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ABSTRACT

The preservation and protection of the marine environment gained more and more interest due to growing concerns around the world. The United Nations Convention on the Law of the Sea(UNCLOS) establishes a unifying framework for marine environment protection seeking to address all sources of marine pollution, strengthening the enforcement capacity of port and flag States and giving coastal States extensive jurisdiction with regards to the preservation and the protection of the marine environment. UNCLOS is therefore the legal basis which requires an international cooperation to establish a juridical system for the seas and oceans to protect and preserve the marine environment. The main applicable rules are: the principle of non-harmful use of the territory, the principle of prevention and the precautionary principle. UNCLOS confers to the International Tribunal for the Law of the Sea(ITLOS) the functions of interpretation and application of the Convention. It sets up mandatory procedures leading to binding decisions. Up to now, it was essentially the urgent procedures that served as the basis for referral to the the Tribunal in environmental disputes. However, the climate change and the marine genetic resources may raise new issues, being a matter of international concern in the near future.

Keywords: Protection And Preservation, Marine Environment, Sources Of Pollution, Non-Harmful Use Of Territory, Principle Of Prevention, Precationary Principle, Advisory Opinion, Arbitral Awards, Provisional Measures, Climate Change, And Marine Genetic Resources.

INTRODUCTION

The protection of the environment has recently gained more and moreinterest due to growing concerns around the world. Damages to the environment is of multiple origins and is essentially caused by the activities of man and its consequences on the different areas of the world.

The global ecosystem is affected although the extent of it remains to be determined. The environment appears to be the new religion. We must note that global environmental issue, such as climate change, or the loss of marine biodiversity has less to do with individual States than with ecosystems.

They need a firm interstate cooperation to be addressed properly, that is why one must pay attention to the BBNJ process and the negotiating procedure ahead. However, the legal aspectof the environment is still to be completed at both domestic and international levels. There is a conceptual migration shifting the environment from a third-generation¹ human right to a quest for a legal system that will be, a

¹Human rights are typified in three generations in the international order. The civil and political rights or rights of the first generation are analyzed in law, as opposable to the State. They assume to be implemented an abstention from the state. These rights were consecrated with the French revolution of 1789. They are sometimes called rights-attributes or rights of freedom. These rights appear most often as individual rights: freedom of movement, freedom of expression, etc ...

With regard to economic, social and cultural rights, also known as second-generation rights, they emerged in the Mexican (1910) and Bolshevik (1917) revolutions and can be seen as human rights, not opposable to The State but due to him. They are thus analyzed as claims against the State. It is the equality rights whose implementation presupposes a state service. These rights are most often collective rights: the right to work, the right to health, the right to education, the right to information, etc.

However, human rights are not static concepts. Every day can bring its new human right. Hence, we speak of the human right of the third generation or of solidarity. They are rights that are at once opposable homogeneous and systemic body of rules to be consolidated and harmonized between independent legislations and uncertain or rapidly changing domestic principles².

At international level, it is a system, applicable to certain areas and the activities carried out there, established by Stateshaving the regulatory competence to do so. These States must work to elaborate an international treaty on environmental law to govern the multiple aspects in this field.

The points of reference are, in this case, the Stockholm Declaration of 16 June 1972, the Rio Conference on Environment and Development of 3-14 June 1992, as well as,Specific Conventions, relating both to the law on armed conflicts³ and to the legal regimes of areas⁴.

The sources and types of pollution of the marine environment and their nature have been the subject of many studies⁵, although it appears that a more regular and systematic assessment of the state of the environment is needed.

One must recall that at the World Summit on Sustainable Development, held in Johannesburg in 2002, it was decided that a permanent assessment of the state of the marine environment was really needed. This decision will subsequently be confirmed by the United Nations General Assembly⁶. The sources of pollution of the marine environment are prolific: pollution from land-based sources; pollution resulting from seabed activities subject to national jurisdiction; pollution from activities in the Area; pollution by dumping; pollution from vessels, pollution from and through the atmosphere.

It appears that pollution from land-based sources and atmospheric pollution accounts for nearly 80% of the pollution of the marine environment per year⁷.

As stated in the UN Secretary General's report⁸ at paragraph 225: "Land-based pollution:

"As much as 80 per cent of marine pollution originates from land-based activities 249 (see also chapter XII below). For example, nearly 3,600 tons of mercury are discharged into the environment annually, much of which reaches the marine environment, where it can bio-

⁵See, for instance, UNEP and Global Program of Action, The State of the Marine Environment: Trends and Process, [The Hague, UNEP / GPA, 2006].

⁶See United Nations General Assembly Resolutions A / 57/141 (2002) and A / 60/30 (2005). The first comprehensive and integrated assessment was conducted in 2014 on the twentieth anniversary of the entry into force of the United Nations Convention on the Law of the Sea on 16 November 1994 (UNCLOS of 10 December 1982)

⁷ GESAMP, The State of the Marine Environment, Oxford, Blackwell Scientific Publication, 1990, p. 88; see A / 60/30 op. cit. (note 6). GESAMP is the Group of Experts on the Scientific Aspects of Marine Environmental Protection.

⁸The Oceans and the Law of the of the Sea, UN Secretary General Report.UN doc, A/64/66/Add.1, para. 225, (2009)

to the State and are due to it and which presupposes the conjunction of the actors in the social game. These include, for example, the right to development; The right to peace; Of the right to a healthy environment (which is found in many contemporary Constitutions), which is based on the Stockholm Declaration of 16 June 1972; Right to the common heritage of mankind etc ... See, Tafsir Malick NDIAYE "Human Rights Today" in Contemporary Developments in International Law, Essays in honor of B. Vukas, BRILL / Nijhoff, Leiden / Boston, 2016 , Pp. 574 and following ²As Alexander Kiss puts it:« Dans le domaine de

²As Alexander Kiss puts it:« Dans le domaine de l'environnement, l'interprétation s'est accentuée : Tantôt ce sont des droits nationaux qui inspirent des solutions internationales, tantôt des principes internationaux pénètrent dans la règlementation d'Etats et les orientent, lorsqu'il ne s'agit pas du tout simplement de l'exécution de normes internationales par les moyens de droits nationaux », in l'Etat de l'Environnement dans le monde, sous la dir. De Beaud et Bougherra, Editions La Découverte, Paris, 1993, p. 420.

³For example, in the field of armed conflict, the ENMOD Convention of 1977, Additional Protocol No. 1 to the Geneva Conventions of 1949 (1977), Article 35 of which reads: "1. In any armed conflict, the right of the Parties to the conflict to choose methods or means of warfare is not unlimited. 2. It is prohibited to use weapons, projectiles and materials, and methods of warfare to cause unnecessary suffering. 3. It is prohibited to use methods or means of warfare which are designed to cause, or may be expected to cause, extensive, lasting and serious damage to the natural environment ". The same applies to the 1997 convention on the uses of international watercourses (article 29), not to mention the regional conventions drawn up with the assistance of the United Nations Environment Program within the framework of its plan, Action on regional seas: the Barcelona Convention of 16

January 1976, the Abidjan Convention of 23 March 1981 and the Cartagena Convention of 24 March 1983, etc.

⁴As regards the regime of space, we have, for example, the 1959 Antarctic Treaty, the 1967 Space Treaty, the 1979 Moon Agreement, etc.

accumulate in the food chain.250 Sources of pollution are sometimes located far from the coast and are transported to the coasts by, inter alia, rivers or other waterways. Thus, regulating pollution at the point of discharge can sometimes be challenging.".

Indeed, one has to think of solid debris of all kinds and especially plastics, including polyethylene and polypropylene. Plastics can strangle seabirds, marine mammals and turtles. They can also block the intestinal transit of fishes and endanger the corals.

The leading authority in this field is GESAMP, a group of independent scientific experts that provides advice to the UN system on scientific aspects of marine environmental protection. Since 1969, GESAMP has been advising United Nations organs on the scientific activities of the protection of the marine environment. The Group is currently sponsored by nine United agencies having interests Nations and responsibilities in marine-related issues: IMO, FAO, UNESCO, IOC, WMO, IAEA, UN, UNEP, UNIDO and UNDP. This joint consultative mechanism is necessary for two reasons. On the one hand, to provide an intersectoral, interdisciplinary and scientific approach to the development of an international policy on marine issues. On the other hand, to meet the requirements for coordination and cooperation among United Nations agencies. The International Maritime Organization (IMO) has been appointed to represent GESAMP (Administrative Secretary) and to host the Group's office in London for its coordination tasks. At present, IMO is also the lead agency for two GESAMP working groups⁹.

Despite the proliferation of sources and types of pollution, there are some that attract more and more attention: the chemicals and the noise.

Chemicals entering the marine environment appear to be more harmful than oils because of their toxic and persistent properties. Moreover, they are not subject to such a strict regulation as that relating to oils.

The other pollutant that is subject to great attention today is the noise generated by human activity in the marine environment. Commercial shipping, exploration with its seismic campaigns and the exploitation of mineral resources, fishing, dredging, pipeline laying, as well as military activities, including the use of new sonar form, generates acoustic pollution, which can travel very long distances at sea. This pollution causes very serious damage to the marine environment by breaking in particular the natural conduct of cetaceans, which depend on the sound to navigate and communicate.

Commercial navigation, exploration and exploitation of mineral resources and the fisheries have an adverse impact on the protection international of the marine environment. This impact generates different forms as far as the fisheries are concerned¹⁰. The first one is the depletion of fish stock due to overfishing and over exploitation of the fishery resources¹¹ was a negative consequence on other species, mammal marines and birds. The second form of fisheries adverse impact on marine environment is the indiscriminate catch of species as well as the destruction of marine habitat.

In fact, number of non-desired species as well as dolphins found themselves mostly on drifting nets¹². The last impact may be analyzed as a cause and consequence of adverse effect of fisheries and marine environment because it has

⁹It is the Working Group 1 : Working Group EHS. The purpose the Working Group (Working Group N°1) is to study, assess the information at their disposal and provide advices that might be requested, notably by the IMO, in order to evaluate, in GESAMP with accordance the approved methodology, threats to the environment and substances carried by sea ». The other is the Working Group 34, it relates to ballast waters. The Gesamp BW Working Group was institued in 2005 in order to examine the proposals presented to the IMO in the framework of the preparatory work of the Convention relating to the approval of management systems of Water Ballast (subsequently called managment system of Water Ballast treatments) that use active substances. For more details, please refer to gesamp website.

¹⁰See report by UN Secretary General, unsustainable fisheries, UN doc A/59/298 (2004) §§. 20-22

¹¹Canadian example is significant "« there was a collapse in the stocks of most commercial species on the Grand Banks off Newfoundland in the early 1990 as a result of persistent overfishing". See fisheries and Oceans Canada, What is holding back the cod Recovery (2013) at httc: // WMN.dfo-mpo.gc.ca/science/ Publication/ article: 2006/01-11-2006-eng.htm.

¹²See B. Miller ""Combating Driftnet Fishing in the Pacific" in J. CRAWFORD and D. R. ROTHWELL (eds) The Law of the Sea in the Asian- Pacific Region [Dordrecht: Martinus Nyhoff Publisher, 1995] p.155

to do with technology, which appears very efficient. The innovation are more and more amazing in particular in the fish monitoring: use of plane and sonar, use of artificial nets, synthetic fiber, fisheries catch processing, etc...¹³

Another point of reference relates to pollution control, in the form of measures. The conditions of exploration and exploitation of natural resources and particularly oil and gas, must be determined with scrutiny to establish a legal regime that will protect the marine environment.

First, preventive measuresaimedat implementing UNCLOS article 193. Second, policing measures consisting of the identification of possible infringements and the actions to face them. After that, repressive measures aimed at establishing the criminal jurisdiction of the State. Lastly, measures to restore damage in bringing responsibility and liability¹⁴.

The protection and preservation of the marine environment is nowadays a growing field of

¹⁴Cf. Crawford, Articles of the ILC on State Responsibility, Paris, Pedone, 2003."International responsibility means the legal institution by virtue of which the State to which an unlawful act is imputable under international law must make reparation to the State against which that act was committed. While responsibility is generally an essential part of any legal system, it is of particular importance in the international order. It would in fact be incorrect to bring it back to the civil institution of the same name, an identical terminology designating two different institutions in this case: for if, within the framework of domestic law, Compensation within the framework of the law of nations, responsibility appears to be the very sanction of the actions of any politically organized and internationally independent community. Right still primitive in many respects, public international law reserves only a small place to the advanced technique of sanctioning the act and knows little more than the sanction against the subjects of law themselves. Consequently, the normal form of international litigation is that of litigation of compensation and not, as under domestic law, that of litigation of legality or of annulment. In other words, reparation by equivalent - in the usual form of pecuniary compensation - is the normal sanction of international law ". Charles Rousseau, International Public Law, Volume V, Conflicting Relations, Paris, Sirey, 1983, p.6.

influence affecting international law. Part XII and 46 articles of the United Nations Convention on the Law of the Sea¹⁵are dedicated to it.

Although the rules governing the use of State territory and spaces were well known to experts, who, in the past, examined them in terms of limitations of sovereignty, it is only recently that international environmental law has been studied as such. In fact, the international environmental law is being developed on the

¹⁵R.J. Dupuy, dir., *L'avenir du droit international de* l'environnement, Nijhoff, Dordrecht, 1985, 514 p.; R.J. Dupuy and D. Vignes, dir., Traité du Nouveau droit de la mer, Economica/Bruylant, 1985, 1447 p.; P.M. Dupuy, La responsabilité internationale des Etats pour les dommages d'origine technologique et industrielle, Pédone, 1977, P. 319; L. Boisson de Chazournes, « La mise en œuvre du droit international dans le domaine de la protection de l'environnement : enjeu et défis », Revue générale de droit international public (RGDIP), 1995/1, pp.37-76; P.M. Dupuy, « La préservation du milieu marin », in R.J. Dupuy et D. Vignes, op. cit., Chapite 20, pp. 979-1045; N. de Sadeleer, Les principes du pollueur-payeur, de prévention et de précaution, Bruylant, Bruxelles, 1999, 437 p.; P. Martin-Bidou, « Le principe de précaution ... «, RGDIP, 1999, pp. 631-666; P.M. Dupuy, « Où en est le droit international de l'environnement à la fin du siècle ? », RGDIP, 1997/4, pp. 873-904 ; L. Boisson de Chazournes, R. Desgagné, C. Romano, Protection l'environnement : internationale de Recueil d'instrumentsjuridiques, Paris, Pédone, 1998, 1117 p.; R. Wolfrum, « Purposes and principles of international environmental law », German Yearbook of International Law, 1990, vol.33, pp.308-330; Fred L. Morrisson and Rüdiger Wolfrum (eds.), International, Regional, and National Environmental Law, The Hague/London/boston, Kluwer Law International, 2000, 976 p.; R. Wolfrum, Ch. Langenfeld, P. Minnerop, Environmental Liability in International Law : Towards a Coherent Conception, Berlin, Erich Schmidt Verlag, 2005, 586 p.; P. Daillet, A. Pellet, Droit international public, Paris, L.G.D.J., 2002, 7^e éd., 1510 p.; P.M. Dupuy, Droit international public, Paris, Dalloz, 1998, 4^e éd., 684 p.; J. Combacau, S. Sur, Droit international public, Paris, Montchrestien, 2004, 6e éd.809 p.; T.M. NDIAYE et R. Wolfrum (eds), Law of Sea, environmental Law and Settlement of Disputes; Liber Amicorum Judge Thomas A. Mensah, Martinus Nijhoff Publishers, Leiden/Boston 2007, 1186 p., spec. pp. 1055-1186. TM NDIAYE "La Responsabilité Internationale pour dommages au milieu Marin"

B. Vukas and T.M. Sosic (eds.), International Law: New Actors, New concepts-continuing Dilemmas; Liber Amicorum Bozidar Bakotic, pp. 265-279.

¹³See FAO collaboration between International Institutions in the field of fisheries, doc: COFI/71/g(b), annexe III, p. 15; Tafsir Malick NDIAYE "The IUU fishing in West Africa" Liber Amicorum Raymond RANJEVA, Edition Pédone, Paris 2013,pp. 233 – 264.

deficiencies of the international law and is becoming autonomous, with the global sustainability approach.

A series of ecological accidents have raised the awareness in the different States: Torrey Canyon, Amoco Cadiz, Ecofisk, Bhopal, Chernobyl, chemical waste poured at Abidjan Laguna, etc.

That is why UNCLOS entrusted the States to take measures aiming at preventing pollution following maritime accidents. These are measures proportionate to the damage actually suffered or damage they are exposed to, in order to protect their shores or related interests, as well as the fisheries, from pollution or a threat of pollution that could have negative consequences¹⁶.

As a result, the United Nations Conference on the Human Environment adopted the famous Stockholm Declaration of 16 June 1972, which embodies the principles relating to the preservation of the marine environment. It must be noted that ecological accidents have enlightened the inadequacy or weakness of international law in this area. The States have expressed concerns over land-based pollution, before attempting to define the various obligations incumbent upon them and those to be borne by the various users of the sea under their jurisdiction.

With the works of the third United Nations Conference on the Law of the Sea, legal problems raised by the protection and preservation of the marine environment have been examined from a global perspective.

The United Nations Convention on the Law of the Sea (UNCLOS)¹⁷ determines the functions of the International Tribunal for the Law of the Sea, which are interpretations and applications of the principles and rules of the Convention concerning the international protection of the marine environment.

The Tribunal on many occasions reaffirmed and developed the basic principles relating to the protection of the marine environment.

UNCLOS establishes a unifying framework for a the marine environment that seeks to address all sources of marine pollution, strengthening the enforcement capacity of ports and flag States and giving coastal States extensive jurisdiction with regard to the protection and preservation of the marine environment on areas under their jurisdiction.

It should be noted that, until now, only urgent procedures have served as the basis for the referral of Courts and Tribunal in disputes relating to international environmental law. The Tribunal has been able to contribute to the progressive development of environmental law on the basis of existing links between the rules established by the Convention and customary international law. Thus, we have the affirmation of the fundamental character of the obligation to cooperate, particularly in this field.

The Tribunal has had several opportunities to adjudicate on this obligation opposable to States Parties. It will indicate that: « States Parties to the Convention have the duty to cooperate directly or through appropriate international organizations with a view to ensuring conservation and promoting the objective of optimum utilization of highly migratory species¹⁸ »

The tribunal will recall that : « The duty to cooperate is a fundamental principle in the prevention of pollution of the marine environment under Part XII of the Convention and general international law ¹⁹»

The Tribunal will thrive to give substance to the cooperation by principle of invoking: exchange of Consultation, information. assessment of the impact of activities on the environment, coordination for the adoption of prevention of damage to the marine environment, the response critical to situations²⁰.

On the other hand, ITLOS has been cautious - as indeed the ICJ - of uncertainties about the precautionary principle that is still invoked in environmental law. Indeed, many applicants rely on this principle in the most diverse and dissimilar situations: to preserve fish stocks from overexploitation; to prevent pollution of the marine environment by radioactive

¹⁶See Article 221 of UNCLOS, 10 December 1982.

¹⁷United Nations convention on the Law of the Sea (UNCLOS), Doc,United Naztions, New york, 1983, sales N° E83 V.S

¹⁸ Southern bluefin Tuna case (New Zealand V. Japan, Australia V. Japan) cases N) 3 and 4, order of 27 August 1999, para. 48

¹⁹Mox Plant Case (Ireland V. UK) case n°10, order of 3rd december 2001, para.82

See also the and Reclamation case (Malaysia V. Singapour) case n° 12, order of 8 Oct. 2003, paras 91 and 92

²⁰ See Mox plant case, op.cit., note 19[supra]

substances; avoid degradation of the marine environment; damage to natural resources due to reclamation works²¹.

Moreover, new issues are emerging today that are of concern and appears as a mater of international concern. They relate, on one hand, to climate change consequences on oceans with multidimensional aspects, and the issue of marine genetic resources relating to conservation and sustainable use of biodiversity in areas beyond national jurisdiction, on the other²².

We will overview the applicable rules (I), the International judge action (II) and lastly, the Prospects (III).

THE APPLICABLE RULES

The United Nations Convention for the Law of the Sea (UNCLOS) is the legal basis for the international protection of the marine environment, which requires an international cooperation to establish a juridical or legal system for the seas and the oceans to protect and preserve of the marine environment.

The Convention relies upon two fundamental principles, the rule of law of the sea and the steadfast safeguarding of the interests of the international community, as a whole, conscious that the problems of maritime spaces are closely related to each other. The main challenge is to eradicate the risks related to the geostrategy of the seas of the world. In that respect, the Convention is regarded as the "Constitution of the Oceans" designed to rule on all aspects of the resources, as well as, the use of the Oceans: the energy; the minerals; the biological resources, the ocean spaces used for the navigation, the leisure, the military activities, the scientific research, the fishing, evacuation of wastes, etc..., anything that could hinder the protection and the preservation of the marine environment. The Convention was supplemented by the 48/362 resolution of 1994 of the United Nations General Assembly the related to part XI that deals with the "Zone", that is to say the seabed beyond national jurisdiction, on one hand. On the other, UNCLOS is supplemented by the Agreement of 4 august 1995 related to the conservation and the management of fish stocks, moving in and

beyond Exclusive Economic Zones (Straddling Fish Stocks) and Highly Migratory fish stocks.

The Convention is comprehensive and of great authority and even the few States that have not yet acceded to it – like the United States of America –however consider it as the applicable law. Consequently, UNCLOS is the starting point of all examination and assessment, all issues relating the law of the sea, its challenges and prospects²³ and particularly the international protection of the marine environment.

The Convention adopted what is called the zonal approach, because of the growing number of claims of coastal States and thrives to find a balanced solution to reconcile these claims with the interests of other States.

The normative framework of the law of the sea is very diverse and comprehensive, despite the rapidly changing environment. That is why; the legal system is facing multiple challenges, inherent to the approach selected by UNCLOS itself, which consist of the sharing of the Ocean between the States of the world. The weakness of this zonal approach is the discrepanciesor divergence between the nature and the law.

The scope of coastal States jurisdiction on maritime spaces is defined according the distance criteria, not taking into account the intrinsic nature of the ocean and the biological and non-biological resources residing in it [see articles 3, 33, 57, and 76 paragraphs 1].

This approach determines for each zone its spatial limits and the legal regime applicable to it, that is to say, the rights and obligations of the different categories of States.

The different zones are: the territorial sea, the contiguous zone; the archipelagic waters; the Exclusive Economic Zone; the Continental Shelf; the High Seas; the international seabed; inland waters; the archeological zone and historic bays.

The implementation of the Convention, however, reveals that the difficulties are hard to overcome. The main challenge, here, is the completion of the sharing and since "only change is constant", new problems arise; unknown at the time of the drafting of the Convention or that could not be resolved solely based on the Convention. This situation created

²¹ Land Reclamation case op. cit. para.74-75 – Mox Plant case, op.cit. para.71-75 and Southern Bluefin Tuna Case, op. cit. par. 34

²² See Below Prospects (III)

²³See Tafsir Malick Ndiaye « Challenges and Prospects of the New Law of the Sea », State Practice and the International Law Journal [SPILJ], London, Vol.3, 2016, pp. 1-39.

new challenges that can bring about new prospects for the law of the sea; it looks like nature took its revenge on law^{24} .

The main applicable rules for the protection of the marine environment at international level are the principle of non-harmful use of the territory (A); the principle of prevention (B); the precautionary principle (C); and the other derived rules.

The Principle of Non-Harmful Use of the Territory25

This principle reflects the idea that the State, in exercising its sovereign rights in its territory, must respect the territorial integrity of the neighboring State and its environment. A State cannot therefore allow activities in its territory to entail or cause damage resulting from transboundary pollution.

Thus, the State shall make reparation for damage caused to a contiguous State by an unlawful act committed in its territory²⁶.

The principle of the prohibition of transboundary pollution appears to be a customary rule today. The doctrine sets it out in numerous occasion, even though the case law is notemphatic, due to the scarcity of contentious cases relating to it at the international stage. In this regard, the 11 April 1941 award of the Tribunal in the Trail Smelter case²⁷ is often referred to. According to that award, "No State shall have the right to use its territory or permit its use in such a way that smoke causes harm in the territory of another neighboring State or to the property of persons If there are serious consequences and if the damage is proved by clear and convincing evidence²⁸".

The principle will later be confirmed and put in practice in the Lake Lanoux²⁹arbitration and in that of the Gut Dam³⁰. The United Nations

smoke of the Annemasse dump; RGDIP, 1969, pp. 185-186.

²⁹The Tribunal says: "21: Article 11 of the Additional Act imposes on the States in which it is proposed to carry out work or new concessions capable of changing the regime or volume of a successive watercourse, Double obligation. One is to give prior notice to the competent authorities of the neighbouring country; The other is to set up a system of claiming and safeguarding all interests incurred on both sides The first obligation does not require much comment since it is intended to allow the implementation of the second. However, the possibility of an infringement of the regime or volume of water contemplated in Article 11 would in no case be left to the exclusive assessment of the State proposing to carry out such work Or to make further concessions; The French Government's assertion that the proposed works can not cause any damage to the Spanish residents is not sufficient, contrary to what was argued [... à, to exempt it from any of the obligations laid down in Article 11[...]. The State liable to suffer the repercussions of the work undertaken by a neighbouring State is the sole judge of its interests, and if the latter has not taken the initiative, the other can not be denied the right to require notification Works or concessions that are the subject of a project; The content of the second obligation is more difficult to determine. The claims referred to in Article 11 relate to the various rights protected by the Additional Act, but the essential problem is to establish how to safeguard all the interests which may be incurred on either side, Http://untreaty.un.org/cod/riaa/cases/vol XII/281-

317-Lanoux.pdf., P.314.

As a result of the discussions, the two Governments were in a position to inform the Tribunal at its

²⁴See Infra, Section III : Prospects

²⁵According to the expression of P.M. Dupuy, La responsabilité internationale ..., op. cit. (Note 5).

²⁶This aspect is particularly emphasized in the Basel Convention of 22 March 1989 on the Control of Transboundary Movements of Hazardous Wastes, International Legal Materials (I.L.M.), vol.28, p.649 (1989).
²⁷Arbitral Tribunal, established between the United

²⁷Arbitral Tribunal, established between the United States and Canada by the Compromise of April 15, 1935, relating to damage caused to the American owners of the State of Washington by deleterious fumes emanating from a smelter situated in British Columbia at 7 miles Of the border. Text in R.S.A., vol.III, pp. 1938-1981.

²⁸Ibid, p. 1965. The same problem arose in the Franco-Swiss relations with the case of the foul

³⁰See, Settlement of Gut Dam Claims (US V. Canada) I.L.M., 8, p, 118 (Lake Ontario Claims Tribunal 1969). See also United States of America and the Government of Canada concerning the establishment of the Gut Dam. Signed at Ottawa on 25 March 1965 (U.N.T.S., vol 607, p.141). The Exchange of Notes constituting an agreement for the final settlement of claims relating to Gut Dam. Ottawa, 18 November 1968 ", it reads:" following the conclusion of the Tribunal's second session in February, 1968, it was proposed by the Tribunal that it may compromise settlement might be negotiated. In consequence, representatives of the two Governments have consulted over the past few months in an effort to resolve the longstanding dispute in respect of Canada's alleged liability arising out of the construction of Gut Dam. These discussions were held in the atmosphere of good neighborliness and friendship which traditionally characterizes the of our relationship two Governments.

Conference on the Human Environment, held in 1972 in Stockholm, was to reiterate the rule. Principle 21 of the Stockholm Declaration reads as follows:

"In accordance with the Charter of the United Nations and the principles of international law, States have the sovereign right to exploit their own resources in accordance with their environmental policies and have a duty to ensure that activities within the limits of Their jurisdictions or their control do not cause damage to the environment in other States or in areas beyond national jurisdiction³¹". The same principle will be proclaimed by the Rio Declaration on Environment and Development adopted on 13 June 1992³². In its advisory opinion of 8 July 1996 on the lawfulness of the threat or use of nuclear weapons, the International Court of Justice confirms the binding force of the principle. Itstates : "The environment is not an abstraction, but the space where human beings live and on which the quality of their lives and their health depend, including for future generations.

The general obligation of States to ensure that activities carried out within their jurisdiction or under their control, respect the environment in other States or in areas beyond national jurisdiction is now part of the body of rules of international environmental law³³.

In the Corfu Channel case, the ICJ had already proclaimed "an obligation on any State not to allow

States, under the United Nations Convention on the Law of the Sea, have the duty "to protect and preserve the marine environment"³⁴. The Convention reiterates the principle of the illegality of transboundary pollution and entrust the States to take the necessary measures to tackle this issue.

The same applies to the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their disposal, as well as the 1992 Convention on Biological Diversity³⁵.

The principle has generated a body of rules, the main ones being the principle of prevention, the principle of precaution and that of cooperation.

The Principle of Prevention

The principle of prevention is embodied in the Stockholm Declaration. Reiterated by that of Rio³⁶: The preventive principle requires action to be taken at an early stage and if possible, before damage has actually occurred. This means that, in the event of an environmental impact assessment, it is necessary to ensure that the environmental impact assessment is carried out in accordance with the principles of environmental protection³⁷.

States must implement the relevant obligations of the United Nations Convention on the Law of the Sea³⁸. The often irreversible nature of damage to the environment, referred to by The Hague Court, justifies preventing its occurrence³⁹. The principle of prevention

³⁸Those provided for in Part II, Section II of the Convention: Cooperation at the global or regional level, Notification of imminent threat of damage or actual damage, Pollution Emergency Plans, Studies, research programs and Exchange of information and data, Scientific criteria for the development of regulations. The Convention also provides for a series of obligations to prevent, reduce and control pollution of the marine environment. See sections 207 to 212 which form section 5

meeting of September 27, 1968, that a settlement had been reached for the final disposal of the dispute. [...] pp. 320-322.

³¹Stockholm Declaration adopted on 16 June 1972 by the United Nations Conference on the Human Environment.

³²Rio Declaration, 14 June 1992, United Nations Conference on Environment and Development, A / Conf / 51/26 / rev.1.

The principle reads: "In accordance with the Charter of the United Nations and the principles of international law, States have the sovereign right to exploit their own resources in accordance with their own environmental and development policies, To ensure that activities within their jurisdiction or power do not affect the environment of other States for areas beyond the limits of their national jurisdiction ".

³³Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, C.I.J. Reports 1996, p. 226, spec. pp. 241-242, para. 29; See also the case concerning the Gabcikovo-Nagymaros Project (Hungary / Slobvakia) of 25 September 1997, C.I.J. Reports 1997, p. 7, spec. P.41, para. 53.

its territory to be used for acts contrary to the rights of other States". C.I.J. Reports 1949, p. 22.

³⁴See Article 192

³⁵See article 3

³⁶Notes 9 and 10 supra

³⁷See Rio Declaration, op. cit., note 21.

³⁹In the Gabcikovo-Nagymaros case, the ICJ said: "... the Tribunal does not lose sight of the fact that, in the field of environmental protection, vigilance and prevention are often irreversible damage to the environment and limitations inherent in the actual mechanism of repairing this type of damage.

Throughout the ages, man has not ceased to intervene in nature for economic or other reasons. In the past, it

obliges States to be vigilant in accordance with international standards in order to prevent the activities carried out on national territory from affecting the transboundary environment.

It guided the first sectoral greements relating to the preservation of certain areas⁴⁰, and it establishes the essential rules for the preservation of the marine environment in Part XII of the Convention.

Suffice to recall articles 192, 193, 194 paragraph 5 and 197 and to stress that pollution is essentially the consequence of modern technology.

Therefore, the exercise of the States' sovereign rights is subject to the obligation 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.

The regulation of the fisheries is of high importance due to overfishing, overexploitation of the fish stocks and particularly the illegal,

has often done so without taking into account environmental effects. Thanks to the new opportunities offered by science and a conscious awareness that the continuation of these interventions at a reckless and sustained pace would represent for mankind - be they present or future generations - new norms and requirements Which have been set out in a large number of instruments over the last two decades. These new standards must be taken into account and these new requirements properly appreciated not only when States are considering new activities but also when they are pursuing activities they have undertaken in the past. The concept of sustainable development reflects the need reconcile economic development and to environmental protection.

For the purposes of this case, this means that the Parties should review the environmental effects of the operation of the Gabcikovo-Nagymaros Power Station. In particular, they must find a satisfactory solution with regard to the volume of water to be dumped in the old bed of the Danube and in the arms situated on either side of the river ", Gabcikovo-Nagymaros project (Hungary / Slovakia), ICJ judgment, Reports 1997, p. 7, spec. pp. 74-75, para. 140.

⁴⁰See R. Wolfrum, op. cit. (Note 10), p. 8; Burhennew (ed.), International Environment Law-Multilateral treaties, pp. 951-992. These sectoral conventions establish special regimes of responsibility, in private international law, for the private person or the private person [Jure Gestionnis] who is expressly designated. See also Wolfrum, Langenfeld, Minnerop, op. cit. (Note 10), spec. pp. 4-135. unreported and unregulated fishing⁴¹, unknown at the time of the drafting of the Convention.

The enshrinement of the Exclusive Economic Zone notion by UNCLOS, whose goal is to end the conflict of interest between coastal States and those possessing long-range flotillas, only aggravated it. The enjoyment of coastal States' sovereign rights through exploration and exploitation, conservation and the management of natural and biological resources of waters superjacent to the seabed in its EEZ, resulted in the flotillas moving from what was considered the High Seas to areas adjacent to the Exclusive Economic Zone, where catches have increased.

This situation is the consequence of State subsidies policies, which facilitated the introduction of numerous fishing vessels to the extent that the official gross tonnage of the world fleet increased exponentially, endangering the sustainability of the resource.

Indeed, the catch capacity of the fishing vessels has risen significantly due to the implementation of new fishing techniques, given that the technology is at its height. The innovations are more and more ingenious, particularly in fish tracking: the use of aircraft and sonar in the purse-seine fishery and the guided trawling. The use of new floating trawlers, new fishing nets, fishing pumps, the use of synthetic fibers, new freezing techniques and fish processing equipment, mother vessels constituting a wide network of recreational harbours⁴².

This terrifying arsenal is the cause of incidental and indiscriminate catches and as a result, destroys the marine habitat and prevents the reproduction of fishes. The consequence of this situation is the overfishing due to over exploitation of fish stocks, hampering the marine economy and the global ecosystem.

The Precautionary Principle

It relates to the principle of prevention and is awaiting a formal customary consecration in the absence of consistency and precision in order to translate the expression of a collective *opinio juris*⁴³. The precautionary principle is polluted

⁴¹See Tafsir Malick Ndiaye, « La Pêche illicite, non déclarée et non règlementée », op. cit., Note 8 supra.

 $^{^{42}}$ See FAO, Collaboration between the International Institutions in the fishery, document COFI/71/g (b) Annex III, p.15

⁴³See L. Boisson de Chazournes, "The Implementation of International Environmental Law: Issues and Challenges", RGDIP, 1995, p.37 et seq .;

by polysemia and multiple invocations in the most diverse and dissimilar domains of which it is the subject⁴⁴. It is found in principle 15 of the Declaration:

"To protect the environment, precautionary measures must be widely applied by States according to their capabilities. In the event of irreversible or serious risks of damage, the absence of absolute scientific certainty should not be used as a pretext for delaying the adoption of effective measures to prevent environmental degradation⁴⁵".

Exhortatory, the principle seems to determine obligations of means, not of results. It "Reflects the growing tendency in international environmental law, which is better protected through prevention through remediation or remedial measures. It has become an intrinsic part of international environmental policy [...]⁴⁶".

The precautionary principle is embodied in a series of resolutions and declarations and

subsequently reproduced in a number of treaties that specify their scope⁴⁷.

The principle raises two essential questions. On the one hand, under which case can the precautionary principle are invoked? And restricting an activity based on principle can it guarantee its review or reconsideration on the other?

It was suggested that the precautionary principle should only apply where there is a risk of serious or irreversible damage to the environment.

This approach is consistent with the spirit of the Rio Declaration. It may also be thought that the earlier the damage is likely to occur, the sooner the precautionary principle must be invoked⁴⁸. Another approach recommends a cautious attitude in any case in order to ensure the vigilant protection of the environment.

In case of restricted or prohibited activity, based on the precautionary principle, the risk or lack of scientific certainty that justified the restriction or prohibition must be reviewed or reconsidered from time to time.

Initiatives, based on the sustainability criteria, had to be taken. The sustainability criteria has been hampered by the overfishing and the detrimental effect on human activity, such as oil rigs; the erosion of bays; the destruction of the

L. Lucchini, "The precautionary principle in international environmental law: shadows more than light", French Directory of International Law (AFDI), 1999, p. 710 et seq .; P.M. Dupuy, "The Precautionary Principle and the International Law of the Sea" in La Mer and its Law, Mixtures offered to Laurent Lucchini and Jean pierre Queneudec, Paris, Pédone, 2003, pp. 205-220; R. Wolfrum, op. cit. (Note 1), p. 10-15; O. McIntyre and T. Mosedale, "The Precautionary Principle as a Norm of Custyomary Interna- tional Law", Journal of Environmental Law, 1997, vol.9, pp.221-235.

⁴⁴As written by P.M. Dupuy, op. cit. (Footnote 32), p. 205: "The precautionary principle seems to be everywhere and nowhere. Everybody talks about it, and its evocation animates the media according to the scandals or the disasters that afflict our technical societies, too quickly developed in the perspective of an immediately profitable progress to take the time to study the impact of good Innovation on ecological balance or

Human health; Contaminated blood, mad cows, British sheep slaughtered with foot-and-mouth disease, uncertainty about the safety of genetically modified organs, fear of genetic research losing its soul, everything seems to make a world become an apprentice to take on what the Principle 15 of the Rio Declaration, adopted at the first Earth Summit in 1992 called for "precautionary measures".

⁴⁵Note 21 supra

⁴⁶R. Wolfrum, op. cit. (note 1). As well as, D. Freestone, D and E. Hey (eds.), The precautionary principle: A fundamental principle of International Law, Kluwer, 1996, 274 p.

⁴⁷P.M. Dupuy, op. cit. (Note 32) pp. 207-215. For example, Article 2 (a) of the Convention for the Protection of the Marine Environment of the North East Atlantic provides: "Contracting Parties shall apply:

a) The precautionary principle, by virtue of which preventive measures are to be taken when there are reasonable grounds for concern that substances or energy introduced, directly or indirectly, into the marine environment may bring about hazards to human health, harm to living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of causal relationship between the inputs and the effects ».

⁴⁸R. Wolfrum, op. cit. (note 10) p. 13, explains that: "However, it is common to all interpretations there should be at least a prima facie finding that a given activity may result in considerable harm to the marine environment. Nonetheless, there remains some uncertainty over when the precautionary principle is to be applied with the effect that one considers to undertake a particular activity has to prove its hamlessness rather than the one envisaging to restrict or prohibit that activity to Environmental damage, however qualified ".

mangroves; industrial pollution; pesticides; the use of explosives, destroying marine life.

Thus, to sustain the Straddling and Highly Migratory fish stocks as well as, other biological resources, adjacent to their Exclusive Economic Zone, coastal States engaged in diplomatic negotiations that led to the agreement related to the conservation and management of the High Seas fish stocks that sets the basic principles and lay down the obligations and policing powers of the flag States.

The States practicing High Seas fishing shall cooperate with coastal States to ensure the sustainability of the fish stocks, build on reliable information, apply the precautionary approach, avoid as much as possible, pollution, waste, catch by lost or discarded gear, catch of nontarget species and impacts on associated or dependent species, in particular endangered species, protect the biological diversity, apply and enforce the conservation and management measures through effective monitoring, control and surveillance systems.

In addition, States practicing High Seas fishing and coastal States shall engage in direct cooperation, through regional or sub regional fisheries organizations to the implementation of conservation and management measures.

Under article 94 of UNCLOS, the flag State shall effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag.

These general provisions are supplemented with the Agreement on Straddling Fish Stocks, which institutes a monitoring system of vessels fishing on the High Seas by the flag State by granting licenses and authorizations. Moreover, the flag State shall carry out thorough investigations and shall take legal action in case of clear evidence of infringement.

The Agreement, also, grant policing powers to States, other than the flag State. It sets comprehensive rules, in respect to boarding and inspection, as well as, investigations on failures of the flag State.

The guidelines in Annex II of the Agreement preciselydetail the precautionary measures and the implementation of the various points of reference in fishery management strategies that apply the precautionary principle.

One might think that the formal consecration of the principle will come from the conventional regulation, which has increased recognition in these times of urgency as the international judge observes a certain caution in this matter⁴⁹.

Case law (II) will be examined before we consider the prospects offered to us(III).

CASE LAW

For the protection of the marine environment, the United Nations Convention on the Law of the Sea is an essential legal instrument.

It contains 46 articles on the subject and appears to be the depository of a universal vocation. Moreover, it sets up mandatory procedures leading to binding decisions.

Its purpose is to resolve "all problems relating to the law of the sea" and to establish "a legal order for the seas and oceans"⁵⁰.

⁴⁹It will be recalled that the ICJ abstained in the Gabcikovo-Nagymaros case (see footnote 17 above) to rule on the existence and scope of the precautionary principle in general international law. Similarly, in the Southern Bluefin Tuna cases, Australia and New Zealand invoked the precautionary principle to request the International Tribunal for the Law of the Sea to prescribe provisional measures to prevent Japan from continuing to fish in addition to the quota to him allotted. According to the Australian Council Pr. Crawford, "The Applicants view of the SBT stock and its current state is a plausible view, and it indicates a reasonable concern. That is all we need for present purposes. You do not have to decide the merit of this case: that is for the future. What is the future of the future, which should be kept open by the preservation of the future, and especially by the avoidance of unilateral increases in catch? I have given powerfully, I have given power, I have given power, I have given power, Contribute tit ha conclusion [...] The effect of these five points is cumulative. They all point the same way, even without the precautionary principle; They make the case for conservation now. The International Tribunal for the Law of the Sea, Memorials, Minutes of Public Hearings and Documents, 1999, vol. 4, Martinus Nijhoff Publishers [Bluefin tuna (New Zealand v. Japan, Australia c Japan) provisional measures], p.427. If the Tribunal has not formally designated the principle and has not ruled on its existence and scope in general international law, it has retained the substance: "Considering that, in the opinion of the Tribunal, the parties Should therefore act with caution and precaution and ensure that effective conservation measures are taken to prevent severe damage to the bluefin tuna stock.

TIDM Case of Southern Bluefin Tuna, New Zealand v. Japan; Australia c. Japan, Application for the Prescription of Provisional Measures, Order of 27 August 1999, para. 77.

Part XII contains most of the articles dealing with disputes relating to the interpretation and application of these provisions.

The environmental aspect is present in many disputes and concerns: fishing and the problems raised by the overexploitation of fishery resources; the risks of radioactive pollution of the sea: consequences for the marine environment of State land reclamation works; non-harmful use of the territory; compliance with protection and preservation measures taken by RFMO / RFMO Member States; obligation to cooperate in the protection of the marine environment, or the obligation of due diligence, or the obligation to protect "fragile ecosystems"

Up to now, it was essentially the urgent procedures that served as the basis for referral to the Tribunal in environmental disputes.

First, the provisional measures contain two scenarios. On the one hand, if a dispute has been duly submitted and if it considers*prima facie*, it has jurisdiction, ITLOS may prescribe any measure which it considers provisional appropriate under the circumstances to preserve the respective rights of the parties to the dispute or to prevent serious harm to the marine environment, pending the final decision. On the other hand, pending the constitution of an Annex VII tribunal, ITLOS may prescribe, modify or revoke provisional measures if it considers that *prima facie*, the Tribunal, which is to be constituted would have jurisdiction and that the urgency of the situation so requires 51 .

Next, the prompt release procedure appears to be the counterpart of the recognition of the concept of EEZ. The procedure is designed to preserve the balance between coastal States and flag States, in particular in the field of navigation; in order to avoid exorbitant economic damage to ship owners and operators. This procedure contains objective limits in the protection and preservation of the marine environment. It focuses on fisheries and the problems posed by the overexploitation of fishery resources⁵².

After that, we have the requests for advisory opinions. Under UNCLOS and the status of the Tribunal, the advisory function is exercised by the Chamber for the settlement of seabed disputes. On 1st February 2011, the Chamber issued its first advisory opinion on "The Responsibilities and Obligations of States sponsoring Persons and Entities with respect to activities in the Area". These two instruments did not contemplate the advisory jurisdiction of the Tribunal in plenary session. This is a creation of the Tribunal in the development of its Rules of Procedure in 1996;

The possibility was then raised for the full court to give advisory opinions. For this reason, the jurisdiction clause is contained on the rules of the Tribunal, in its Article 138, which provides that the Tribunal may give an advisory opinion on a legal question as far as an international agreement relating to the purpose of the Convention expressly provides for a request of such opinion shall be submitted to the Tribunal.

Finally, the cases treated by the Ad Hoc tribunals dealt with the environment either by preterition or in *Obiter Dictum*.

It is clear from the case law that provisional measures play a special role in the protection of the marine environment. Let us examine the jurisprudence through the aforementioned procedures.

PROVISIONAL MEASURES

Southern Bluefin Tuna Case [ITLOS Order of 27 August 1999] Cases N° 3 and 4. Japan / Australia / New Zealand.

This case is related to the overexploitation of the Southern Bluefin Tuna fish stocks. New Zealand asserted that Japan did not comply with its obligation to cooperate in the management and the conservation of the Southern Bluefin Tuna fish stocks by refusing to take the necessary measures, against its nationals fishing in High Seas, in order to maintain the Southern Bluefin Tuna fish stocks at constant sustainable yield⁵³.

In its request of 30 July 1999, Australia demands that Japan immediately ceases its unilateral experimental fishing catch of SBT and restricts its catch in any given fishing year to its national allocation as last agreed in the Commission for the Conservation of Southern Bluefin Tuna⁵⁴.

Whether provisional measures are required pending the constitution of the arbitral

⁵⁰UNCLOS preamble of December 10. 1982

⁵¹UNCLOS, article 290, para. 1 and 5,

⁵²To date, ITLOS has experienced more than nine cases of prompt release. See www.itlos.org/business.

⁵³See paragraphs 28-31, order of the 27 august 1999

⁵⁴Ibid, paragraph 32; See paragraph 33 for the conclusions and arguments presented by Japan in its statement of claim.

tribunal,the Tribunal notes, "in accordance with article 290 of the Convention, the Tribunal may prescribe provisional measures to preserve the respective rights of the parties to the dispute or to prevent serious harm to the marine environment" (para. 67)⁵⁵.

The Tribunal observes that "the conservation of the living resources of the sea is an element in the protection and preservation of the marine environment" (para. 70)⁵⁶, and that "there is no disagreement between the parties that the stock of southern Bluefin tuna is severely depleted and is at its historically lowest levels and that this is a cause for serious biological concern" (para. 71)⁵⁷.

The Tribunal notes that it "has been informed by the parties that commercial fishing for southern Bluefin tuna is expected to continue throughout the remainder of 1999 and beyond" (para. 75)⁵⁸, that "the catches of non-parties to the Convention of 1993 have increased considerably since 1996" (para. 76)⁵⁹, and that "the parties should in the circumstances act with prudence and caution to ensure that effective conservation measures are taken to prevent serious harm to the stock of southern Bluefin tuna" (para. 77)⁶⁰.

The Tribunal notes that "there is scientific uncertainty regarding measures to be taken to conserve the stock of southern Bluefin tuna and that there is no agreement among the parties as to whether the conservation measures taken so far have led to the improvement in the stock of southern Bluefin tuna" (para. 79)⁶¹.

It then states that, "although the Tribunal cannot conclusively assess the scientific evidence presented by the parties, it finds that measures should be taken as a matter of urgency to preserve the rights of the parties and to avert further deterioration of the southern Bluefin tuna stock" (para. 80)⁶².

⁵⁸ *Ibid*, para. 75.

- ⁶⁰ Ibid, para. 77.
- ⁶¹*Ibid*, *para*. 79.

Mox Plant case

[United Kingdom / Ireland; ITLOS Order of 3 December 2001]: No. 10.

Whether provisional measures are required pending the constitution of the arbitral tribunal, it states that, "in accordance with article 290, paragraph 1, of the Convention, the Tribunal may prescribe provisional measures to preserve the respective rights of the parties to the dispute or to prevent serious harm to the marine environment" (para. 63)⁶³, and that "according to article 290, paragraph 5, of the Convention, provisional measures may be prescribed pending the constitution of the Annex VII arbitral tribunal if the Tribunal considers that the urgency of the situation so requires in the sense that action prejudicial to the rights of either party or causing serious harm to the marine environment is likely to be taken before the constitution of the Annex VII arbitral tribunal" (para. 64)⁶⁴. "the Tribunal must, therefore, decide whether provisional measures are required pending the constitution of the Annex VII arbitral tribunal" (para. 65)⁶⁵.

The Tribunal notes Ireland's contentions that, once the MOX plant becomes operational, "some discharges into the marine environment will occur with irreversible consequences" $(para. 68)^{66}$, and "it is not possible to return to position that existed before the the commissioning of the MOX plant simply by ceasing to feed plutonium into the system" $(para. 70)^{67}$. The Tribunal also notes that Ireland "argues that the precautionary principle places the burden on the United Kingdom to demonstrate that no harm would arise from discharges and other consequences of the operation of the MOX plant, should it proceed, and that this principle might usefully inform the assessment by the Tribunal of the urgency of the measures it is required to take in respect of the operation of the MOX plant" (para. 71)⁶⁸.

The Tribunal takes note of the arguments of the United Kingdom which "contends that it has adduced evidence to establish that the risk of pollution, if any, from the operation of the MOX plant would be infinitesimally small" (para.

⁵⁵ Order of 27 October 1999, para. 67.

⁵⁶*Ibid*, *para*. 70.

⁵⁷ Ibid, para. 71.

⁵⁹ Ibid, para. 76.

⁶² *Ibid, para.* 80.

⁶³Order of 3 December 2001, para. 63

⁶⁴*Ibid, para.* 64

⁶⁵ Ibid, para. 65

⁶⁶ Ibid, para.68

⁶⁷ Ibid, para.70

⁶⁸ Ibid, para.71.

72)⁶⁹, that "the commissioning of the MOX plant ... will not ... cause serious harm to the marine environment or irreparable prejudice to the rights of Ireland, in the period prior to the constitution of the Annex VII arbitral tribunal..." (para. 73)⁷⁰, and that "neither the commissioning of the MOX plant nor the introduction of plutonium into the system is irreversible, although decommissioning would present the operator of the plant with technical and financial difficulties, if Ireland were to be successful in its claim before the Annex VII arbitral tribunal" (para. 74)⁷¹.

The Tribunal also notes that, in the view of the United Kingdom, "Ireland has failed to supply proof that there will be either irreparable damage to the rights of Ireland or serious harm to the marine environment resulting from the operation of the MOX plant and that, on the facts of this case, the precautionary principle has no application" (para. 75)⁷².

The Tribunal observes that the Respondent, at the public sitting held on 20 November 2001, "has stated that 'there will be no additional marine transports of radioactive material either to or from Sell afield as a result of the commissioning of the MOX plant" (para. 78)⁷³, that "'there will be no export of MOX fuel from the plant until summer 2002' and that 'there is to be no import to the THORP plant of spent nuclear fuel pursuant to contracts for conversion to the MOX plant within that period either" (para. 79)⁷⁴. The Tribunal places on record these assurances given by the United Kingdom (para. 80)⁷⁵.

For these reasons, the Tribunal does not find that in the circumstances of this case "the urgency of the situation requires the prescription of the provisional measures requested by Ireland, in the short period before the constitution of the Annex VII arbitral tribunal" (para. 81)⁷⁶. The Tribunal notes, however, "that the duty to cooperate is a fundamental principle in the prevention of pollution of the marine environment under Part XII of the Convention and general international law and that rights arise therefrom which the Tribunal may

- ⁷¹ Ibid, para.74.
- ⁷² Ibid, para.75.
- ⁷³ Ibid, para.78.
- ⁷⁴*Ibid*, *para*.79.
- ⁷⁵ Ibid, para.80.

consider appropriate to preserve under article 290 of the Convention" (para. 82)⁷⁷. "[I]n the view of the Tribunal, prudence and caution require that Ireland and the United Kingdom cooperate in exchanging information concerning risks or effects of the operation of the MOX plant and in devising ways to deal with them, as appropriate" (para. 84)⁷⁸.

In its Order, the Tribunal (para. 89)⁷⁹: ". Unanimously, Prescribes, pending a decision by the Annex VII arbitral tribunal, the following provisional measure under article 290. paragraph 5, of the Convention: Ireland and the United Kingdom shall cooperate and shall, for this purpose, enter into consultations forthwith in order to: (a) exchange further information with regard to possible consequences for the Irish Sea arising out of the commissioning of the MOX plant; (b) monitor risks or the effects of the operation of the MOX plant for the Irish Sea; (c) devise, as appropriate, measures to prevent pollution of the marine environment which might result from the operation of the MOX plant.

Land reclamation case (Malaysia v. Singapore) case N[•] 12, Order of 8 October 2003.

Whether provisional measures are required pending the constitution of the arbitral tribunal, the Tribunal notes that "in accordance with article 290, paragraph 1, of the Convention, the Tribunal may prescribe measures to preserve the respective rights of the parties to the dispute or to prevent serious harm to the marine environment" (para. 64)⁸⁰.

In relation to the Applicant's argument that the Respondent has breached certain provisions of the Convention, and in relation thereto, the precautionary principle (para. 74)⁸¹, the Tribunal notes that during the oral proceedings Singapore, in response to the measures requested by Malaysia, reiterated its offer to share the information requested by Malaysia with respect to the reclamation works (para. 76)⁸², stated that it would provide Malaysia with a full opportunity to comment on the reclamation works and their potential impacts (para. 77)⁸³, declared that it was ready and

⁸² *Ibid*, *para*.76.

⁶⁹ *Ibid*, *para*.72.

⁷⁰ Ibid, para.73.

⁷⁶ Ibid, para.81.

⁷⁷ *Ibid*, *para*.82.

⁷⁸ Ibid, para.84.

⁷⁹ Ibid, para.89.

⁸⁰Order of 8 October 2003, para. 64.

⁸¹ Ibid, para.74.

⁸³*Ibid, para*.77.

willing to enter into negotiations (para. 78)⁸⁴ and assured the Tribunal that it would not accelerate its works (para. 80)⁸⁵. The Tribunal places on record these assurances given by Singapore (para. 81)⁸⁶. With respect to the infilling works in Area D at Pulau Tekong, which was of primary concern to Malaysia (para. 84)⁸⁷, the Tribunal notes the commitment made by Singapore at the hearing not to undertake any irreversible action to construct the stone revetment around Area D pending the completion of a joint study to be undertaken by independent experts (para. 87)⁸⁸. The Tribunal places on record this commitment (para. 88)⁸⁹.

The Tribunal considers that "it cannot be excluded that, in the particular circumstances of this case, the land reclamation works may have adverse effects on the marine environment" $(para. 96)^{90}$, and that "given the possible implications of land reclamation on the marine environment, prudence and caution require that Malaysia and Singapore establish mechanisms for exchanging information and assessing the risks or effects of land reclamation works and devising ways to deal with them in the areas concerned" (para. 99)⁹¹. The Tribunal states that "Malaysia and Singapore shall ensure that no action is taken which might prejudice the carrying out of any decision on the merits which the Annex VII arbitral tribunal may render" $(para. 100)^{92}$.

In its Order, the Tribunal (para. 106)93: " Unanimously, Prescribes, pending a decision by the Annex VII arbitral tribunal, the following provisional measures under article 290, paragraph 5, of the Convention: Malaysia and Singapore shall cooperate and shall, for this purpose, enter into consultations forthwith in order to: (a) establish promptly a group of independent experts with the mandate (i) to conduct a study, on terms of reference to be agreed by Malaysia and Singapore, to determine, within a period not exceeding one year from the date of this Order, the effects of Singapore's land reclamation and to propose, as appropriate, measures to deal with any adverse

- ⁸⁸ Ibid, para.87.
- ⁸⁹ Ibid, para.88.
- ⁹⁰ Ibid, para.96.
- ⁹¹ Ibid, para.99.
- ⁹² Ibid, para.100.

effects of such land reclamation; (ii) to prepare, as soon as possible, an interim report on the subject of infilling works in Area D at Pulau Tekong; (b) exchange, on a regular basis, information on, and assess risks or effects of, Singapore's land reclamation works;

Delimitation of the maritime boundary between Ghana and Côte d'Ivoire (Order of 25 April 2015).

