at a certain moment may become not diligent enough in light, for instance, of new scientific or technological knowledge’

It includes an obligation to adopt all the appropriate and necessary domestic measures as well as

As well as a ‘certain level of vigilance in their enforcement and the exercise of administrative control’ to ensure compliance by nationals and vessels flying its flag
States shall adopt laws and regulations to prevent, reduce and control pollution from:

- land-based sources (Art 207)
- seabed activities (Art 208)
- activities in the Area (Art 209)
- pollution from dumping (Art 210)
- pollution from vessels (Art 211)
- pollution from or through the atmosphere (Art 212)
States shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment from land-based sources, including rivers, estuaries, pipelines and outfall structures, taking into account internationally agreed rules, standards and recommended practices and procedures.

These Laws, regulations, measures rules, standards and recommended practices and procedures shall include those designed to minimise to the fullest extent possible, the release of toxic, harmful or noxious substances, especially those which are persistent in the marine environment.

(Art 207)
UNCLOS Key provisions – Cont’d

- These measures taken to protect and preserve the marine environment shall include

Those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life
### Part 3 – Applicable International Law in Southeast Asia

<table>
<thead>
<tr>
<th>Common Family Name</th>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Appendix I</th>
<th>Appendix II</th>
<th>Agreement or MoU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whale</td>
<td>Sei Whale</td>
<td><em>Balaenoptera borealis</em></td>
<td>X</td>
<td>X</td>
<td>ACCOBAMS and Pacific Islands Cetaceans</td>
</tr>
<tr>
<td>Whale</td>
<td>Blue Whale</td>
<td><em>Balaenoptera musculus</em></td>
<td>X</td>
<td>-</td>
<td>ACCOBAMS and Pacific Islands Cetaceans</td>
</tr>
<tr>
<td>Whale</td>
<td>Fin Whale</td>
<td><em>Balaenoptera physalus</em></td>
<td>X</td>
<td>X</td>
<td>ACCOBAMS and Pacific Islands Cetaceans</td>
</tr>
<tr>
<td>Whale</td>
<td>Humpback Whale</td>
<td><em>Megaptera novaeangliae</em></td>
<td>X</td>
<td>-</td>
<td>ACCOBAMS and Pacific Islands Cetaceans</td>
</tr>
<tr>
<td>Whale</td>
<td>Sperm Whale</td>
<td><em>Physeter macrocephalus</em></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Dolphins</td>
<td>Irrawaddy Dolphin</td>
<td><em>Orcaella brevirostris</em></td>
<td>X</td>
<td>X</td>
<td>Pacific Islands Cetaceans</td>
</tr>
<tr>
<td>Sea turtles</td>
<td>Green turtle</td>
<td><em>Chelonia mydas</em></td>
<td>X</td>
<td>X</td>
<td>IOSEA Marine Turtles and Atlantic Turtles</td>
</tr>
<tr>
<td>Sea turtles</td>
<td>Loggerhead turtle</td>
<td><em>Caretta caretta</em></td>
<td>X</td>
<td>X</td>
<td>IOSEA Marine Turtles and Atlantic Turtles</td>
</tr>
<tr>
<td>Sea turtles</td>
<td>Hawksbill turtle</td>
<td><em>Eretmochelys imbricata</em></td>
<td>X</td>
<td>X</td>
<td>IOSEA Marine Turtles and Atlantic Turtles</td>
</tr>
<tr>
<td>Sea turtles</td>
<td>Olive Ridley turtle</td>
<td><em>Dermochelys olivacea</em></td>
<td>X</td>
<td>X</td>
<td>IOSEA Marine Turtles and Atlantic Turtles</td>
</tr>
<tr>
<td>Sea turtles</td>
<td>Leatherback turtle</td>
<td><em>Dermochelys coriacea</em></td>
<td>X</td>
<td>X</td>
<td>IOSEA Marine Turtles and Atlantic Turtles</td>
</tr>
<tr>
<td>Shark</td>
<td>Great white shark</td>
<td><em>Carcharodon carcharias</em></td>
<td>X</td>
<td>X</td>
<td>Shark MOU (2010)</td>
</tr>
<tr>
<td>Shark</td>
<td>Basking shark</td>
<td><em>Cetorhinus maximus</em></td>
<td>X</td>
<td>X</td>
<td>Shark MOU (2010)</td>
</tr>
<tr>
<td>Manta ray</td>
<td>Narrow sawfish</td>
<td><em>Anoxypristis cuspidata</em></td>
<td>X</td>
<td>X</td>
<td>Sharks (2016)</td>
</tr>
<tr>
<td>Manta ray</td>
<td>Dwarf sawfish</td>
<td><em>Pristis clavata</em></td>
<td>X</td>
<td>X</td>
<td>Sharks (2016)</td>
</tr>
<tr>
<td>Manta ray</td>
<td>Green sawfish</td>
<td><em>Pristis zijsron</em></td>
<td>X</td>
<td>X</td>
<td>Sharks (2016)</td>
</tr>
<tr>
<td>Manta ray</td>
<td>Largetooth sawfish</td>
<td><em>Pristis pristis</em></td>
<td>X</td>
<td>X</td>
<td>Sharks (2016)</td>
</tr>
<tr>
<td>Manta ray</td>
<td>Reef manta ray</td>
<td><em>Manta alfredi</em></td>
<td>X</td>
<td>X</td>
<td>Sharks (2016)</td>
</tr>
<tr>
<td>Manta ray</td>
<td>Giant manta ray</td>
<td><em>Manta birostris</em></td>
<td>X</td>
<td>X</td>
<td>Sharks (2016)</td>
</tr>
<tr>
<td>Manta ray</td>
<td>Japanese devil ray</td>
<td><em>Mobula japonica</em></td>
<td>X</td>
<td>X</td>
<td>Sharks (2016)</td>
</tr>
<tr>
<td>Manta ray</td>
<td>Bentfin devil ray</td>
<td><em>Mobula thurstoni</em></td>
<td>X</td>
<td>X</td>
<td>Sharks (2016)</td>
</tr>
<tr>
<td>Manta ray</td>
<td>Sickle fin devil ray</td>
<td><em>Mobula tarapacana</em></td>
<td>X</td>
<td>X</td>
<td>Sharks (2016)</td>
</tr>
<tr>
<td>Manta ray</td>
<td>Longhorned pigmy devil ray</td>
<td><em>Mobula eregoolootenkee</em></td>
<td>X</td>
<td>X</td>
<td>Sharks (2016)</td>
</tr>
<tr>
<td>Manta ray</td>
<td>Shortfin devil ray</td>
<td><em>Mobula kuhlii</em></td>
<td>X</td>
<td>X</td>
<td>Sharks (2016)</td>
</tr>
</tbody>
</table>

