The Precautionary Principle/Approach and the United Nations Convention on the Law of the Sea

Management of Living Resources

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10.1 INTRODUCTION

The United Nations Convention on the Law of the Sea (UNCLOS or Convention)¹ is an international treaty among an excessive number of subjects of international law. These 168 subjects have committed themselves to adhere to international law established in the (almost) comprehensive system codified in the 320 articles and nine annexes.² The Convention strives to provide answers on 'all issues relating to the law of the sea'.³ Hence, it is more than an ordinary convention – it is 'an international state of mind and a commitment to the rule of law'.⁴ Accordingly, one may argue, the Convention reproduces a commitment 'to uphold legal order and stability, to provide equality of application of the law, . . . and to settle disputes before an independent legal body'.⁵

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- ¹ 1833 UNTS 3.
- ² Cf. Tanaka, Y., The International Law of the Sea, 3rd ed. (Cambridge: Cambridge University Press, 2019), 38; von Vitzthum, W., 'Begriff, Geschichte und Rechtsquellen des Seerechts', in W. von Vitzthum (ed.), Handbuch des Seerechts (Munich: C.H. Beck, 2006), 46.
- ³ Preamble (para. 1) UNCLOS.
- Galdorisi, G., "The United States Freedom of Navigation Program: A Bridge for International Compliance with the 1982 United Nations Convention on the Law of the Sea?' (1996) 27 Ocean Development & International Law, 399–408, 399; cf. Oxman, B. H., "The Rule of Law and the United Nations Convention on the Law of the Sea' (1996) 7 European Journal of International Law, 353–71, at 354f; Moore, J. N., "The Rule of Law in the Oceans', in M. H. Nordquist and J. N. Moore (eds.), Security Flashpoints: Oil, Islands, Sea Access and Military Confrontation (Leiden: Martinus Nijhoff Publishers, 1998), 473.
- For this definition of the 'international rule of law' see: McCorquodale, R., 'Defining the International Rule of Law: Defying Gravity?' (2016) 65 International and Comparative Law Quarterly, 277–304 at 303f.

More than two-thirds of the Earth is covered by seas and oceans⁶ with about 90 per cent of the living biomass.⁷ This living biomass, in particular fish, is of importance as a source of food (e.g., as a protein source) and raw materials.⁸ As set out in the preamble of the UNCLOS, one of the Convention's objectives intends the 'equitable and efficient utilization' of the seas and oceans and 'conservation of their living resources'.⁹ Nonetheless, stocks fished at a 'biologically unsustainable level' increased from 10 per cent in 1974 to almost 35 per cent in 2017.¹⁰ Thus, from a bird's eye view, it seems that the Convention's impact is rather lean in respect of living resources.¹¹

One way to counter such developments is the application of the precautionary principle/approach. Whilst the principle/approach is no stranger to, for example, the 1995 United Nations (UN) Fish Stocks Agreement, the 1982 UNCLOS does not demand application of the precautionary principle/approach *expressis verbis*. Concluded after the UN Conference on the Human Environment (1972), but long before the UN Conference on Environment and Development (1992), the specific requirements of the precautionary principle/approach were not subject to a general scientific debate during the negotiations for the UNCLOS. 13

More than 20 years ago, in the Southern Bluefin Tuna cases (SBT cases), the International Tribunal for the Law of the Sea (ITLOS) laid the cornerstone with respect to the precautionary principle/approach. ¹⁴ In the SBT cases between the States of Australia, New Zealand and Japan, both the ITLOS and an *ad hoc* arbitral

- Moore, J. N., "The United Nations Convention on the Law of the Sea: One of the Greatest Achievements in the International Rule of Law", in M. H. Nordquist, J. N. Moore and R. Long (eds.), Legal Order in the World's Oceans (Leiden: Martinus Nijhoff Publishers, 2018), 8; Oxman (n 4) 359.
- Beyerlin, U. and Marauhn, T., International Environmental Law (Oxford: Hart Publisher, 2011), 133.
- 8 Cf. Matz-Lück, N., 'Meeresschutz', in A. Proelß (ed.), Internationales Umweltrecht (Berlin: De Gruyter, 2017), paras. 2, 23, 114; Beyerlin and Marauhn (n 7) 133.
- ⁹ Preamble (para. 4) UNCLOS.
- ¹⁰ FAO, The State of World Fisheries and Aquaculture 2020: Sustainability in Action (Rome: Food and Agriculture Organization, 2020), 47.
- ¹¹ Cf. Beyerlin and Marauhn (n 7) 140.
- Arts. 5(c), 6 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (FSA), 2167 UNTS 3.
- Hassan, D. and Karim, M. S., 'Ocean Governance and Marine Environmental Conservation: Concepts, Principles and Institutions', in D. Hassan and M. S. Karim (eds.), International Marine Environmental Law and Policy (London: Routledge, 2018), 24; cf. Beyerlin, U., 'New Developments in the Protection of the Marine Environment: Potential Effects of the Rio Process' (1995) 55 Zeitschrift für ausländisches öffentliches Recht und Völkerrecht, 554; Proelß, A., Meeresschutz im Völker- und Europarecht: Das Beispiel des Nordostatlantiks (Berlin: Duncker & Humblot, 2004), 83.
- Wolfrum, R. (2007), 'Statement on Agenda item 77 (A) at the Plenary of the Sixty-second Session of the United Nations General Assembly, New York, 10 December 2007', available at: www.itlos.org/fileadmin/itlos/documents/statements_of_president/wolfrum/ga_101207_eng.pdf.

tribunal (SBT Tribunal) (constituted in accordance with Annex VII of the UNCLOS) were confronted with Australia's and New Zealand's claims regarding the 'precautionary principle'.¹⁵ Due to both tribunals' lack of jurisdiction with respect to the merits, they were unable to discuss the management of Southern Bluefin Tuna in detail. However, the ITLOS, whilst prescribing provisional measures, hinted broadly at the requirement of the precautionary application under the UNCLOS. It prescribed that the parties should act with 'prudence and caution', which may be seen as 'equivalent to [act] by applying a precautionary approach'.¹⁶

This chapter therefore undertakes an expedition through the UNCLOS, analysing its relationship with the precautionary principle/approach and addressing the two decades after the SBT cases and respective developments. This journey seeks to answer one question only:

Does the UNCLOS demand application of the precautionary principle/approach with respect to management of living resources *vel non*?

In answering this question, this chapter will briefly turn to the general notions of the precautionary principle/approach and management of living resources (2). Building on this, the most relevant provisions of the Convention and the corresponding jurisprudence are analysed (3).

10.2 PRECAUTIONARY PRINCIPLE/APPROACH, MANAGEMENT OF LIVING RESOURCES

10.2.1 The Notion of the 'Precautionary Principle/Approach'

Countless books, articles and judgments of national and international courts address the precautionary principle/approach. As law serves to set clear expectations regarding rights and obligations, ¹⁷ it is neither the intention nor a requirement to reproduce these colossal findings – it will suffice to identify the core elements of the principle/approach as a benchmark for the analysis of the UNCLOS in this chapter.

¹⁵ Cf. Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan), Request for the Prescription of Provisional Measures Submitted by Australia, available at: www.itlos.org/cases/list-of-cases/case-no-3-4/, para. 8; Southern Bluefin Tuna, Request for the Prescription of Provisional Measures Submitted by New Zealand, available at: www.itlos.org/cases/list-of-cases/case-no-3-4/, para. 8.

Golitsyn, V. (2014), 'Statement on Agenda Item 74 (A) "Oceans and the Law of the Sea", New York, 9 December 2014', available at: www.itlos.org/fileadmin/itlos/documents/statements_of_president/Golitsyn/Statement_GA_09122014_FINAL_EN.pdf; different view: 'the Tribunal [in the SBT Order] did not speak of the precautionary principle/approach' MOX Plant (Ireland v. United Kingdom), Provisional Measures, Separate Opinion of Judge Wolfrum, Order of 3 December 2001, ITLOS Reports 2001, 95, 133f; cf. Zander, J., The Application of the Precautionary Principle in Practice: Comparative Dimensions (Cambridge: Cambridge University Press, 2010), 39.

¹⁷ Cf. Moore, 'One of the Greatest Achievements' (n 6) 9.

The scope of the precautionary principle/approach is broad, and no universal definition exists.¹⁸ The precautionary principle and precautionary approach are often used interchangeably¹⁹ and even if not, there is no clear-cut differentiation.²⁰ As no significant legal relevance to the distinction may be identified,²¹ hereinafter the term 'precautionary principle' is used, including the idea of an approach.²²

The so-called Rio Declaration's Principle 15 and its underpinning definition can be regarded as accepted by a broad spectrum, ²³ stating '[w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation'. ²⁴ In light of many similar international instruments, ²⁵ three elements may be deduced: a threat of environmental harm, scientific uncertainty and action despite uncertainty. ²⁶ Accordingly, a threat of environmental harm bundled with scientific uncertainty 'triggers' precautionary actions. ²⁷

