Contribution to the report of the Secretary-General on oceans and the law of the sea, on capacity building and the transfer of marine technology: new developments, approaches and challenges, pursuant to General Assembly resolution 79/144 of 12 December 2024, entitled "Oceans and the law of the sea".

A significant percent of the population resides in low lying coastal zones in the Americas which is illustrative of she dependency on the oceans for livelihoods and business activity. Sustainable business growth in the region also relies on ocean connectivity. It is estimated that 896 million people from low-lying coastal zones will be particularly exposed to changes in the ocean and the cryosphere, notably through sea level rise and the associated loss of biodiversity. Increases in ocean temperature, deoxygenation and acidification, which "reduce risks to marine biodiversity, fisheries, and ecosystems, and their functions and services to humans".[1]

The United Nations Convention on the Law of the Sea (UNCLOS),[2] establishes in **Article 266** that States are required to cooperate and assist developing States and geographically disadvantaged States in developing their technological, marine, and scientific capacities. These capacities are critical to addressing the above and other challenges facing oceans. To this end, States must work to foster favourable economic and legal conditions for the transfer of technology. The goal is to advance, in an equitable and reasonable manner, the development of marine activities and the sustainable use of resources, as highlighted by **Goal 14** of the UN 2030 Agenda: "conserve and sustainably use the oceans, seas, and marine resources for sustainable development."[3]

Part V of the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ), adopted on June 19, 2023, also covers this topic extensively. The objectives of the Agreement in relation to Capacity-Building and the Transfer of Marine Technology (CB&TMT) include to:

- Assist Parties in implementing the Agreement, to achieve its objectives;
- Enable inclusive, equitable and effective cooperation and participation in the activities undertaken under the Agreement;

[1] See Intergovernmental Panel on Climate Change: AR6 Synthesis Report: Climate Change 2023, finalized for the 6th Assessment Report at the IPCC Panel's 58th Session held in Interlaken, Switzerland (13 - 19 March 2023).
[2] See Art. 266, UNCLOS. Available at: https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf.
[3] More information on this goal is available at this link: https://www.globalgoals.org/goals/14-life-below-water/.

- Develop the marine scientific and technological capacity, including with respect to research, of Parties, regarding the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction;
- Increase, disseminate and share knowledge on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction;
- Support developing States Parties in achieving the objectives of the Agreement relating to: marine genetic resources, including the fair and equitable sharing of benefits; measures such as area-based management tools, including marine protected areas and environmental impact assessments.[4]

Specifically, for capacity building, States must commit to creating and improving organizations dedicated to marine research, ocean management, and conservation, as well as promoting the development and exchange of data in this field. Examples of useful tools include oceanographic analysis systems that monitor the state of the oceans, measuring their acidification, and advanced technologies to protect natural habitats or mitigate pollution. Advanced technology is now a fundamental tool, as it allows the use of artificial intelligence systems, such as drones, to monitor the oceans. As for the challenges, the main one remains the knowledge gap between different States and the disparity in financial resources to build advanced technology. Therefore, based on the principle of equity, international cooperation and financial support from developed States to developing ones are necessary.

Regarding the main challenges currently facing the oceans, it is worth highlighting **Advisory Opinion 23/17** of the Inter-American Court of Human Rights[5], concerning State obligations in relation to the environment and, consequently, oceans and the marine environment. The Inter-American Court of Human Rights in acknowledging the transboundary nature of challenges, has established that human rights obligations occur within a system of environmental conventionality. Therefore, States should comply with obligations included in all Multilateral Environmental Agreements (MEAS), including UNCLOS. Cooperation and capacity building on the topic of the report for the Secretary General are of relevance to ensure States ability to comply with obligations with respect to:

a) Regulate private activities that may have a negative impact on the environment. As was established in the case of *Vera Rojas et Al. v. Chile*, «States must adopt legislative and other measures (...) to prevent violations and to investigate, punish and remedy

[4] See United Nations Digital Library, 2024/Factsheet 5, *Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction*. Available at: https://www.un.org/bbnjagreement/sites/default/files/2024-08/BBNJAgreementFactsheet5CBTMT.pdf.
[5] See CIDH, 15.11.2017, *OC/23-17.* Available at: https://corteidh.or.cr/docs/opiniones/seriea_23_ing.pdf.

