Chapter 6

Conclusion

_E la nave va_

Ships have always required ballast, initially, in the form of rocks, sand, and other heavy materials, for the safe operation of vessels. Since the 1880s, however, ships increasingly used water for ballast to avoid the time-consuming task of loading solid materials and to reduce the danger of vessel instability resulting from the shifting of solid ballast during a voyage. This seemed an ideal solution until the international community realized the dangerous effects on the marine environment of the transfer from one ecosystem to another of alien invasive species contained in ballast water (marine, fresh or brackish) and its associated sediment. Such discharges into the waters of port States may cause irreversible damage. The uptake and discharge of ballast water is potentially the most significant form of introducing invasive species in port and States’ jurisdictions worldwide. Bioinvasions have been disastrous in many locations. They continue to grow at an alarming pace, causing damage to the marine environment as well as human health, biodiversity, fishing and mariculture. Actually, this is not a new phenomenon. In 1903, the first reference to the problem was presented by Ostenfeld following the occurrence of the flowering of the _Odontella sinensis_ algae in the North Sea. However, it was not until 70 years later that a sample of a ship’s ballast water was studied.

Scientists acknowledge that the oceans’ natural communities are being disrupted by bioinvasions that are fast becoming one of the greatest threats to the Earth’s biological diversity. Vessels are referred as a ‘floating ecological islands’, carrying species-rich communities from one coast or sea to another. Harmful aquatic organisms and pathogens are ‘free dangerous dancers’ that do not respect geographical and jurisdictional boundaries in the oceans. As a result, multilateral agreements based on standardized technical approaches are required to respond to global bio-pollution. Eradication of established alien invasive species is not a realistic option. There are just a few examples of successful eradication actions. Effective treatment methods for the control and management of ships ballast water to prevent or reduce the risks of ship-mediated introductions are required. This global problem underlies major ecological and economic negative impacts in numerous ecosystems.
From a holistic perspective, this book provides a thorough study of the international legal regime in regard to biopollution of the marine environment through ships’ ballast water and associated sediments. It gives the reader a broad overview of the evolution of the rules on this issue. The legal framework on ballast water comprises a complex of interconnected provisions addressed in the IMO resolutions on ballast water, technical rules and standards, national legislation, customary international law, and international treaties, in particular, the 2004 BWM Convention, which is not yet in force.

Since the 1980s, alien invasive species have been part of the international agenda. Accordingly, the international law on ballast water has evolved from a customary to a conventional regime focused on the general obligation of States to prevent and control pollution, in particular biopollution, of the marine environment. This obligation is linked with the no harm and preventive principles and is further underlined by the precautionary principle as defined by current international environment law and adopted in the context of IMO practices, procedures and resolutions. The preventive and/or precautionary approaches are the central pillars of the legal structure of this corpus juris.

Initially, the issue of ballast water biopollution was related to health security under sanitary law, in particular, the 1969 International Health Regulations (amended in 2005). Almost simultaneously, in the 1970s, the codification of the international law on ballast water emerged under the IMO in the form of soft law initiatives. Initially, health guidelines evolved into broader guidelines developed under the general legal framework addressed in anti-pollution conventions, namely MARPOL 73/78, the law of the sea regulatory regime adopted by the UNCLOS (1982), and the 1992 biodiversity regime.

A review of the legal nature of the IMO guidelines on the control and management of ship’s ballast water opens the Pandora’s Box on this issue. The mechanism to transform non-binding instruments, i.e. soft law, into mandatory rules with the features of hard law, is extremely complex if not addressed through treaty or customary law. It is prudent to recall the sovereign State’s real intent in participating in drafting an international instrument. It is assumed that States make a conscious decision to draft either a text that will be legally binding through international treaty, and considered law, or an instrument that is not legally binding, i.e. through resolutions adopting guidelines on specific technical issues. Given the lack of distinction in the terminology adopted in the international instruments drafted under the aegis of IMO, the complexity in distinguishing soft law from hard law rules is evident. The terms ‘regulations’, ‘guidelines’ and ‘codes’ can refer to either purpose. Thus analyzing the content of an IMO instrument is pivotal to verifying whether it draws on the general principles of international law and/or rules long established in customary and treaty law. Accordingly, irrespective of the juridical classification of such an international instrument, it may provide binding rules.

Generally, the IMO resolutions on ballast water are considered recommendatory. However, despite this limited juridical effect, they have a fundamental and