Whether provisional measures are required pending the final decision, the Special Chamber states that its power "to prescribe provisional measures under article 290, paragraph 1, of the Convention has as its object the preservation of the respective rights of the parties to the dispute or the prevention of serious harm to the marine environment pending the final decision" (para. 39)⁹⁴, and that it "may not prescribe provisional measures unless it finds that there is 'a real and imminent risk that irreparable prejudice may be caused to the rights of the parties in dispute" $(para. 41)^{95}$. The Special Chamber refers, in this connection, to paragraph 72 of the Tribunal's Order of 23 December 2010 in the M/V "Louisa" Case. The Special Chamber also notes that "urgency is required in order to exercise the power to prescribe provisional measures, that is to say the need to avert a real and imminent risk that irreparable prejudice may be caused to rights at issue before the final decision is delivered" (para. 42)⁹⁶.

As regards Côte d'Ivoire's request for "provisional measures to prevent serious harm to the marine environment" (para. 64)⁹⁷, "the Special Chamber finds that Côte d'Ivoire has not adduced sufficient evidence to support its allegations that the activities conducted by Ghana in the disputed area are such as to create an imminent risk of serious harm to the marine $67)^{98}$. environment" (para. The Special Chamber, however, notes that "the risk of serious harm to the marine environment is of great concern to [it]" (para. 68)⁹⁹ and that in its view "the Parties should in the circumstances 'act with prudence and caution to prevent serious harm to the marine environment" (para. $72)^{100}$. The Special Chamber refers, in this connection, to paragraph 77 of the Tribunal's Order of 23 December 2010 in the M/V

⁸⁴ Ibid, para.78.

⁸⁵ Ibid, para.80.

⁸⁶ Ibid, para.81.

⁸⁷ Ibid, para.84.

⁹³ Ibid, para.106.

⁹⁴Order of 25 April 2015, para.39.

⁹⁵Ibid, para.41.

⁹⁶Ibid, para.42.

⁹⁷Ibid, para.64.

⁹⁸Ibid, para.67.

⁹⁹Ibid, para.68.

¹⁰⁰Ibid, para.72.

"Louisa" Case, to paragraph 77 of the Tribunal's Order of 27 August 1999 in the Southern Bluefin Tuna Cases and to paragraph 132 of the Seabed Disputes Chamber's Advisory Opinion of 1 February 2011 (Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area) (para. 72)¹⁰¹

ADVISORY OPINIONS

Case No. 17: Responsibilities and obligations of States sponsoring Persons and Entities with respect to Activities in the Area [Advisory Opinion of 1 February 2011]

The Council of the International Seabed Authority raised the following question: What are the legal responsibilities and obligations of States-Parties to the Convention the sponsor the activities in the zone, in accordance with the 1994 Agreement related to the application of part XI of UNCLOS? The seabed chamber gave the following answer¹⁰²:

Sponsoring States have two kinds of obligations under the Convention and related instruments: A. The obligation to ensure compliance by sponsored contractors with the terms of the contract and the obligations set out in the Convention and related instruments. This is an obligation of 'due diligence'. The sponsoring State is bound to make best possible efforts to secure compliance by the sponsored contractors. The standard of due diligence may vary over time and depends on the level of risk and on the activities involved.

This 'due diligence' obligation requires the sponsoring State to take measures within its legal system. These measures must consist of laws and regulations and administrative measures. The applicable standard is that the measures must be 'reasonably appropriate'. B. Direct obligations with which sponsoring States must comply independently of their obligation to ensure a certain conduct on the part of the sponsored contractors. Compliance with these obligations may also be seen as a relevant factor in meeting the 'due diligence' obligation of the sponsoring State. The most important direct obligations of the sponsoring State are: (a) the obligation to assist the Authority set out in article 153, paragraph 4, of the Convention; (b) the obligation to apply a precautionary approach

as reflected in Principle 15 of the Rio Declaration and set out in the Nodules Regulations and the Sulphides Regulations; this obligation is also to be considered an integral part of the 'due diligence' obligation of the sponsoring State and applicable beyond the scope of the two Regulations; (c) the obligation to apply the 'best environmental practices' set out in the Sulphides Regulations but equally applicable in the context of the Nodules Regulations; (d) the obligation to adopt measures to ensure the provision of guarantees in the event of an emergency order by the Authority for protection of the marine environment; and (e) the obligation to provide recourse for compensation. The sponsoring State is under a due diligence obligation to ensure compliance by the sponsored contractor with its obligation to conduct an environmental impact assessment set out in section 1, paragraph 7, of the Annex to the 1994 Agreement. The obligation to conduct an environmental impact assessment is also a general obligation under customary law and is set out as a direct obligation for all States in article 206 of the Convention and as an aspect of the sponsoring State's obligation to assist the Authority under article 153, paragraph 4, of the Convention

Advisory Opinion of the SRFC of 2 April 2015 (Case N°. 21)103

By a letter dated 27 March 2013, received on 28 March 2013, the Permanent Secretary of the Sub-Regional Fisheries Commission (SRFC) transmitted to the Tribunal a request for an advisory opinion, pursuant to a resolution adopted by the Conference of Ministers of the SRFC at its fourteenth session, held on 27 and 28 March 2013. 2. In the said resolution, the Conference of Ministers had decided, in accordance with article 33 of the 2012 Convention on the Determination of the Minimal Conditions for Access and Exploitation of Marine Resources within the Maritime Areas under Jurisdiction of the Member States of the SRFC, to authorize the Permanent Secretary of the SRFC to seize the Tribunal, pursuant to article 138 of the Rules, in order to obtain its advisory opinion on the following questions: "1. What are the obligations of the flag State in cases where illegal, unreported and unregulated (IUU) fishing activities are conducted within the Exclusive Economic Zone of third party States?

¹⁰¹Ibid, para.72.

¹⁰²Advisory opinion of 1 February 2011, Operative part.

 $^{^{103}\}text{Advisory}$ opinion of 2nd April 2015, case N° 21, (para. 219)

2. To what extent shall the flag State be held liable for IUU fishing activities conducted by vessels sailing under its flag? 3. Where a fishing license is issued to a vessel within the framework of an international agreement with the flag State or with an international agency, shall the State or international agency be held liable for the violation of the fisheries legislation of the coastal State by the vessel in question? 4. What are the rights and obligations of the coastal State in ensuring the sustainable management of shared stocks and stocks of common interest, especially the small pelagic species and tuna?"

In its advisory opinion, the Tribunal (para. 219):Unanimously Replies to the first question as follows: The flag State has the obligation to take necessary measures, including those of enforcement, to ensure compliance by vessels flying its flag with the laws and regulations enacted by the SRFC Member States concerning marine living resources within their exclusive economic zones for purposes of conservation and management of these resources.

The flag State, in fulfillment of its obligation to effectively exercise jurisdiction and control in administrative matters under article 94 of the Convention, has the obligation to adopt the necessary administrative measures to ensure that fishing vessels flying its flag are not involved in activities in the exclusive economic zones of the SRFC Member States which undermine the flag State's responsibility under article 192 of the Convention for protecting and preserving the marine environment and conserving the marine living resources which are an integral element of the marine environment.

The foregoing obligations are obligations of 'due diligence'. The flag State and the SRFC Member States are under an obligation to cooperate in cases related to IUU fishing by vessels of the flag State in the exclusive economic zones of the SRFC Member States concerned. The flag State, in cases where it receives a report from an SRFC Member State alleging that a vessel or vessels flying its flag have been involved in IUU fishing within the exclusive economic zone of that SRFC Member State, has the obligation to investigate the matter and, if appropriate, take any action necessary to remedy the situation, and to inform the SRFC Member State of that action.

By 19 votes to 1 Replies to the fourth question as follows: Under the Convention, the SRFC Member States have the obligation to ensure the sustainable management of shared stocks while these stocks occur in their exclusive economic zones; this includes the following:

(i) the obligation to cooperate, as appropriate, with the competent international organizations, whether subregional, regional or global, to ensure through proper conservation and management measures that the maintenance of the shared stocks in the exclusive economic zone is not endangered by overexploitation (see article 61, paragraph 2, of the Convention);

(ii) In relation to the same stock or stocks of associated species which occur within the exclusive economic zones of two or more SRFC Member States, the obligation to 'seek ... to agree upon the measures necessary to coordinate and ensure the conservation and development of such stocks' (article 63, paragraph 1, of the Convention);

(iii) In relation to tuna species, the obligation to cooperate directly or through the SRFC with a view to ensuring conservation and promoting the objective of optimum utilization of such species in their exclusive economic zones (see article 64, paragraph 1, of the Convention). The measures taken pursuant to such obligation should be consistent and compatible with those taken by the appropriate regional organization, namely the International Commission for the Conservation of Atlantic Tunas, throughout the region, both within and beyond the exclusive economic zones of the SRFC Member States. To comply with these obligations, the SRFC Member States, pursuant to the Convention, specifically articles 61 and 62, must ensure that: conservation and management measures are designed to maintain or restore stocks at levels which can produce the maximum sustainable vield, as qualified by relevant environmental and economic factors, including the economic needs of coastal fishing communities and the special needs of the SRFC Member States, taking into account fishing patterns, the interdependence of stocks and any generally recommended international minimum standards, whether sub regional, regional or global. In exercising their rights and performing their duties under the Convention in their respective exclusive economic zones, the SRFC Member States and other States Parties to the Convention must have due regard to the rights and duties of one another. This flows from articles 56, paragraph 2, and 58, paragraph 3, of the Convention and from the States Parties' obligation to protect and preserve the marine environment, a fundamental principle underlined in articles 192 and 193 of the Convention and referred to in the fourth paragraph of its preamble. Living resources and marine life are part of the marine environment and, as stated in the Southern Bluefin Tuna Cases, 'the conservation of the living resources of the sea is an element in the protection and preservation of the marine environment

Arbitral Awards

South China Sea Arbitration (Philippines v. China) Award of 12 July 2016

Under article 192 and 194, the states are under the obligation to protect and preserve the marine habitat. In this regard, they take, separately or jointly, measures, in line with the Convention, that are necessary to prevent, reduce and avoid the pollution of the marine environment. whatever the source. They take all the necessary measures so that activities under their authority cannot cause damages through pollution to other States. Concerning the responsibility of the flag State, each party must ensure that vessels flying its flag do not exercise any activity, likely to the compromise effectiveness of the international measures of conservation and management¹⁰⁴.

Thus, the award in the present case indicates: «The South China Sea includes highly productive fisheries and extensive coral reef which are among the most ecosystems, world. The biodiverse in the marine environment around Scarborough Shoal and the Spratly Islands has an extremely high level of biodiversity of species, including fishes, corals, echinoderms, mangroves, seagrasses, giant clams, and marine turtles, some of which are recognised as vulnerable or endangered.

While coral reefs are amongst the most biodiverse and socioeconomically important ecosystems, they are also fragile and degrade under human pressures. Threats to coral reefs include overfishing, destructive fishing, pollution, human habitation, and construction.