**Extract of CMS**

- Does not include Appendix II species (55 CMS-listed species have a geographic range which includes the SCS)
- Nor CITES listed-species
- Other ecosystems, species and their habitats that may qualify as under UNCLOS article 194(5) although they are not listed in an international instrument
- All items on IUCN Red-list may not qualify (not international law)
Monitoring of the Risks or Effects of Pollution (Art 204)

1. States shall (...) observe, measure, evaluate and analyse, by recognized scientific methods, the risks or effects of pollution of the marine environment.

2. In particular, States shall keep under surveillance the effects of any activities which they permit or in which they engage in order to determine whether these activities are likely to pollute the marine environment.

Also an obligation to publish reports of the results and to assess potential effect of planned activities under States’ jurisdiction or control.
• Taken together, UNCLOS provisions can be seen as mandating States
  - to monitor all activities that may cause substantial pollution of or significant and harmful changes to the marine environment,
  - to monitor the risks or effects of pollution
  - including with respect to sensitive habitats and threatened or endangered species
  - to legislate and take measures to minimize the release of toxic substances especially if they are persistent

• Of note also is the Precautionary approach according to which scientific uncertainty cannot justify not taking action
Part 4 – On-going initiatives and what to look out for

- Several on-going working groups and research projects under the mandate of international organisations that deal with different aspects of the protection of the marine environment
  - IMO: MEPC for plastic pollution from commercial shipping and LC/LP for dumping of waste at sea
    - LC/LP is particularly dynamic and quick to developing sampling and monitoring guidelines
  - GESAMP working groups and reports
  - UNEA / UN Environment
  - Regional Seas
Option 2 – **Revise & strengthen**

**Strengthen & harmonise:**
- International, regional legal instruments
- Add measures specific to marine litter

**Voluntary international agreement:**
- Voluntary national reduction targets
- Industry commitments
- Reporting & monitoring guidelines

---

Option 3 – **New global architecture**

**Phase I: Voluntary measures of Option 2**
- Self-determined national reduction targets
- National inventories + timeline to review, improve
- Trade in non-hazardous plastic waste

**Phase II: Binding measures**
- Global standards (technical, industry)
- Compliance measures (monitoring & reporting)
- Legal basis: funding; information sharing; liability & compensation

---

1) Expand mandate of existing global body.
2) Consider countries in need of assistance.
3) Review.

**Courtesy of Karen Raubenheimer, ANCORS, University of Wollongong**
Challenges

- Ubiquity of plastic makes it a cross-sectoral issue (vs. CFC, Mercury or oil spill from shipping)
- There already is a complex legal framework to work with
- Most parts of governments are concerned but few states have a functioning integrated ocean management framework to tackle it
- Effect of a lack of a shared approach at domestic level is magnified at regional and global level
Conclusion

- Development of an understanding of the issue is critical: specific impact on different components of the marine environment, human health, other activities at sea and timeframe
- Frame research questions so that they also answer law and policy questions at global, regional or local levels
- Prefer methodologies proposed by government bodies – Keep under scrutiny resolutions of intergovernmental bodies with public international lawyer to guide interpretation
- Consider papers with large authorship – regional can also be convincing
Thank you!

Questions?

Youna Lyons
younalyons@nus.edu.sg