- For a detailed analysis see: Sandin, P., 'Dimensions of the Precautionary Principle' (1999) 5 Human and Ecological Risk Assessment: An International Journal, 889–907; Wiener, J. B., 'Precaution', in D. Bodansky, J. Brunnée and E. Hey (eds.), The Oxford Handbook of International Environmental Law (Oxford: Oxford University Press, 2007), 602–7.
- 19 Cf. Schröder, M., 'Precautionary Approach/Principle', in R. Wolfrum (ed.), Max Planck Encyclopedia of Public International Law (Oxford: Oxford University Press, 2014), para. 3.
- Peel, J., 'Precaution a Matter of Principle, Approach or Process?' (2004) 5 Melbourne Journal of International Law, 483–501, 490; Schiffman, H. S., 'The Precautionary Approach at the International Tribunal for the Law of the Sea: The Southern Bluefin Tuna Cases' (2005) 5 International Journal of Global Environmental Issues, 78–95 at 81f.
- ²¹ Proelß, A., 'Prinzipien des internationalen Umweltrechts', in A. Proelß (ed.), Internationales Umweltrecht (n 8), 89; contra: Macdonald, J. M., 'Appreciating the Precautionary Principle as an Ethical Evolution in Ocean Management' (1995) 26 Ocean Development & International Law, 255–86.
- ²² The ITLOS uses the term 'precautionary approach'.
- ²³ Sands, P., Peel, J., Fabra Aguilar, A. and Mackenzie, R., *Principles of International Environmental Law*, 4th ed. (Cambridge: Cambridge University Press, 2018), 230.
- ²⁴ A/CONF.151/26 (1992), The Rio Declaration on Environment and Development.
- E.g., Art. 3(f) Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa, 2101 UNTS 177; Art. 3 United Nations Framework Convention on Climate Change, 1771 UNTS 107; Art. 2 (1)(a) Convention for the Protection of the Marine Environment of the North-East Atlantic, 2354 UNTS 67; Art. 3(2) Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1507 UNTS 166; Art. 6 Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean, 2275 UNTS 43; Art. 5 (2)(a) Convention on the Sustainable Management of Lake Tanganyika, 2338 UNTS 43.
- Trouwborst, A., 'The Precautionary Principle in General International Law: Combating the Babylonian Confusion' (2007) 16 Review of European Community & International Environmental Law, 185–95, 187, 191; for other, yet similar elements, see e.g., Wiener, J. B., 'Precautionary Principle', in L. Krämer and O. Emanuela (eds.), Principles of Environmental Law (Cheltenham: Edward Elgar Publishing, 2018), 179; delineation from the preventive principle see: Zanella, T. V. and Cabral, R. P., 'The Application of the Precautionary Principle in International Law: An Analysis of the Contribution of the International Tribunal for the Law of the Sea' (2017) 14 Veredas do Direito, 229–60 at 233–5.
- ²⁷ Cf. Peel (n 20) 487.

As a side note, the features beyond the Rio Declaration ascribe and stipulate that the principle may be limited to mere authorization/legitimization to take measures²⁸ or go as far as having effects on the burden or standard of proof.²⁹

10.2.2 The Notion of 'Living Resources'

Lacking a definition by the UNCLOS, two dominant views address the question of living resources. The first calls for a broad scope emphasizing 'living' as a differentiation from 'non-living'³⁰ to include all marine living resources, for example, corals and birds.³¹ The second and narrower view relies on resources 'prone to exploitation for economic reasons'.³² The latter view can be considered predominant³³ and, therefore, is adopted in this chapter; thus, primarily fish, cuttlefish, cetaceans, pinnipeds and sirenians comprise living resources.³⁴

10.2.3 The Notion of 'Management'

Despite also being undefined in the UNCLOS, management may reflect 'human intervention in the dynamic processes . . . to maintain a particular desired pattern or series of processes'. ³⁵ To 'manage one or more species of living marine resources' can be considered a management measure. ³⁶

- ²⁸ Wiener (n 26) 177.
- Southern Bluefin Tuna (n 15), Provisional Measures, Separate Opinion of Judge Laing, Order of 27 August 1999, ITLOS Reports 1999, 305, para. 14; Birnie, P. W., Boyle, A. and Redgwell, C., International Law and the Environment, 3 ed. (Oxford: Oxford University Press, 2009), 158; cf. Cançado Trindade, A. A., 'Principle 15 Rio Declaration', in J. E. Vinuales (ed.), The Rio Declaration on Environment and Development: A Commentary (Oxford: Oxford University Press, 2015), 407–9.
- ³⁰ Harrison, J. and Morgera, E., 'Article 61 UNCLOS', in A. Proelß (ed.), United Nations Convention on the Law of the Sea: A Commentary (Munich: C.H. Beck/Hart/Nomos, 2017), para. 2; Beyerlin, U., 'Different Types of Norms in International Environmental Law Policies, Principles, and Rules', in Bodansky, Brunnée and Hey (eds.), The Oxford Handbook of International Environmental Law (n 18), 340.
- ³¹ Sands et al. (n 23) 506.
- ³² Fuchs, J., 'Marine Living Resources, International Protection', in R. Wolfrum (ed.), Max Planck Encyclopedia of Public International Law (n 19), para. 6.
- 33 Cf. Churchill, R., "The UNCLOS Regime for Protection of the Marine Environment Fit for the Twenty-First Century?", in R. G. Rayfuse (ed.), Research Handbook on International Marine Environmental Law (Cheltenham: Edward Elgar Publishing, 2015), 13f. See also Art. 119(b) UNCLOS.
- ³⁴ Rothwell, D. and Stephens, T., *The International Law of the Sea*, 2nd ed. (Oxford: Hart Publishing, 2016), 332; Matz-Lück (n 8), para. 115.
- 35 Holdgate, M. W., 'Conservation in a World Context', in I. F. Spellerberg, F. B. Goldsmith and M. Morris (eds.), The Scientific Management of Temperate Communities for Conservation (Oxford: Blackwell, 1991), 1.
- ³⁶ Art. 1(b) FSA.

'Management' is often used together with 'conservation' but cannot be equated to it.³⁷ The World Conservation Strategy defines the latter as 'the management of human use of the biosphere ...',³⁸ combining both notions. Management has further been defined by, for example, Article 2 of the Geneva Convention on Fishing and Conservation of the Living Resources of the High Seas 1958³⁹ as 'the aggregate of the measures rendering possible the optimum sustainable yield ... to secure a maximum supply of food and other marine products'.

In sum, 'management' should be understood broadly so as to encompass human activities in general, including conservation measures.

10.3 THE PRECAUTIONARY PRINCIPLE IN REGARD TO THE MANAGEMENT OF LIVING RESOURCES 'WITHIN' THE UNCLOS

10.3.1 Part V, Part VII and Article 290(1) UNCLOS

Judge Laing, in his separate opinion in the SBT cases, articulated 'it cannot be denied that [the UNCLOS] adopts a precautionary approach'.⁴⁰ Hereby, the approach will be envisaged in Part V (Exclusive Economic Zone), Part VII (High Seas) and Article 290 (1) UNCLOS.⁴¹

Regarding Article 290(1) UNCLOS, the possibility to prescribe provisional measures 'to prevent serious harm to the marine environment' 'underscores the salience of the [precautionary] approach'.⁴² Judge Treves also stated that 'a precautionary approach seems ... inherent in the very notion of provisional measures'.⁴³ Further, he suggested in the particular SBT cases that the requirement of 'urgency' in Article 290(5) UNCLOS 'is satisfied only in the light of such precautionary approach'.⁴⁴

The question, however, is whether application of the precautionary principle is demanded. This seems not to be the case as courts and tribunals are not obliged to prescribe provisional measures. ⁴⁵ They are, rather, provided with the possibility to do

³⁷ Cf. illustrated by the enumerations in Art. 65 UNCLOS.

³⁸ IUCN (1980), World Conservation Strategy: Living Resource Conservation for Sustainable Development, available at: https://portals.iucn.org/library/efiles/documents/WCS-004.pdf.

³⁹ 559 UNTS 286.

⁴⁰ SBT cases, ITLOS, Provisional Measures, Separate Opinion Laing (n 29), para. 17.

⁴¹ Ibid.

⁴² Ibid.

⁴³ Southern Bluefin Tuna (n 15), Provisional Measures, Separate Opinion of Judge Treves, Order of 27 August 1999, ITLOS Reports 1999, 316, para. 9.

⁴⁴ Ibid., para. 8.

⁴⁵ Treves, T., 'Article 290 UNCLOS', in A. Proelß (ed.), United Nations Convention on the Law of the Sea: A Commentary (n 30), para. 18; for more on the topic see: Tanaka, Y., 'The Impacts of the Tribunal's Jurisprudence on the Development of International Law', in International Tribunal for the Law of the Sea (ed.), The Contribution of the International Tribunal for the Law of the Sea to the Rule of Law: 1996–2016 / La contribution du Tribunal international du droit de la mer à l'état de droit: 1996–2016 (Leiden: Martinus Nijhoff Publishers, 2018), 170–4.

so.⁴⁶ In any event, it seems doubtful whether provisional measures are the appropriate stage for applying the precautionary principle.⁴⁷ Therefore, Article 290 UNCLOS need not be further addressed.⁴⁸

Addressing Part V and Part VII, the UNCLOS establishes a far-reaching system of marine resource management.⁴⁹ This system may be divided into a direct approach (addressing the living resource itself) and an indirect approach (addressing their habitat).⁵⁰ Further, it may be distinguished between a zonal⁵¹ and a species-specific⁵² management approach. However, not many arguments have been voiced regarding demand for application of the principle by the UNCLOS under Part V and Part VII.⁵³

- 46 Cf. M/V "Louisa" (Saint Vincent and the Grenadines v. Kingdom of Spain), Provisional Measures, Order of 23 December 2010, ITLOS Reports 2008–2010, 58, para. 83.
- ⁴⁷ Cf. MOX Plant, Provisional Measures, Separate Opinion Wolfrum (n 16), 134; MOX Plant (*Ireland v. United Kingdom*), Provisional Measures, Separate Opinion of Judge Treves, Order of 3 December 2001, ITLOS Reports 2001 (n 16) 137, para. 9.
- ⁴⁸ Of course, the elaborations here may be utilized when at the stage of provisional measures, cf. Fabra, A., 'The LOSC and the Implementation of the Precautionary Principle' (1999) 10 Yearbook of International Environmental Law, 15–24 at 22.
- ⁴⁹ Dupuy, P.-M. and Vinuales, J., International Environmental Law, 2nd ed. (Cambridge: Cambridge University Press, 2018), 114; Rosenne, S. and Yankov, A., 'Articles 192 to 278, Final Act, Annex VI', in M. H. Nordquist, N. S. Nandan, S. Rosenne and N. R. Grandy (eds.), United Nations Convention on the Law of the Sea 1982: A Commentary (Leiden: Martinus Nijhoff Publishers, 1990), para. 192.2.
- ⁵⁰ Cf. PCA, South China Sea Arbitration (Republic of the Philippines v. People's Republic of China), Award, Award of 12 July 2016, available at: https://pcacases.com/web/sendAttach/2086, para. 959; Czybulka, D., 'Article 192 UNCLOS', in A. Proelß (ed.), United Nations Convention on the Law of the Sea: A Commentary (n 30), para. 25.
- ⁵¹ Tanaka, 'Law of the Sea' (n 2) 284–9; Rothwell and Stephens (n 34) 308; regarding the management of living resources in the internal waters, territorial sea, archipelagic waters and continental shelf, see: Matz-Lück, N. and Fuchs, J., 'Marine Living Resources', in D. Rothwell, A. O. Elferink, K. Scott and T. Stephens (eds.), The Oxford Handbook of the Law of the Sea (Oxford: Oxford University Press, 2015), 497ff; Harrison, J., Saving the Oceans through Law: The International Legal Framework for the Protection of the Marine Environment, 1st ed. (Oxford: Oxford University Press, 2017), 168ff.
- ⁵² Tanaka, 'Law of the Sea' (n 2) 289-301.
- 53 E.g. the term 'available' in Art. 119 UNCLOS may demand application of the precautionary approach Verschuuren, J., Principles of Environmental Law: The Ideal of Sustainable Development and the Role of Principles of International, European, and National Environmental Law (Baden-Baden: Nomos, 2003), 120; Rayfuse, R. G., 'Article 119 UNCLOS', in A. Proelß (ed.), United Nations Convention on the Law of the Sea: A Commentary (n 30), para. 24; Nandan, N. S. and Rosenne, S., 'Articles 86 to 132 and Documentary Annexes', in M. H. Nordquist et al. (eds.), United Nations Convention on the Law of the Sea 1982: A Commentary (n 49), para. 119.7(c); cf. Marr, S., The Precautionary Principle in the Law of the Sea: Modern Decision Making in International Law (Leiden: Martinus Nijhoff Publishers, 2003), 135f; Winter, G. (ed.), Towards a Legal Clinic for Fisheries Management (IUCN Environmental Policy and Law Paper No. 74), available at: https://portals.iucn.org/library/sites/library/files/documents/EPLP-074.pdf.

10.3.2 Part XII UNCLOS

Beyond Judge Laing's claim, the UNCLOS is influenced by concepts such as sustainable development,⁵⁴ ecosystem-based approaches⁵⁵ and the precautionary approach. Whether the latter is incorporated in protection and preservation of the marine environment regime (Part XII) has been subject to debate in recent years.⁵⁶

The UNCLOS does not define 'protection and preservation', or 'marine environment' as prescribed by Article 192 UNCLOS. Deriving from its heading and the overwhelming number of pollution-based provisions, Part XII might appear as limited to the prevention, reduction and control of pollution. Such assumption is reaffirmed by abstaining from using the wording 'conservation', as otherwise mostly utilized in connection with living resources.⁵⁷ However, Article 194(5) UNCLOS hints at an ecosystem and habitat focus.⁵⁸ In the SBT cases, the ITLOS stated that 'the conservation of the living resources of the sea is an element in the protection and preservation of the marine environment'.⁵⁹ In 2015, it confirmed this finding in its Request for an advisory opinion submitted by the Sub-Regional Fisheries Commission (SRFC AO).⁶⁰ Thus, Part XII must be regarded as (indirectly) applying to the management of marine living resources.⁶¹

- ⁵⁴ Tanaka, 'Law of the Sea' (n 2) 301–3; cf. Gabčíkovo-Nagymaros Project (*Hungary/Slovakia*), Judgment of 25 September 1997, ICJ Reports 1997, 7, para. 140; Award in the Arbitration Regarding the Iron Rhine ('Ijzeren Rijn') Railway between the Kingdom of Belgium and the Kingdom of the Netherlands, Decision of 24 May 2005, RIAA XXVII, 35, para. 59.
- ⁵⁵ Tanaka, 'Law of the Sea' (n 2) 303–6.
- ⁵⁶ Other provisions may be e.g. Art. 145 UNCLOS, cf. Churchill (n 33) 21.
- Nandan, N. S. and Rosenne, S., 'Article 1 to 85, Annexes I and II, Final Act, Annex II' (n 49) para. 61.12(a).
- Wacht, F., Mariner Umweltschutz durch Meeresschutzgebiete im jurisdiktionsfreien Raum der Hohen See (Baden-Baden: Nomos, 2018), 218; cf. Czybulka, D., 'Article 194 UNCLOS' (n 30) para. 30; Gjerde, K. M., 'High Seas Marine Protected Areas: Participant Report of the Expert Workshop on Managing Risks to Biodiversity and the Environment on the High Seas, including Tools Such as Marine Protected Areas: Scientific Requirements and Legal Aspects Current Legal Developments: High Seas Marine Protected Areas' (2001) 16 International Journal of Marine and Coastal Law, 515–28 at 524.
- 59 Southern Bluefin Tuna (n 15), Provisional Measures, Order of 27 August 1999, ITLOS Reports 1999, 280, para. 70; cf. Proelß, A., "The Contribution of the ITLOS to Strengthening the Regime for the Protection of the Marine Environment', in A. Del Vecchio and R. Virzo (eds.), Interpretations of the United Nations Convention on the Law of the Sea by International Courts and Tribunals (Berlin: Springer, 2019), 99.
- ⁶⁰ Request for Advisory Opinion Submitted by the Sub-Regional Fisheries Commission (SRFC), Advisory Opinion, 2 April 2015, ITLOS Reports 2015, 4, para. 120.
- ⁶¹ Proelß, A. and Houghton, K., 'Protecting Marine Species', in R. G. Rayfuse (ed.), Research Handbook (n 33), 233; Guo, J. and Wang, P., 'Due Diligence and Overlooked Evidence in the South China Sea Arbitration: A Note' (2019) 50 Ocean Development & International Law, 235–42 at 240; cf. Wacht (n 58) 218–20; Tanaka, Y., 'Principles of International Marine Environmental Law, in R. G. Rayfuse (ed.), Research Handbook (n 33), 35; Boyle, A., 'The Environmental Jurisprudence of the International Tribunal for the Law of the Sea Symposium to Mark the Tenth Anniversary ITLOS: The Jurisprudence of the International Tribunal of the

10.3.2.1 The Precautionary Principle and Due Diligence/Obligations of Conduct

Taking one step back, in the 2010 *Pulp Mills* case, the International Court of Justice (ICJ) held 'that the principle of prevention, as a customary rule, has its origins in the due diligence'. The Seabed Disputes Chamber in its 2011 Responsibilities and obligations of States with respect to activities in the Area advisory opinion (Seabed Mining AO) took this one step further. The Chamber noted that 'the precautionary approach is also an integral part of the general obligation of due diligence', that due diligence and obligations of conduct are interrelated and the precautionary principle applies outside the International Seabed Authority's Regulations. Further, the ITLOS linked due diligence and the precautionary principle in its SBT cases. Although these cases do not deal with living resources, it may be noted that the overall concept of due diligence may include application of precaution/the precautionary principle.

10.3.2.2 Due Diligence/Obligations of Conduct under the UNCLOS

Arguably, the idea of due diligence is reflected in the jurisprudence as early as the SBT cases. ⁶⁷ The ITLOS determined that 'although the Tribunal cannot conclu-

Law of the Sea: Assessment and Prospects' (2007) 22 International Journal of Marine and Coastal Law, 369–82, 373; Rosenne and Yankov, Volume IV (n 49) para. 192.11(a).

- ⁶² Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment of 20 April 2010, ICJ Reports 2010, 14, para. 101; ILC (2001), Draft Articles on Prevention of Transboundary Harm from Hazardous Activities, with Commentaries, Yearbook of the International Law Commission, 2001, Vol. II, Part Two, 146.
- ⁶³ Responsibilities and Obligations of States with Respect to Activities in the Area, Advisory Opinion, 1 February 2011, ITLOS Reports 2011, 10, paras. 111–115.
- 64 Ibid., paras. 131f, cf. 242.3(B)(b); cf. Kelly, E., "The Precautionary Approach in the Advisory Opinion Concerning the Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area', in International Tribunal for the Law of the Sea (ed.), The Contribution of the International Tribunal for the Law of the Sea to the Rule of Law (n 45), 55; the other way around: Hey, E., Advanced Introduction to International Environmental Law (Cheltenham: Edward Elgar Publishing, 2016), 71f.
- ⁶⁵ Seabed Mining AO (n 63), para. 132.
- Oral, N., 'Implementing Part XII of the 1982 UN Law of the Sea Convention and the Role of International Courts', in N. Boschiero, T. Scovazzi, C. Pitea and C. Ragni (eds.), International Courts and the Development of International Law: Essays in Honour of Tullio Treves (The Hague: T. M. C. Asser Press, 2013), 419; Jaeckel, A. and Stephens, T., 'The Interpretation of Sustainable Development Principles in ITLOS', in M.-C. Cordonier Segger and C. G. Weeramantry (eds.), Sustainable Development Principles in the Decisions of International Courts and Tribunals: 1992–2012 (London: Routledge, 2017), 348.
- ⁶⁷ Cf. Chen, L., 'Realizing the Precautionary Principle in Due Diligence' (2016) 25 Dalhousie Journal of Legal Studies, 1–24, 22.

sively assess the scientific evidence presented by the parties', they should 'act with prudence and caution . . . to prevent serious harm to the stock of southern bluefin tuna'. ⁶⁸ Thus, in light of scientific uncertainty, the ITLOS ordered the parties to act with 'prudence and caution'. ⁶⁹

The ITLOS reaffirmed this notion of 'prudence and caution' in its MOX Plant case.⁷⁰ It considered employing it to require cooperation of the disputing parties.⁷¹ The duty to cooperate 'is a fundamental principle in the prevention of pollution of the marine environment under Part XII'.⁷² Judge Treves, in a separate opinion, hinted that procedural rights, including obligations to cooperate, may be 'relevant for complying with the general obligation of due diligence' in regard to environmental impacts.⁷³ This seemingly applies a principle of international (environmental) law, that is, the cooperation principle; and links 'prudence and caution' to that principle.⁷⁴

The Seabed Mining AO determined that the 'responsibility to ensure' in Article 139(1) UNCLOS is one of conduct and of due diligence,⁷⁵ that is, a 'due diligence to ensure'.⁷⁶ Such diligence has flexible content and may change over time as measures 'may become not diligent enough'.⁷⁷ This entails all measures necessary, hence, all adequate means.⁷⁸ The AO further noted the obligation 'to ensure' can be found in Article 194(2) UNCLOS.⁷⁹ Hence, the findings have been considered as embracing the precautionary principle under the UNCLOS implicitly.⁸⁰

- 68 SBT cases, ITLOS, Provisional Measures (1999), para. 80, 77; passim: Land Reclamation in and around the Straits of Johor (*Malaysia v. Singapore*), Provisional Measures, Order of 8 October 2003, ITLOS Reports 2003, 10, para. 99; M/V "Louisa" (n 46), para. 77.
- ⁶⁹ Cf. Zanella and Cabral (n 26) 245.
- 7° MOX Plant (Ireland v. United Kingdom), Provisional Measures, Order of 3 December 2001, ITLOS Reports 2001 (n 16) 95, para. 84; reiterated in: Land Reclamation (n 68), para. 92.
- ⁷¹ MOX Plant, ITLOS, Provisional Measures (n 16), para. 84.
- ⁷² Ibid., para. 82; repeated in: SRFC AO, ITLOS (n 60), para. 140.
- 73 MOX Plant, ITLOS, Provisional Measures, Separate Opinion Treves (n 16), para. 9.
- ⁷⁴ Rashbrooke, G., 'The International Tribunal for the Law of the Sea: A Forum for the Development of Principles of International Environmental Law?' (2004) 19 The International Journal of Marine and Coastal Law, 515–36 at 526; Golitsyn, V., 'The Contribution of the International Tribunal for the Law of the Sea to the Progressive Development of International Environmental Law' (2016) 46 Environmental Policy and Law, 292–8 at 294.
- 75 Seabed Mining (n 65), para. 110.
- ⁷⁶ Kelly (n 64) 52.
- ⁷⁷ Seabed Mining (n 65), para. 117.
- ⁷⁸ Ibid., para. 118.
- ⁷⁹ Ibid., para. 113.
- 80 Cf. LaMotte, K. R., 'Introductory Note to the International Tribunal for the Law of the Sea: Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to the Activities in the Area (Request for Advisory Opinion Submitted to the Seabed Disputes Chamber)' (2011) 50 International Legal Materials, 455–93, 457; French, D., 'From the Depths: Rich Pickings of Principles of Sustainable Development and General International Law on the Ocean Floor: The Seabed Disputes Chamber's 2011 Advisory Opinion' (2011) 26 The International Journal of Marine and Coastal Law, 525–68, 547.

In 2015, the ITLOS held in the SRFC AO that flag States have a 'responsibility to ensure' that ships flying their flag comply with coastal State regulations and do not engage in illegal, unreported and unregulated fishing. ⁸¹ The Tribunal stressed this responsibility, reaffirming such obligation's character as being of conduct as well as due diligence. ⁸² Pursuant to Article 192 and 193 UNCLOS, this encompasses measures necessary to ensure, hence, a duty to 'do the utmost'. ⁸³ This finding seems doubtful in the absence of 'to ensure' or similar language. ⁸⁴

According to Annex VII of the Tribunal in the South China Sea Arbitration (SCS Tribunal), Article 192 UNCLOS imposes a due diligence obligation on States to protect the marine environment.⁸⁵ Beyond prevention of direct harvesting of threatened species, the obligation further indirectly prevents harm to habitat 'that would affect depleted, threatened, or endangered species', this is 'given particular shape in the context of fragile ecosystems by Article 194(5)'.⁸⁶

10.3.2.3 Beyond Today's Jurisprudence

Beyond the jurisprudence, it has been argued that the wording of Article 1(1)(4) UNCLOS, read in conjunction with the obligation under Articles 192, 206 UNCLOS, may be seen as implying application of the precautionary principle. ⁸⁷ The definition of 'pollution of the marine environment' in Article 1(1)(4) UNCLOS stipulates that pollution is the introduction of substances or energy by humans, 'which results or is likely to result' in *inter alia* harm to living resources. Thus, such wording may be considered to be an 'embryonic' use of the precautionary principle. ⁸⁸

Further, it has also been argued that Article 196 UNCLOS 'clearly reflects the precautionary principle'. ⁸⁹ This was particularly based on a 'fairly far-reaching' interpretation of the term 'which may cause significant and harmful changes'. ⁹⁰ The word 'may' can be seen as incorporating an obligation to take measures 'before preventive measures have to be taken'. ⁹¹

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SRFC AO, ITLOS (n 60), paras. 124–6.
Ibid., paras. 127f.
Ibid., paras. 136, 29.
Cf. Guo and Wang (n 61) 236; Schatz, V., 'Fishing for Interpretation: The ITLOS Advisory Opinion on Flag State Responsibility for Illegal Fishing in the EEZ' (2016) 47 Ocean Development & International Law, 327–45, 333.
SCS Arbitration, Annex VII, Merits (2016), paras. 959, 64; critic: Schatz (n 84) 334.
SCS Arbitration, Merits (n 85), para. 959.
Proelß and Houghton (n 61) 232; cf. Marr (n 53) 52f; Proelß (n 59) 95f.
Churchill (n 33) 9.
Czybulka, D., 'Article 196 UNCLOS' (n 30) para. 9.
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9° Ibid., para. 19.

However, these arguments reflected in literature seem difficult to accept. In the absence of an interpretation by a competent authority, their understandings of the meaning of the Convention are marginalized.

10.3.2.4 Conclusion

Summa summarum, the relationship between the precautionary principle, obligations of conduct/due diligence and obligations under the UNCLOS might be a plausible reason for future tribunals to interpret Article 192 UNCLOS so that it requires application of the precautionary principle. 92 Overall, should this be the case, the Convention will have come a long way.

10.4 FINAL REMARKS

This section returns to the original question of whether the UNCLOS requires application of the precautionary principle: recalling that the precautionary principle was only visible on the horizon during the negotiations. ⁹³ It therefore appears the Convention originally did not require application. However, it seems that the principle now informs the normative content of the UNCLOS, and, thus, some may argue that the Convention does require its application after all. ⁹⁴ If so, following the latter view, then such requirement may be considered indirect through the obligation to protect and preserve the marine environment (see Section 10.3.2). As Part XII covers all maritime zones, ⁹⁵ a good argument may be made that direct approaches must be interpreted considering the obligations set out

- ⁹² Cf. Mossop, J., 'Can We Make the Oceans Greener: The Successes and Failures of UNCLOS as an Environmental Treaty' (2018) 49 Victoria University of Wellington Law Review, 573–94, 588f; König, D., 'The Elaboration of Due Diligence Obligations as a Mechanism to Ensure Compliance with International Legal Obligations by Private Actors', in International Tribunal for the Law of the Sea (ed.), The Contribution of the International Tribunal for the Law of the Sea to the Rule of Law (n 45) 88.
- ⁹³ Kimball, L. A., 'The United Nations Convention on the Law of the Sea: A Framework for Marine Conservation (Part 1)', in D. M. Johnston, L. A. Kimball, P. Payoyo and P. M. Saunders (eds.), The Law of the Sea: Priorities and Responsibilities in Implementing the Convention (Gland: International Union for Conservation of Nature, 1995), 36; cf. Proelß (n 59) 95; Churchill, (n 33) 29.
- ⁹⁴ E.g., 'these principles cannot modify the UNCLOS', Rothwell and Stephens (n 34) 520; cf. Sage-Fuller, B., The Precautionary Principle in Marine Environmental Law: With Special Reference to High Risk Vessels (London: Routledge, 2013), 70.
- ⁹⁵ Oral (n 66) 405; Wolfrum, R., 'Preservation of the Marine Environment', in J. Basedow, U. Magnus and R. D. Wolfrum (eds.), The Hamburg Lectures on Maritime Affairs 2011–2013 (Berlin: Springer, 2015), 12; Jakobsen, I. U., Marine Protected Areas in International Law: An Arctic Perspective (Leiden: Martinus Nijhoff Publishers, 2016), 76; for more details see: Czybulka, Article 102 (n 30) paras. 5–7.

in Part XII.⁹⁶ Therefore, it may well be argued that the UNCLOS requires application of the precautionary principle.

However, one must keep in mind, that (too much) 'coercion kills all noble, voluntary devotion'. Many States have subjected themselves to the UNCLOS and the so called package deal. Ho an extensive but general framework. Excessive pulling on the cords that hold the package together can lead to unforeseeable consequences.

⁹⁶ Cf. Fabra (n 48) 22.

⁹⁷ Translation by the author (originally: "Zwang tötet alle edle, freiwillige Hingebung"), Knigge, A. F., Über den Umgang mit Menschen (Leipzig: Reclam, 1878), 126.

⁹⁸ See Art. 309 UNCLOS; cf. Moore, 'One of the Greatest Achievements' (n 6) 8f.

⁹⁹ Cf. Beyerlin and Marauhn (n 7) 120.