In the South China Sea, ocean currents and the life cycles of marine species create a high degree of connectivity between the different ecosystems. This means that the impact of any environmental harm occurring at Scarborough Shoal and in the Spratly Islands may not be limited to the immediate area, but can affect the health and viability of ecosystems elsewhere in the South China Sea ».

The Arbitral Tribunal examined three obligations concerning marine environment preservation and protection under UNCLOS. First, the obligation of due diligence.

"Article 192 of the Convention provides that "States have the obligation to protect and preserve the marine environment." Although phrased in general terms, the Tribunal considers it well established that Article 192 does impose a duty on States Parties, 1093 the content of which is informed by the other provisions of Part XII and other applicable rules of international law. This "general obligation" extends both to "protection" of the marine environment from future damage and "preservation" in the sense of maintaining or improving its present condition. Article 192 thus entails the positive obligation to take active measures to protect and preserve he marine environment, and by logical implication, entails the negative obligation not to degrade the marine environment. The corpus of international law relating to the environment, which informs the content of the general obligation in Article 192, requires that States "ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control."1094 Thus States have a positive "duty to prevent, or at least mitigate" significant harm to the environment when pursuing large-scale construction activities." 1095 The Tribunal considers this duty informs the scope of the general obligation in Article 192.¹⁰⁵

Second. the obligation to conduct an Environnemental Impact Assessment (EIA) « Article 206 ensures that planned activities with potentially damaging effects may be effectively controlled and that other States are kept informed of their potential risks. In respect of Article 206, the International Tribunal for the Law of the Sea emphasised that "the obligation to conduct an environmental impact assessment is a direct obligation under the Convention and a general obligation under customary international law." 1107 As such, Article 206 has beendescribed as an "essential part of a comprehensive environmental management system" and as a "particular application of the

¹⁰⁴ITLOS advisory Opinion of 2 April 2015, op. cit.

 $^{^{105}}$ South china Sea Arbitration (Philippines Vs China), Arbitral Award 2016, PCA case N° 2013 - 19, para.941.

obligation on states, enunciated in Article 194(2)."1108 While the terms "reasonable" and "as far as practicable" contain an element of discretion for the State concerned, the obligation to communicate reports of the results of the assessments is absolute ».

Moreover, The Tribunal considers that given the scale and impact of the island-building activities described in this Chapter, China could not reasonably have held any belief other than that the construction "may cause significant and harmful changes to the marine environment."

Accordingly, China was required, "as far as practicable" to prepare an environmental impact assessment. It was also under an obligation to communicate the results of the assessment¹⁰⁶.

And lastly, the Tribunal examined the obligation to cooperate.It said : « With respect to China's island-building program, the Tribunal has before it no convincing evidence of China attempting to cooperate or coordinate with the other States bordering the South China Sea. This lack of coordination is not unrelated to China's lack of communication,¹⁰⁷». It appears that it is always useful for States to cooperate and for this purpose enter into consultations forthwith in order to exchange further information, with regard to possible consequences, to monitor risks and devise as appropriate measures to prevent and protect pollution of the marine environnent. The measures taken must encompass the protection and the preservation of rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life. Otherwise, the flag State may carry out in depth investigation in the allegation of an infringement. [The Pulp Mills case (ICJ); Responsibilities and obligations of sponsoring States... (Advisory Opinion of 1 February 2011 - ITLOS); Chago Marine Protection Arbitration case; Mox Plant case (ITLOS)].

We shall now look at the prospects offered to us, these days.

PROSPECTS

There are two problems of concern to the international community of States as a whole. It isabout:

Consequences of Climate Change

The consequences of climate change on the oceans are likely to be on the Law of the Sea agenda for a long time and may well occupy a number of international institutions. The 2010 report of the UN Secretary-General on Oceans and the Law of the Sea highlights the various aspects of these consequences: "rising sea levels; the melting of ice in the Arctic Ocean; The issue of ocean acidification; the challenges of marine biodiversity; increased frequency of extreme weather events and transfers in the distribution of biological species¹⁰⁸ ". That is why the United Nations General Assembly continues to stress the urgent need to address the effects of climate change and ocean acidification on the marine environment and marine biodiversity and recommends a number of measures¹⁰⁹. One of the flagship measures is raising public awareness of the adverse effects of climate change on the oceans¹¹⁰.

As part of its revised mandate, approved by the General Assembly, UN-Oceans, the interagency coordination mechanism for oceans and coastal issues, continued to give priority to a searchable online database containing an inventory of mandates and activities¹¹¹. In accordance with its mandate¹¹², the UN-Oceans Coordinator held the sixteenth meeting of the consultative process on the work of this mechanism¹¹³.

UN-Oceans also organized a briefing session on the activities of UN-Oceans members on the sidelines of the Conference of the Parties (COP 21) at the United Nations Framework Conference on Climate Change in Paris The issue of Oceans and climate change and the acidification of the oceans¹¹⁴.

The issue of climate change is of global concern. It is multidimensionnels¹¹⁵ in that it

¹¹¹ Ibid.

¹¹⁵ See UN document A/65/69/add.2, para 374 ; R. Rayfuse and Scott (eds.) International law in the Era of Climate Change, London, 2012; Dryzek, Norgaard and Schlosberg (eds.), Oxford Handbook of Climate Change and Society Oxford, 2011; A. Boyle, "Climate Change and Ocean Governance", in M.C.

See

¹⁰⁶ Ibid, paragraphs 948 and 988

¹⁰⁷ Ibid. 986

¹⁰⁸ See United Nations document A/65/69/Add.2, para.374

¹⁰⁹ UN GA, Resolution 69.245

¹¹⁰ See UN Secretary-General report

¹¹² See resolution 68/70, annexe.

¹¹³ See www.un.oceans.org

¹¹⁴

http://unfccc.int/files/meetings/Bonn_jun_2015/

covers the most diverse and dissimilar domains¹¹⁶.

As Ph.Sands says:"It is plain that climate change poses significant challenges to international law. The subject transcends the classical structure of an international legal order that divides our planet into territorially defined areas over which states are said to have

RIBEIRO (ed.), 30 years after he signature of the UNCLOS ... op. cit.[Note 112], pp. 357-382, où l'auteur écrit: "Rather, the important lesson is that climate change should be on the negotiating agenda of all international institution whose mandate is affected by it. It is a human rights issue. It is a trade issue. It is also an issue for IMO and those convention secretariats responsible for protecting the marine environment pursuant to part XII of the 1982 Convention", p. 358.

¹¹⁶As stated in the 2014 summary report dedicated to theleaders:

"1) Human influence on the climate system is clear ... recent climate changes have had widespread impacts on human and natural systems;

2) many of the observed changes are unprecedented;

3) the atmosphere and oceans have warmed, that amounts of snow and ice have diminished, and sea level has risen;

4) anthropogenic greenhouse gas emissions are extremely likely to have been the dominant cause of the observed warming since the mid-20th century;

5) Continued emissions ... will cause further warming and long-lasting changes ... increasing the likelihood of severe, pervasive and irreversible impacts;

6) Limiting climate change would require substantial and sustained reductions in greenhouse gas emissions;

7) It is very likely that heat waves will occur more often and last longer, and that extreme precipitation events will become more intense in frequent in many regions. The ocean will continue to warm and acidify, and global mean sea level to rise:

8) Many aspects of climate change and associated impacts will continue for centuries;

9) The risks of abrupt or irreversible changes increase as the magnitude of the warming increases;

10) Without additional mitigation efforts ... warming by the end of the 21st century will lead to high , to very high risk of severe, wide-spread and irreversible impacts globally and

11) there are multiple mitigation pathways that are likely to limit warming to below 2°C relative to preindustrial levels. the pathways would require substantial emissions reductions over the next few decades and near zero emissions of CO2 and other long-lived greenhouse gases by the end of the century", IPCC, Climate Change 2014 Synthesis Report, Summary for Policymakers, http://www.ipcc.ch/pdf/assessment.

Report/ar5/syr/AR5 SYR FINAL SPM. pdf.

sovereignty. Issues associated with climate change permeate national boundaries: emissions or actions in one state will have adverse consequences in another, and in areas over which states have no jurisdiction or sovereignty. (...) there is no other issue like climate change, where the sources of the problem-according to the IPCC-are so many and so broad, requiring actions that touch upon virtually every aspect of human endeavour and action. Each of us contributes to climate change; each of us will be affected by climate change;"

Given the prolific nature of the problems raised by the changes and, above all, their differences in nature, several specialty criteria will have to be put in place to deal with the situation. Sealevel rise is likely to affect many islands and the low-tide elevation that may disappear. The problem of the rights to the maritime areas which fell within the jurisdiction of the said islands after the disappearance of the low-tide elevation will have consequences for the determination of the baselines.

Scientists have revealed that sea-level rise was faster from 2000 to 2009 than in the previous 5,000 years¹¹⁸. The immediate challenge facing this situation is the protection of archipelagos likely to be threatened by rising sea levels and populations living on the coast. The various island formations of certain archipelagos are at a very low level above the present level of the sea¹¹⁹.

The melting of continental glaciers and polar ice will affect the law of the sea. It will generate new continental shelves; new shipping routes and may be a new piracy due to the idleness of indigenous peoples likely to be and the migration of fish stocks to these new ice-free areas. This situation can create new fishing

¹¹⁷Ph. Sands, "Climate change and the Rule of Law: Adjudicating the Future in International Law", Public Lecture, United Kingdom Supreme court, 17 September 2015, 530 pm, pp. 1-21, spec.p.6.

¹¹⁸It is estimated that one third of the increase is due to the melting of continental glaciers and polar ice (average winter temperature in Antarctica rose by 6 degrees in 50 years), another third to dilation of Sea water because of its warming, even minimal, the last third causal being still indeterminate. See J.P. Pancracio, Law of the Sea, Précis Dalloz 2010, p. 2.

¹¹⁹This is the case for the archipelagos of Tuvalu (Pacific Ocean), the Maldives (Indian Ocean) and the Seychelles (Indian Ocean). These archipelagos are classified as Small Island Developing States, many of whose islands are only 1 or 2 meters high; Which exposes them singularly.

activities at the same time as a new hydrocarbon or gas industry, that is to say also a possible pollution. This means that many issues will emerge and will require a very close international cooperation to remove these zones from a geo-economic and geostrategic conflict situation. Meanwhile, States may rely on UNCLOS for the protection and preservation of the marine environment. "States have an obligation to protect and preserve the marine environment"¹²⁰. They are thus required to take measures to prevent, reduce and control pollution of the marine environment. In particular, States must take all necessary measures to ensure that activities within their jurisdiction or control are conducted in such a way as not to cause pollution damage to other States and their environment and to ensure that the resulting pollution Incidents or activities within their jurisdiction or control does not extend beyond the areas where they exercise sovereign rights¹²¹. This principle of non-harmful use of the territory¹²² appears to be a due diligence¹²³ obligation, and therefore liable to involve the responsibility of a State¹²⁴.

The other major challenge is the acidification of the oceans, whose level of scientific knowledge is in the limbo of stagnation, prompting the Community of Nations to take note of the situation. As Tommy Koh points out:

"The nexus between climate change and the oceans is insufficiently understood. People generally do not know that the oceans serve as the blue lungs of the planet, absorbing Co2 for the atmosphere and returning oxygen to the atmosphere. The oceans also play a positive role in regulating the world's climate system. One impact of global warming on the oceans is that the oceans are getting warmer and more acidic. This will have a deleterious effect on our coral reefs. In view of the symbiotic relationship between land and sea, the world should pay more attention to the health of our oceans¹²⁵."

Marine Genetic Resources

The issue is being considered by an Ad Hoc Open-ended Informal Working Group, established by the United Nations General Assembly in 2004, to address issues related to the conservation and sustainable use of marine biodiversity in Areas beyond national jurisdiction "the Ad Hoc Working Group¹²⁶".

This work is carried out through the Open-ended Informal Consultative Process on Oceans and the Law of the Sea ("the Consultative Process"), which focuses on marine genetic resources and agrees that the Ad Hoc Working Group To consider this issue¹²⁷. Discussions were held on the legal regime to be applied to marine genetic resources in areas beyond national jurisdiction, in accordance with UNCLOS and the General Assembly had to ask States to continue

¹²⁰Article 192 of UNCLOS and Article 194 paragraph 5 to clarify that "measures taken in accordance with this Part shall include measures necessary to protect and preserve rare or delicate ecosystems and the habitat of species and other marine organisms in decline , Threatened or threatened with extinction ". These obligations should be considered in tandem with those relating to the conservation and management of the living resources of the high seas as contained in articles 117 to 120 of UNCLOS

¹²¹Article 194, para.2

¹²²See Tafsir Malick NDIAYE "The International Responsibility of States for Marine Damage", in B. Vukas, T. SOSIC (eds.), International Law: New Concepts, Continuing Dilemma, Liber Amicorum Boziclar Bakotic, Martinus Nijhoff Publishers, Leiden / Boston 2010, pp. 265-279, 267; See also the Basel Convention of 22 March 1989 on the Control of Transboundary Movements of Hazardous Wastes, International Legal Materials (ILM), Vol. 28, p. 649 (1989).

¹²³See ITLOS, Case No. 17, Responsibilities and Obligations of States Sponsoring Persons and Entities in Activities Conducted in the Area (Request for Advisory Opinion Submitted to the Seabed Disputes Tribunal), paragraphs 115-120.

¹²⁴On the justiciability of climate change, see A. BOYLE, op. cit. [Note 141] pp.378-380; Ph. Sands op. cit. [Note 143], p. 11-15.

¹²⁵See, T. Koh, in L. Del Castillo (ed.) Law of the Sea, from Grotius to the International Tribunal for the Law of the Sea, Liber Amicorum Judge Hugo Caminos, Brill / Nijhoff, 2015, p.108; In its resolution, the General Assembly of the United Nations says: "§81 Takes note of the work of the Intergovernmental Panel on Climate Change, including its conclusions that, The effects of ocean acidification on marine biology are not yet known, this progressive acidification is expected to have a negative impact on shellfish marine organisms and their dependent species, and in this regard encourages States to continue, Urging research on ocean acidification, in particular observation and measurement programs ", A / RES / 62/215 of 14 March 2008, Resolution adopted by the General Assembly of the United Nations on 22 December 2007, P. 16, para. 81.

¹²⁶See A / 61/65 and Corr. 1

¹²⁷ As requested by the United Nations General Assembly in paragraph 91 of Resolution 61/222. The Working Group held several meetings from 2006 to 2015.

consideration of this issue in within the mandate of the Ad Hoc Working Group, to advance the work¹²⁸. The community of States is doubly aware of the abundance and diversity of marine genetic resources and their value in terms of the benefits that can be derived from it and the goods and services to which they may give rise, a part. On the other hand, it is also aware of the importance of research on marine genetic resources to better understand and better manage marine ecosystems and their potential uses and applications¹²⁹.

The first meetings of the Informal Working Group saw very little progress in the discussions where there was strong disagreement and divergence on the issue of the applicable legal regime for marine biodiversity, including marine genetic resources beyond the national jurisdictions.

The particular nature of genetic resources, which must be thoroughly explored, makes discussions very difficult. The question that arises is whether they belong to the seabed or to the superjacent waters. The answer to this question reflects on the applicable rules of the law of the sea. Thus, two opposing and exclusive points of view have clashed in the process. On the one hand, some States have argued that the fundamental principle to be applied in this matter is that of the common heritage of mankind, while other States have asserted the principle of freedom of the high seas, 'other.

Three types of arguments are advanced to support the different positions.

First, the question of whether the regime applicable to the Area concerns resources other than minerals. It is well known that UNCLOS means resources of all in situ solid, liquid or gaseous mineral resources in the area that are on the seabed or subsoil thereof, including polymetallic nodules and once extracted from the Zone, are called "minerals"¹³⁰. The argument is sometimes developed on the basis of an analogy with the status of sedentary species on the continental shelf.

Second, the question of whether Article 143 of UNCLOS can be invoked in support of the idea that the prospecting of genetic resources should be conducted for exclusively peaceful purposes and in the interest of all humanity In accordance with Part XIII¹³¹.

Finally, the question of whether the International Seabed Authority is called upon or not to play any role in this matter, since the Authority is the organization through which States Parties organize and Control activities in the Area, including the administration of its resources¹³².

It was in 2011 that the Working Group was to recommend the establishment of a process whereby the legal framework for the conservation and sustainable use of marine biodiversity in areas not under national jurisdiction reflects Different points of view of States. In particular, "taken jointly and as a whole", issues relating to marine genetic resources, including those related to benefitsharing, measures such as area management tools, including marine protected areas, Impact on the environment, as well as capacity building and transfer of marine technology.

This recommendation will be adopted by the United Nations General Assembly and is presented as the package deal of negotiations in the development of an international legally binding instrument related to UNCLOS on the conservation and sustainable use of Marine

¹²⁸ See document A / RES / 62/215 of 14 March 2008, p.24, para. 133.

¹²⁹ Ibid. Paragraphs 134 and 135; See also J. Wehrli and Th. Cottier " towards a treaty instrument on marine genetic resources" in M. C. Ribeiro (ed.), 30 years after the signature of the UNCLOS ... op. cit. [Note 112] pp.517-549 where it is stated that "The law, and international law, finds itself in the classic constellation of ex post assessment of the implications of rules not per se designed to deal with novel and impending challenges. [...] Even the deep sea, which belongs to the least explored areas in the world, supports mammals and fish, including sea stars, sponges, jellyfish and bottom - dwelling fish, worms, molluscs, crustaceans, and a board range of single-celled orga-nisms", p.518; M. Allsopp and al., World Watch Report 174: Oceans in Peril: Protecting Marine Biodiversity, World Watch Institute, Washington DC, September 2007, p. 7.; T. Heidar, "Overview of the BBNJ Process and Main Issues", CIL International Workshop, Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction: Prepa-ring for the PrepCom, Singapore, 3-4 February 2016 [PowerPoint].

¹³⁰UNCLOS, article 133, para. a) and b)

¹³¹The words of Article 143, paragraph 1, of the UNCLOS relating to "Marine Scientific Research" in the Area, that is to say, the seabed and its subsoil beyond the limits of jurisdiction national. ¹³²UNCLOS, article 157

biodiversity in areas not under national jurisdiction (BBNJ)¹³³.

The Working Group continued to examine these issues in the context of the new process. It held two workshops in 2013 on marine genetic resources and on the conservation and sustainable use of marine biodiversity on the other. The General Assembly convened that the Working Group should hold several meetings to prepare the decision it was due to take at its 69th session and for which it requested recommendations on terms of reference¹³⁴, application, parameters and possibilities for the development of an international instrument related to the Convention.

After considering the recommendations¹³⁵ of the Ad Hoc Open-ended Working Group and welcoming the progress made by the Working Group in implementing, in accordance with its mandate¹³⁶, the General Assembly decided to develop a legally binding international instrument on 19 June 2015.

It also decides to establish, before the date of an intergovernmental conference, a preparatory committee, and open to all Member States of the United Nations, members of the specialized agencies and parties to the Convention¹³⁷. The

Committee is responsible for making substantive recommendations to the General Assembly on the elements of the draft international legally binding instrument relating to the Convention. The Committee will have to take into account the various Co-Chairs' reports on the work of the ad hoc informal working group on issues related to the conservation and sustainable use of marine biodiversity. The committee began its work in 2016 and will hold two sessions of two weeks each.

The first session took place from 28 March to 8 April and the second session will take place from 26 August to 9 September. The same will happen in 2017 and the Preparatory Committee will report to the General Assembly on the status of its work by the end of 2017. The Preparatory Committee is chaired by Ambassador Eden Charles of Trinidad and Tobago¹³⁸.

The General Assembly of the United Nations decided that before the end of its seventy-second session it would take a decision, taking into account the report of the Preparatory Committee, on the organization and date of the opening of an intergovernmental conference, To be held under the auspices of the United Nations; The recommendations of the Preparatory Committee and the development of an international legally binding instrument related to the Convention.

On 28 February 2017, the Chairman of the Preparatory Commission submitted a text entitled 112 pages "Non-paper" and 759 proposals from States, which constitute the elements of the draft international legally binding instrument on the conservation and sustainable management of Biodiversity beyond national jurisdiction.

The text is a reference document, which will greatly assist delegations in the consideration of issues and ideas under discussion in the Preparatory Committee¹³⁹.

Section E of Chapter III, "Environmental Impact Assessments", is particularly important for the protection and preservation of the marine environment with the suggested principles: "Precautionary principle / Approach; Ecosystem approach; Science-based approach;

¹³³See United Nations document A / RES / 69/292 of 6 July 2015, adopting the Resolution adopted by the General Assembly on 19 June 2015 "Preparation of an international instrument relating to UNCLOS, Sustainable use of marine biodiversity in areas beyond national jurisdiction ", p. 2, para. 1.

¹³⁴See A / RES / 69/292 op. [Note 113] where the first recital reads: "The General Assembly, Reaffirming the commitment made by the Heads of State and Government in para. 162 of the outcome document of the United Nations Conference on Sustainable Development, held in Rio de Janeiro, Brazil from 20 to 22 June 2012, entitled "The future we want, IJ endorsed in its resolution 66/288 of 27 July 2012, to address urgently the issue of Conservation and Sustainable Use of Marine Biodiversity in Not based on national jurisdiction, on the basis of the work of the Ad Hoc Open-ended Working Group ij Open-ended Composition on the Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond Of the limits of national jurisdiction and in particular to take a decision on the adoption of an international instrument relating to the United Nations Convention on the Law of the Sea before the end of its sixtyninth session ".

¹³⁵ See doc. A/69/780, annex sect.I

¹³⁶See resolutions 66/321 of 24 december 2011 and 67/78 of 11 december 2012

¹³⁷ See doc. A/69/780, annex sect. I

¹³⁸Ibid. For the organisation and the ruling of the preparatory committee, paragraph 1, ¹³⁹Seehttp://www.un.org/depts/los/biodiversity

[/]prepcom.htm]

Transparency in decision making; Inter-and-Intra Generational Equity; Responsibility to protect and preserve marine environment; Stewardship; No-net-loss principle¹⁴⁰ »This process of negotiation will undoubtedly be enhanced by the interpretation and application of Part XII of UNCLOS. Moreover, the dialogue between international and arbitral tribunals will gradually establish an international regime for the protection of the environment.

Citation: Tafsir Malick NDIAYE. "The International Courts and Tribunals, the Protection and Preservation of the Marine Environment" Journal of Law and Judicial System, 1(3), pp. 21-44

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¹⁴⁰ See Non Paper, ibid, pp. 64-78