violations (...) when they occur».[6] States, therefore, have the duty to legislate in order to regulate companies so that their actions respect human rights recognized in the various instruments of the inter-American system;[7]

b) Supervise and monitor activities that could cause significant damage to the environment, and this entails an obligation to develop and implement appropriate independent monitoring and reporting mechanisms;[8]

c) To fulfill the obligation of prevention, States must regulate, supervise, and monitor activities under their jurisdiction that may cause significant environmental damage; They must also conduct and approve environmental impact assessments (EIA), which is defined as a national procedure for assessing the likely impact of a proposed activity on the environment.[9] In addition, they must conduct environmental impact assessments when there is a risk of significant environmental damage;

d) Having a contingency plan to address any environmental disaster, ensuring the ability to ensure or restore human rights violated in its own territory or in the territories of other States, as suggested by **Resolution 3/21** of the Inter-American Commission on Human Rights;[10]

e) Ensure reparation systems for victims of climate change effects, such as ocean pollution, sea level rise and other phenomena that may violate the human rights of individuals or entire communities;[11]

f) The Stockholm and Rio Declarations,[12] which state that "States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem," as well as in numerous international treaties.[13]

This duty to cooperate in environmental matters and its customary nature have been recognized by arbitral tribunals, the International Tribunal for the Law of the Sea and the International Court of Justice. According to the latter, the duty to cooperate is derived from the principle of good faith in international relations, is essential for protection of the environment, and allows States jointly to manage and prevent risks

[6] See *The Written Opinion by IUCN, prepared by the WCEL, concerning the request by the Republic of Colombia and the Republic of Chile for an Advisory Opinion from the Inter-American Court on Human Rights concerning the Climate Emergency and Human Rights,* p. 89. Available at: https://www.corteidh.or.cr/sitios/observaciones/OC-32/11_IUCN.pdf.

[7] The same solution was found in the following cases: *Lhaka Honhat (Our Land) Association v. Argentina* and *Los Buzos Miskitos (Lemoth Morris y Otros) v. Honduras*.

[8] See *The Written Opinion by IUCN, prepared by the WCEL, concerning the request by the Republic of Colombia and the Republic of Chile for an Advisory Opinion from the Inter-American Court on Human Rights concerning the Climate Emergency and Human Rights,* p. 91. Available at: https://www.corteidh.or.cr/sitios/observaciones/OC-32/11_IUCN.pdf.

[9] Ibidem, p. 94.

[10] Ibidem, p. 97.

[11] Ibidem, pp. 101-105.

[12] See *Rio Declaration on Environment and Development*, adopted at the United Nations Conference on Environment and Development, Rio de Janeiro, June 14, 1992, UN Doc. A/CONF.151/26 (Vol. I), Principle 9, and *Stockholm Declaration on the Human Environment*, adopted at the United Nations Conference on the Human Environment, Stockholm, June 5 to 16, 1972, UN Doc. A /CONF.48/14/Rev.1, Principle 20.

[13] See CIDH, 15.11.2017, *OC/23-17, par. 183.* Available at: https://corteidh.or.cr/docs/opiniones/seriea_23_ing.pdf

of environmental damage that could result from projects undertaken by one of the parties.[14]

As the Court specified in the paragraph 206 of its referred Advisory Opinion, the obligation to cooperate includes the exchange of information between States. In this regard, the Rio Declaration establishes that "States should co-operate to strengthen endogenous capacity-building for sustainable development by improving scientific understanding through exchanges of scientific and technological knowledge, and by enhancing the development, adaptation, diffusion and transfer of technologies, including new and innovative technologies." Also, the Stockholm Declaration stipulates that "the free flow of up-to-date scientific information and transfer of experience must be supported and assisted to facilitate the solution of environmental problems."[15]

Best practices for managing the oceans in a more sustainable way have been clarified by the International Tribunal for the Law of the Sea (ITLOS) in its recent Advisory Opinion issued in May 2024. The Tribunal recalled the obligations of States Parties under **Article 194**, paragraph 1 (UNCLOS). Paragraph 1 obliges States to use appropriate means in their possession and according to their capacity and to provide effective policies for achieving the purpose. The Tribunal specified the meaning of these words, declaring the obligation of the States to use scientific knowledge and to respect already binding treaties, such as the indicators provided for by the Paris Agreement. Compliance with paragraph 1 of article 194 of the Convention means fulfilling a duty of due diligence, which the Court specified may vary according to the resources available to individual States.[16] Article 194(2) UNCLOS states that the countries are obliged to: «take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this Convention».[17] The Tribunal has specified that this rule refers to possible damage resulting from transboundary pollution, which is why the duty of diligence required by this paragraph is even stricter than the previous one. Paragraph 3 of the UNCLOS is even more specific, providing some of the possible sources of marine pollution, including: the spillage of toxic, harmful or noxious substances and in particular those which are not degradable from land-based sources or air, or by release; b) pollution by ships [...] c) pollution by installations and machinery used for the exploration or exploitation of natural resources of the seabed and

[14] See CIDH, 15.11.2017, *OC/23-17, par. 184.* Available at: https://corteidh.or.cr/docs/opiniones/seriea_23_ing.pdf

[15] See *Rio Declaration on Environment and Development*, adopted at the United Nations Conference on Environment and Development, Rio de Janeiro, June 14, 1992, UN Doc. A/CONF.151/26 (Vol. I), Principle 9, and *Stockholm Declaration on the Human Environment*, adopted at the United Nations Conference on the Human Environment, Stockholm, June 5 to 16, 1972, UN Doc. A /CONF.48/14/Rev.1, Principle 20.

[16] see ITLOS, Press 350, *Tribunal delivers unanimous Advisory Opinion in Case No. 31*, p. 2, par. (b) e (c). Available at: https://www.itlos.org/fileadmin/itlos/documents/press_releases_english/PR_350_EN.pdf.

[17] Ibidem, p. 2, par. (d).

subsoil [...] d) pollution by other installations or equipment which operate in the marine environment [...]. The Tribunal then referred to other articles of the Convention, such as 207, 212, 213, and 222, which oblige States to adopt laws and regulations that limit marine pollution as much as possible, taking into account the opinion of experts from international organizations and what has been discussed at diplomatic conferences at regional and global level.[18] To achieve this objective, the Tribunal has specified the importance of cooperation between the various States in order to ensure shared procedures for improving the environment. This also includes the assistance and funding that the more developed countries must provide to developing countries.[19] In addition, States Parties to the Convention are required to monitor activities that may result in marine pollution and to anticipate all possible risks arising from plans under design.[20]

In addition, the Tribunal in its Advisory Opinion specified the obligation of the States under Art. 192 to take all necessary measures to protect and preserve the marine environment and rare or fragile ecosystems (art. 194.5), as well as the habitat of threatened or endangered species and other forms of marine life.[21]

A crucial role in addressing sustainability challenges is played by the private sector and Public-Private Partnerships (PPP).[22] The private sector can invest in sustainable technologies and solutions or turn sustainability into an economic opportunity. PPPs allow for the combination of public and private resources and expertise to tackle challenges that might be too costly or complex for either party alone, creating solid and sustainable opportunities for the future.

Finally, taking into account that implications of new developments in marine technology may have a negative impact on both the people and the environment or could cause significant damage, it would be relevant to ensure that all cooperation and capacity building integrates nature-based solutions,[23] implement appropriate independent monitoring and reporting mechanisms while ensuring their social and environmental safeguards.
Nature based solution can help to stimulate sustainable innovation and scientific research. These solutions are efficient and effective when designed on a context-specific basis to achieve multiple benefits and applied in accordance with the best available science. Cognizant of the potential associated risks, all efforts must be coherent with the rule of law, consistent with international commitments and relevant multilateral agreements on biodiversity, climate, environment and sustainable development.

[18] Ibidem, pp. 2-3, par. (f), (g) e (h).
[19] Ibidem, pp 3-4, par. (i), (j) e (k).
[20] Ibidem, p. 4, par. (l).
[21] Ibidem, p. 34, par. 112.
[22] This role is encouraged by Goal 17 of the UN 2030 Agenda. Available at: https://sdgs.un.org/goals.
[23] Nature-based solutions are actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits.