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RESEARCH ARTICLE

Transformation From Soft Law to Hard Law of International Environmental Protection: Process, Basic Concepts and Principles – Part 1: "Common Heritage of Mankind", "Present and Future Generations", "Inter/Intra-generational Equity" and "Sustainable Development"

Mehmet Semih Gemalmaz*

Abstract

In this study transformation from soft law to hard law of international environmental protection is analysed within the historical perspective with a special emphasis on process, basic concepts and principles. In Part I of this study, firstly soft-hard law dichotomy and enforcement is examined and attention has been drawn to the 1972 Stockholm and the 1992 Rio Declarations. It follows the examination of "common heritage of mankind", "present and future generations", "inter/intra-generational equity", and "sustainable development" as the basic notions and principles which have roots in soft law and subsequently become an integral part of international environmental protection of hard law instruments. In Part 2 of the study which will be published in the subsequent issue, "no transboundary environmental harm", "precautionary", "environmental impact assessment" principles as well as "access to information and participation to decision-making processes" criteria have been analysed. As a whole in this study in addition to relevant international literature and soft/hard law documents some of the significant jurisprudence in its historical process have been referred to.

Keywords

Common Heritage of Mankind, Environmental Law, Sustainable Development, Present and Future Generations, Inter/Intragenerational Equity, 1972 Stockholm Declaration, 1992 Rio Declaration

* **Corresponding Author:** Mehmet Semih Gemalmaz (Prof. Dr.), İstanbul, Türkiye. E-posta: msgemalmaz@superonline.com
ORCID: 0000-0002-7686-5612

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Transformation From Soft Law to Hard Law of International Environmental Protection: Process, Basic Concepts and Principles – Part 1:

"Common Heritage of Mankind", "Present and Future Generations", "Inter/Intra-generational Equity" and "Sustainable Development"

A-) Legal Nature and Form of International Environmental Law Instruments

1. Soft/hard Law

It is usual to categorize international environmental rules in terms of 'soft-law' and 'hard-law', depending on whether or not they meet formal treaty criteria.[1]

In examining the question whether resolutions of the General Assembly carry any binding force, Sloan as early as 1948 concludes that "the judgment by the General Assembly as a collective world conscience is itself a force external to the individual conscience of any given State. It is submitted that in view of these considerations the 'moral force' of the General Assembly is in fact a nascent legal force".[2] Higgins in her 1963 study maintains that "resolutions of the Assembly are not *per se* binding: though those rules of general international law which they may embody are binding on member states, with or without the help of the resolution. But the body of resolutions as a whole, taken as indications of a general customary law, undoubtedly provides a rich source of evidence".[3]

Considering the issue within the parameter of international law in general[4], one may refer to, *inter alia*, Schachter's article published in 1977. The author stated that "the

1 Oscar Schachter, '*The Twilight Existence of Nonbinding International Agreements*' (1977) 71/2 AJIL 296; C. M. Chinkin, '*The Challenge of Soft Law: Development and Change in International Law*' (1989) 38/4 ICLQ 850; Günther Handl, '*Environmental Security and Global Change: The Challenge to International Law*' (1990) 1 Y.B. Int'l Envtl. L. 3, 7-8; Catherine Tinker, '*Environmental Planet Management by the United Nations: An Idea Whose Time Has Not Yet Come?*' (1990) 22/4 N.Y.U. J. Int'l L & Pol. 793, 800-803; Pierre-Marie Dupuy, '*Soft Law and the International Law of the Environment*' (1991) 12/2 Mich. J. Int'l L. 420; Peter H. Sand, '*UNCED and the Development of International Environmental Law*' (1992-93) 8/2 J. Nat. Resources & Envtl. L. 209, 212; Francesco Francioni, '*International 'Soft Law': A Contemporary Assessment*' in Vaughan Lowe and Malgosia Fitzmaurice (eds.) *Fifty Years of the International Court of Justice - Essays in Honour of Sir Robert Jennings* (Grotius Publications, Cambridge University Press 1996) 167; A. E. Boyle, '*Some Reflections on the Relationship of Treaties and Soft Law*', (1999) 48/4 ICLQ 901; Lluis Paradell-Trius, '*Principles of International Environmental Law: an Overview*' (2000) 9/2 RECIEL 93, 95-97.

2 F. Blaine Sloan, '*The Binding Force of a 'Recommendation' of the General Assembly of the United Nations*' (1948) 25 BYBIL 1, 32 (According to Sloan, "there is, however, in the Charter no express undertaking to accept recommendations of the General Assembly similar to the agreement in Article 25 to accept and carry out decisions of the Security Council. On the other hand, it cannot be said that the Charter specifically negates such an obligation, and it may be possible to deduce certain obligations from the Charter as a whole which it would be impossible to establish from an express undertaking", *id.* 14.); further see, D. H. N. Johnson, '*The Effect of Resolutions of the General Assembly of the United Nations*' (1955-56) 32 BYBIL 97.

3 Rosalyn Higgins, The Development of International Law through the Political Organs of the United Nations, (Oxford University Press 1963) 5, *quoted in* S. K., Chatterjee, '*The Charter of Economic Rights and Duties of States: An Evaluation after 15 Years*' (1991) 40/3 ICLQ 669, 682 (According to the author "it may be unwise to dismiss the legal effect of all UN General Assembly resolutions, especially those pertaining to State responsibility", ibid.).

4 Francesco Francioni, '*International Soft Law*' (n. 1) 173. (The author referring to the İCJ's jurisprudence found that the **(i)** Court has contributed to furthering the development of the concept of soft law; **(ii)** this concept has been understood to include unwritten prescriptions such as general considerations of humanity; **(iii)** the Court has applied soft law contained in international documents, in particular General Assembly resolutions, and finally **(iv)** reference to soft law has been understood as a method for facilitating the process of their transformation into hard law.)

fact that nonbinding agreements may be terminated more easily than binding treaties should not obscure the role of the agreements which remain operative… As long as they do last, even non-binding agreements can be authoritative and controlling for the parties. There is no *a priori* reason to assume that the undertakings are illusory because they are not legal".[5] Chinkin who argued that "soft law instruments range from treaties, but which include only soft obligations ('legal soft law'), to non-binding or voluntary resolutions and codes of conduct formulated and accepted by international and regional organizations ('non-legal soft law'), to statements prepared by individuals in a non-governmental capacity, but which purport to lay down international principles. The use of a treaty form does not of itself ensure a hard obligation".[6] The author concluded that "labeling (international) instruments as law or non-law disguises the reality that both play a major role in the development of international law and both are needed for the regulation of States' activities and for the creation of expectations".[7]

According to Dupuy, "soft law creates and delineates goals to be achieved in the future rather than actual duties, programs rather than prescriptions, guidelines rather than strict obligations".[8] But it is necessary to distinguish between the *substance* and the *instrument*. There may be cases "where the content of a formally non-binding instrument has been so precisely defined and formulated that, aside from the precaution of using 'should' instead of 'shall' to determine the proper behavior for concerned States, some of its provisions could perfectly be integrated into a treaty". Furthermore, there are numerous treaty provisions which the wording used is so 'soft' that seems "impossible to consider them as creating a precise obligation or burden on States parties".[9] In the view of Dupuy "the criteria used to identify 'soft' law should no longer be *formal*, i.e., based on the compulsory or non-compulsory character of the instrument, but instead *substantial*, i.e., *dependent on the nature and specificity of the behavior requested of the State*, whether or not it is included in a legally binding instrument"[10] (emphasis original).

5 Schachter '*The Twilight Existence of Nonbinding International Agreements*' (n. 1) 304. (The author also reminded that "not all nonbinding agreements are general and indefinite. Governments may enter into precise and definite engagements as to future conduct with a clear understanding shared by the parties that the agreements are not legally binding. The so-called 'gentlemen's agreements' fall into this category… In these cases the parties assume a commitment to perform certain acts or refrain from them. The nature of the commitment is regarded as 'non-legal' and not binding. There is nonetheless an expectation of, and reliance on, compliance by the parties", *ibid* 299.)

6 Chinkin, (n. 1) 851 (In view of the author soft law instruments "are frequently not only regulatory but are also intended to construct and programme the development towards a new economic structure", *ibid* 853. This is also true of soft law instruments in other subject areas, e.g. human rights, the UDHR of 1948 and the environment, the Stockholm Declaration on the Human Environment, *ibid* 853 note 13.).

7 *ibid* 866.

8 Dupuy, '*International Law of the Environment*' (n. 1) 428.

9 *ibid* 429.

10 *ibid* 430 (Dupuy added that "if the norm is included in a non-binding instrument, it should be considered presumptive evidence of the 'soft' nature of the norm; at the same time, the 'hard' or 'soft' nature of the obligation defined in a treaty provision should not necessarily be identified on the sole basis of the formally binding character of the legal instrument in which the concerned norm is integrated and articulated", *ibid*. Basing upon those arguments the author reminded that "one must avoid grouping texts of remote origins and character in order to demonstrate the development of an emerging 'soft' rule", *ibid* 431).

With regard to argument that some rules even when embodied in treaties may still be considered as 'soft undertakings' or in the words of Chinkin 'soft obligations'/'legal soft law', or in the words of Dupuy the criteria used "should no longer be formal, but instead substantial", Boyle observed that "this view focuses on the contrast between 'rules', involving clear and reasonably specific commitments which are in this sense hard law, and 'principles', which, being more open-textured or general in their content and wording can thus be seen as soft. From this perspective treaties may be either hard or soft, or both" as can be seen in the Convention on Climate Change. "In this category it is the content of the treaty provision which is decisive in determining whether it is hard or soft, not its form as a treaty".[11]

According to Sands, "rules of 'soft law', which are not binding, play an important role by pointing to the likely future direction of formally binding obligations, by informally establishing acceptable norms of behavior, and by 'codifying' or reflecting rules of international common law".[12] With respect to soft law as general norms or principles Boyle stated that "a treaty may be potentially normative, but still 'soft' in character, because it articulates 'principles' rather than 'rules'. They may lay down parameters which affect the way courts decide cases or the way an international institution exercises its discretionary powers. They can set limits, or provide guidance, or determine how conflicts between other rules or principles will be resolved. They may lack the supposedly harder edge of a 'rule' or an 'obligation', but they are certainly not legally irrelevant. As such, they constitute a very important form of law, which may be 'soft', but which should not be confused with 'non-binding' law".[13]

Turning to the principles in the international environmental law, according to Francesco there is an increasing role for soft law with respect to institutionalization of international cooperation to deal with issues of common concern, particularly in relation to concerns for the maintenance of peace and security, the protection of human dignity and the preservation of the earth's environment.[14] He added that "the manifestations of soft law may pave the way to the adoption of hard law in the form

11 Boyle, 'Reflections on Treaties and Soft Law' (n. 1) 901, 908.

12 Philippe Sands, '*Introduction*' in P. Sands (ed.) *Greening International Law* (Routledge 1994) xxii.

13 Boyle, 'Reflections on Treaties and Soft Law' (n. 1) 907, and also at 908 the author, with respect to principles provided in Article 3 of the Climate Change Convention, stated that "despite all these limitations they are not legally irrelevant". Consequently, it seems that Boyle was generally in line with the arguments raised by Chinkin and Dupuy quoted above. For similar arguments also see, Paradell-Trius, (n. 1) 95. (The author in this context quoted from Boyle's aforementioned article.); Also see, Ronald Dworkin, Taking Rights Seriously (Oxford 1977) 24-26 (Dworkin's frequently quoted view that principles and rules "point to particular decisions about legal obligations in particular circumstances, but they differ in character of the direction they give. Rules are applicable in an all-or-nothing fashion… (A principle) states a reason that argues in one direction, but does not necessitate a particular decision… All that is meant, when we say that a particular principle is a principle of our law, is that the principle is one which officials must take into account, if it is relevant, as a consideration inclining in one way or another"); further see, Sands, '*Introduction*' (n. 12) xxx.

14 Francioni, '*International Soft Law*' (n. 1) 174 (According to the author, the 1989 World Charter for Nature, and the 1992 Rio Declaration are less susceptible of being transformed into hard regulations, and their role is mainly that of providing a framework of principles, objectives and programmes to orient and legitimize further legislative action, *ibid* 175.).

of multilateral treaties with a vocation to universality. This has happened in the field of human rights, with regard to principles governing activities in outer space, with regard to the status of the international sea-bed".[15] Similarly, Strong argued that "the Rio Declaration and Agenda 21 are major new examples of 'soft law', based on political agreement rather than on legally binding instruments. Although not legally binding, they provide a basis for voluntary cooperation, which enables the action process to proceed expeditiously and paves the way for the negotiation of binding agreements. Although we cannot be satisfied with these as long-term substitutes for enforceable legal measures, we should not minimize their value".[16] In the same line P. Sand stated that "the very success of soft-law instruments in guiding the evolution of contemporary international environmental law has also produced a backlash effect: governments have become wary of attempts at formulating reciprocal principles, even when couched in non-mandatory terms, well knowing that 'soft' declarations or recommendations have a tendency to harden over time and to come back to haunt their authors".[17]

Unlike rules, principles "embody legal standards, but the standards they contain are more general than commitments and do not specify particular actions".[18] The limitations of principles should not be ignored. However, "properly constructed they can assist in interpreting obligations, defining parameters for new obligations, and filling legal gaps. They cannot, however, replace or override the critical mass of substantive rights and obligations necessary to give any principles precision and effect, even when the latter fall short of what the principles might appear to require".[19]

In view of Dupuy "international standards based on 'soft' law are not only available for use by international judges or arbitrators. They can also be of great help in everyday inter-State diplomacy. They may also effectively be taken into account by municipal judges in evaluating the legality, with regard to international law, of any internal administrative action having had or able to have some damaging impact on the environment beyond national boundaries… Albeit indirect, the legal effect of 'soft' law is nevertheless real."[20] Paradell-Trius observed that "principles, like rules, may have international legal significance and normative authority. Unlike

15 *Ibid*.

16 Maurice F. Strong, '*Beyond Rio: Prospects and Portents*' (1993) 4/1 Colo. J. Int'l Envtl. L. & Pol'y 21, 31-32; with respect to "voluntary cooperation", also see, Tinker (n. 1).

17 Sand, (n. 1); on the other hand, see, Douglas M. Johnston, '*Systemic Environmental Damage: The Challenge to International Law and Organization*' (1985) 12/2 Syracuse J. Int'l L. & Com. 255, 266 (According to the author "a modern practitioner of the normative approach is likely to be aware of the need to be creative through recourse to 'soft law' as well as 'hard law' concepts, adding less precise, concepts of 'responsibility' to more rigid concepts of 'obligation', but the normative approach still rests essentially on the concept of 'commitment'…").

18 Daniel Bodansky, '*The United Nations Framework Convention on Climate Change: A Commentary*' (1993) 18/2 Yale J. Int'l L. 451, 501.

19 H. Mann, '*Comment on the Paper by Philippe Sands*' in W. Lang (ed.) *Sustainable Development in International Law* (1995 Graham Trotman) 67, 71, *quoted in*, Paradell-Trius (n. 1) 97.

20 Dupuy, '*International Law of the Environment*', (n. 1) 435.

rules, however, principles do not directly prescribe conduct, but act as 'reasons' or 'considerations' inclining decision-makers to choose a particular course of action… Principles contained in framework conventions, for example, serve primarily to define parameters for new obligations and to facilitate further negotiations by the parties on more detailed commitments".[21] Sands stated that "the fact that legal principles, like rules, can have international legal consequences has focused attention on their content while being elaborated in recent treaties".[22]

2. Soft/hard Enforcement

As appeared in certain international environmental instruments, soft law standards or principles also lead to soft enforcement or implementation procedures. This relatively new form of enforcement procedures replace the traditional adversarial procedures of enforcement based on sanctions, international liability and compensation of damages.[23] According to Boyle "reliance on institutional machinery in the form of intergovernmental commissions and meetings of treaty parties as a means of coordinating policy, developing the law, supervising its implementation, resolving conflicts of interest and putting community pressure on individual States, meets these needs much more flexibly and effectively than traditional bilateral forms of dispute settlement".[24]

The Vienna "*Convention for the Protection of the Ozone Layer*"[25] of 22/03/1985 is the first environmental treaty in which a formal "noncompliance procedure" has been adopted. At the drafting process an attempt for an inclusion of a strong dispute resolution mechanism was failed.[26] Under the "*Montreal Protocol on Substances that Deplete the Ozone Layer*"[27] of 16/09/1987 (Article 8), as shown in this study below, first the non-compliance working group, which later becomes the implementation committee, was established at the first meeting of the parties in 1989. The

21 Paradell-Trius, (n. 1) 96 (In view of the author, prominent examples of reliance on soft law as part of the international environmental law-making process, including the formulation of principles, are the declarations of intergovernmental conferences, such as the 1972 Stockholm Declaration and the Rio Declaration, *ibid* 95.).

22 Philippe Sands, '*Principles of International Environmental Law'* (Cambridge University Press 2003) 233.

23 Francioni, '*International Soft Law*' (n. 1) 176 (According to the author "the most important reason for the increasing role of soft implementation procedures is the contemporary widening of the scope of application of the concept of *erga omnes* obligations. These obligations… have made it possible to picture the international community as the title holder of certain collective interests such as human rights and environmental quality", *ibid* 177.).

24 Alan E. Boyle, '*Saving the World? Implementation and Enforcement of International Environmental Law Through International Institutions*' (1991) 3/2 J. Envtl. 229, 230.

25 The "*Convention for the Protection of the Ozone Layer*", adopted on 22/03/1985 and entered into force on 22/09/1988; *reproduced in*, 26 ILM 1516 (1987). The 1985 Vienna Convention is largely a framework treaty; rather than laying down any specific measures for controlling emissions of chlorofluorocarbon gasses, it leaves these to be elaborated through subsequent protocols. See, Robin Churchill, '*International Environmental Law and the United Kingdom*', (1991) 18/1 J. L. & Soc'y. 155, 158.

26 Alexander Gillespie, '*Implementation and Compliance Concerns in International Environmental Law: The State of Art within Three International Regimes*', (2003) 7 N.Z. J. Envtl. L. 53, 54.

27 The '*Montreal Protocol on Substances that Deplete the Ozone Layer*', adopted on 16/09/1987 and entered into force on 01/01/1989; *reproduced in*, 26 ILM 1541 (1987).

Implementation Committee has given power to review complaints concerning the implementation of the Protocol by any party and to report to the Meeting of Parties.[28] As seen in this model of noncompliance procedure regimes the main aim is not to take controversial countermeasures, but rather to seek amicable solutions to anticipated noncompliance.[29] Under this regime the key functions which the intergovernmental bodies carried out are those of data and information gathering, receiving and considering reports on treaty implementation by States, facilitating independent monitoring, acting as a forum for reviewing the performance of individual States or the negotiation of further measures and regulations. Consequently, such bodies may acquire law enforcement, law-making and dispute settlement functions.[30] In this context, one may note that some international environment protection instruments do not even provide for sanctions.[31] Such type of soft law of international environmental protection, as well as their soft enforcement procedures, on the one hand, encourages States to become parties to these instruments, and on the other hand, facilitate the continuity of supervision of compliance with the standards laid down by these instruments.

The same type of dispute settlement mechanisms also seen in the instruments concerning the air pollution regime. For instance, Article 13 of the 1979 "*Convention on Long-Range Transboundary Air Pollution*"[32] states that "if a dispute arises between two or more Contracting Parties to the present Convention as to the interpretation or application of the Convention, they shall seek a solution by negotiation or by

28 Boyle, '*Saving the World?*' (n. 24) 244. Gillespie, (n. 26).

29 O. Yoshida, '*Soft Enforcement of Treaties: The Montreal Protocol's Noncompliance Procedure and the Functions of Internal International Institutions*' (1999) 10/1 Colo. J. Int'l Envtl. L. & Pol'y 95, 123-127 (The author also argued that "in theory, countermeasures such as suspension or termination of multilateral treaties are not realistic approaches in environmental disputes, simply because one of the main problems of environment-related regulatory regimes is securing the participation of developing states that may not think much of diplomatic policy regarding global environment protection", *ibid* 126, note 145. Yoshida concluded that the Montreal noncompliance procedure "is not meant to supplant or replace traditional legal settlement procedures under the Vienna Convention", *ibid* 139); also see, Francioni, '*International Soft Law*' (n. 1) 177.

30 Boyle, '*Saving the World?*' (n. 24) 231 (The author listed arguments to indicate the advantages of such methods: **(i)** Community pressure and the scrutiny of other States in an intergovernmental forum may often be more effective than other more confrontational methods. **(ii)** Individual States may lack standing to bring international claims relating to the protection of global common areas, such as the high seas. In such cases accountability to international organizations may be the only practical remedy available, *ibid* 233.).

31 For example, see, **(i)** The "*Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Further Reduction of Sulphur Emissions*" (the Oslo Sulphur Protocol) of 14/06/1994 (entered into force on 05/08/1998); available at, <http://www.unece.org/env/lrtap/pops> Article 5 provides reporting obligation, and Article 8 establishes an Implementation Committee. However, there is no a direct sanction norm. For reporting obligation, also see, Article 7 of the "*Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Heavy Metals*" adopted on 24/06/1998 (entered into force on 29/12/2003); available at, <http://www.unece.org/env/lrtap/pops>; Article 9 of the "*Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Persistent Organic Pollutants*" adopted on 24/06/1998 (entered into force on 23/10/2003); available at, http://www.unece.org/env/lrtap/pops. **(ii)** Pursuant to Article 29 of the UNESCO "*Convention Concerning the Protection of the World Cultural and Natural Heritage*" of 23/11/1972, the States Parties undertake to submit reports concerning the measures that have adopted for the application of the Convention. These reports are transmitted to the World Heritage Committee which was established by the Convention in order to monitor the state of conservation of sites and monuments of universal interest of humankind, (Articles 8-14).

32 The "*Convention on Long-range Transboundary Air Pollution*" was adopted on 13/11/1979 and entered into force on 16/03/1983; available at, <http://www.unece.org/env/lrtap/full%20text/1979.CLRTAP.e.pdf>, also *reproduced in*, 18 ILM 1442 (1979). For an analysis of this Convention, see, Armin Rosencranz, '*The ECE Convention of 1979 on the Long-Range Transboundary Air Pollution*' (1981) 75/4 AJIL 975.

any other method of dispute settlement acceptable to the parties to the dispute." Pursuant to Article 10, paragraph 1, of the 1979 Convention the Executive Body was established, which has the main function to review the implementation of the Convention, (Article 10/2, a).[33]

The following Protocols adopted the same system with regard to settlement of disputes.[34] Among those, however, the Geneva "*Protocol concerning the Control of Emissions of Volatile Organic Compounds on Their Transboundary Fluxes*" (the VOC Protocol) of 18/11/1991 went further and in Article 3, paragraph 3, provides that "the Parties shall establish a mechanism for monitoring compliance with the present Protocol. As a first step based on information provided pursuant to article 8 or other information, any Party which has reason to believe that another Party is acting or has acted in a manner inconsistent with its obligations under this Protocol may inform the Executive Body to that effect and, simultaneously, the Parties concerned. At the request of any Party, the matter may be taken up at the next meeting of the Executive Body". Note that the aforementioned Executive Body, as Gillespie pointed out, established an Implementation Committee which was modeled, to a limited degree, "Montreal Protocol on Substances that Deplete the Ozone Layer" of 16/09/1987 and "the principles of non-complex, non-confrontational, transparent, facilitating technical and financial assistance and vesting final authority for decision making with the Executive Body."[35] In fact, the 'Executive Body' mentioned in 1991 VOC Protocol refers to the Executive Body constituted under Article 10/1 of the 1979 Convention. In light of the foregoing, it is not surprising that in accordance with Article 7, paragraph 1, of the Oslo "*Protocol on Further Reduction of Sulphur Emissions*" of 14/06/1994 the Implementation Committee has been established directly by the

33 Rosencranz, "*The ECE Convention of 1979*" (n. 32) 977-979.

34 For instance, see, the Geneva "*Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Long-Term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants in Europe (EMEP)*" of 28/09/1984 (entered into force on 28/01/1988; available at, <http://www.unece.org/env/lrtap/full%20text/1984.EMEP.e.pdf>), Article 7 (Settlement of Disputes) provides that "If a dispute arises between two or more Contracting Parties to the present Protocol as to its interpretation or application, they shall seek a solution by negotiation or by any other method of dispute settlement acceptable to the parties to the dispute". The Helsinki "*Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on the Reduction of Sulphur Emissions or Their Transboundary Fluxes by At Least 30 per cent*" of 08/07/1985 (entered into force on 02/09/1987; available at, <http://www.unece.org/env/lrtap/full%20text/1985.Sulphur.e.pdf>), Article 8 (Settlement of Disputes) provides that "If a dispute arises between two or more Parties as to the interpretation or application of the present Protocol, they shall seek a solution by negotiation or by any other method of dispute settlement acceptable to the parties to the dispute". Article 1, paragraph 3, refers to the Executive Body established in accordance with Article 10/1 of the 1979 Convention, and Article 4 (Reporting of annual emissions) requires each Party to provide annually to the Executive Body its levels of national annual sulphur emissions, and the basis upon which they have been calculated. In the same line, the Sofia "*Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution concerning the Control of Emissions of Nitrogen Oxides or Their Transboundary Fluxes*" of 31/10/1988 (entered into force on 14/02/1991; available at, http://www.unece.org/env/lrtap/full%20text/1988.NOX.e.pdf), Article 12 provides identical provisions. Article 1, paragraph 3, refers to the Executive Body established in accordance with Article 10/1 of the 1979 Convention. Finally, the Geneva "*Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution concerning the Control of Emissions of Volatile Organic Compounds on Their Transboundary Fluxes*" (the VOC Protocol), of 18/11/1991 (entered into force on 29/09/1997; available at, <http://www.unece.org/env/lrtap/full%20text/1991.VOC.e.pdf>) Article 12 provides identical provisions with regard to dispute settlement.

35 Gillespie (n. 26) 55.

Protocol.[36] But the structure and functions of the Implementation Committee as well as procedures for its review of compliance were left to the decision of the first session of the Executive Body after the entry into force of the Protocol, (Article 7/3). In 1994 a text was adopted with respect to Structure and Functions of the Implementation Committee.[37] Also, both Article 9 of the "*Protocol on Heavy Metals*" of 24/06/1998 and Article 11 of the "*Protocol on Persistent Organic Pollutants*" of 24/06/1998 provide Implementation Committee.

Similarly, Article 15 (Review of Compliance) of the "*Protocol on Water and Health*"[38] of 17/06/1999 to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes provides for the following: "Multilateral arrangements of a *non-confrontational, non-judicial and consultative nature for reviewing compliance shall be established* by the Parties at their first meeting. These arrangements shall allow for appropriate public involvement". (Emphasis added). The objective of the compliance procedure is to facilitate, promote and aim to secure compliance with the obligations under the Protocol, with a view to preventing disputes. Following the entry into force of the Protocol on 04/08/2005, at the First Meeting of Parties, held in Geneva, on 17-19/01/2007, the Parties adopted the "Decision I/2 on Review of Compliance"[39] and elected the first Compliance Committee. Under Decision I/2, "Annex- Compliance Procedure" (para.1) clearly states that "the objective of this compliance procedure is to facilitate, promote and aim to secure compliance with the obligations, *with a view to preventing disputes*". Pursuant to (para.2) "*the compliance procedure shall be simple, facilitative, non-adversarial and cooperative in nature*, and its operation shall be guided by the principles of transparency, fairness, expedition and predictability". (Emphasis added). The Committee may examine compliance issues and make recommendations or take

36 Article 7, paragraph 1, of the 1994 Oslo Sulphur Protocol reads as follows: "An Implementation Committee is hereby established to review the implementation of the present Protocol and compliance by the Parties with their obligations. It shall report to the Parties at sessions of the Executive Body and may make such recommendations to them as it considers appropriate".

37 *Structure and Functions of the Implementation Committee as well as Procedures for its Review of Compliance*, EB.AIR/WG.5/CPR.13, para. 7(b), 1994.

38 The "*Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes*", done in London, on 17/06/1999, and entered into force on 04/08/2005; available at, <http://www.unece.org/env/documents/2000/wat/mp.wat.2000.1.e.pdf> The 1999 London Protocol is the first international agreement of its kind adopted specifically to attain an adequate supply of safe drinking water and adequate sanitation for everyone, and effectively protect water used as a source of drinking water. Under Article 7 (Review and Assessment of Progress), the Parties are required to collect and evaluate data, and publish periodically the results of this collection and evaluation of data, and on that basis to review periodically the progress made in achieving the targets provided in the Protocol. The frequency of such publication, as well as the frequency of such reviews shall be established by the Meeting of the Parties. Furthermore, each Party is required to provide to the secretariat referred to in article 17, for circulation to the other Parties, a summary report of the data collected and evaluated and the assessment of the progress achieved. Pursuant to Article 16, the Meeting of the Parties shall keep under continuous review the implementation of this Protocol. Article 20 provides procedures for the settlement of disputes as regards to the interpretation or application of the Protocol.

39 *Report of the Meeting of the Parties to the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes on its First Meeting* (Geneva, 17-19 January 2007), ECE/MP.WH/2/Add.3; EUR/06/5069385/1/Add.3, 3 July 2007, "Decision I/2 – Review of Compliance"; available at, <http://www.unece.org/env/documents/2007/wat/wh/ece.mp.wh.2_add_3.e.pdf> But note that pursuant to (para. 36) of the "Compliance Procedure" provided by the Decision I/2, this compliance procedure shall be without prejudice to article 20 of the Protocol on the settlement of disputes.

measures if and as appropriate, (para.12). The Committee shall report on its activities at each ordinary meeting of the Parties and make such recommendations as it considers appropriate, (para.33). It is significant that in addition to "submissions" by the Parties (paras.13-14) or "referrals" by the joint secretariat (para.15), one or more members of the public may submit communications to the Committee concerning that Party's compliance with the Protocol, (paras.16-22). Note that the conditions required for such "communications" (para.18) and exceptions for such requirements (para.19) are parallel to the requirements for individual application under international human rights conventions. Furthermore, the Compliance Committee is also empowered to seek the services of experts and advisers, including representatives of NGOs or members of the public, as appropriate, (para.23/d). It is also noteworthy that the authors of submissions, referrals or communications are entitled to participate in the discussions of the Committee with respect to that submission, referral or communication, (para.30). In addition to measures indicated in (para.34), the Committee, taking into account the cause, type, degree and frequency of the non-compliance, may decide further measures, They include "(d) issue declarations of non-compliance; (e) give special publicity to cases of non-compliance; (f) suspend, in accordance with the applicable rules of international law concerning the suspension of the operation of a treaty, the special rights and privileges accorded to the Party concerned under the Protocol; or (g) take such other non-confrontational, non-judicial and consultative measures as may be appropriate", (para.35/d-g). Finally attention should be drawn to the fact that the independence of the Committee, as well as a more liberal election process of the members of the Committee is also provided.[40]

Turning to the question of soft enforcement or implementation procedures, the significance and necessity of hard law cannot be entirely ignored particularly in cases of systematic breaches of obligations. As Francesco observed, "in these instances it would have little sense to exclude the operation of ordinary countermeasures under customary international law or under the Vienna Convention on the Law of Treaties. Soft law and soft remedies cannot be understood in such a way as to displace and curtail the operation of hard law".[41] Handl stated that "where basic constituent principles and 'hard' legal parameters are concerned, disputes should be amended both technically and politically to formal third-party decision-making in accordance with international law narrowly defined".[42]

40 Pursuant to (para. 36) of the "Compliance Procedure" provided by the Decision I/2, "the Compliance Committee shall consist of nine members, who shall serve in their personal capacity and objectively, in the best interests of the Protocol". (Para. 5) reads as follows: "The members shall be persons of high moral character and have recognized expertise in the fields to which the Protocol relates, including legal and/or technical expertise. They shall be elected by the Meeting of the Parties to the Protocol from among candidates nominated by the Parties, taking into consideration any proposal for candidates made by Signatories or by non-governmental organizations (NGOs) qualified or having an interest in the fields to which the Protocol relates."

41 Francioni, '*International Soft Law*' (n. 1) 178.

42 Günther Handl, '*Controlling Implementation of and Compliance with International Environmental Commitments: The Rocky Road from Rio*', (1994) 5/2 Colo. J. Int'l Envtl. L. & Pol'y 305, 330.

Nevertheless, if the promising compliance regime model as provided by the "Protocol on Water and Health" of 17/06/1999 has been taken into account, the soft enforcement or implementation procedures of environmental law instruments appear to be an attractive option to be considered not only by States but also potential individual complainants.

3. Two Specific Environmental Declarations

In this context a special attention should be given to the 1972 Stockholm Declaration and the 1992 Rio Declaration.

i-) The 1972 Stockholm Declaration

The United Nations Conference on the Human Environment was held at Stockholm from 5 to 16 June 1972, which marked a turning point in the UN's role in the protection of the world environment. The "*Stockholm Declaration*"[43] ("Declaration of the United Nations Conference on the Human Environment"), adopted by the Conference on 16/06/1972 was designed to "inspire and guide the peoples of the world in the preservation and enhancement of the human environment". Stockholm Conference led to the establishment of the United Nations Environment Programme (UNEP).[44]

Note that in the UNGA Resolution 2894 (XXVII) of 15/12/1972 the General Assembly first reaffirmed the responsibility of the international community to take action to preserve and enhance the environment, and, in particular, the need for continuous international co-operation to this end (preamble), then took note "with satisfaction of the report of the United Nations Conference on Human Environment", (para.1).[45]

It may not be wrong to argue that the role had been played by the Universal Declaration on Human Rights (UDHR) of 10/12/1948 in the field of International Human Rights Law, the 1972 Stockholm Declaration assumed a similar function in the sphere of International Environmental Law.

This Declaration may be regarded as doing for the protection of the environment of the earth what the Universal Declaration of Human Rights of 1948 accomplished for the protection of human rights and fundamental freedoms.[46] After recalling

43 The "*Declaration of the United Nations Conference on the Human Environment*" ("Stockholm Declaration"), adopted on 16/06/1972, *in* Report of the United Nations Conference on the Human Environment, UN Doc. A/CONF.48/14/Rev.1, sec. 1, (1972); *reprinted in* 11 ILM 1416 (1972); also see, Barry E. Carter - Phillip R. Trimble, *International Law: Selected Documents*, (2001-2002 edition, Aspen Law and Business) 737-741.

44 Patricia Birnie, '*Environmental Protection and Development*', (1995) 20/1 Melb. U. L. Rev. 66, 80-84.

45 The UN General Assembly resolution 2994 (XXVII) on "*United Nations Conference on Human Environment*" was adopted on 15/12/1972 at its 2112th plenary meeting.

46 Shearer (n. 46) 365.

the arguments on the legal nature of the Universal Declaration of Human Rights of 10/12/1948, Sohn observed that "similarly, despite the statements by some of the conservative participants in the drafting of the Stockholm Conference that this document is not a binding legal instrument, it is quite likely that in the not too distant future a more enlightened view of the nature and stature of the Stockholm Declaration will be accepted. In the new ambiance of international relations thus established, this first step toward the establishment of international environmental law on a firm foundation might prove to be more decisive than originally anticipated. Having accepted the responsibility for the preservation and improvement of the human environment, the international community will find in the Stockholm Declaration a source of strength for later, more specific action".[47]

The authors who draw attention to the legal nature of the Declaration, and even express their doubts with regard the vague formulation of principles do nevertheless admit the value and, at least, potential effect of it. For example, in 1975, Falk argued: "There is not much reason to applaud the outcome at Stockholm, even though it came off better that could reasonably have been expected in view of the obstacles… Its value, if any, lay in providing a focus for attention, comment and criticism." The Declaration, "a non-binding document embodying idealistic sentiments which, although not expected to provide guidelines for governmental action, does nevertheless provide a framework for assessing reasonable behavior".[48] Twenty years later Birnie stated that "though formulated as a Declaration, a solemn for used in the UN to emphasize and enhance its importance (as, for example, in the Universal Declaration of Human Rights), and later endorsed by a Resolution of the General Assembly, "it had only status of the codes, namely that of a 'soft law', non-binding recommendation. In practice, however, it has proved influential".[49]

The influence of the 1972 Stockholm Declaration on the subsequent development of international environmental law is undeniable. As one commentator observed "one may say that what decides in practice the importance of one or another declaration is the influence on the further development of international and domestic law. From this point of view, without any doubt, the Stockholm Declaration became a turning point in the development of internal legislation concerning the environment adopted after 1972".[50] The Declaration provided foundations for the development of international environmental law. [51]

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47 Louis B. Sohn, '*The Stockholm Declaration on the Human Environment*', (1973) 14/3 Harv. Int'l L. J. 423, 515.

48 Richard A. Falk, '*The Global Environment and International Law: Challenge and Response*', (1975) 23/3 Kan L. Rev. 385, 413-414.

49 Birnie, '*Environmental Protection and Development*' (n. 44) 84.

50 Janusz Symonides, '*The Human Right to a Clean, Balanced and Protected Environment*' (1992) 20/1 Int'l. J. Legal Info. 24, 25.

51 Shearer (n. 46) 369.

Although there were also views which question the customary law nature of the Stockholm Declaration[52], it is generally agreed that, at least some principles, in particular Principle 21, enshrined in the Stockholm Declaration acquired international customary law[53] character.[54] As Sohn observed soon after the adoption of the Declaration, "taking the document as a whole, one is nevertheless surprised that despite the generality of some provisions and their uncertain phrasing the general tone is one of a strong sense of dedication to the idea of trying to establish the basic rules of international environmental law. The development of the new notion that international law should no longer be purely an interstate system but should bring both individuals and international organizations into the picture, and the impact of the other modern idea that international law should have more social content and should become an instrument of distributive justice – have led to a new way of expressing the basic rules of international law."[55]

Although not legally binding or enforceable, the Stockholm Declaration has received broad-based recognition and acceptance in the international community as a result of the fundamental nature of the values expressed.[56] From a formal point of view, the 1972 Stockholm Declaration is only a non-binding resolution. However, many of its principles, particularly Principle 21, have been relied upon by governments to

52 Günther Handl, '*Human Rights and Protection of the Environment*' in A. Eide, C. Krause and A. Rosas (eds.) *Economic, Social and Cultural Rights* (second edition, Martinus Nijhoff, printed in the Netherlands, 2001) 303, 307 (Handl argued that "at the time of its adoption, Principle 1 –like much of the rest of the Stockholm Declaration on the Human Environment– was understood not to reflect customary law".); Shelton, '*What Happened in Rio to Human Rights?*' (1992) 3 Yearbook Int'l. Envtl. L. 75, 77 (Arguing that the General Assembly endorsed the Stockholm Declaration; thus far it has not proclaimed the existence of a right to environment.); Philip Alston, '*Conjuring up New Human Rights: A Proposal for Quality Control*' (1984) 78/3 AJIL 607, 612 ("The right to a clean environment was recognized for the first time in the framework of the United Nations in 1972… Although the General Assembly endorsed that Declaration in general terms, it has never specifically proclaimed the existence of a right to a clean environment, despite proposals that it do so".).

53 In the *North Sea Continental Shelf Cases* the ICJ held that customary international law requires "State practice" which should have been "both extensive and virtually uniform… and should moreover have occurred in such a way as to show a general recognition that a rule of law or legal obligation is involved". See, North Sea Continental Shelf Cases (Germany v. Denmark; Germany v. Netherlands) [1969] ICJ Reports 43, para.74.

54 W. Paul Gormley, '*The Right to Safe and Decent Environment*', (1988) 28/1 Indian J. Int'l L. 1 ,13 (The author stated that "while not a formal treaty, the Stockholm Declaration at least had the tacit support of many State governments. It, therefore, be suggested that the principles contained in the Declaration constitute customary international law" at 13, and "the Stockholm Declaration constitutes customary international law" at 14 note 50.); Tinker, (n. 1) 802 (According to the author, "Principle 21 may now have achieved the status of customary international law".); Iveta Hodkova, '*Is There a Right to a Healthy Environment in the International Legal Order?*' (1991) 7/1 Conn. J. Int'l L. 65, 67; Melissa Thorme, '*Establishing Environment as a Human Right*' (1991) 19/2 Denv. J. Int'l L. & Pol'y 301, 314-315 (Thorme argued that in the process the Stockholm principles of environmental protection have become entrenched in municipal *opinio juris* and in customary international law through the general principles of law recognized by civilized nations and by the teachings of the most highly qualified publicists of various nations.); Mariea Clara Maffei, 'Evolving Trends in the International Protection of Species' (1993) 36 German YBIL 131, 150 (Referring Principle 21, the author stated that "this rule which is almost unanimously considered as customary international law is embodied in other conventions concluded even before the UNCHE".); Shearer (n. 46) 365 (According to the author, the Stockholm Declaration was essentially a manifesto, expressed in the form of an ethical code, intended to govern and influence future action and programmes, both at the national and international levels.); Aurelie Lopez, '*Criminal Liability for Environmental Damage Occurring in Times of Non-International Armed Conflict: Rights and Remedies*' (2007) 18/2 Fordham Envtl. L. Rev. 231, 256; Alexandre Kiss and Dinah Shelton, *Guide to International Environmental Law* (Martinus Nijhoff Publishers 2007) 36.

55 Sohn (n. 47) 513.

56 Tony Simpson and Vanessa Jackson, '*Human Rights and the Environment*' (1997) 14/4 Envtl. & Plan. L. J. 268, 271; also see, Shawkat Alam, 'The United Nations' Approach to Trade, the Environment and Sustainable Development' (2006) 12/3 ILSA J. Int'l & Comp. L. 607, 613.

justify their legal rights and duties. There is no doubt that the subsequent practice has been influenced by such provisions.[57]

Notwithstanding its non-binding character, the Stockholm Declaration is generally regarded as the foundation of modern international environmental law. Some of the principles laid down in the declaration are now "considered as part and parcel of general international law and as binding on governments, independent of their specific consent. In particular, Principle 21 has evolved into hard law".[58]

ii-) The 1992 Rio Declaration

Twenty years after the promulgation of the 1972 Stockholm Declaration the UNCED meeting held in Rio de Janeiro (Brazil) adopted the "*Rio Declaration on Environment and Development*" in June 1992.[59] It had the aim to clarify the rights and responsibilities of the States with regard to the environment.

It is true, there were some critical approaches as to the nature, significance and effect of the Rio Declaration, such as, "the Rio Conference did not usher in the 'New International Ecological Order' many had hoped for, nor was it probably a 'turning point in the history of civilization'…"[60], or "Rio did not produce enough binding new principles of international environmental law sufficient to protect the environment against known threats or secure its future" and "the necessary structural adjustments were not made at Rio – they were not even addressed"[61], or "the operative provisions in fact proceed to unravel the Stockholm Declaration, which it ironically was pretending to reaffirm"[62], or "the Rio Declaration, without any accompanying broad framework of action, improved very little on the Stockholm Declaration of 1972. Although linkage between the environment and development was recognized in the Rio Declaration and in Stockholm, little progress was made towards real integration of the environment and the development process".[63]

57 Dupuy, '*International Law of the Environment*' (n. 1) 422.

58 Marc Pallemaerts, '*International Environmental Law From Stockholm to Rio: Back to the Future*' in P. Sands (ed.) *Greening International Law* (The New Press 1994) 1, 2 (The author also added that "numerous principles and concepts which were first articulated in the Stockholm Declaration were subsequently incorporated not only in the preambles of international environmental treaties, but also in certain binding provisions, and even in the constitutions or other provisions of domestic law of various States", *id*.).

59 The "*Rio Declaration on Environment and Development*", the United Nations Conference on Environment and Development, meeting in Rio de Janeiro/Brazil, (A/CONF.151/5/Rev 1, 3–4 June 1992); *reproduced in*, 31 ILM 874 (1992).

60 Sand (n. 1) 227; David Freestone, '*The Road from Rio: International Environmental Law After the Earth Summit*', (1994) 6/2 J. Envtl. L. 193.

61 Geoffrey Palmer, '*The Earth Summit: What Went Wrong at Rio?*', (1992) 70/4 Wash. U. L. Q. 1005, 1008 (The author concluded that "Progress was, simply, insufficient, due to a general failure of political will. Rio produced too little, too late", *ibid* 1028.).

62 Pallemaerts (n. 58) 4.

63 Alam (n. 56) 620-621.

On the other hand, it seems, however, that a considerable number of scholars are in agreement that the 1992 Rio Declaration marks a significant milestone in the evolution of international law on the protection of the environment.[64] The Rio Conference may be seen as another incremental step in the evolution of international environmental law, adding further material to the growing body of legal norms in this field.[65] Some authors went even further to state that "history will record Rio as a pivot point, a time and a place where opportunity and awareness coalesced. The events of the summer of 1992 plainly were monumental; after Rio no world leader or educated citizen can avoid a share of responsibility for the fate of the world".[66] Maurice Strong, who was the Secretary-General of the 1992 Rio UN Conference, stated that the Stockholm Conference of 1972 first put the environment issue on the world agenda. Twenty years later, the Earth Summit in Rio de Janeiro "moved the environment issue into the center of economic policy and decision-making in virtually every sector of our economic life".[67] According to Kovar, "even if the Rio Declaration does not represent a bold advance, it is an important step forward, building on the foundations of the Stockholm Declaration".[68] Some authors argued that "the Rio Conference was a landmark world community event evincing a paradigmatic shift within the field of international law. The shift has resulted in the world community's acceptance of the position that Homo sapien-driven projects of economic development are to be evaluated in relation to their impact on mankind's natural environmental surroundings. Without doubt, the Rio Conference established new environmental ethics and a set of prescriptions… We accent the Declaration, because we view its twenty-seven principles as an assemblage of 'Grund-norms' (superior norms)".[69] The 1992 Rio Declaration, on the one hand, codified some existing international law, and on the other hand, attempted to develop some new law.[70]

64 Günther Handl '*Controlling Implementation'* (n. 42). But note that Handl, shortly before the adoption of the Rio Declaration, in his article published in 1991 noted the importance of "formal abandonment of the idea that the principle of individual state consent continues to represent a fundamental defining characteristic of the international legal system"; see, Handl, '*Environmental Security and Global Change*' (n. 1) 33. Referring to the quoted passage, Palmer commented that the Rio meeting did not establish institutions likely to be effective in producing a new approach to environmental problems. Rio did not elicit the one development that is essential to changing the condition of the global environment: (quoted from Handl's argument)". See, Palmer (n. 61) 1008.

65 Sand (n. 1) 211.

66 David H. Getches, '*The Challenge of Rio*', (1993) 4/1 Colo. J. Int'l Envtl. L. & Pol'y 1, 3 (The author also stated that the Rio Declaration may be viewed either as the greatest success or the greatest failure of Rio. It succeeded in garnering universal support, yet it failed to meet the expectations of many… Viewed positively, it is a notable announcement of the understanding of all countries that priorities should shift to environmentally and economically sustainable policies that can be maintained only through international collaboration", *ibid* 14.).

67 Strong (n. 16) 22.

68 Jeffrey D. Kovar, 'A Short Guide to the Rio Declaration', (1993) 4/1 Colo. J. Int'l Envtl. L. & Pol'y 140.

69 John Batt & David C. Short, '*The Jurisprudence of the 1992 Rio Declaration on Environment and Development: A Law, Science and Policy Explication of Certain Aspects of the United Nations Conference on Environment and Development*', (1993) 8/2 J. Nat. Resources & Envtl. L. 229, 230-231 (The authors concluded that the Rio Declaration demonstrates a clear-cut preference in favor of human dignity, ecological maintenance, and an equitable worldwide distribution of the eight values identified by those working within the law, science, and policy tradition", *ibid* 292. The mentioned eight values are affection, well-being, wealth, enlightenment, respect, skill, power and rectitude, *ibid* 249-291.).

70 Boyle, 'Reflections on Treaties and Soft Law' (n. 1) 904 (The author added that "it is not obvious that a treaty with the same provisions would carry greater weight or achieve its objectives any more successfully. On the contrary, it is quite possible that such a treaty would, seven years later, still have far from universal participation, whereas the Declaration secured immediate consensus support, with such authority as that implies", *id*.).

B-) Basic Principles and Standards of International Environmental Law

1. Common Good of Humankind and Future Generations

i-) The Notions of 'Common Heritage of Mankind' and of 'Present and Future Generations'

a) The Notion of 'Common Heritage of Mankind' in Soft-Law Instruments

With regard to the emergence of notion of 'common heritage of mankind'[71] (CHM) in the 20th century one may trace the concept as far back as the 1920s. However, as shown in my previous article[72], in the 1893 *Bering Sea Fur-Seals* arbitration case the notion of 'common interest of mankind' was explicitly used by the United States in its submissions before the arbitral tribunal.

The notion has been used particularly with regard to resources in common space areas, such as marine resources and ocean floor, outer space, the moon and Antarctica. It may be added that various international organizations and commentators have proposed that the "common heritage of mankind" regime extends or should extend to other resources such as the natural environmental resources, genetic resources, cultural heritage, and even seeds.[73]

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71 Stephen Gorove, '*The Concept of 'Common Heritage of Mankind': A Political, Moral or Legal Innovation?*' (1972) 9/3 San Diego L. Rev. 390; Rudolph Preston Arnold, '*The Common Heritage of Mankind as a Legal Concept*' (1975) 9/1 The International Lawyer 153; Jon Van Dyke and Christopher Yuen, '*Common Heritage v. Freedom of the Seas: Which Governs the Seabed?*' (1982) 19/3 San Diego L. Rev 493; Rüdiger Wolfrum, '*The Principle of the Common Heritage of Mankind*' (1983) 43 ZaöRV 312 (Development of the CH principle, *ibid* 315-316; Content of the CH principle, 316-324.); L.F.E. Goldie, '*A Note on Some Diverse Meanings of 'the Common Heritage of Mankind'*' (1983) 10/1 Syracuse J. Int'l L. & Com. 69; Bradley Larschan and Bonnie C. Brennan, '*The Common Heritage of Mankind Principle in International Law*' (1983) 21/2 Colum. J. Transnat'l L. 305; Alexandre Kiss, '*The Common Heritage of Mankind: Utopia or Reality?*' (1985) 40/3 International Journal 423; Christopher C. Joyner, '*The Common Heritage of Mankind*' (1986) 35 ICLQ 190. Alexander Charles Kiss, '*Conserving the Common Heritage of Mankind*', (1990) 59/4 Rev. Jur. U.P.R. 773; Kemal Baslar, *The Concept of the Common Heritage of Mankind in International Law* (Martinus Nijhoff Publishers, Published by Kluver Law International, 1998) (Especially see, under "Part II: The Application of the Common Heritage of Mankind in International Law. **5.** Outer Space and the Common Heritage of Mankind. **6.** The Law of the Sea and the Common Heritage of Mankind. **7.** Antarctica and the Common Heritage of Mankind. **8.** International Environmental Law and the Common Heritage of Mankind. **9.** International Human Rights Law and the Common Heritage of Mankind. **10.** The Legal Status of the Common Heritage of Mankind. Appraisal); Jennifer Frakes, '*The Common Heritage of Mankind Principle and the Deep Seabed, Outer Space, and Antarctica: Will Developed and Developing Nations Reach a Compromise?*' (2003) 21/2 Wisconsin Int'l L. J. 409; Chuanliang Wang - Yen-Chiang Chang, '*A New Interpretation of Common Heritage of Mankind in the Context of International Law of the Sea*' (2020) 191 Ocean. & Coast. Manag. 1.

72 M. Semih Gemalmaz, '*Introduction to International Environmental Law: From Initial Steps to Institution Building for the Conservation of Environment-Part 1*', (2021) 33/2 ERPL/REDP (120).

73 Baslar (n. 71) 108-109, 206; Petra Drankier, Alex G. Oude Elfring, Bert Visser and Tamara Takacs, '*Marine Genetic Resources in Areas beyond National Jurisdiction: Access and Benefit-Sharing*' (2012) 27/2 Int. J. Mar. Coast. L. 375; Konrad Jan Marciniak, '*Chapter 16. Marine Genetic Resources: Do They Form the Part of the Common Heritage of Mankind Principle?*' in *Natural Resources and the Law of the Sea: Exploration, Allocation, Exploitation of Natural Resources in Areas under National Jurisdiction and Beyond* (Arbitration & Practice 2017) 373 (Especially see, *ibid* 384-402, The interpretation of Common Heritage Principle under the Vienna Convention on the Law of Treaties" and under "UNCLOS".); Lee & Kim, '*Chapter 2. Applying the Principle of the Common Heritage of Mankind: An East Asian Perspective*' in Keyuan Zou (ed.) *Global Commons and the Law of Sea* (Koninklijke Brill NV, 2018) 15, 16; Karen N. Scott, '*Chapter 16. Protecting the Commons in the Polar South: Progress and Prospects for Marine Protected Areas in the Antarctic*' in Keyuan Zou (ed.) *Global Commons and the Law of Sea* (Koninklijke Brill NV, 2018) 326 (The concept of global commons as applied to the oceans has undergone a significant shift over the last fifty years: from the notion of open access and absence of exclusive sovereign control *(res communis*) to one based on principles of shared management

On the other hand it should be noted that relevant literature also discloses a critical approach to the concept of CHM.[74]

Sea-bed and ocean floor:

An Argentine jurist Jose Leon Suarez who was entrusted with the drafting of a report[75] on international rules concerning the exploitation of marine resources by the Experts Committee for the Progressive Codification of International Law, in his report presented in 1927 proposed that the living resources of the sea, and whales in particular, should be considered a *heritage of mankind*. According to Mr. Suarez there was a need to draft a new kind of treaty which would aim at the prevention of the destruction of living resources rather than merely settling disputes among fishermen.[76]

The need for an international law governing the deep seabed began in the late 1960s when the mining of valuable minerals found on the seabed floor became possible.[77] Arvid Pardo, Malta's former Ambassador to the United Nations (UN) and hailed as the forefather of the common heritage of mankind principle in the law of the sea.[78]

The term "CHM" was used by Mr. Arvid Pardo, Malta's Ambassador to the United Nations, in a memorandum supplementing his *note verbale* of 17/08/1967, with regard to preservation of the deep seabed for peaceful development in the

and responsibility, and in the case of the deep seabed and its mineral resources, a form of global commons distribution via the concept the common heritage of mankind, *ibid* 326.); Eleftheria Asimakopoulou and Essam Yassin Mohammad, '*Marine genetic resources in areas beyond national jurisdiction: a 'common heritage of mankind'* (February 2019) IIED (International Institute for Environment and Development) Briefing <http://pubs.iied.org/17498IIED>; Chuanliang Wang, '*On the Legal Status of Marine Genetic Resources in Areas Beyond National Jurisdiction*' (2021) 13/14: 7993 Sustainability 1 (The principle of CHM has its institutional foundation of the law of the sea and its legal connotation has constantly evolved in practices of the law of the sea. Consequently, the principle has the potential to become the applicable principle of the international legally binding instrument under UNCLOS on the Conservation and Sustainable Use of Marine Biodiversity of Areas beyond National Jurisdiction, *ibid* 1-2.); further see, Hua Zhang, '*Chapter 14. The Obligation of Due Diligence in Regulating the Marine Genetic Resources in Areas beyond National Jurisdiction*' in Keyuan Zou (ed.) *Global Commons and the Law of Sea (*Koninklijke Brill NV, 2018).

74 For instance, see, Werner Scholtz, '*Common Heritage: Saving the Environment for Humankind or Exploiting Resources in the Name of Eco-Imperialism?*' (2008) 41/2 Comparative and International Law Journal of Southern Africa (Comp. Int'l L. J. S. Africa) 27 (The author who critically examines the notion of CHM, argues that the application of CHM principle may benefit the rich to the detriment of the people of developing countries.).

75 Report of M. Jose Suarez on the "*Exploitation of the Products of the Sea*" Report to the Council of the League of Nations on the Questions Which Appear Ripe for Codification, League of L. Larry Leonard, '*Recent Negotiations toward the International Regulation of Whaling*' (1941) 35/1 AJIL 90, 90-91; with regard to whaling further see, Gemalmaz (n. 72).

76 Tullio Scovazzi, *The Evolution of International Law of the Sea: New Issues, New Challenges* (*Collected Courses of the Hague Academy of International Law* Vol. 286, Martinus Nijhoff Publishers, 2000) 90; further see, H. A. Smith, *The Law and the Custom of the Sea* (Stevens & Sons Limited, 1950) 63 (The author argued that: "If the view suggested is correct, that all maritime territory really consists of land submerged under water, it follows that the land lying at the bottom of the high seas is a 'no man's land', what the Roman law calls a *res nullius*, rather than *res communis*, something owned in common by all mankind.").

77 Lea Brilmayer & Natalie Klein, '*Land and Sea: Two Sovereignty Regimes in Search of a Common Denominator*', (2001) 33/3 N.Y.U. J. Int'l. L. & Pol. 703, 726; Rosanna Sattler, '*Transporting a Legal System for Property Rights: From the Earth to the Stars*', (2005) 6/1 Chi. J. Int'l. L. 23, 34-37.

78 Goldie (n. 71) 86. Harminderpal Singh Rana, '*Note, the 'Common Heritage of Mankind' & the Final Frontier: A Revaluation of Values Constituting the International Legal Regime for Outer Space Activities*', (1994) 26/1 Rutgers L.J. 225, 235; Baslar (n. 71) 31-37. Lee & Kim (n. 73) 16-17.

'interests of mankind'.[79] Ambassador Pardo stated: "The objective of the Maltese proposal was to replace the principle of freedom of the high seas by the principle of common heritage of mankind in order to preserve the greater part of ocean space as a commons accessible to the international community. The commons of the high seas, however, would be no longer open to the whims of the users and exploiters; it would be internationally administered. International administration of the commons and management of its resources for the common good distinguished the principle of common heritage from the existing traditional principle of the high seas as res communis."[80] But as shown below the notion of "CHM" was in fact first used by Argentine jurist Prof. Cocca in June 1967 in the UN Committee on Outer Space.[81] Ambassador Pardo understood the need for an international common body to exploit and distribute the resources.[82] Developing nations embrace this approach-referred to as the "common property" approach.[83]

Special attention had been given at the Law of the Sea Conference to the concept of "CHM" in order to turn this statement of political intent and moral obligation into a juridical obligation with respect to the deep seabed.[84] Much of this debate[85] lies in the contrary perspectives of developed and developing states.[86] Developed states veer towards the notion that the CHM allows the "common use of designated areas, while upholding traditional concepts such as freedom of the high seas and freedom of exploration." On the contrary, developing countries view the principle of CHM as having three goals: **(i)** the prevention of monopolization in these areas by developed nations at the expense of nations that lack technology or financing; **(ii)** the direct participation of developing nations in the international management of resource extraction, and **(iii)** favorable distribution of economic benefits to developing

79 The statement of Ambassador Arvid Pardo of Malta: '*Declaration and Treaty Concerning the Reservation Exclusively for Peaceful Purposes of the Seabed and of the Ocean Floor, Underlying the Seas Beyond the Limits of Present National Jurisdiction, and the Use of Their Resources in the Interests of Mankind*' UN Doc. A/AC.105/C.2/SR.75 (17 August 1967); also see, Gorove, '*Common Heritage of Mankind*' (n. 71) 390-391; Carol R. Buxton, '*Property in Outer Space: The Common Heritage of Mankind Principle vs. the 'First in Time, First in Right' Rule of Property Law*' (2004) 69 J. Air L. & Com. 689, 694.

80 Rana (n. 78) 228. Buxton (n. 79) 694.

81 Doc. A/AC.105/C.2/SR 75, (19/06/1967), cited in, Aldo Armando Cocca, '*The Advances in International Law through the Law of Outer Space'* (1981) 9/1-2 J. Space L. 13.

82 Brilmayer & Klein (n. 77).

83 Buxton (n. 79) 694.

84 René-Jean Dupuy, *The Law of the Sea: Current Problems* (Dobbs Ferry, Oceana Publications Inc. - Leiden, A. W. Sijthoff, 1974) 39; further see, Barnaby J. Feder, 'A Legal Regime for the Arctic' (1978) 6/3 Ecology L. Q. 785, 800.

85 Sattler (n. 77) 35-37.

86 Frakes (n. 21) (The author argued that the CHM principle is too indeterminate to be classified as customary law due to theoretical inconsistency in its interpretation. Consequently, the standard only binds those states that have signed the relevant treaties, *ibid* 410-411.); *Cf.*, Wolfrum (n 71) 333 (To accept the common heritage principle to be part of international customary law the -following preconditions have to be met: The content of the principle must be distinct enough so as to enable it to be part of the general corpus of international law, and respective State practice accompanied by evidence of opinio juris must exist. Custom must finally be so widespread that it can be considered as having been generally accepted.).

nations.[87] Saying differently, technologically advanced, sea-faring nations felt that the resources should become the property of the nation that extracted them.[88] Smaller nations without the capabilities or funds to launch expeditions felt that the profits and benefits of the resources should be shared among all nations, since the high seas are international territory belonging equally to all nations.[89]

Only four months after the historic statement of Ambassador Pardo, the UN General Assembly, on 18/12/1967, adopted a resolution 2340 (XXII) on "*The question of the reservation exclusively for peaceful purposes of the sea-bed and the ocean floor, and the subsoil thereof, and the use of their resources in the interests of mankind*".[90] The General Assembly after recognizing the common interest of mankind in the sea-bed and ocean floor (Preamble, para.3), and that the exploration and use of the said area, as well as the subsoil thereof, should be conducted, among others, "for the benefit of all mankind" (para.4), emphasized the importance of preserving the said area "from actions and uses which might be detrimental to the common interests of mankind" (para.6). The resolution 2340 (XXII) of 1967 proves that Ambassador Pardo's terminological and/or conceptual suggestion has immediately been well-received by the General Assembly.[91]

A year later, the General Assembly in its resolution 2467 A (XXIII) on 21/12/1968 under the same title[92] declared, *inter alia*, that "it is in the interest of mankind as a whole to favor the exploration and use of the sea-bed and the ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction, for peaceful purposes", (Preamble, para.5), and also expressed its conviction that "such exploitation should be carried out for the benefit of mankind as a whole, irrespective of the geographical location of States, taking into account the special interests and needs of the developing countries", (Preamble, para7). In (Operative para.1) of the same resolution, the General Assembly established a Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor beyond the Limits of National Jurisdiction, composed of 42 States; and in (Operative para.2, a) it instructed the said Committee to study the elaboration of the legal principles and norms in this field which would ensure that the

87 Rana (n. 78) 230.

88 Sattler (n. 77) 34-35.

89 Buxton (n. 79) 694. Sarah Coffey, '*Establishing a Legal Framework for Property Rights to Natural Resources in Outer Space*', (2009) 41/1 Case Western Reserve Journal of International Law (Case W. Res. J. Int'l. L.) 119, 129.

90 The UN General Assembly resolution 2340 (XXII) on "*Examination of the question of the reservation exclusively for pecaful purposes of the sea-bed and the ocean floor, and the subsoil thereof, underlying the high seas beyond the limits of present national jurisdiction, and the use of their resources in the interests of mankind*" was adopted on 18/12/1967 at its 1639th plenary meeting. All UNGA resolutions are accessible at, <http://daccess-dds-ny.un.org/doc/RESOLUTION>.

91 Indeed, the resolutions adopted by the General Assembly in 1966 (for example, resolution 2172 (XXI) on "*Resources of the sea*", or resolution 2173 (XXI) on "*Development of natural resources*", both adopted on 06/12/1966 at its 1485th plenary meeting) did not refer to the concept of 'common interest of mankind'.

92 The UN General Assembly resolution 2467 A (XXIII) (entitled same as the former resolution 2340 (XXII) of 1967) was adopted on 21/12/1968 at its 1752nd plenary meeting.

exploitation of the said resources "for the benefit of mankind", and that the regime to be established should "meet the interests of humanity as a whole".[93]

Under the same title of resolutions which subsequently resulted in the adoption of the 1970 "Declaration of Principles on the Sea-Bed" noted below, the UN General Assembly in its resolution 2574 A (XXIV) of 15/12/1969, again affirmed that the said area should be used exclusively for peaceful purposes and its resources should be utilized "for the benefit of all mankind" (Preamble, para.6), and declared that there was an urgent necessity of preserving this area from encroachment, or appropriation by any State, which could be "inconsistent with the common interest of mankind" (Preamble, para.7).[94] Although issued in a different context, the resolution 2602F (XXIV) of 16/12/1969 on "*Question of general and complete disarmament*"[95] gave recognition to "the common interest of mankind in the reservation of the sea-bed and the ocean floor exclusively for peaceful purposes" (Preamble, para.1).

Those initiations have eventually been resulted in the promulgation of the "*Declaration of Principles Governing the Sea-Bed and the Ocean Floor, and the Subsoil Thereof, Beyond the Limits of National Jurisdiction*" of 17/12/1970 adopted by the UN General Assembly resolution 2749 (XXV).[96] Paragraph 1 of the 1970 Declaration provides that "the sea-bed and ocean floor and the subsoil thereof, beyond the limits of national jurisdiction, as well as the resources of the area, are the *common heritage of mankind*..." (Emphasis added). Thus, the former usage of the phrase 'common interest or benefit of mankind as a whole' finally turned into an explicit formulation of 'CHM'.[97]

93 It is significant to note that in Part B of the resolution 2467 B (XXIII) of 21/12/1968, the General Assembly specifically focused on the threat to the marine environment presented by pollution and other hazardous and harmful effects which might result from exploration and exploitation of the said areas, and stressed the need to promote effective measures of prevention and control of such pollution and to allay the serious damage which might be caused to the marine environment, and, in particular, to the living marine resources which constitute one of the mankind's most valuable food resources, (Preamble, paras.2 and 3).

94 The UN General Assembly resolution 2574 A (XXIV) (entitled same as the former resolution 2467 A (XXIII) of 1968) was adopted on 15/12/1969 at its 1833rd plenary meeting. It may be added that Preambular paras.1 and 4) of Part D of the resolution 2574 also reaffirmed both the 1967 and 1968 resolutions explained above again referring the same concept in question.

95 The UN General Assembly resolution 2602 F (XXIV) on "*Question of general and complete disarmament*" was adopted on 16/12/1969 at its 1836th plenary meeting.

96 The "*Declaration of Principles Governing the Sea-Bed and the Ocean Floor, and the Subsoil Thereof, Beyond the Limits of National Jurisdiction*" was adopted by the UN General Assembly Resolution 2749 (XXV) of 17/12/1970. This Declaration was adopted by a vote of 108 in favor to none against, with 14 abstentions. The text of the Declaration *reproduced in*, Brownlie, *Basic Documents in International Law* (1995) 124-128. *Cf.*, Article 136 of the UNCLOS of 10/12/1982.

97 Gorove, *'Common Heritage of Mankind'* (n. 71) 399-400. (The author, referring and noting discussions at the UN in the drafting process of the 1970 "Declaration of Principles on the Sea-Bed", stated that the idea that the seabed and ocean floor and the subsoil thereof beyond the limits of national jurisdiction are the 'common heritage' of mankind was widely supported but not acceptable to all. A number of representatives felt that the concept of common heritage was neither realistic nor practical.) Wang & Chang (n. 71) (The authors argued that after Arvid Pardo recommended that the seabed and subsoil beyond national jurisdiction should be regarded as CHM, put forward the proposal of an international seabed system, the principle of CHM was perceived as the foundation of a specific marine legal regime. Later, the principle of CHM was stipulated, both in the General Assembly Resolution 2749 (XXV) and UNCLOS. However, there is no clear definition of its legal connotations.).

The notion of 'CHM' has subsequently been appeared in the first sentence of Article 29 of the "*Charter of Economic Rights and Duties of States*"[98] (CERDS) of 12/12/1974, in which the above quoted provision provided in (para.1) of the 'Declaration of Principles on the Sea-Bed' of 17/12/1970 has identically been repeated. Chapter III of the 1974 CERDS emphasizes the common responsibilities of all States towards the international community. Consequently, the sea-bed and ocean floor and the subsoil thereof, beyond the limits of national jurisdiction, as well as the resources of the area are to be regarded as the common heritage of mankind, which requires all States to ensure that "the exploration of the area and exploitation of its resources are carried out exclusively for peaceful purposes and that the benefits derived therefrom are shared equitably by all States."[99]

The aforementioned two resolutions of the UN General Assembly, namely the 'Declaration of Principles on the Sea-Bed' of 17/12/1970 and the 'Charter of Economic Rights and Duties' of 12/12/1974 have been declared to create customary international law.[100]

In the context of the international law of the sea, it is argued that the legal connotations of CHM are as follows: the subject of CHM is the aggregation of all States. Marine resources, which are seen as CHM, have the characteristics of extraterritoriality, sharing and legality. There are four main elements of CHM based on content elements considered: (i) No State shall claim or exercise sovereignty or sovereign rights over marine resources, which are seen as CHM, nor shall any State or natural or juridical person appropriate any part thereof. (ii) It must be used for the benefit of all mankind, taking into account the interests and needs of developing States in particular. (iii) It must be used exclusively for peaceful purposes. (iv) Take into account the protection of the marine environment and the sustainable use of marine resources. With the modification and refinement of the Area system, the connotations of CHM have been evolving.[101]

Outer space and moon:

Apart from resolutions concerning sea-bed and ocean floor, and even before the adoption of such resolutions, the notion 'common interest of mankind' has been incorporated into the resolutions dealt with the use of outer space.[102]

98 The "*Charter of Economic Rights and Duties of States*" (CERDS) was adopted by the UN General Assembly resolution 3281 (XXIX) on 12/12/1974; *reproduced in*, 14 ILM 251 (1975); also see, Ian Brownlie (ed.), *Basic Documents in International Law* (fourth edition, Clarendon Press, 1995) 240-254; Charles Chatterjee - David R. Davies and D.G. Cracknell, *Public International Law* (Old Bailey Press, 1996) 276-289. On the 1974 CERDS, see, Chatterjee (n.3).

99 P. N. Agarwala *'The New International Economic Order: An Overview'* (Pergamon 2015) 188.

100 Goldie (n.71) 74.

101 Wang & Chang (n. 71).

102 Ernst Fasan, '*The Meaning of the Term 'Mankind' in Space Legal Language*' (1974) 2/2 J. Space L. 125, 126; Leslie I. Tennen, '*Outer Space: A Preserve for All Humankind'* (1979-80) 2/1 Hous. J. Int'l L. 145. Cocca (n. 81); Goedhuis, '*Some Recent Trends in the Interpretation and the Implementation of the Rules of International Space Law*' (1981) 19/2 Colum. J.

Indeed, the United Nations General Assembly in its resolution 1348 (XIII) on "*Question of the peaceful use of outer space*"[103], adopted on 13/12/1958, started its words by recognizing the "*common interest of mankind* in outer space" which should be used for peaceful purposes only, (Preamble, para.1), and stressed that the exploration and exploitation of outer space should be carried out for the benefit of mankind, (para.4). Thus the resolution 1348 (XIII) recognized the fact that the space contains innumerable resources that can be used to improve the human condition.[104] The General Assembly resolution of 1472 (XIV) on "*International co-operation in the peaceful uses of outer space*"[105] adopted on 12/12/1959 went further and recognized what it called the "common interest of mankind *as a whole*" in furthering the peaceful uses of outer space, (Preamble, para.1). In the same resolution the General Assembly also expressed the view that "the exploration and use of outer space should be only for the *betterment of mankind* and to the benefit of States irrespective of the stage of their economic or scientific development", (Preamble, para.2). (Emphasis added). The UN General Assembly resolution 1721 A (XVI) of 20/12/1961[106] under same heading, not only recognized the common interest of mankind in the peaceful uses of outer space, but also stated that space exploration and use should only be for the betterment of mankind, (Preamble paras.1 and 2), and prohibited national appropriation in outer space (Operative para.1/b). The General Assembly resolution 1884 (XVIII) adopted on 17/10/1963[107] referred to the GA resolution 1721 A (XVI) of 1961 and repeated the same phraseology, i.e. exploration and use of outer space should only be for the betterment of mankind, (Preamble para.1).[108] The General Assembly resolution 1884 (XVIII) further welcomes the expressions by the USSR and the USA of their intention "not to station in outer space any objects carrying nuclear weapons or other kinds of weapons of mass destruction", (para.1). The latter call of the General Assembly was

Transnat'l L. 213; Eric Husby, '*Sovereignty and Property Rights in Outer Space*' (1994) 3 J. Int'l. L. & Prac. 359; Buxton (n. 79); Ram Jakhu, ' *Legal Issues Relating to the Global Public Interest in Outer Space*' (2006) 32/1 J. Space L. 31, 34; Lynn M. Fountain, '*Creating Momentum in Space: Ending the Paralysis Produced by the 'Common Heritage of Mankind' Concept*' (2003) 35 Conn. L. Rev. 1753; Joanne Irene Gabrynowicz, '*Space Law: Its Cold War Origins and Challenges in the Era of Globalization*' (2004) 37 Suffolk U. L. Rev. 1041 (*Id* 1041-1047, the author discusses the Cold War origins of Space Law in the context of International Law.); Sattler (n. 77) 23-44; Jijo George Cherian & Job Abraham, '*Concept of Private Property in Space: An Analysis*' (2007) 2/4 J. Int'l. Com. L. & Tech. 211; Adam G. Quinn, '*The New Age of Space Law: The Outer Space Treaty and the Weaponization of Space*' (2008) 17/2 Minn. J. Int'l. L. 475; Coffey (n. 89); Francis Lyall and Paul B. Larsen, *Space Law: A Treatise* (Ashgate, 2009)193-197; Steven Freeland, '*For Better or for Worse? The Use of 'Soft Law' within the International Legal Regulation of Outer Space*' (2011) 36 Annals of Air and Space Law (Ann. Air & Space L.) 409; Steven Freeland, '*The Limits of Law: Challenges to the Global Governance of Space Activities*' (2020) 153/1 Journal & Proceedings of the Royal Society of New South Wales, (J. & Procee. R. S. New South Wales) 70-82.

103 The UN General Assembly resolution 1348 (XIII) on "*Question of the peaceful use of outer space*" was adopted on 13/12/1958 at its 792nd plenary meeting.

104 Tennen (n. 102) 146.

105 The UN General Assembly resolution 1472 (XIV) on "*International co-operation in the peaceful uses of outer space*" was adopted on 12/12/1959 at its 856th plenary meeting.

106 The UN General Assembly resolution 1721 A (XVI) on "*International co-operation in the peaceful uses of outer space*" was adopted on 20/12/1961 at its 1085th plenary meeting.

107 The UN General Assembly resolution 1884 (XVIII) on "*Question of general and complete disarmament*" was adopted on 17/10/1963 at its 1244th meeting.

108 Also see, Fasan (n. 102) 126.

subsequently transformed into a treaty obligation, i.e., into Article IV, paragraph 1, of the "*Outer Space Treaty*"[109] of 27/01/1967.[110]

The following step was the adoption of the "*Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space*"[111] of 13/12/1963 by the General Assembly resolution 1962 (XVIII). Preambular (para.2) of the 1963 'Declaration of Legal Principles' recognized "*the common interest of all mankind* in the progress of the exploration and use of outer space for peaceful purposes", Preambular (para.3) emphasized that the exploration and use of outer space should be carried on for the betterment of mankind and for the benefit of States irrespective of their degree of economic or scientific development. Furthermore, while (Operative para.1) of the 1963 Declaration provided that the exploration and use of outer space should be carried on for the benefit and in the interests of all mankind, (Operative para.9) declared that astronauts shall be regarded by the States as "envoys of mankind".[112] As it will be shown below also the aforementioned principles and standards would then be inserted into the 1967 'Outer Space Treaty'.[113] Article I of the Outer Space Treaty provides that, "the exploration and use of outer space… shall be the *province of all mankind*". (emphasis added). It may be added that in the treaties regulating Outer Space, many of the goals as well as some basic principles are borrowed from the Antarctic System and from various treaties governing the high seas.[114]

Thus even before the adoption of the 1967 Outer Space Treaty it was realized that by denying the legality of such (sovereignty) claims the interests of the world community as a whole would be best served.[115] However it has to be underlined that the "common heritage" notion is still a subject of different views.[116]

109 The "*Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies*" was adopted by General Assembly resolution 2222 (XXI), (Annex), on 19/12/1966, opened for signature on 27/01/1967, and entered into force on 10/10/1967.

110 Also see, Manfred Lachs, *The Law of Outer Space: An Experience in Contemporary Law-Making* (Sijthoff, 1972) 109.

111 The General Assembly resolution 1962 (XVIII) on "*Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space*" was adopted on 13/12/1963 at its 1280th plenary meeting.

112 C. W. Jenks, *The Common Law of Mankind* (Frederick A. Praeger 1958) 246-247 argued that "presumably an 'envoy of mankind' can act as such only on behalf of mankind; he cannot therefore, in his capacity as an 'envoy of mankind', exercise the public authority of a particular State on its behalf, by any symbolical taking of possession as an assertion of a claim of sovereignty (in any case prohibited elsewhere in the (1963) Declaration", *cited in*, Fasan (n. 102) 128. Fasan, in 127 also refers to Zhukov, *Space Law* (International Relations Publishing House 1966) 39, who argues that the scientific exploration of outer space shall serve toward a better standard for all mankind; outer space is deemed the domain of the whole mankind.

113 The "*Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies*", Jan. 27, 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205.

114 Buxton (n. 79) 694; Quinn (n. 102) 483-484.

115 Goedhuis (n. 102) 214; Lachs (n 110) 42-43. Jakhu (n 102) 44.

116 The relevant argumentation may be summarized as follows: **(i)** Due to the differing interpretations of the Outer Space Treaty, the "common heritage" notion has been interpreted in two different ways. In view of the non-space actors, the language is typically interpreted to mean that outer space, all its resources, and any benefits derived there from should be equitably distributed. In view of the space actors, the phrase merely speaks to the optimism inherent in space exploration and places no limitations on them whatsoever. See, Husby (n. 102) 364; Fountain (n. 102) 1762 (The author argued that the principles articulated in the UN Space Treaties mean that there can be no private property in space.); Quinn (n. 102) 480. **(ii)** Furthermore, a similar disagreement arises with the Outer Space Treaty's non-appropriation clause (Article II).

In the subsequent resolutions on the same subject adopted in the late 1960s the General Assembly reaffirmed the common interest of mankind in furthering the exploration and use of outer space for peaceful purposes.[117] On the other hand, the General Assembly resolution 2130 (XX) on "*International co-operation in the peaceful uses of outer space*"[118] adopted on 21/12/1965 endorses the recommendations contained in the reports of the Committee on the Peaceful Uses of Outer Space concerning, *inter alia*, international sounding rocket launching facilities, potentially harmful effects of space experiments, (Section II, para.1).[119]

Consequently, before the 'Stockholm Declaration' was adopted in 1972, the necessity to combat against potentially harmful interference of space activities, the area of which is called the "common interest of mankind as a whole" was in fact recognized by the UN General Assembly.

It has already been noted that the term "CHM" was used by Ambassador Pardo, Malta's Ambassador to the United Nations, in a memorandum supplementing his *note verbale* of 17/08/1967, with regard to preservation of the deep seabed for peaceful development in the 'interests of mankind'. However, the notion of "CHM" had previously been introduced by Prof. Cocca in June 1967 in the UN Committee on Outer Space, i.e. not in the Seabed Committee.[120]

While the non-space actors, again, argue that outer space resources cannot be lawfully appropriated because they belong to all mankind. This interpretation acts as a virtual bar to mining outer space because one would need the permission of all mankind to proceed. Space actors argue that the non-appropriation clause refers to the permanent appropriation of celestial bodies by sovereign nations, not the consumption of resources by private actors. Under the latter understanding, private space actors would be allowed to mine space minerals. See, Fountain (n. 102) 1762-1763; Quinn (n. 102) 481. **(iii)** The use of non-binding norms has become increasingly prevalent in many areas of international law. The difficulty of formulating and enacting binding multilateral treaties, the diversity of States' interests and the increasing importance of private actors on the international level have contributed to this phenomenon. The term "soft law" is often used to describe such instruments, even though this is sometimes criticized as confusing and inappropriate. As regards the international regulation of outer space, non-binding norms have played an important role from the very beginning of space activities, augmenting a series of United Nations Treaties that codify the fundamental principles that apply to the exploration and use of outer space. This article analyses the function of soft law in the international legal system in general and for the development of international space law in particular. The legal status and effect of soft law instruments varies in accordance with the circumstances, and this adds to the complexity in assessing the precise value of such instruments. In this regard, this article offers some cautionary comments as to how they should be assessed in the realm of space activities, concluding that, even though soft law instruments play a useful role, they should not be regarded as something they are not i.e., legally binding norms. Instead, the finalization of additional hard law multilateral treaties, negotiated in the spirit of cooperation, will be the most effective legal means by which to maintain the peaceful exploration and use outer space in the future. See, Freeland, '*For Better or for Worse?'* (n. 102).

117 For example, see, the UN General Assembly resolution 2453 B (XXIII) on "*International co-operation in the peaceful uses of outer space*" was adopted on 20/12/1968, at its 1750th plenary meeting, (Preamble, para.4). In the same line, see, the UN General Assembly resolution 2601 A (XXIV) (under the same heading), adopted on 16/12/1969 at its 1836th plenary meeting, (Preamble, para.3).

118 The UN General Assembly resolution 2130 (XX) on "*International co-operation in the peaceful uses of outer space*" was adopted on 21/12/1965 at its 1408th plenary meeting. In Preamble (para.1) of the resolution 2130 (XX), the General Assembly referred to its resolutions 1962 (XVIII) and 1963 (XVIII), both adopted unanimously on 13/12/1963.

119 Cocca (n. 81) 20.

120 Doc. A/AC.105/C.2/SR 75, (19/06/1967), *cited in*, Cocca (n. 81) 15 (The author added that he "later proposed – in May 1970 – the 'Draft Agreement on the principles governing the activities of States in the use of natural resources of the moon and other celestial bodies' (UN Doc. A/AC.105/C.2/L.71 and Corr. 1 (1970), and UN Doc. A/AC.105/85, July 3, 1970, Annex II, at 1). Article 1 of this Draft agreement provides that 'The natural resources of the Moon and other Celestial Bodies shall be the common heritage of ALL MANKİND'. This is the first international text where the principle appeared. It was later examined in the Seabed Committee and towards the end of 1970 a UNGA resolution was adopted where reference was made to the concept of common heritage which was bore in 1954 during the Vth Congress of the International Astronautical Federation, Innsbruck, and applied to the law of outer space", *ibid*); also see, Jakhu (n. 102) 193.

Cocca, who introduced the notion of '*res communis humanitatis*' in relation to the rights of mankind argues that "the moon and other celestial bodies are, by virtue of the mentioned treaty the subsequent Outer Space Treaty (1967), a *res communis humanitatis*, which is a legal condition especially elaborated by law for this new field of human activity, and which is derived from the community of interests and benefits recognized in favor of mankind in outer space and celestial bodies".[121] The same author in his 1981 article argues with regard to the notion of *res communis* derived from Roman law that "from the moment that outer space and celestial bodies are subject to a *jus humanitatis*, it is proper to speak of a *res communis humanitatis*. The latin term 'humanitatis' is ambivalent means of and for. We are therefore referring to things – in the legal sense – belonging to and for Humankind".[122] Grove argues that "it has been suggested that the term '*res communis omnium*' would imply for every individual, and not just for every nation, the right to have an active part in and to be co-apropiator in the enjoyment of the thing under consideration. On the other hand, the phrase '*res communis humanitatis*' which bears close resemblance to the concept of 'common heritage of mankind' has been said better to express the idea that the right is limited to states".[123]

Although it is frequently argued that in The Outer Space Treaty, 1967 the concept of *res communis* was accepted to serve as a defence against sovereign appropriation of property[124], it is also argued that, "a *laissez-faire* philosophy in space does not exist for either private or public activities. Rather, the *corpus juris spatialis* contains provisions for, and prohibition against, certain uses of space".[125]

The space treaties were concluded during the Cold War and reflect Cold War fears and ambitions, with significantly less emphasis on modern day concerns about space resources, commercialization, and production.[126]

121 *Proc. 6th Colloquium on the Law of Outer Space*, 1963, 3-4, *quoted in*, Fasan (n. 102) 129 (According to Fasan, the legal notion of 'mankind' has a special meaning which indicates that mankind is just undergoing the painful process of becoming a new legal subject of international law, *ibid* 131).

122 Cocca (n. 81) 14.

123 Gorove, '*Common Heritage of Mankind*' (n. 71) 393-394. Gorove refers to: Enrico Scifoni, '*The Principle 'Res Communis Omnium' and the Peaceful Use of Space and Celestial Bodies*' (1970) Proc. 12 Coll. on Law of Outer Space 50, 51-52.

124 Cherian & Abraham (n. 102) 216 (According to the authors the common heritage of mankind principle, nations manage, rather than own certain designated international zones. No national sovereignty over these spaces exists, and international law (i.e., treaties, international custom) governs. The common heritage of mankind principle deals with international management of resources within a territory, rather than the territory itself. Developed nations interpret the principle as meaning that "anyone can exploit these natural resources so long as no single nation claims exclusive jurisdiction" over the area from which they are recovered. Simply stated, every nation enjoys access and each nation must make the most of that access. The heritage lies in the access to the resources, not the technology or funding to exploit them. The Common Heritage concept, formulated during the cold war era, though well intentioned, does not serve any useful purpose in the current scenario – the free market economy. The freedom granted to the states for exploration and use cannot be mired. The Common Heritage Concept binds nations and firms to make the most of what their access grants them. Thus, if a nation or firm is unable to properly exploit a resource found in international territories, then that resource should be left to a nation or firm that is able. This view is aligned with the "first in time, first in right" view of ownership. Industrialized nations promote this view because, unlike the limited access view of the developing world, unlimited access promotes and rewards private investment, *ibid* 214.).

125 Tennen (n. 102) 146.

126 Gabrynowicz (n. 102) 1043-1044; Coffey (n. 89) 124.

With regard to present commercial space activities by the US, one may note that infact almost forty years ago NASA was asked to advance commercial activity in space, while o explicit statutory policy existed until 1984. In that year Congress amended the Space Act and required NASA to seek and encourage to the maximum extent possible the fullest use of space.[127] Many countries with government space programs are rapidly becoming technologically and economically capable of implementing a viable space industry. Companies and entrepreneurs play an integral role in this multi-billion dollar enterprise.[128] A comprehensive legal system governing operations on celestial bodies, however, does not yet exist.[129]

Stockholm Declaration:

Coming to the 1972 'Stockholm Declaration' which directly involves environment protection, a number of provisions refer to the 'common good of mankind'. For example, in the Preamble paragraph 6 of the 1972 'Stockholm Declaration' explicitly states that "to defend and improve the human environment for present and future generations has become an *imperative goal for mankind*-a goal to be pursued together with".

With regard to the principles provided in the 1972 'Stockholm Declaration', while Principle 5 indicates that the non-renewable resources of the earth must be employed in such a way as to guard against the danger of their future exhaustion and "to ensure that benefits from such employment are shared by all *mankind*", Principle 18 requires that science and technology must be applied, *inter alia*, to the solution of environmental problems and "*for the common good of mankind*". As a consequence, Principle 21, on the one hand, recognizes the sovereign right of States to exploit their own resources, and, on the other hand, places those States under the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

127 Sattler (n. 77) (Reference: National Aeronautics and Space Administration Authorization Act of 1985, Pub L No 98- 361, 98 Stat 422, codified at 42 USC § 2451 (2000).) The author further noted that, in 1998, Congress passed the Commercial Space Act, which directs NASA to use the International Space Station as a springboard for space commerce (42 USC § 14701 (1998).). The Act promotes the use of commercial launch services and emphasizes the importance of commercial providers in the operation, servicing, and use of the space station. It also provides some guidelines for space commercialization. Following adoption of the 1998 Act, NASA produced a "Commercial Development Plan" to implement its provisions. This plan calls for a nongovernmental organization (NGO) to manage future commercialization of space, but the plan description is almost silent as to how commercialization will actually be advanced by the organization, *ibid* 38-39.); also see, Gabrynowicz (n. 102) 1049-1050 (For a discussion of move and trend for commercialization and integration of government space systems, *id,* 1056-1057. For the emergence of private law for space, *ibid* 1061-1063.).

128 Fountain (n. 102) 1787; Further see, Coffey (n. 89) 123 (Currently, at least six nations and numerous private companies have plans to go to the moon in the near future. NASA's Vision for Space Exploration aims to send astronauts back to the moon in 2020 and to establish a permanently staffed base by 2024. The author also noted that while both public and private ventures are racing to use the moon's resources, the laws governing those resources have remained vague and unchanged for many years, *id,* 124.); Freeland, '*The limits of law*' (n. 102) 74 (The beginning of the 1990s saw the commercialization of space really start to expand rapidly. By 1998, the spend on commercial space had caught up to Governmental space expenditure. It has been estimated that the total value of the global commercial space "industry" in 2018 was approximately US $ 385 billion. This figure is anticipated to grow exponentially to somewhere between US $ 1-3 trillion by 2040.).

129 Sattler (n. 77) 44.

This approach in the field of environmental protection, which has been consistently reaffirmed in the subsequent relevant instruments, indicates the emergence of obligations of an objective character.[130]

The 1997 UNESCO Declaration:

The UNESCO "*Declaration on the Responsibilities of the Present Generations towards Future Generations*"[131], adopted on 12/11/1997, in Article 8 (common heritage of mankind) states that "the present generations may use the common heritage of humankind, as defined in international law, provided that this does not entail compromising it irreversibly."

As it will be examined below the notion of 'common heritage of humankind' has subsequently been inserted into legally binding instruments.

b) Basic Characteristics of the Notion of 'Common Heritage of Humankind'

As argued in the early 1970s, 'common heritage' is a new concept in international law with emerging content. It has been suggested that the concept has three characteristics: "absence of national property"; international "management of all uses", and "sharing of benefits".[132]

Cheng has described the notion of the 'common heritage of mankind' as follows: "The emergent concept of the common heritage of mankind,… while it still lacks precise definition, wishes basically to convey the idea that the management, exploitation and distribution of the natural resources of the area in question are matters to be decided by the international community… and are not to be left to the initiative and discretion of individual states or their nationals".[133] In the same line Francioni argued that "despite the fact that its precise legal implications still remain rather uncertain, there is a general consensus that the common heritage principle tends to create an obligation for individual states to use the resources of the international seabed area as well as those of outer space in a way that promotes not only national interests, but the well-being of mankind as a whole".[134] As Kiss stated "the common heritage is the complete territorial expression or at least the materialization of the common interest

130 *Cf.* Antonio Augusto Cançado Trindade, '*Human Rights and the Environment*' in Janusz Symonides (ed.), *Human Rights: New Dimensions and Challenges* (Manual on the Rights, UNESCO Publishing, Ashgate, 1998) 117, 123.

131 The "*Declaration on the Responsibilities of the Present Generations Towards Future Generations*" was adopted on 12/11/1997 by the General Conference of the UNESCO, meeting in Paris from 21 October to 12 November 1997 at its 29th session. In Preamble para.5 of the 1997 Declaration it is stressed that "full respect for human rights and ideals of democracy constitute an essential basis for the protection of the needs and interests of future generations."

132 '*Introduction to Part Three: The Emerging Ocean Regime*' in E. Borgese (ed.), *PACEM IN MARIBU* (1972) 161-162, *cited in*, Note (no author indicated), '*Thaw in International Law? Rights in Antarctica under the Law of Common Spaces*' (1978) 87/4 Yale L. J. 804-859, 847.

133 Bin Cheng, '*The Legal Regime of Airspace and Outerspace: The Boundary Problem, Functionalism versus Spatialism: The Major Premises*' (1980) 5 Annals Air and Space Law 323, 337, *quoted in*, Larschan and Brennan (n. 71) 319.

134 Francioni, 'Legal Aspects of Mineral Exploitation in Antarctica' (n. 202) 171.

of mankind".[135] Trindade argued that "despite semantic variations in international instruments on environmental protection when referring mankind, a common denominator of them all appears to be the common interest of mankind".[136] In early 1970s some authors[137] argue that the 'rights of mankind' should be distinguished from 'human rights', since while the latter indicates rights which individuals are entitled to on the ground of their belonging to the human race, the former relates to the rights of the collective entity which could not be analogous with the rights of individuals forming that entity.

The concept of "CHM", which was considered by Mr. Suarez in his 1927 report as a developing concept, and also suggested by Mr. Pardo in 1967, is today applied in the 1982 UNCLOS only with respect to mineral resources of the seabed beyond the limits of national jurisdiction.[138]

Referring to the drafting process of the United Nations Convention on the Law of the Sea (UNCLOS), Anand noted that many developing States argued that regional environmental concerns must be met within the framework of the law of the sea. They insisted on protection of the 'common heritage of mankind' concept in areas outside national jurisdiction. This concept symbolized their "interests, needs, hopes and aspirations… and serves as a useful rallying cry in support of their objectives".[139] According to Adede, who examines the issue in relation to the Law of the Sea Convention, the basic ideas of the concept of the 'common heritage of mankind' are: "*(a)* that the seabed and the ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction (referred to as the Area), as well as the resources of the Area, are the common heritage of mankind; *(b)* that the area shall not be subject to appropriation by any means by states or persons, natural or juridical; *(c)* that the Area shall be reserved exclusively for peaceful purposes, and *(d)* that the exploration of the Area and the exploitation of its resources shall be carried out for the benefit of mankind as a whole."[140]

As Christol argues the basic characteristics of the 'common heritage of mankind' notion may be listed as follows: **(i)** It is an enlargement of the traditional international legal principle of *res communis*; it rejects *the res nullius* perspective. It follows

135 Kiss, '*Conserving the Common Heritage of Mankind*' (n. 71) 774.

136 Trindade, '*Human Rights and the Environment*' (n. 130) 125.

137 Gorove, *'Common Heritage of Mankind'* (n. 71) 393 (The author also stated that "occasionally reference may also be found to this phrase even in the sense that it encompasses all ages embracing not only present but past and future generations as well. To some extent it is this vagueness in the general meaning of the term that makes acceptance of the phrase as a legal term particularly difficult", *ibid* 394.); also see, Fasan (n. 102) 130.

138 Scovazzi (n. 76) 93.

139 Ram Prakash Anand, '*Interests of the Developing Countries and the Developing Law of the Sea*' (1973) 4 Annals of Int'l Studies 13, 22, *quoted in*, Feder (n. 84) 826.

140 A. O. Adede, '*The System for Exploitation of the 'Common Heritage of Mankind' at the Caracas Conference*' (1975) 69/1 AJIL 31, 31, note 1.

that, like the high seas, such areas may not become the subject of appropriation by States. **(ii)** The principle seeks to benefit mankind generally by protecting the physical environment against unnecessary degradation. **(iii)** It endeavors to conserve the resources of the world for present and future generations. **(iv)** It seeks through agreement to achieve the goal of equitable allocation of such resources and benefits with particular attention to the needs of the developing countries. This is the essence of the *res communis humanitatus* concept. **(v)** It contemplates the presence or formation of an international regime containing such rules as may be necessary to insure the realization of the previously identified objectives. If necessary, the legal regime would lead to the establishment of an appropriate international inter-governmental governing body. **(vi)** The principle includes as an overriding mandate the expectation that all areas in which it applies will be used onl for peaceful purposes.[141]

c) The Notion of 'Present and Future Generations' in Soft-Law Instruments

With respect to notion of 'present and future generations', among various instruments, the UN Charter of 1945 may first be noted, since its Preamble clearly states that "We the peoples of the United Nations determined to save succeeding generations from the scourge of war..., to reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women..."

Unlike the early stages of international environmental law where the focus was on economic interests, rather than conservation of resources[142], the notion of the preservation of the environment beyond mere national benefits and interests of the present generation has subsequently been evolved in the direction to recognize the rights of future generations which essentially imply the responsibility of the present generation to the succeeding ones.

Numerous UN General Assembly (UNGA) resolutions adopted as far back as the 1960s indicate the notion of the protection of the environment for present and future generations. For example, the UNGA Resolution 1629 (XVI) adopted on 27/10/1961 declared that "both concern for the future of mankind and the fundamental principles of international law impose a responsibility on all states concerning actions which might have harmful biological consequences for the

141 Carl Q. Christol, *The Modern International Law of Outer Space* (Pergamon Press, 1982) 286 (The author further stated that the common heritage of mankind principle, as a reflection of high principles of justice and equity, is a political-legal response to the world's unequal distribution of resources and human capabilities. It can facilitate the hope for a sharing of resource benefits", *ibid* 288.).

142 Edith Brown Weiss, '*International Environmental Law: Contemporary Issues and the Emergence of a New World Order*' (1992-93) 81/3 Geo. L. J. 675, 679-684 (The author also argued that "the international community is increasingly aware that it is important not only to monitor and research environmental risks, but also to reduce them. Thus, states have moved from international agreements that mainly address research, information exchange, and monitoring to agreements that require reductions in pollutant emissions and changes in control technology", *id*, 680. The provisions in the new agreements are generally more stringent and detailed than in previous ones, the range of subject matter broader, and the provisions for implementation and adjustment more sophisticated, *id.* 684.).

existing and future generations of peoples of other states, by increasing the levels of radioactive fallout", (para.2).[143]

The United Nations considered environmental issues for the first time at the 45th session of the Economic and Social Council (ECOSOC), when in Resolution 1346 (XLV) of 30/07/1968 it recommended that the General Assembly consider convening a United Nations conference on "problems of the human environment".[144] At its 23rd session the General Assembly adopted Resolution 2398 (XXIII) of 03/12/1968 convening a United Nations Conference on the Human Environment noting the "continuing and accelerating impairment of the quality of the human environment" (preamble, para.3) and its "consequent effects on the condition of man, his physical, mental and social well-being, his dignity and his enjoyment of basic human rights, in developing as well as developed countries" (para.4), thus relating the Charter to emerging environmental issues. The resolution also recognized that "the relationship between man and his environment is undergoing profound changes in the wake of modern scientific and technological developments", (para.1).[145] Thus the adoption of the General Assembly Resolution 2398 (XXIII) of 03/12/1968 was the first time that the United Nations explicitly recognized the linkage between environmental protection and human rights.[146]

Article 9, sub-paragraph 2, of the "*Declaration on Social Progress and Development*"[147] of 11/12/1969 reads as follows: "Social progress and economic growth require recognition of the common interest of all nations in the exploration, conservation, use and exploitation, exclusively for peaceful purposes and in the interests of all mankind, of those areas of the environment such as outer space and the sea-bed and ocean floor and the subsoil thereof, beyond the limits of national jurisdiction, in accordance with the purposes and principles of the Charter of the United Nations."

The UN General Assembly resolution 2849 (XXVI) of 20/12/1971 on "*Development and Environment*" declares that "the rational management of the environment is of fundamental importance for the future of mankind", (Preamble para.6).[148]

143 The UN General Assembly resolution 1629 (XVI) on "*Report of the United Nations Scientific Committee on the effects of atomic radiation*" was adopted on 27/10/1961 at its 1043rd plenary meeting.

144 The UN ECOSOC resolution 1346 (XLV) on "*Questions on convening an international conference on the problems of human environment*" was adopted on 30/07/1968 at its 1555th plenary meeting.

145 The UN General Assembly resolution 2398 (XXIII) on "*Problems of the human environment*" was adopted on 03/12/1968 at its 1733rd plenary meeting.

146 Symonides, '*The Human Right to a Clean, Balanced and Protected Environment*' (n. 50) 24.

147 The "*Declaration on Social Progress and Development*" was adopted by the UN General Assembly resolution 2542 (XXIV) of 11/12/1969 at its 1829th plenary meeting; *reproduced in*, UNHCHR, *Human Rights - A Compilation of International Instruments* (Volume I (First Part), United Nations, New York and Geneva, 2002) 435-445. Further see, Articles 13(c), 23 and 25(a) of the 1969 Declaration.

148 The UN General Assembly resolution 2849 (XXVI) on "*Development and Environment*" was adopted on 20/12/1971 at its 2026th plenary meeting. In (para.4/b) of the same Resolution it was recognized that "no environmental policy should adversely affect the present and future development possibilities of the developing countries".

The 1972 Stockholm Declaration:

Principle 1 the 1972 Stockholm Declaration declares the following: "Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for *present and future generations*."[149] In Principle 2 of the Stockholm Declaration the notion of 'present and future generations' once again emphasized with regard to safeguarding the natural resources for the benefit of these generations.[150]

Between Stockholm and Rio Declarations:

Only two years after the adoption of the Stockholm Declaration, the UN "*Charter of Economic Rights and Duties of States*" was adopted on 12/12/1974. Under Chapter III of the 1974 CERDS Article 30 declares, *inter alia*, that: "The protection, preservation and enhancement of the environment for the *present and future generations* is the responsibility of all States. All States shall endeavor to establish their own environmental and developmental policies in conformity with such responsibility. The environmental policies of all States should enhance and not adversely affect the present and future development potential of developing countries..." It is argued that both notions of 'common heritage of mankind' (Article 29) and 'present and future generations' (Article 30) of the 1974 CERDS "are sufficiently non-controversial provisions, and indeed, protection and preservation of the environment have in recent years been regarded as matters require the urgent attention of the international community".[151]

The UN General Assembly, in its resolution 42/100 on "*Human rights and scientific and technological developments*"[152] adopted on 07/12/1987, calls upon States "to take all necessary measures to place all the achievements of science and technology at the service of mankind and to ensure that they do not lead to the degradation of the natural environment", (para.3).

The UN General Assembly resolution 35/8 of 30/10/1980 on "*Historical responsibility of States for the preservation of nature for present and future generations*"[153] gave impulse to the recognition of this principle. In (para.1) of

149 Sohn (n. 47) 451-455 (commentary on Principle 1 of the Declaration) (Sohn argued that "it would have been an important step forward if the right to an adequate environment were put in the forefront of the statement of principles, thus removing the lingering doubts about its existence", ibid 455.).

150 Note that the World Health Organization (WHO) submitted a proposal stating the following: "Everyone has a fundamental right to an environment that safeguards the health of present and future generations for the full enjoyment of his basic human rights". See, Sohn (n. 47) 453.

151 Chatterjee (n. 3) 679.

152 The General Assembly resolution 42/100 on '*Human rights and scientific and technological developments*' was adopted on 07/12/1987 at its 93rd plenary meeting.

153 The UN General Assembly resolution 35/8 on '*Historical responsibility of States for the preservation of nature for present and future generations*' was adopted on 30/10/1980 at its 49th plenary meeting.

this Resolution the GA "proclaims the historical responsibility of States for the preservation of nature for present and future generations", and in (para.3) calls upon States, "in the interests of present and future generations, to demonstrate due concern and take the measures, including legislative measures, necessary for preserving nature, and also to promote international co-operation in this field". By resolution 44/228 of 22/12/1989, the UN GA decided to convene a *United Nations Conference on Environment and Development* ("UNCED"), which would mark the 20th anniversary of the 1972 Stockholm Conference. Resolution 44/228 indicates the objective of the Conference "as to promote the further development of international environmental law".[154]

Moreover, The Hague Declaration on the Environment of 11/03/1989, which was signed by representatives of 24 States, provides that it is the "duty of the community of nations vis-à-vis present and future generations to do all that can be done to preserve the quality of the atmosphere".[155]

The 1992 Rio Declaration and the 1993 Vienna Declaration:

While Principle 1 of the 1992 Rio Declaration states that "Human beings… are entitled to a healthy and productive life in harmony with nature", Principle 3 provides that "the right to development must be fulfilled so as to equitably meet developmental and environmental needs of *present and future generations*".[156]

Consequently, it is obligatory that economic development not to be conducted as to penalize future generations. "Present generations are to bind themselves to future generations through the link of generativity".[157] The latter formulation was subsequently included into (Part I, paragraph 11) of the "*Vienna Declaration and Programme of Action*"[158] of 25/06/1993 which stated that "the right to development should be fulfilled so as to meet equitably the developmental and environmental needs of present and future generations".

154 Sand (n. 1) 5-7.

155 '*Hague Declaration on the Environment*' of 11/03/1989, *reproduced in*, 28 ILM 1308 (1989); and '*Selected International Legal Materials on Global Warming and Climate Change*' (1990) 5 Am. U. J. Int'l L. & Pol. 513, 567-569; also see, Dupuy '*International Law of the Environment*' (n. 1) 428.

156 According to Kovar, "the first principle represents a victory for the proponents of a human-centered approach to the Rio Declaration". See, Kovar (n. 68) 124; (With regard to Principle 3, Kovar noted that the words "so as" was included at the final drafting session. He added that "these words, which replaced the words 'in order' subtly shifted the balance back from one where development would be a precondition to environmental protection, to one in which development is to be carried out *in such a way as* to meet equitably both developmental and environmental needs for present and future generations", *id.*, p.126. (Emphasis original)). Despite the clear wording of Principle 3 of the Rio Declaration, Maggio stated that "the Rio Declaration does not expressly… use the words "present and future generations". See, Gregory F. Maggio, '*Inter/intra-generational Equity: Current Applications under International Law for Promoting the Sustainable Development of Natural Resources*' (1997) 4/2 Buff. Envtl. L. J. 161, 211.

157 Batt & Short (n. 69) 251.

158 The '*Vienna Declaration and Programme of Action*' was adopted by the World Conference on Human Rights held in Vienna on 25/06/1993; *reproduced in*, UNHCHR, *Compilation of International Instruments* (Volume I (First Part), 2002) 43, 47. Furthermore, Part II, para.72 of the 'Vienna Declaration' requires the UN General Assembly to formulate "comprehensive and effective measures to eliminate obstacles to the implementation and realization of the Declaration on the Right to Development" and to recommend "ways and means towards the realization of the right to development by all States".

The 1997 UNESCO Declaration:

Article 1 of the UNESCO "*Declaration on the Responsibilities of the Present Generations towards Future Generations*" of 12/11/1997 recognizes the responsibility of the present generations to ensure that the needs and interests of present and future generations are fully safeguarded. Two provisions in the 1997 UNESCO Declaration directly involve conservation and protection of the environment. Article 4 (*Preservation of life on Earth*) provides that "the present generations have the responsibility to bequeath to future generations an Earth which will not one day be irreversibly damaged by human activity. Each generation inheriting the Earth temporarily should take care to use natural resources reasonably and ensure that life is not prejudiced by harmful modifications of the ecosystems and that scientific and technological progress in all fields does not harm life on Earth".[159]

"*Article 5 - Protection of the environment*

1. In order to ensure that future generations benefit from the richness of the Earth's ecosystems, the present generations should strive for sustainable development and preserve living conditions, particularly the quality and integrity of the environment.

2. The present generations should ensure that future generations are not exposed to pollution which may endanger their health or their existence itself.

3. The present generations should preserve for future generations natural resources necessary for sustaining human life and for its development.

4. The present generations should take into account possible consequences for future generations of major projects before these are carried out."

Article 5 of the 1997 UNESCO Declaration may be read in conjunction with Principle 3 of the 1992 Rio Declaration. The significance of Article 5 of the 1997 Declaration emanates from the recognition of two basic environmental law concepts, i.e., 'sustainable development' and, at least, implicitly 'environmental impact assessment'.

Resolutions of the UN Commission on Human Rights:

On its part the UN Commission on Human Rights in its resolution 1994/65 on "*Human rights and the environment*" of 09/03/1994 reiterated that the right to development must be fulfilled so as to meet equitably the developmental and environmental needs of *present and future generations* (para.2) and recognized that environmental damage has potentially negative effects on human rights and

159 The provisions in Article 4, as well as Article 3 of the 1997 UNESCO Declaration should be read in the light of Principles 1 and 2 of the 1972 Stockholm Declaration.

the enjoyment of life, health and a satisfactory standard of living, (para.3).[160] The Commission on Human Rights, in its Resolution 2000/72 on "*Adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights*" of 26/04/2000, in (para.3) categorically condemned the illicit dumping of toxic and dangerous products and wastes in developing countries, which adversely affects the human rights to life and health of individuals in those countries; and in (para.4) reaffirmed that illicit traffic and dumping of toxic and dangerous products and wastes constitute a serious threat to the human rights to life, health and a sound environment for every individual.[161]

The Commission on Human Rights, in its Resolution 2003/71 on "*Human rights and the environment as part of sustainable development*" of 25/04/2003, in (para.1) reaffirmed that peace, security, stability and respect for human rights and fundamental freedoms, including the right to development, as well as respect for cultural diversity are essential for achieving sustainable development, and in (para.2) recalled that that environmental damage can have potentially negative effects on the enjoyment of some human rights.[162] The Commission on Human Rights, in its Resolution 2005/60 on "*Human rights and the environment as part of sustainable development*" of 20/04/2005, in preambular (para.7) took note that respect for human rights can contribute to sustainable development, including its environmental component, and in preambular (para.8) considered that environmental damage, including that caused by natural circumstances or disasters, can have potentially negative effects on the enjoyment of human rights and on a healthy life and a healthy environment, and in preambular (para.9) considered also that protection of the environment and sustainable development can also contribute to human well-being and potentially to the enjoyment of human rights.[163]

160 The Commission on Human Rights resolution 1994/65 on '*Human rights and the environment*' was adopted on 09/03/1994 at the 64th meeting, [Adopted without a vote. See chap. XVII. E/CN.4/1994/132]. Also see, The Commission on Human Rights resolution 1995/14 on '*Human rights and the environment*' was adopted on 24/02/1995 at the 41st meeting, [Adopted without a vote. See chap. VII. E/CN.4/1995/176]. Preambular (para.8) "Considering that the promotion of an environmentally healthy world contributes to the protection of the human rights to life and health of everyone" and Preambular (para.9) "Reaffirming that States have common but differentiated responsibilities and capabilities, as defined in Agenda 21"; and Operative (paras. 2 and 3) were same as the previous resolution.

161 The Commission on Human Rights resolution 2000/72 on "*Adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights*" was adopted on 26/04/2000 at the 66th meeting, [Adopted by a roll-call vote of 37 votes to 16].

162 The Commission on Human Rights resolution 2003/71 on '*Human rights and the environment as part of sustainable development*' was adopted on 25/04/2003 at the 62nd meeting, [Adopted without a vote. See chap. XVII, E/CN.4/2003/L.11/Add.7]. The Commission in operative (para.4) of the Resolution reaffirmed that everyone has the right, individually and in association with others, to participate in peaceful activities against violations of human rights and fundamental freedoms and calls upon States to take all necessary measures to protect the legitimate exercise of everyone's human rights when promoting environmental protection and sustainable development, and in (para.6) encouraged all efforts towards the implementation of the principles of the Rio Declaration, in particular principle 10, in order to contribute, inter alia, to effective access to judicial and administrative proceedings, including redress and remedy.

163 The Commission on Human Rights resolution 2005/60 on '*Human rights and the environment as part of sustainable development*' was adopted on 20/04/2005 at the 58th meeting, [Adopted without a vote. See chap. XVII, E/CN.4/2005/L.10/Add.17]. The Commission in operative (para.3) of the Resolution called upon States to take all necessary measures to protect the legitimate exercise of everyone's human rights when promoting environmental protection and sustainable development and reaffirms, in this context, that everyone has the right, individually and in association with others, to

The "*United Nations Millennium Declaration*"[164], adopted by the UN General Assembly resolution 55/2 of 08/09/2000, under "*Part I. Values and Principles*" lists certain "fundamental values" to be essential to international relations in the twenty-first century. One of them is as follows: "*Respect for nature*: Prudence must be shown in the management of all living species and natural resources, in accordance with the precepts of sustainable development. Only in this way can the immeasurable riches provided to us by nature be preserved and passed on to our descendants. The current unsustainable patterns of production and consumption must be changed in the interest of our future welfare and that of our descendants", (para.6). "*Part IV. Protecting Our Common Environment*" of the Millennium Declaration (para.21) requires special attention: "We must spare no effort to free all of humanity, and above all our children and grandchildren, from the threat of living on a planet irredeemably spoilt by human activities, and whose resources would no longer be sufficient for their needs".

ii-) The Notion of 'Common But Differentiated Responsibility'

With regard to the concept of *common but differentiated responsibility*, this notion was partially expressed in Principle 23 of the Stockholm Declaration of 1972.[165] While Principle 6 of the Rio Declaration of 1992 states that "the special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority…", Principle 7 of the same Declaration stresses that States have a common but differentiated responsibilities to pursue sustainable development. In this Principle, the developed countries acknowledged the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment, and of the technologies and financial resources they command.

Despite the fact that in particular Principle 7 of the 1992 Rio Declaration was controversial and did not satisfy either developed or developing States, criticized as lacked any mention of the provision of financial and technological resources[166] from developed countries to the developing countries in the sense of a kind of

participate in peaceful activities against violations of human rights and fundamental freedoms; and in (para.5) encouraged all efforts towards the implementation of the principles of the Rio Declaration on Environment and Development, in particular principle 10, in order to contribute, *inter alia*, to effective access to judicial and administrative proceedings, including redress and remedy.

164 The '*United Nations Millennium Declaration*' was adopted by the UN General Assembly resolution 55/2 on 08/09/2000; *reproduced in*, UNHCHR, *Compilation of International Instruments* (Volume I (First Part), 2002) 69, 70. One of the other values indicated in (Part.I, para.6) of the Millennium Declaration is "*Solidarity*": "Global challenges must be managed in a way that distributes the costs and burdens fairly in accordance with basic principles of equity and social justice. Those who suffer or who benefit least deserve help from those who benefit most". The other indicated value is "*Shared responsibility*": "Responsibility for managing worldwide economic and social development, as well as threats to international peace and security, must be shared among the nations of the world and should be exercised multilaterally…"

165 Principle 23 of the Stockholm Declaration states: "It will be essential in all cases to consider the systems of values prevailing in each country, and the extent of applicability of standards which are valid for the most advanced countries but which may be inappropriate and of unwarranted social cost for the developing countries."

166 Kovar (n. 68) 128-129.

compensation for environmental degradation (Principle 9 was not considered as sufficient to overcome such criticisms), nevertheless Principle 7 is still considered as "a major new contribution to international environmental law".[167] It is particularly because, "Principle 7 seems to recognize the notion of common but differentiated responsibilities as having significant legal implications, though whether it is a legal principle or just a political guideline is still open to debate".[168]

The General Assembly in its resolution 56/199 on "*Protection of global climate for present and future generations of mankind*"[169] of 21/12/2001 calls upon all States parties to continue to take effective steps to implement their commitments under the Convention, in accordance with the principle of common but differentiated responsibilities, (Operative para.2).

The principle of *common but differentiated responsibility* includes two elements. The first relates to "common responsibility of States to protect certain environmental resources. The second element relates to the need to take account of differing circumstances, particularly in relation to each State's contribution to particular environmental problems, and to its ability to respond to, prevent, reduce or control the threat".[170] As French puts "the most obvious reason for the existence of differential obligations is the different contributions States make to the present state of environmental degradation".[171] This notion plays a significant role in many international environmental regimes and this significance is likely to increase as developing States continue to take an active role in environmental policy and law-making.[172] But there are also some criticisms as well. As Handl argued, "a dilution of the normative demands on developing countries is likely to impede progress by those countries towards an adequate level of local environmental protection, the acquisition of technological know-how and managerial ability on which sustainable development locally will depend".[173]

167 Duncan French, '*Developing States and International Environmental Law: The Importance of Differentiated Responsibilities*' (2000) 49/1 ICLQ 35, 38 (In view of the author it becomes apparent that international environmental law is adopting a much more flexible approach to global environmental issues to take account of the economic and social reality, *ibid* 41.).

168 Ibid 38 (The author also refers to Alexandra Kiss, '*The Rio Declaration on Environment and Development*' in L. Campiglio *et al.*, (eds.) The Environment after Rio: International Law and Economics (London/Dordrecht/Boston: Graham & Trotman/Martinus Nijhoff, 1994) 61.).

169 The General Assembly resolution 56/199 on '*Protection of global climate for present and future generations of mankind*' was adopted on 21/12/2001 at its 90th plenary meeting.

170 Sands, '*Introduction*' (n. 12) xxxiv.

171 French, '*The Importance of Differentiated Responsibilities'* (n. 167) 47 (The author also refers to Chowdhury who argues that "contribution to global degradation being unequal, responsibility… has to be unequal and commensurate with the differential contribution to such degradation"); see, S. Chowdhury, '*Common but Differentiated Responsibility in International Environmental Law: from Stockholm (1972) to Rio (1992)*' in Denters E. M., Ginther K. and de Waart (Eds.) *Sustainable Development and Good Governance* (Brill 1995) 333.

172 French '*The Importance of Differentiated Responsibilities'* (n. 167) 59.

173 Handl, '*Environmental Security and Global Change*' (n. 1) 10.

iii-) Incorporation of The Notions of 'Common Heritage of Humankind' and of 'Present and Future Generations' into Legally Binding Instruments

In addition to above-mentioned soft law documents some of the "hard-law" (legally binding) instruments may also be listed in this context.

a) The notion in the instruments concerning the whaling regime

The failure of the international attempts to protect whale stocks under the "*Convention for the Regulation of Whaling*" adopted by the League of Nations on 24/09/1931, as well as the amendment on 08/06/1937[174] has already been discussed in my previous (2021) article. As early as 1938 a Norwegian expert while stressing that "to exploit any kind of wild animal to such a degree that is threatened by extinction is vandalism… It must not be said of our generation that we permitted them to be hunted in such a way that they were threatened by destruction"[175] was in fact recognizing the responsibility of the present generation to the future generations.

Preambular paragraph 1 of the "*International Convention for the Regulation of Whaling*"[176] (ICRW) of 02/12/1946 recognizes "the interest of the nations of the world in safeguarding for *future generations* the great natural resources represented by the whale stocks".[177] This expression implies the recognition that species should be preserved not only because of their economic value but also because of their own value.[178] The reference to the 'future generations' in the preamble of the 1946 Whaling Convention may be interpreted as allowing a policy of preservation of whales by the International Whaling Commission (IWC) and the promotion of non-lethal forms of exploitation of marine mammals.[179]

174 The '*Convention for the Regulation of Whaling*' was adopted at Geneva on 24/09/1931 and entered into force in 16/01/1935. '*Agreement for the Regulation of Whaling and Final Act*' was adopted on 08/06/1937; also see, Philip C. Jessup, '*The International Protection of Whales*' (1930) 24/4 AJIL 751-752, League of Nations Doc. C.196.M.70.1927.V, 120 et al, *reproduced in*, *AJIL (*Volume 20 Supp., 1926) 230. This report is also *cited in*, Leonard (n. 75) 90.

175 Birger Bergensen, '*The International Whaling Situation*' (1938) 1 Le Nord 112, 120, *cited in*, Leonard (n. 75) 112.

176 The '*International Convention for the Regulation of Whaling*' (ICRW) adopted on 02/12/1946 and entered into force on 10/11/1948; available at, <http://iwcoffice.org/commission/convention.htm#convention>; *reproduced in*, *AJIL* (Volume 43 Supp. No.4 1949) 174-184.

177 Generally see, Patricia W. Birnie, *International Regulation of Whaling: From Conservation of Whaling to Conservation of Whales and Regulation of Whale-Watching* (Vols.1 and 2, Oceana Publications Inc., New York, 1985); John Colombos, *The International Law of the Sea* (Longmans 1967) 417-420; Kiss and Shelton, (n. 54) 284-285; Scovazzi (n. 76) 187-193 *Principles of International Environmental Law* (n. 22) 590-597; Kimberly Davis, '*International Management of Cetaceans Under the New Law of the Sea Convention*' (1985) 3/2 B. U. Int'l L. J. 477; Kazuo Sumi, '*The 'Whale War' Between Japan and the United States: Problems and Prospects*' (1989) 17/2 Denv. J. Int'l L. & Pol'y 317; Nancy C. Doubleday, '*Aboriginal Subsistence Whaling: The Right of Inuit to Hunt Whales and Implications for International Environmental Law*' (1989) 17/2 Denv. J. Int'l L. & Pol'y 373; Anthony D'Amato and Sudhir K. Chopra, 'Whales: Their Emerging Right to Life', (1991) 85/1 AJIL 21; Gregory Rose and Saundra Crane, '*The Evolution of International Whaling Law*' in Philippe Sands (ed.), *Greening International Law* (The New Press 1994) 159-181, 163-165; Judith Berger-Eforo, '*Sanctuary for the Whales: Will This Be the Demise of the International Whaling Commission or a Viable Strategy for the Twenty-First Century?*' (1996) 8/2 Pace Int'l L. Rev. 439; Patricia Birnie, '*Small Cetaceans and the International Whaling Commission*' (1997) 10/1 Geo. Int'l Envtl. L. Rev. 1; Maria Clara Maffei, '*The International Convention for the Regulating of Whaling*' (1997) 12/3 Int'l J. Marine & Coastal L. 287; further see, Laura L. Lones, '*The Marine Mammal Protection Act and International Protection of Cetaceans: A Unilateral Attempt to Effectuate Transnational Conservation*' (1989) 22/3 Vand. J. Transnat'l L. 997 (The author examines the US Marine Mammal Protection Act of 1972, including 1984 amendments, in light of the relevant international instruments.); Gemalmaz (n. 72) (Under heading "Marine mammals").

178 Maffei, '*Convention for the Regulating of Whaling*' (n. 177) 301.

179 Scovazzi (n. 76) 191.

But at the same time the ICRW establishes a linkage between "to provide for the proper conservation of whale stocks" and "to make possible the orderly development of the whaling industry", (Preamble, para.7). That is why some commentators argue that the ICRW is based on the concept of "ecodevelopment or sustainable development".[180]

Pursuant to Article III, paragraph 1, of the Whaling Convention, the Contracting Governments agree to establish an International Whaling Commission (IWC). Article IX of the Convention imposes duty upon Contracting Governments to take measures to criminalize the breaches of the standards laid down by the Convention. The IWC is an example of a greater global concern to contract to protect the global commons.[181]

Some authors emphasized the existence value of other living creatures in addition to human beings. They examine the issue under six stages: free resource, regulation, conservation, protection, preservation and entitlement. The argument is based on the view that whales should be used in a manner that does not cause the death of these animals.[182] This argument although seems to be supported by many States and NGOs, also subjected to criticism that it contradicts with the views and needs of traditional consumers of whale products[183] other than for instance indigenous peoples in the Arctic.[184]

At the UN Conference on the Human Environment held in Stockholm in 1972, the United States proposed a ten-year moratorium on commercial whaling. Dr. R. White, Administrator of the National Oceanic and Atmospheric Agency in support of the proposal for a ten-year moratorium on commercial whaling stated that "world whale stocks must be regarded as the *heritage of all mankind* and not the preserve of any one or several nations… We feel that strong action in restoring the world's whale stocks is a matter of great urgency…"[185] (Emphasis added). The recommendation for the moratorium was finally adopted in the Plenary by a vote of 53 in favor to none against, with 3 abstentions (Brazil, Japan and Spain). The adopted recommendation was incorporated as Recommendation 33 into the Action Plan for the Human Environment which states: "It is recommended that Governments agree to strengthen the International Whaling Commission, to increase international research efforts and

180 Sumi (n. 177) 324.

181 Berger-Eforo (n. 177) 454.

182 D'Amato and Chopra (n. 177) 28-50; Rose and Crane (n. 177) 167.

183 Maffei, '*Convention for the Regulating of Whaling*' (n. 177) 290-291; also see, Sumi (n. 177) 318 (Sumi argues that the Japanese communities the whale is not only a food source, but also a basis of their cultural identity According to the author, unlike the US whalers who made use only of the oil, Japanese whaling industry was practical in using all parts of the whale in a productive manner. The author, in p.355, further noted that: "Since the Japanese had regarded whales as a kind of fish, little thought had been given to conservation of wildlife or marine mammals. For a long time, the Japanese considered whale resources not as *res communis*, but as *res nullius*. *It was not until the 1970s that Japan came to understand the real need for conservation of whale resources as a common heritage of mankind*".) (Emphasis added).

184 Doubleday (n. 177).

185 U.S. Press Release, HE/13/72, 1-2, 09/06/1972, *quoted in*, Sumi (n. 177) 329.

as a matter of urgency to call for an international agreement, under the auspices of the International Whaling Commission and involving all Government concerned, for a ten year moratorium on commercial whaling".[186]

In 1982 IWC at its 34th meeting passed an amendment to the Whaling Convention that created a moratorium on commercial whaling, which provided that "catch limits for the killing for commercial purposes of whales from all stocks for the 1986 coastal and the 1985/86 pelagic seasons and thereafter shall be zero…" However, this moratorium binds only those who agree to be constrained. Japan, the Soviet Union, Chile, Norway and Peru objected to the moratorium and were not bound. Peru withdrew its objection in July 1983. Japan claimed that its opposition was not only commercial but also cultural, citing a "desire for whale meat (that) has traditional roots deeply imbedded in the Japanese psych". In 1984, Japan accepted the moratorium decision on commercial whaling by the IWC under the diplomatic pressure of the United States.[187]

The 1982 moratorium relates only to commercial whaling; it provides two exceptions. First exception is "aboriginal subsistence whaling", the other is carried out under "scientific whaling". Some States, in particular Japan, continue to conduct scientific whaling, and in practice it in fact conceals commercial whaling. The ignorance of the Scientific Committee's recommendations and the conclusions of the IWC has eventually resulted in an Application to the International Court of Justice. As shown in Chapter 3 of this study below, on 31/05/2010, Australia initiated proceedings against Japan regarding "Japan's continued pursuit of a large-scale program of whaling under the Second Phase of its Japanese Whale Research Program under Special Permit in the Antarctic ('JARPA II'), in breach of obligations assumed by Japan under the International Convention for the Regulation of Whaling ('ICRW')[188], as well as its other international obligations for the preservation of marine mammals and the marine environment".[189] That case has been entered in the Court's General List under the title: "*Whaling in the Antarctic* (*Australia v. Japan*)".

Since the 1946 ICRW is an instrument for whaling, which does not necessarily exclude the requirement of sustainable whaling, it might be going too far to turn a convention *on whaling* into a convention *for the preservation of whales*.[190] Thus it

186 UN Doc. A/CONF.48/14/Rev.1, 12.

187 Lones (n. 177) 1021; Maffei, '*Convention for the Regulating of Whaling*' (n. 177) 293-294; Sumi (n. 177) 319-320, 335-336, 365 (The author also noted that the 1982 moratorium decision was adopted without any recommendation of the Scientific Committee which is contrary the requirement provided in Article V, paragraph 2(b), of the ICRW, ibid 325.); Berger-Eforo (n. 177) 454.

188 Australia ratified the 1946 ICRW on 01/12/1947, and it entered into force for Australia on 10/11/1948. Japan lodged its notice of adherence on 21/04/1951, and it entered into force for Japan on the same day.

189 "*Whaling in the Antarctic (Australia* v. *Japan)*", Application of 31 May 2010, para.2. Also see, ICJ, Press release, No.2010/16 of 1 June 2000, "*Australia institutes proceedings against Japan for alleged breach of international obligations concerning whaling*", accessible at, www.icj-cij.org/docket/files/148/15953.pdf

190 Maffei, '*Convention for the Regulating of Whaling*' (n. 177) 302. (Emphasis original)

may be argued that, in order to meet changing expectations for the conservation of whales which is the interest of both present and future generations, it would not be less practicable to enter into negotiations in order to conclude a specific convention rather than to attempt to amend the existing Convention.

The first UN Conference on the Law of the Sea adopted a resolution on "*Humane killing of marine life*"[191] on 25/04/1958, in which States are requested to prescribe, "by all means available to them, those methods for the capture and killing of marine life, especially of whales and seals, which will spare them suffering to the greatest extent possible".

The "*Convention on International Trade in Endangered Species*"[192] (CITES) of 03/03/1973 indicates six species of cetaceans which are threatened with extinction (Article II, and Appendix 1) and prohibits their trade among parties. However, it does not list any cetaceans that may subsequently become threatened by extinction (Article II, Appendix 2, the second Appendix does not list cetaceas).[193]

In this connection one may also refer to Article 65 of the 1982 UN "*Convention on the Law of the Sea*"[194] (UNCLOS) which requires States to "cooperate with a view to the conservation of marine mammals". Article 120 of the UNCLOS provides that "Article 65 also applies to the conservation and management of marine mammals in the high seas".[195] The UNCLOS is potentially vital for conservation of cetaceans. It presents the opportunity for the development of truly effective international regulation of whaling through the IWC.[196] Unlike other marine living resources of the sea, "the exploitation of these animals can be prohibited, limited or regulated, irrespective of the fact that they are in danger of extinction or their stocks are being depleted".[197]

The Parties to the "*Agreement on Cooperation in Research, Conservation and Management of Marine Mammals in the North Atlantic*"[198]signed by some whaling States on 09/04/1992, express their common concerns for the rational management, conservation and optimum utilization of the living resources of the sea in accordance with generally accepted principles of international law as reflected in the 1982

191 The UN Conference on the Law of the Sea resolution on "*Killing of Marine Life*" was adopted on 25/04/1958, UN Doc. A/CONF.13/L.56; *reproduced in*, (1958) 52 AJIl 866.

192 The "*Convention on International Trade in Endangered Species of Wild Fauna and Flora*" (CITES), adopted on 03/03/1973 and entered into force on 01/07/1975.

193 With respect to the 1973 CITES and the protection of cetaceans, see, Lones (n. 177) 1020.

194 The "*Convention on the Law of the Sea*" (UNCLOS), done at Montego Bay, Jamaica, on 10/12/1982 and entered into force on 16/11/1994.

195 On the potential of the Articles 65 and 120 of the UNCLOS on the conservation of whales, see, Davis (n. 177) 501-506.

196 Davis (n. 177) 492, 518.

197 Scovazzi (n. 76) 190.

198 The "*Agreement on Cooperation in Research, Conservation and Management of Marine Mammals in the North Atlantic*" was signed at Nuuk on 09/04/1992 by Faeroe Islands and Greenland (Denmark), Norway and Iceland, and entered into force on 08/07/1992.

UNCLOS, (Preamble, para.2). Thus the 1992 Agreement covers whales as well. Although the 1992 North Atlantic Marine Mammals Agreement does not refer to the notions of 'common heritage' and 'present and future generations', the reference to 'common concern' is noteworthy. It establishes the North Atlantic Marine Mammals Commission (NAMMCO) (Article 1), the objective of which is to contribute to the conservation, rational management and study of marine mammals in the North Atlantic, (Article 2). The functions of the NAMMCO are listed in Article 4. According to the 1992 Agreement, it is without prejudice to the obligations of the parties under other international agreements, (Article 9). It follows that there may be a potential conflict as between this Agreement and the 1946 ICRW, and in case of such a conflict, the 1946 ICRW prevails.[199]

However, the "*Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area*"[200] (ACCOBAMS) of 24/11/1996, which was concluded within the framework of the Bonn 'Convention on the Conservation of Migratory Species of Wild Animals' of 23/06/1979, the Parties recognize that "cetaceans are an integral part of the marine ecosystem which must be conserved for the benefit of present and future generations, and that their conservation is a common concern", (Preamble, para.3). Thus, the 1996 Agreement, unlike the above-mentioned North Atlantic Marine Mammals Agreement of 1992, explicitly refers to the notion of 'present and future generations'. The purpose of the 1996 ACCOBAMS is to achieve and maintain a favourable conservation status for cetaceans. To this end, Parties undertake to prohibit and to take all necessary measures to eliminate, any deliberate taking of cetaceans, and to create and maintain a network of specially protected areas to conserve cetaceans, (Article II, para.1).

Although the following argument was presented in the context of protection of whales, it equally applies with equal force to a more general and broader concept of environmental protection: "…In the current stage of progression, nearly all nations accept the obligation of preservation… This anticipation of a stage of entitlement for a nonhuman species in international law is a revolutionary development. It takes seriously the fact that human beings are open systems – that our lives are dependent on our environment. The human race will live or die as the ecosystem lives or dies. International law can no longer be viewed as an artifact exclusively concerned with state and human interactions against a mere background called the environment.

199 Maffei, '*Convention for the Regulating of Whaling*' (n. 177) 304.

200 The "*Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area*" (ACCOBAMS) was adopted in Monaco on 24/11/1996 and entered into force on 01/06/2001. The 1996 ACCOBAMS establishes the following bodies in order to implement the purposes of the Agreement: a Meeting of Parties (Article III); a Secretariat of the Agreement (Article IV); two sub-regional coordination Units (Article V), and a Scientific Committee (Article VII), involving experts qualified in Cetaceans conservation science, established as a consultative body of the Meeting of the Parties.

Rather, other living creatures in the environment are players in a new and expanded international legal arena."[201]

b) The notion in the Antarctic Treaty System

Under the Antarctic Treaty system[202] the first instrument was the "*Antarctic Treaty*"[203], signed at Washington on 01/12/1959.

Preamble paragraph 1 of the 1959 Antarctic Treaty recognizes that "it is in the interest of *all mankind* that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord". Moreover, while Preambular paragraph 2 of the Treaty refers to international cooperation in scientific investigation in Antarctica, the next paragraph 3 states that "for the continuation and development of such cooperation on the basis of freedom of scientific investigation in Antarctica as applied during the International Geophysical Year accords with the interests of science and the *progress of all mankind*" (Emphasis added). Thus a connection has been established between identifying the region as falling within the domain of 'all mankind' and carrying-out scientific investigation in the area for the progress of 'all mankind'.

Chronologically, the first elements of the 'common heritage of mankind' appeared in the Antarctic Treaty of 1959.[204] Attention has to be drawn to the fact that although the terms 'all mankind' have been used in the 1959 Antarctic Treaty, it does not contain a specific reference to the common heritage principle, and "it could not have done so because, in 1959, the expression was not yet part of the international vocabulary".[205]

201 D'Amato and Chopra (n. 177) 50.

202 See, generally, Robert D. Hayton, 'The Antarctic Settlement of 1959' (1960) 54/2 AJIL 349; John Hanessian, 'The Antarctic Treaty 1959' (1960) 9/3 ICLQ 436; John Kish, *The Law of International Spaces (*A. W. Sijthoff, 1973) 170; Frank C. Alexander, Jr., 'Legal Aspects: Exploitation of Antarctic Resources: A Recommended Approach to the Antarctic Resource Problem' (1978) 33/2 U. Miami L. Rev. 371; M. C. W. Pinto, 'The International Community and Antarctica' (1978) 33/2 U. Miami L. Rev. 475; Note (n 132) 804; Christopher C. Joyner, 'Antarctica and the Law of the Sea: Rethinking the Current Legal Dilemmas' (1981) 18/3 San Diego L. Rev. 415; Christopher C. Joyner, 'The Southern Ocean and Marine Pollution: Problems and Prospects', (1985) 17/2 Case W. Res. J. Int'l L. 165; Gillian Triggs, 'The Antarctic Treaty Regime: A Workable Compromise or a 'Purgatory of Ambiguity'?' (1985) 17/2 Case W. Res. J. Int'l L. 195; Benedetto Conforti, 'Territorial Claims in Antarctica: A Modern Way to Deal with an Old Problem' (1986) 19/2 Cornell Int'l L. J. 249; Christopher C. Joyner, 'Protection of the Antarctic Environment: Rethinking the Problems and Prospects' (1986) 19/2 Cornell Int'l L.J. 259; Francesco Francioni, 'Legal Aspects of Mineral Exploitation in Antarctica' (1986) 19/2 Cornell Int'l L. J. 163; Bruno Simma, 'The Antarctic Treaty as a Treaty Providing for an Objective Regime' (1986) 19/2 Cornell Int'l L. J. 189; Lee Kimball, 'Environmental Law and Policy in Antarctica' in P. Sands (ed.), *Greening International Law,* (The New Press, 1994) 122; Donald R. Rothwell, 'International Law and the Protection of the Arctic Environment' (1995) 44/2 ICLQ 280; Stuart B. Kaye, 'Legal Approaches to Polar Fisheries Regimes: A Comparative Analysis of the Convention for the Conservation of Antarctic Marine Living Resources and the Bering Sea Doughnut Hole Convention', (1995) 26/1 Cal. W. Int'l L. J. 75, 79-80; Patrizia Vigni, 'The Interaction between the Antarctic Treaty System and the Other Relevant Conventions Applicable to the Antarctic Area' in J.A. Frowein and R. Wolfrum (eds.), *Max Planck UNYB,* vol 4 (Kluwer Law International, 2000) 481; Sands, *Principles of International Environmental Law* (n. 22) 712-713; Arthur Watts, *International Law and the Antarctic Treaty System,* (Grotius Publications Ltd.,1992).

203 The "*Antarctic Treaty*" was signed in Washington on 01/12/1959 by the twelve nations (Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, United Kingdom, United States and USSR), and entered into force on 23/06/1961; available at <www.antarctic.ac.uk>; *reproduced in*, AJIL 477-483.

204 Kiss, 'Conserving the Common Heritage of Mankind' (n. 71) 774; further see, Armin Rosencranz, 'The Origin and Emergence of International Environmental Norms' (2003) 26/3 Hastings Int'l & Comp. L. Rev. 309-320 and 311 (The notion of common heritage of humankind made its first strong emergence in the Antarctic Treaty of 1959.).

205 Francioni, 'Legal Aspects of Mineral Exploitation in Antarctica' (n. 202) 171.

Moreover, it is observed that the 'equitable sharing of resources' as one of the fundamental elements of the common heritage principle has not been included in the Antarctic Treaty System.[206] It follows that, in order to apply to Antarctica UNCLOS norms which establish that the deep sea-bed is a part of the common heritage of mankind, this concept needs to be adapted to the peculiar legal characteristics of the area.[207]

Some authors argued that from its discovery, until the adoption of the Antarctic Treaty in 1959, Antarctica had been *terra nullius* (no man's land). As far back as the 1909, Scott, referring to discovery of the Spitzbergen archipelago in late 19th century and Norway and Sweden agreement in 1872 that the region should remain as it had been, no man's land (*terra nullius*), argued in relation to the arctic that "it would appear that arctic discovery as such vests no title, and that the arctic regions, except and in so far as they have been occupied, are in the condition of Spitzbergen, that is to say, no man's land".[208] In 1910 Balch went further to argue that "on general principles it would seem that both East and West Antarctica should become the common possessions of all of the family of nations".[209]

It is a fact that various nations had developed competing claims of sovereignty over the area.[210] Even before the adoption of the 1959 Antarctic Treaty, Jessup drew attention to the fact that since it became apparent that the resources of Antarctica were of great importance, it would no doubt become necessary to settle the conflicting claims to sovereignty.[211] In that connection it is argued that contiguity theory[212], discovery theory, effective occupation theory, minimal control theory and sector theory could not be appropriate theories to support territorial claims over or in Antarctica.[213]

206 Vigni (n. 202) 500 (Vigni also refers to, R. McDonald, '*The Common Heritage of Mankind'*, in (1995) Recht zwischen Umbruch und Bewahrung, Völkerrecht, Europarecht, Staatrecht: Festschrift für Rudolf Bernhardt, 54, who points out that no Antarctic norm provides, as the principle of equitable sharing does, that states which do not have the technical and financial means to carry out exploitation of resources, can enjoy the benefit deriving from the outcome of the exploitation of other states.).

207 *Ibid* 501 citing E Suy, 'Antarctica: Common Heritage of Mankind?' in J. Verhoeven - Ph. Sand - M. Bruce (eds.), *The Antarctic Environment and International Law* (1992) 96.

208 James B. Scott, 'Arctic Exploration and International Law' (1909) 3/4 AJIL 928, 941.

209 Thomas W. Balch, 'Arctic and Antarctic Regions and the Law of Nations' (1910) 4/2 AJIL 265, 275 (The author, among others and including doctrinal studies, also noted that "no nation has successfully asserted a claim to the possession of the Spitzbergen archipelago; on the contrary those islands have come to be regarded as a joint possession of all mankind", 274.).

210 Alexander, Jr. (n. 202) 373-379 and 387-395; Pinto (n. 202) 479-480; Triggs (n. 202) 197-199; Conforti (n. 202) 258.

211 Philip C. Jessup, 'Sovereignty in Antarctica' (1947) 41/1 AJIL 117.

212 See, J. Peter A. Bernhardt, 'Sovereignty in Antarctica', (1975) 5/2 Cal. W. Int'l L. J. 297-349 (The author further argued that "applying the contiguity principle to the Antarctic would be an unwarranted extension of an already overstretched idea… The contiguity principle has now for all practical purposes fallen into desuetude and has no adherents in modern international law. In the *Palmas Island Arbitral Award*, it was stated, 'the title of contiguity, understood as a basis of territorial sovereignty, has no foundation in international law'…" 342.). For the *Palmas Island Arbitral*, see, "*The Island of Palmas Arbitral Award* (*United States v. Netherlands*)", Arbitral Award of 04/04/1928, *reproduced in* (1928) 22/4 AJIL 867-912 & 910-911.

213 Note (n. 132) 815-816 and references therein; furthermore on the question why other theories are not appropriate theories to support territorial claims over or in Antarctica, see 816-824.

The 1959 Antarctic Treaty imposed a moratorium on territorial claims. It temporarily freezes existing claims to territorial sovereignty in Antarctica, (Article IV).[214] The contracting parties agreed to administer Antarctica as if it were *terra communis* for thirty years in order to foster scientific research.[215] These provisions indicate the interim character of the 1959 Treaty.[216]

Nevertheless, in the legal literature starting from the 1970s numerous authors express views that the common heritage principle has to be applied to Antarctica.[217] The theories of territorial acquisition deriving from international law of the colonial era are inapplicable to Antarctica, and the 1959 Antarctic Treaty affirms the applicability of concepts of common rights to Antarctica.[218] It is argued that, like seas and outer space, Antarctica must be subject only "to the cooperative control of the world community".[219] Accordingly, "Antarctica is a *res communis omnium* to which the principle of common heritage of mankind applies… The common heritage principle, like most rules of international law, may be observed and implemented through self-imposed limitations, restraints, and safeguards so that states involved in mineral activities in Antarctica will behave not only *uti singuli*, in the pursuit of their national interest, but also *uti universi*, as interpreters and guarantors of the interests of mankind, in the conservation of the Antarctic environment and in the rational use of its resources".[220] Some authors argue that the concept of 'common concern of humankind', as a new variant on the common heritage principle, appears to be more suitable for the *sui generis* legal status of Antarctica. "Although it seems to be correct to consider the preservation of the Antarctic environment as an interest of all mankind, the 'common concern' principle nevertheless avoids the attribution to Antarctica of

214 Hayton (n. 202) 359; Triggs (n. 202) 199-204; Francioni, 'Legal Aspects of Mineral Exploitation in Antarctica' (n. 202) 165-168; Vigni (n. 202) 449.

215 Feder (n. 84) 821.

216 Hayton (n. 202) 360; Simma (n. 202) 203 (According to the author, the Antarctic Treaty regime has not acquired an 'objective' character, or validity *erga omnes*, through the operation of customary law, 205.).

217 Note (n. 132) 844-858; Pinto (n. 202) 478-479; Francioni, 'Legal Aspects of Mineral Exploitation in Antarctica' (n. 202) 171-174 and 182 (According to the author the principle of the common heritage of mankind is applicable to Antarctic resources.).

218 Note (n. 132) 828 (It is added: "This Note has defined a world common space as a space that is, or may become, of value to mankind generally and for which there has developed a practice or general expectation of common access, use, or control. Antarctica conforms to this definition. Antarctica therefore must be governed by the principles of international 'law of common spaces', and an international 'common-space' regime must be established", 848.).

219 *Ibid* 859 (Various commentators have analogized Antarctica to the seas. For instance, Goldblat argued that Antarctic resources should be exploited "in the interest of mankind, in the same way as the sea-bed and ocean floor are planned to be used"; see, *ibid* 846 note 201 citing Jozef Goldblat, 'Troubles in the Antarctic' (1973) 4 Bulletin of Peace Proposals 286, 287; further see, Alexander, Jr. (n. 202) 383 ("While it is certainly true that, in a physical sense, ice is different from water, that fact does not preclude the classification of some forms of ice as 'water', or perhaps as 'high seas' for juridical purposes".); however, compare Vigni (n. 202) 503 (According to the author, "with regard to the issue of the legal status of Antarctic seas, the norms on the law of the sea have revealed their inappropriateness for regulating such status due to the geographic and legal peculiarity of the area. The UNCLOS regime is, in fact, based on the concept of state sovereignty that is not embraced by the ATS at all.").

220 Francioni, 'Legal Aspects of Mineral Exploitation in Antarctica' (n. 202) 187-188 (The author as a conclusion added that "common resources may not be allocated according to the primitive *first come*, *first served* rule, but must be subject to some governance that will include effective access and equitable sharing today as tomorrow, for all participants of the world community and for future generations: In such a governance rests the true essence of the common heritage spirit", 188.).

the status of *res communis omnium*. The 'common concern' principle can be used to resolve the potentially endless conflict between the concept of 'common heritage of mankind' and the content of Article IV of the Antarctic Treaty which, although precluding new claims of sovereignty on Antarctic territory, does not definitively negate the legitimacy of preexisting claims."[221]

Although the 1959 Antarctic Treaty did not directly focus on environmental protection some of its provisions contribute to such protection in the region; such as the use of the region only for peaceful purposes, prohibition of military activities (Preamble, and Articles I, II and IX/1, a), prohibition of nuclear explosions in Antarctica and the disposal there of radioactive waste material (Article V/1). The first nuclear test ban was provided by the 1959 Antarctic Treaty.[222] Scholars have adopted the general postulate of the peaceful use of Antarctica. In late 1950s Jenks argued that "an agreement for the continued demilitarization of Antarctica coupled with mutual warning arrangements as a safeguard against any violation thereof would be an essential element in any such international regime".[223] Although no precise definition of the term 'peaceful purposes' has been given, "the intention of the signatories was that it should include all activity not clearly identified as military".[224] Furthermore, Article IX, paragraph 1/f, of the 1959 Treaty allows parties having consultative status to take additional measures concerning, among others, the "preservation and conservation of living resources in Antarctica".[225] Consequently, it seems possible to argue that one of the fundamental goals of the Antarctic Treaty is the preservation of the area in question.[226]

The 1959 Antarctic Treaty did not establish an administrative body to deal with implementation of these measures, which obviously created problems of enforceability.[227] Nevertheless, the Treaty provides for a "unique inspection system".[228] Pursuant to Article VII, paragraphs 1, 2 and 3, of the Treaty the Contracting Parties have the right to designate observers to carry out inspection, who have "complete freedom of access at any time to any or all areas of Antarctica".[229] Moreover, reporting arrangements are utilized under the Antarctic Treaty to assist in obtaining compliance

221 Vigni (n. 202) 501 (The author added that the 'common concern' principle, on the other hand, perfectly fits with the new trends of international law concerning the protection of the environment, 502.).

222 Kish (n. 202) 171-173 and 176-178; Alexander, Jr. (n. 202) 379.

223 Kish (n. 202) 175 citing C. W. Jenks, *The Common Law of Mankind* (n. 112) 380.

224 Hanessian (n. 202) 468.

225 *Ibid* 468-469; also see, Sands, *Principles of International Environmental Law,* (n. 22) 713; Joyner, 'Protection of the Antarctic Environment' (n. 202) 165.

226 Francioni, 'Legal Aspects of Mineral Exploitation in Antarctica' (n. 202) 175.

227 Sands, *Principles of International Environmental Law,* (n. 22) 713.

228 Hanessian (n. 202) 471. Hayton (n. 202) 360-361.

229 James Simsarian, 'Inspection Experience under the Antarctic Treaty and the International Atomic Energy Agency' (1966) 60/3 AJIL 502-510 and 503-507; Kish (n. 202) 175 citing C. W. Jenks, *The Common Law of Mankind* (n. 112) 176. Note (n. 132) 830.

with the provisions of the Treaty, according to which each party is required to provide advance information to other parties on activities to be taken in Antarctica.[230]

With regard to the question whether the Antarctic Treaty constitutes a model for the Arctic it is argued that the Antarctic Treaty might be of limited value as a model for structuring an environmentally sound regime in the Arctic; nevertheless, this Treaty is a worthy example which might aid creation of a special regime in the Arctic.[231]

Environmental protection concerns with regard to Antarctica, as well as the appearance of commercial whaling and sealing in the high seas around Antarctica and overexploitation of such marine mammals[232] leads to the adoption of the Brussels "*Agreed Measures on the Conservation of Antarctic Fauna and Flora*"[233] of 13/06/1964. The 1964 'Agreed Measures' designate the region a 'Special Conservation Area', in which the parties prohibit interference with native mammals or birds without prior authorization, for example, such authorization that may be granted only for scientific and educational research, (Preamble of the Agreed Measures, and Articles II, VI/1-2). Moreover, the 1964 'Agreed Measures' also establish 'Specially Protected Areas' whereby strict rules are required for such authorization, (Articles VI/3 and VIII).[234] Actions permitted under Specially Protected Areas should not jeopardize the natural ecological system existing in that Area, (Article VIII/4, b). Pursuant to Article VII/1 of the 1964 Agreed Measures, the Parties are required to take appropriate measures to minimize harmful interference within the Treaty Area with the normal living conditions of any native mammal or bird, or any attempt at such harmful interference.

The above-mentioned system was replaced by the "*Protocol to the Environmental Protection to the Antarctic Treaty*"[235] of 04/10/1991, when it entered into force in 1998. Preambular paragraph 8 of the 1991 Protocol reemphasized the notion of "mankind": The Parties "convinced that the development of a comprehensive regime for the protection of the Antarctic environment and dependent and associated ecosystems is in the *interest of mankind as a whole*".[236]

230 James (n. 229) 504.

231 Feder (n. 84) 821-822; in the same line, see, Rothwell (n. 202) 305 (Despite obvious similarities, it is not suggested that the Antarctic model should be adopted in the Arctic. Nevertheless, there are sufficient similar characteristics for the arctic States to learn from the southern experience.); Kaye, (n. 202) 79.

232 R. Tucker Scully, 'The Marine Living Resources of the Southern Ocean' (1978) 33/2 U. Miami L. Rev. 345-348; George A. Llano, 'Ecology of the Southern Ocean Region' (1978) 33/2 U. Miami L. Rev. 357, 363 and 366.

233 Agreed Measures on the Conservation of Antarctic Fauna and Flora (adopted 13 June 1964, entered into force 01 November 1982) < http://sedac.ciesin.org/entri/texts/acrc/aff64.txt.html>

234 Joyner, 'Protection of the Antarctic Environment' (n. 202) 266; Kimball (n. 202) 126; Sands, *Principles of International Environmental Law* (n. 22) 713.

235 The Protocol to the Environmental Protection to the Antarctic Treaty (adopted 04 October 1991, entered into force 14 January 1998) *reproduced in*, 30 ILM 1455 (1991).

236 Analysis on the 1991 Protocol, generally see, S. K. N. Blay, 'New Trends in the Protection of the Antarctic Environment: The 1991 Madrid Protocol' (1992) 86/2 AJIL 377-399; Francesco Francioni, 'The Madrid Protocol on the Protection of the Antarctic Environment' (1993) 28/1 Tex. Int'l L. J. 47-72; Catherine Redgwell, 'Environmental Protection in Antarctica: The 1991 Protocol' (1994) 43/3 ICLQ 599-634; Kimball (n. 202) 134-135 and 137; Sands, *Principles of International Environmental Law* (n. 22) 721-726.

The objective of the 1991 Protocol is to ensure comprehensive protection of the Antarctic environment and dependent and associated ecosystems, and it designates Antarctica as a "natural reserve, devoted to peace and science", (Article 2). Pursuant to 1991 Protocol the protection of the Antarctic environment is to be fundamental consideration in the planning and conduct of all human activities in Antarctica. This includes protection of Antarctica's "intrinsic value"[237] (including wilderness and aesthetic values) and its value as an area for the conduct of scientific research (especially research essential to understanding the global environment), (Article 3/1). Some authors found it doubtful whether States would have decided to recognize the intrinsic value of Antarctica, if the 1991 Protocol regulated the exploitation of natural resources.[238] Indeed, while Article 7 of the Protocol prohibits any activity relating to mineral resources other than scientific research, Article 25, paragraph 2 prohibits any mineral resource activities for a period of 50 years after the Protocol came into force. The environmental principles in the Protocol also include requirements for prior assessment of the environmental impacts of all activities and regular and effective monitoring to assess predicted impacts and to detect unforeseen impacts, (Article 3/2, a, b and c). The requirement of environmental impact assessment (EIA) of all activities is also indicated in (Articles 6/1, c; 6/3 and 8/1-4).

The 1991 Protocol establishes the Committee for Environmental Protection, (Article 11), empowered, *inter alia*, to provide advice and formulate recommendations to the Parties in connection with the implementation of this Protocol, including the operation of its Annexes, (Article 12/1). Furthermore, six Annexes have been drawn up: "Annex I - Environmental Impact Assessment"; "Annex II - Conservation of Antarctic Fauna and Flora"; "Annex III - Waste Disposal and Waste Management"; "Annex IV - Prevention of Marine Pollution" (adopted on 04/10/1991 and entered into force on 14/01/1998); and "Annex V - Area Protection and Management" (adopted on 18/10/1991 and entered into force on 24/05/2002). Finally, "Annex VI – Liability Arising From Environmental Emergencies"[239] (adopted on 14/06/2005, and as of Nov, 2021 it has not entered into force).

With respect to the Antarctic environmental protection regime three other treaties should also be noted. Chronologically they are: the "*Convention for the Conservation of Antarctic Seals*"[240] (CCAS) of 01/06/1972; the "*Convention on the*

237 As explained in may previous article Gemalmaz (n. 72, under heading "Nature and wildlife conservation"), the 1979 Bern Convention (Preamble para.3) indicates that species are to be protected because of their intrinsic value. Similarly, the United Nations "*World Charter for Nature*" of 28/10/1982 recognizes that "Every form of life is unique, warranting respect regardless of its worth to man" (Preamble).

238 Maffei, 'Evolving Trends in the International Protection of Species' (n. 54) 154.

239 Pursuant to Article 2/(b) of the Annex VI to the 1991 Protocol, "environmental emergency" means any accidental event that has occurred, having taken place after the entry into force of this Annex, and that results in, or imminently threatens to result in, any significant and harmful impact on the Antarctic environment.

240 The "*Convention for the Conservation of Antarctic Seals*" (adopted on 01 June 1972, entered into force 11 March 1978); *reproduced in*, 11 ILM 251 and 417 (1972).

Conservation of Antarctic Marine Living Resources"[241] (CCAMLR) of 20/05/1980, and the "*Convention on the Regulation of Antarctic Mineral Resource Activities*"[242] (CRAMRA) of 02/06/1988.

The 1972 CCAS is promulgated as a preventive measure, rather than in response to a threat to the species. Preamble paragraph 4 recognizes that this resource should not be depleted by over-exploitation, and hence that any harvesting should be regulated so as not to exceed the levels of the optimum sustainable yield.[243] The CCAS covers all six species of seal which breed in the Antarctic (Article 1, para.2), and prohibits the killing of both Ross and Antarctic fur seals and sets at low levels of catch limits and requires special permits, (Article 3/1; Article 4; Annex I-Permissible Catch; Annex 2-Protected Species; Annex 3-Closed Season and Sealing Season). The 1972 CCAS also establishes obligations on exchange of information as requiring each party to provide annual reports to other parties, as well as to the Scientific Committee for Antarctic Research, (Article 5/1-2 and Annex 6-Exchange of Information). Article 1/1 of this Convention acknowledges the legal status of Antarctica as established by article IV of the Antarctic Treaty.

The objective of 1980 CCAMLR is the conservation, including rational use, of Antarctic marine living resources, (Article II/1-2). The Preamble (para.9) of this Convention states that "it is the interest of all mankind to preserve the waters surrounding the Antarctic continent for peaceful purposes only". The 1980 CCAMLR, unlike the 1959 Antarctic Treaty, the 1964 Agreed Measures and the 1972 CCAS, covers the whole of the Southern Ocean, south of the biological boundary of the Antarctic Polar Front (Antarctic Convergence). It applies to the resources "which form part of the Antarctic marine ecosystem", (Article I.1). It follows that the CCAMLR is based on the "ecosystem approach", which takes account of the whole of the food chain and assesses the stocks of seals and seabirds as well as fish, squid and krill. Catch limits are set for all commercial fisheries and strict controls aim to minimize

241 The "*Convention on the Conservation of Antarctic Marine Living Resources*" (CCAMLR) (adopted on 20 May 1980, entered into force on 07 April 1982); *reproduced in*, 19 ILM 841 (1980).

242 The "*Convention on the Regulation of Antarctic Mineral Resource Activities*" (CRAMRA) (adopted 02 June 1988 and not entered into force) reproduced in 27 ILM 868 (1988). The CRAMRA could not enter into force after France and Australia decided not to sign the Convention. Generally see, Sands, *Principles of International Environmental Law,* (n. 22) 716-721; for an early analysis, see, Watts (n. 202) 221-248 (Despite the fact that it never entered into force due to a lack of sufficient ratifications, the Convention on the Regulation of Antarctic Mineral Resources, signed in Wellington in 1988, was a turning point in the evolution of the Antarctic Treaty. Contested from the start of negotiations by Third States that had claimed the right to take part with full rights in the formulation process, the Convention soon became the object of criticism also by certain of the countries that had participated in the drafting of the text. The Convention's failure to enter into force cannot be explained solely by the conflicts that emerged concerning the 'right' to take part in negotiations or by the content of the regulation for the operation of the Convention or by the proclamation, in certain key countries, of new environmental policies. The Convention's failure concerns more generally the legal definition of Antarctica's international status, which has remained vague due to ambiguity on the question of the individual claims to sovereignty. Extending the Treaty to encompass this aspect of cooperation in the Antarctic would have forced the parties to confront the legal-political problem of territorial claims on Antarctica and its resources, thereby laying to rest the age-old sovereignty question.).

243 Scully (n. 232) 347-348; Llano (n. 232) 366; Kimball (n. 202) 126; Kaye (n. 202) 81; Sands, *Principles of International Environmental Law,* (n. 22) 713-714.

illegal and unregulated fishing. Thus, the ecosystem approach does not only require that the exploitation of the resources must not deplete the harvested species, but also imposes a duty to refrain from the adverse effects of exploitation on other species and on the entire ecosystem. These conservation ends indicate that pollution-causing activities are clearly discouraged and prohibited.[244] The Contracting Parties which are not Parties to the 1959 Antarctic Treaty are obliged to comply with the 1964 "Agreed Measures", (Article V/2). Further, Article VI provides that nothing in the CCAMLR is to derogate from the rights and obligations under the 1946 International Whaling Convention.

The 1980 CCAMLR establishes two bodies. The first is the Commission for the Conservation of Antarctic Marine Living Resources, (Article VII/1). The functions of the Commission are regulated in Article IX, which include the formulation, adoption and revision of conservation measures on the basis of the best scientific evidence available, (Article IX/1, f). Since Article VI saves the rights and obligations derived from the 1946 Whaling Convention, it follows that the CCAMLR Commission seems unlikely to deal with seals and whales of the CCAMLR area.[245] As the second organ the 1980 CCAMLR establishes the Scientific Committee for the Conservation of Antarctic Marine Living Resources (Article IVX/1). One of the functions of the Scientific Committee is to "assess the effects of proposed changes in the methods or levels of harvesting and proposed conservation measures", (Article XV/2, d), which apparently indicates the recognition of the principle of 'environmental impact assessment'.

In the period between the 1980 CCAMLR and the 1988 CRAMRA, at the Conference of Heads of State or Government on Non-Aligned Countries held in New Delhi in March 1983 a resolution was adopted in which the Heads "expressed their conviction that, in the interest of all mankind, Antarctica should continue forever to be used exclusively for peaceful purposes, should not become the scene or object of international discord and should be accessible to all nations. They agreed that the exploration of the area and the exploitation of its resources shall be carried out for the benefit of all mankind, and in a manner consistent with the protection of the environment of Antarctica".[246]

244 R. F. Frank, 'The Convention on the Conservation of Antarctic Marine Living Resources', (1983) 13/3 Ocean Dev. & Int'l L. 291-346; Martin H. Belsky, 'Management of Large Marine Ecosystems: Developing a New Rule of Customary International Law' (1985) 22/4 San Diego L. Rev. 733-763 and 761-762; Joyner, 'Protection of the Antarctic Environment' (n. 202) 265; Watts (n. 202) 215-221; Maffei, 'Evolving Trends in the International Protection of Species' (n. 54) 146; Kaye (n. 202) 82-83; Sands, *Principles of International Environmental Law,* (n. 22) 714-715.

245 Kaye (n. 202) 86; also see, Maffei, 'Evolving Trends in the International Protection of Species' (n. 54) 289.

246 See, Francioni, 'Legal Aspects of Mineral Exploitation in Antarctica' (n. 202) 169 citing U.N. Doc. A/38/193 (1983) (The author also noted that the Heads of States of the Organization of African Unity adopted the Mauritions-sponsored resolution on 07/08/1985. The first paragraph of the operative part of the 1985 resolution, African leaders declared that "Antarctica to be the common heritage of mankind"; see, *ibid* 172, note.35.).

c) The notion in the instruments concerning conservation of natural resources and biological diversity

Preamble paragraph 6 of the "*African Convention on the Conservation of Nature and Natural Resource*"[247] of 15/09/1968 indicates that the Parties are willing to undertake "individual and joint action for the conservation, utilization and development of these assets by establishing and maintaining their rational utilization for the present and future *welfare of mankind*."[248] Article IV (Fundamental Obligations) of the "*African Convention on the Conservation of Nature and Natural Resources (Revised Version)*"[249] of 11/07/2003 imposes upon Parties the obligation to adopt and implement all measures necessary to achieve the objectives of this Convention, in particular through preventive measures and the application of the precautionary principle in the interest of *present and future generations*. Furthermore, in Preambular paragraph 5 of the 2003 Revised African Convention the Parties affirm that the conservation of the global environment is a common concern of humankind as a whole, and the conservation of the African environment a primary concern of all Africans. [250]

The "*Convention on International Trade in Endangered Species*" (CITES) of 03/03/1973 recognizes that "wild fauna and flora in their many beautiful and varied forms are an irreplaceable part of the natural systems of the earth which must be protected for this and *the generations to come*", (Preamble, para.1). Similarly, in Preamble paragraph 2 of the "*Convention on the Conservation of Migratory Species of Wild Animals*"[251] of 23/06/1979 the Contracting Parties declared that they are "aware that each generation of man holds the resources of the earth for future generations and has an obligation to ensure that this legacy is conserved and, where utilized, is used wisely".[252] In the Preambular paragraph 3 of the Council of Europe "*Convention on the Conservation of the European Wildlife and Natural Habitats*"[253] of 19/09/1979 the Parties recognized "that wild flora and fauna constitute *a natural heritage* of

247 The African Convention on the Conservation of Nature and Natural Resource (adopted on 15 September 1968, entered into force on 16 June 1969); *reproduced in*, Victor J. Orsinger, 'Natural Resources of Africa: Conservation by Legislation' (1971) 5 Afr. L. Stu. 29-55 and 36-39.

248 According to Article XVI of the 1968 African Conservation Convention, the Contracting States shall supply to Organization of African Unity with the text of laws, decrees, regulation and instructions in force in their territories, which are intended to ensure the implementation of the Convention, and also with reports on the results achieved in applying the provisions of the Convention. As one commentator observed, such functions are clearly supervisory. See, Alexandre Charles Kiss, 'Mechanisms of Supervision of International Environmental Rules' in Frits Kalshoven, Pieter Jan Kuyper and Johan G. Lammers (eds.), *Essays on the Development of the International Legal Order: in memory of Haro F. Van Panhuys* (Sijthoff and Noordhoff 1980) 99-114 and 102.

249 The "*African Convention on the Conservation of Nature and Natural Resources (Revised Version)*" (adopted on 11 July 2003, entered into force on 23 July 2016).

250 On the 2003 Convention, see, IUCN, *An Introduction to the African Convention,* (2004) 5-23.

251 The "*Convention on the Conservation of Migratory Species of Wild Animals*" (Bonn Convention) (adopted on 23/06/1979, entered into force on 01/11/1983); *reproduced in*, 19 ILM 15 (1980).

252 In the 1979 Bonn Convention the Parties recognize that wild animals "are an irreplaceable part of the earth's natural system" that have an increasing value "from environmental, ecological, genetic, scientific, aesthetic, recreational, cultural, educational, social and economic points of view", (Preamble).

253 The "*Council of Europe Convention on the Conservation of the European Wildlife and Natural Habitats*" (ETS No.104) (adopted on 19/09/1979, entered into force on 01/06/1982).

aesthetic, scientific, cultural, recreational, economic and *intrinsic* value that needs to be preserved and handed on to *future generations*". Under the EEC legislation one may refer to, for instance, the Council Directive 79/409/EEC of 02/04/1979 on the conservation of wild birds".[254] Preamble paragraph 3 of the 1979 EU Directive states that the species of wild birds "constitute a *common heritage* and effective bird protection is typically a trans-frontier environment problem entailing common responsibilities".

Article 1 of the "*International Undertaking on Plant Genetic Resources*"[255] of 1983 declares plant genetic resources to be a "heritage of mankind". Furthermore, it calls for international co-operation in "establishing or strengthening the capabilities of developing countries… with respect to plant genetic resource activities", (Article 6).

In the last Preambular paragraph of the "*Convention on Biological Diversity*"[256] of 05/06/1992 the Contracting Parties declared their determination "to conserve and sustainably use biological diversity for the benefit of *present and future generations*". Furthermore, this Convention in its preamble also refers to the concept of 'common concern of humankind': "The Contracting Parties… (affirm) that the conservation of biological diversity is a *common concern of humankind*…" In various Articles of this Convention obligations imposed upon States are formulated with a phrase "as far as possible and as appropriate" which implies the recognition of differentiated responsibility.[257]

In accordance with Article 1 of the "*Convention for the Conservation of Biological Diversity and the Protection of Priority Wild Areas in Central America*" of 05/06/1992, the objective of this regional instrument is to conserve biological diversity and the biological resources of the Central American region by means of sustainable use for the benefit of present and future generations, (Article 1).[258]

254 Council Directive 79/409/EEC of 02/04/1979 on the 'Conservation of wild birds'; OJ L 103, 1-18 (25 April 1979).

255 Food and Agriculture Organization (FAO), *International Undertaking on Plant Genetic Resources*, (1983), (Article 1. The objective of this Undertaking is to ensure that plant genetic resources of economic and/or social interest, particularly for agriculture, will be explored, preserved, evaluated and made available for plant breeding and scientific purposes. *This Undertaking is based on the universally accepted principle* that plant genetic resources are *a heritage of mankind* and consequently should be available without restriction.) (emphasis added.)

256 The "*Convention on Biological Diversity*" (CBD), (UN Doc. UNEP/Bio.Div./CONF/L.2), was adopted on May 1992 in Nairobi, and was opened for signature in Rio de Janeiro on 05/06/1992 at the UN Conference on Environment and Development, and entered into force on 29/12/1992; *reproduced in*, 31 ILM 818 (1992).

257 For instance, see, Articles 5, 7-11, and 14 of the 1992 Convention on Biological Diversity. Also see, French, '*The Importance of Differentiated Responsibilities'* (n. 167) 39. (According to the author, "despite the fact that the phrase as a whole is extremely ambiguous, the insertion of 'as far as possible' is an attempt to prevent developing State Parties relying too heavily upon 'as appropriate' for a justification for inaction".)

258 The original Spanish version of Article 1 of the 1992 "*Convention for the Conservation of Biological Diversity and the Protection of Priority Wild Areas in Central America*" reads as follows: "El objetivo de este Convenio es conservar al maximo posible la diversidad biologica, terrestre y costero-marina, de la region centroamericana, para el beneficio de las presentes y futures generaciones".

In the last preambular paragraph of the UN "*Convention to Combat Desertification*"[259] (UNCCD) of 17/06/1994 it is stated that the Parties to the Convention are determined "to take appropriate action in combating desertification and mitigating the effects of drought for the benefit of *present and future generations*". In the UNCCD in addition to some preambular paragraphs, particularly Articles 3(d), 5 and 6 clearly refer to the needs of developing countries; consequently the Convention recognizes the standard of differentiated obligations/responsibilities of States.

Article 1, paragraph 5, of the "*Protocol for the Implementation of the 1991 Alpine Convention on Soil Protection*"[260] of 16/10/1998 emphasizes the principle of prevention, which compromises the safeguarding of the functionality of soils and the possibility to use them for various purposes, and "their *availability to future generations*" with a view to sustainable development.

In addition to above-mentioned instruments the same notion also appears in some other instruments. For example, in Preamble paragraph 5 of the "*Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques*" ("ENMOD Convention")[261] of 18/05/1977 the State Parties declared that the use of environmental modification techniques for peaceful purposes could improve the interrelationship of man and nature and contribute to the preservation and improvement of the environment for the benefit of *present and future generations*.

The "*Convention on the Transboundary Effects of Industrial Accidents*" (Industrial Accidents Convention) of 17/03/1992[262] emphasizes the special importance of protecting human beings and the environment against the effects of industrial accidents in the interest of present and future generations, (Preamble, para.1).

The Preamble paragraph 10 of the "*Protocol on Pollutant Release and Transfer Registers*"[263] ("Protocol on PRTRs") of 21/05/2003 the Parties expresses their desire "to provide a mechanism contributing to the ability of every person of present and future generations to live in an environment adequate to his or her health and well-being, by ensuring the development of publicly accessible environmental information systems".

259 The "*United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa*" (adopted on 17/06/1994, entered into force on 26/12/1996) *reproduced in*, 33 ILM 1328 (1994).

260 The "*Protocol for the Implementation of the 1991 Alpine Convention on Soil Protection*" (adopted on 16/10/1998, entered into force on 18/12/2002); further see, Gemalmaz (n. 72).

261 The "*Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques*" ("ENMOD Convention") adopted by Resolution 31/72 of the UN General Assembly at its 96th plenary meeting on 10/12/197. The ENMOD Convention was opened for signature on 18/05/1977 and entered into force on 05/10/1978; *reproduced in*, 16 ILM 88 (1977).

262 The "*Convention on the Transboundary Effects of Industrial Accidents*" (Industrial Accidents Convention) (17 March 1992); *reproduced in*, 31 ILM 1333 (1992).

263 The Protocol on Pollutant Release and Transfer Registers was adopted at an extraordinary meeting of the Parties to the Aarhus Convention at the meeting took place in the framework of the fifth Ministerial Conference 'Environment for Europe', Kiev, on 21/05/2003, and entered into force on 08/10/2009; available at, <http://treaties.un.org>. Thirty-six member States and the European Community signed the Protocol in Kiev.

d) The Notion in the Instruments Concerning Marine Protection and International Waters

The "*International Convention for the High Seas Fisheries of the North Pacific Ocean*" (INPFC) of 09/05/1952 establishes a conservation regime in order to "best serve the common interest of mankind", (Preamble, para.2). Moreover, the INPFC describes tuna and other fish as being of "common concern" to the parties, (Article II/8).

Some scholars draw attention to the fact that Article 136 should be read in conjunction with Article 133, which defines "resources" for the purpose of Part XI of the Convention, the notion of which only refers to non-living resources.[264] Nevertheless there are suggestions that the simple formulation of Article 136 of UNCLOS might be interpreted in a wider context.[265]

Article 136 of the UN "*Convention on the Law of the Sea*" of 10/12/1982 proclaims that the Area meaning the seabed and ocean floor and subsoil thereof beyond the limits of national jurisdiction, is the *common heritage of mankind*.[266] The phrase "beyond the limits of national jurisdiction" is called "the Area" in the UNCLOS. The concept 'common heritage of mankind' in the UNCLOS "presupposes a third kind of regime which is different from both the concept of sovereignty, which applies in the territorial sea and the exclusive economic zone, and the concept of freedom, which applies on the high seas".[267] The legal status of the Area and its resources is regulated in Article 137 of the Convention. While Article 137, paragraph 1, prohibits any claim by any State of sovereignty over any part of the Area or its resources, and does not allow appropriation any part thereof by any State or natural or legal person, which is in no case be recognized, paragraph 2 clearly indicates that "all rights in the resources of the Area are vested in mankind as a whole, on whose behalf the Authority shall act". Furthermore, with respect to economic objectives of the notion of common heritage of mankind[268] Article 140 of the Convention provides that "activities in

264 Marciniak (n. 73) 382.

265 Baslar (n. 71) 206.

266 For an overview, see, Wolfrum (n. 71) 324-332 (The CH notion under UNCLOS. The author, in this context, concluded that: The common heritage principle as specified by Part XI of the Convention on the Law of the Sea contains the following elements: It stipulates that the sea-bed has to be regarded as the common heritage of mankind which will be represented by the Sea-Bed Authority as its trustee. However, mankind is not considered to be an active subject in deep seabed activities but remains only an object the interests of which have to be taken into account. Therefore in deep sea-bed mining the interests of peoples not having attained full independence - and thus not being represented in the Authority as their States did not adhere to the Convention - and of further generations have to be considered. As a logical consequence of the common heritage principle, any claim or exercise of sovereignty or sovereign rights over the deep sea-bed area and its resources as well as its appropriation are prohibited. The regime on the utilization of the deep seabed and of its resources contains the following elements: peaceful use, protection of the marine environment, activities to be carried out for the benefit of mankind as a whole, *ibid* 332.); as was already noted, also see, paragraph 1 of the Declaration of Principles Governing the Sea-Bed and the Ocean Floor, and the Subsoil Thereof, Beyond the Limits of National Jurisdiction adopted by the UNGA Resolution 2749 (XXV) of 17/12/1970.

267 Scovazzi (n. 76) 117.

268 Joyner, 'The Common Heritage of Mankind' (n. 71) 196.

the Area shall be carried out for the benefit of mankind as a whole… taking into particular consideration the interests and needs of developing States and of peoples who have not attained full independence or other self-governing status".

Preamble paragraph 6 of the "*Convention on Conservation of Nature in the South Pacific*"[269] of 12/06/1976, entered into force on 26/06/1990 reads as follows: "Desirous of taking action for the conservation, utilization and development of these resources through careful planning and management for the benefit of present and future generations". In Preamble paragraph 3 of the "*Convention for the Protection of the Natural Resources and Environment of the South Pacific Region*"[270] ("Noumea Convention") of 24/11/1986, the Parties recognize their responsibility to preserve their natural heritage for the benefit and enjoyment of present and future generations.

The "Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean" of 10/06/1995 is the modified version of the "*Convention for the Protection of the Mediterranean Sea against Pollution*"[271] (Barcelona Convention) which was adopted on 16/02/1976 by the Conference of Plenipotentiaries of the Coastal States of the Mediterranean Region for the Protection of the Mediterranean Sea, held in Barcelona. The original Convention has been modified by amendments adopted on 10/06/1995 by the Conference of Plenipotentiaries on the Convention for the Protection of the Mediterranean Sea against Pollution and its Protocols, held in Barcelona on 09-10/06/1996. The amended Convention was recorded as "*Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean*" (also known as, Barcelona Convention).[272] In Preambular paragraph 2 of the Barcelona Convention of 10/06/1995 the Contracting Parties stated that they are "fully aware of their responsibility to *preserve this common heritage* for the benefit and enjoyment of *present and future generations*". Pursuant to

269 The "*Convention on Conservation of Nature in the South Pacific*" (adopted on 12/06/1976, entered into force on 26/06/1990) <http://www.ecolex.org/server2.php/libcat/docs/TRE/Multilateral/En/TRE000540.txt>; furthermore see, the "*Convention on Conservation of Nature in the South Pacific*" (Apia Convention) (signed in Apia on 12/07/1976, entered into force on 26/06/1990). Generally see, P. Lawrence, 'Regional strategies for the implementation of environmental conventions: Lessons from the South Pacific?', (1994) 15 Australian YBIL 203-229.

270 The "*Convention for the Protection of the Natural Resources and Environment of the South Pacific Region*" ('Noumea Convention') (adopted on 24/11/1986, entered into force on 22/08/1990); *reproduced in*, 26 ILM 38 (1987). In the same context also see, "*The Agreement Establishing the South Pacific Regional Environment Programme*" (Agreement Establishing SPREP), (adopted on 16/06/1993, entered into force on 31/08/1995) <http://www.sopac.org/sopac/docs/RIF/SPREP_Agreement%20Establishing%20SPREP.pdf>. In Preamble paragraph 2 of the 1993 SPREP Agreement the Parties declared that they were "Conscious of their responsibility to preserve their natural heritage for the benefit and enjoyment of present and future generations and their role as custodians of natural resources of global importance".

271 The "*Convention for the Protection of the Mediterranean Sea against Pollution*" (Barcelona Convention) was adopted on 16/02/1976 and entered into force on 12/02/1978. According to Article 13 of the Barcelona Convention of 16/02/1976, Contracting Parties designated United Nations Environmental Programme (UNEP) as responsible for carrying out secretarial functions, some of which imply supervisory functions; such as, "to consider inquiries by, and information from, the Contracting Parties, and to consult with them on questions relating to this Convention", (Art.13, paragraph iii). Pursuant to Article 20, the Contracting Parties shall transmit to the Organization reports on the measures adopted in the implementation of this Convention.

272 The "*Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean*" (Barcelona Convention) (adopted 10/06/1995, entered into force 09/07/2004).

Article 4, paragraph 3, of 1995 Convention, the Contracting Parties pledge themselves to take appropriate measures concerning the protection of the marine environment in the Mediterranean Sea area from all types and sources of pollution. Note that both Preambular para.2 and Article 4/3 of the 1995 Convention are identically taken from the 1976 original Convention.

The UN/ECE "*Convention on the Protection and Use of Transboundary Watercourses and International Lakes*"[273] of 17/03/1992 provides as one of the guiding principles that water resources shall be managed so that the needs of the present generation are met without compromising the ability of future generations to meet their own needs. It may be noted that the "Protocol on Water and Health" of 17/06/1999 identically repeats the same provision in Article 5/a. It is noteworthy that both the 1992 Convention and the 1999 Protocol refer to the "present and future generations" notion in the Articles concerning guiding principles.

Unlike the aforementioned instruments, the UN "*Convention on the Law of the Non-navigational Uses of International Watercourses*"[274] of 21/05/1997 refers to the same notion in its Preamble in the following words: "Expressing the conviction that a framework convention will ensure the utilization, development, conservation, management and protection of international watercourses and the promotion of the optimal and sustainable utilization thereof for present and future generations", (Preamble, para.5).

e) The Notion in the Ozone Protection Instruments

In early 1990s the concept appeared, for instance, in the UN "*Framework Convention on Climate Change*"[275] (FCCC) of 09/05/1992. While in Preambular paragraph 23 of the FCCC the Contracting Parties declared that they are "determined to protect the climate system for present and future generations", Article 3, paragraph 1, of the Convention provided that "the Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities". This element is drawn directly from the 1992 Rio Declaration.[276] A

273 The UN/ECE "*Convention on the Protection and Use of Transboundary Watercourses and International Lakes*" was adopted at Helsinki on 17/03/1992 and entered into force on 06/10/1996, United Nations, Doc. E/ECE/1267; reproduced in, 31 ILM 1312 (1992).

274 The "*Convention on the Law of the Non-navigational Uses of International Watercourses*" was adopted by the UN General Assembly Resolution 51/229 on 21/05/1997, and entered into force on 17/08/2014; *reproduced in*, 36 ILM 700 (1997). Preambular paragraph 6 affirms "the importance of international cooperation and good-neighbourliness in this field".

275 The Framework Convention on Climate Change (adopted 09 May 1992, entered into force 21 March 1994) *reproduced in*, 31 ILM 848 (1992); also see, Barry E. Carter - Phillip R. Trimble, (n. 43) 805-818. Preambular para.7 of this Convention refers to the 1972 Stockholm Declaration.

276 Boyle, 'Reflections on Treaties and Soft Law' (n. 1) 908. (In view of the author the elements of Article 3 "reflect principles which are not simply part of the Climate Change Convention, but which are also emerging at the level of general international law, even if it is as yet premature to accord them the status of customary international law. They are not expressed in obligatory terms: the use of 'should' qualifies their application, despite the obligatory wording of the chapeau sentence".)

special reference has been made to "the specific needs and special circumstances of developing country Parties" in Article 3/2 of the UNFCCC.[277]

Article 10 of the 1997 "*Kyoto Protocol*" provides that "All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, without introducing any new commitments for Parties not included in Annex I, but reaffirming existing commitments under Article 4, paragraph 1, of the Convention, and continuing to advance the implementation of these commitments in order to achieve sustainable development, taking into account Article 4, paragraphs 3, 5 and 7, of the Convention, shall…"

In that connection it may be noted that the General Assembly in its resolution 56/199 on "*Protection of global climate for present and future generations of mankind*"[278], adopted on 21/12/2001, after referring to its resolutions 50/115 of 20/12/1995, 51/184 of 16/12/1996, 52/199 of 18/12/1997 and 54/222 of 22/12/1999, its decision 55/443 of 20/12/2000 and other resolutions relating to the protection of the global climate for present and future generations of mankind, (Preamble para.1), in Operative (para.1) recalls the United Nations Millennium Declaration, in which heads of State and Government resolved to make every effort to ensure the entry into force of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, and to embark on the required reduction of emissions of greenhouse gases, and calls upon States to work cooperatively towards achieving the ultimate objective of the United Nations Framework Convention on Climate Change". More recently, the General Assembly in its resolution 63/32 on "*Protection of global climate for present and future generations*"[279], adopted on 26/11/2008, recalls its resolutions 43/53 of 06/12/1988, 54/222 of 22/12/1999, 61/201 of 20/12/2006 and 62/86 of 10/12/2007 and other resolutions and decisions relating to the *protection of the global climate for present and future generations of mankind* (Preamble, para.1), and calls upon States to take urgent global action to address climate change in accordance with the principles identified in the Convention, including the *principle of common but differentiated responsibilities* and respective capabilities, and, in this regard, urges all countries to fully implement their commitments under the Convention, to take effective and concrete actions and measures at all levels, and to enhance international cooperation in the framework of the Convention, (Operative para.9). (Emphasis added).

277 Also see, Article 4, paragraph 8, of the UNFCCC, which refers to "specific needs and special situations of the least developed countries".

278 The General Assembly resolution 56/199 on "*Protection of global climate for present and future generations of mankind*" was adopted on 21/12/2001 at its 90th plenary meeting.

279 The General Assembly resolution 63/32 on "*Protection of global climate for present and future generations*" was adopted on 26/11/2008 at its 60th plenary meeting. The principle of 'common but differentiated responsibilities' is also referred to in Preamble paragraph 2 of this resolution.

f) The Notion in the Outer Space and Moon Instruments

Furthermore, by treaty, the moon and outer space are also considered as part of global commons and of the common heritage of humankind.[280]

For example, in Preambular paragraph 2 of the "*Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies*"[281] of 27/01/1967, States Parties recognize "*the common interest of all mankind* in the progress of the exploration and use of outer space for peaceful purposes". As will be shown below, the 'common interest' principle does not appear only in its Preamble but also in the operative part of the Treaty. The 1967 'Outer Space Treaty' provides that the exploration and use of outer space[282] shall be carried out "for the benefit and in the interests of all countries", irrespective of their degree of economic or scientific development, and shall be the "*province of all mankind*", (Article I, sub-paragraph 1). It is further provided that "outer space, including the Moon and other celestial bodies shall be free for exploration and use by all States without discrimination of any kind and on basis of equality and in accordance with international law…", (Article I, sub-paragraph 2). Thus in the latter provision three complementary elements are indicated: the prohibition of discrimination, the recognition of the equality of all States and the requirement that the activities be conducted in accordance with international law. [283]

In short, the object and the purpose of the Outer Space Treaty are to enhance and protect the common interest of all humankind in the exploration and use of outer space for peaceful purposes.[284] The common interest principle in outer space is reinforced by other principles, such as the freedom of outer space and non-appropriation of outer space.[285]

Indeed, Article II of the 1967 'Outer Space Treaty' stipulates that "outer space, including the Moon and other celestial bodies, *is not subject to national appropriation* by claim of sovereignty, by means of use or occupation, or by any other means". (Emphasis added). Article II of the Treaty indicates the application

280 Generally see, Lachs (n. 110); Ogunsola O. Ogunbanwo, *International Law and Outer Space Activities* (Martinus Nijhoff Publishers, 1975); Christol (n. 141); Gerardine Meishan Goh, *Dispute Settlement in International Space Law* (Martinus Nijhoff Publishers, 2007) (Arguing the urgent need for the creation of a permanent authority to determine the basis of the corpus international and transnational space law, as well as the sectorialized dispute settlement mechanism); Lotta Viikari, *The Environmental Element in Space Law* (Martinus Nijhoff Publishers, 2008); Lyall and Larsen (n. 102); for examples from early literature, see, C. Wilfred Jenks, '*International Law and Activities in Space*' (1956) 5/1 ICLQ 99-114.

281 The "*Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies*" (Outer Space Treaty') was adopted by General Assembly resolution 2222 (XXI), (Annex), on 19/12/1966, opened for signature on 27/01/1967, and entered into force on 10/10/1967.

282 Stephen Gorove, 'Freedom of Exploration and Use in the Outer Space Treaty: A Textual Analysis and Interpretation', (1971) 1/1 Denv. J. Int'l L. & Pol'y 93-107 and 104-106; Lachs (n. 110) 42-48; Ogunbanwo (n. 280) 214-216; Christol (n 141) 37-46; Lyall and Larsen (n 102) 53-80.

283 Lachs (n. 110) 44-45.

284 Jakhu (n. 102) 34.

285 Christol (n. 141) 47-48; Jakhu (n. 102) 39.

of the *res communis* principle to outer space, the moon and other celestial bodies. Thus, States have been prevented from "extending to them, and exercising within them, those rights which constitute attributes of territorial sovereignty".[286] As shown above, the latter principle was first stated in the General Assembly resolution 1721 (XVI) of 20/12/1961[287] and was subsequently inserted into the 'Declaration of Legal Principles'[288] of 13/12/1963. It follows that, if no national occupation on the part of States is possible, it is something common to all Humankind, considered as a whole.[289] It is noteworthy that as far back as 1950s Jenks argued that "space beyond the atmosphere is a *res extra commercium* incapable by its nature of appropriation on behalf of any particular sovereignty".[290] The prohibition of "national appropriation" in Article II of the 1967 Outer Space Treaty includes both sovereign rights and private property rights.[291]

The incorporation of the principles and basic ideas expressed in the earlier space resolutions into the 1967 Treaty confirmed their status as between the parties, and transformed them into treaty obligations. Moreover, those principles, particularly Articles I-III, have now the status of customary as well as treaty law, and thus binding on all States.[292]

The guarantee that the exploration, use, and exploitation of the space environment shall be "the province of all mankind", which is mentioned in the Preamble, Article 1/1 and Article 5 of the 1967 Treaty, thus inserted, for the first time[293], a concept having a major concern for 'all mankind' into an operative part of an international agreement.[294] The phrase 'the province of mankind' is not easy to interpret "as a matter of law. Rhetorically it adds a little gloss to the freedom of exploration and use in para.2 of Article I".[295] Some authors argue that the concept of 'province of all

286 Lachs (n. 110) 42-43. The author added that "neither priority in discovery nor the mastery of technical facilities could constitute a title to exclusive rights in this field", *ibid* 47.

287 The UN General Assembly resolution 1721 A (XVI) on "*International co-operation in the peaceful uses of outer space*" was adopted on 20/12/1961 at its 1085th plenary meeting, Part A, para.1(b). Also see, Christol (n 141) 48.

288 The General Assembly resolution 1962 (XVIII) on "*Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space*" was adopted on 13/12/1963 at its 1280th plenary meeting. As was already noted the 1963 Declaration of Legal Principles also provides that the exploration and use of outer space shall be carried on for the benefit and in the interests of all mankind, (Operative para.1).

289 Cocca (n. 81) 14.

290 Jenks, 'International Law and Activities in Space' (n. 280). (Further, the author found it "desirable to start from the principle that title to the natural resources of the moon and of other planets and satellites should be regarded as vested in the United Nations and that any exploitation of such resources which may be possible should be on the basis of concessions, leases or licences from the United Nations", *ibid* 111, 114.)

291 Jakhu (n. 102) 46.

292 Lyall and Larsen (n. 102) 54, 59; Jakhu (n. 102) 48; Goedhuis (n. 102) 215.

293 As shown above the Antarctic Treaty of 01/12/1959 in its Preamble makes reference to "the interests of all mankind" in the exclusively peaceful use of Antarctica.

294 Christol (n. 141) 44; Jakhu (n. 102) 38.

295 Lyall and Larsen (n. 102) 62. (The authors added that "it is inappropriate to interpret OST Art.I as implying at that stage the existence of the notion of a regime of 'common heritage'… It was not in the minds of the negotiators and drafters of the OST that there should be such a common controlling regime (as is the case in Part XI of the 1982 UNCLOS) as the latter concepts of common heritage imply", *ibid* 64.)

mankind' is broader than, and different from, the legal principle of 'common heritage of all mankind'[296], as included in Article 11, paragraph 1, of the 1979 Moon and Other Celestial Bodies Agreement.

Pursuant to Article IV, sub-paragraph 1, of the 'Outer Space Treaty', States Parties undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner. Note that Preamble para.2 of the 1967 Treaty was taken from Preamble para.2 of the above-mentioned 1963 'Declaration of Legal Principles', which has already been indicated above under soft-law instruments.

In sum, one of the principles common in outer space treaties, namely the freedom of exploration and use as provided, for example, in Article I of the 1967 'Outer Space Treaty' is limited by a number of criteria or requirements including, *inter alia*, the activity should be carried out "for the benefit and interests of all countries", since outer space constitutes "the province of all mankind". The latter has thus lead the prohibition of national appropriation (Article II), limitations on military uses (Article IV), and avoidance of harmful contamination (Article IX).[297] Thus, the traditional international law principle, i.e. "everything not prohibited is permitted" indicated in the *Lotus* case in 1927 by the PCIJ, does not constitute a precedent in favor of unrestricted national uses and activities in outer space. [298]

Article IX of the 1967 Outer Space Treaty provides for avoidance of harmful contamination of outer space and celestial bodies and avoidance of adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter, which is completed by the duty, where necessary, to adopt appropriate measures for this purpose. In that connection, as examined below, Preamble, para.3, as well as Article I of the Nuclear Test Ban Treaty of 05/08/1963 may be noted. Moreover, it may be added that space technology provides an opportunity to improve more effective protection of the Earth's environment. As to the latter, among others, the 1986 UN "Remote Sensing Principles"[299] can be noted.[300]

On the other hand, it may be noted that the formulation that all astronauts are to be treated as "envoys of mankind in outer space" appear in (Operative para.9) of the

296 Jakhu (n. 102) 49.

297 Gorove, 'Freedom of Exploration and Use in the Outer Space Treaty' (n. 282) 100; Jakhu (n. 102) 41.

298 Christol (n. 141) 267; Jakhu (n. 102) 43.

299 "*Principles Relating to Remote Sensing of the Earth from Space*" was adopted by the UN General Assembly resolution 41/65 on 03/12/1986. Principle I of the 1986 Remote Sensing Principles provides that "the term 'remote sensing' means the sensing of the Earth's surface from space by making use of the properties of electromagnetic waves emitted, reflected or diffracted by the sensed objects, *for the purpose of improving natural resources management, land use and the protection of the environment*". (Emphasis added).

300 Generally see, Masami Onoda, 'Satellite Earth Observation as 'Systematic Observation' in Multilateral Environmental Treaties' (2005) 31/2 J. Space L. 339-411; 370-388 and 401-408.

1963 'Declaration of Legal Principles' was subsequently included in Article V of the 1967 Outer Space Treaty, and further elaborated by the 1968 Rescue Agreement.[301]

As it is argued in early 1970s "the world community has increasingly recognized the shared resource character of the atmosphere".[302] While some authors noted the vagueness attached to such expressions as 'province of mankind' and 'benefit of mankind' and the difficulty to identify the 'common interest of mankind' even though it implies that such an international interest exists as opposed to national interest in outer space[303]Others argued that "the phrase referring to the 'province of all mankind' is presently more of an expression of hope than that of actual content. The provision as it stands seems to be a compromise between the interests of the underdeveloped nations and those of the space powers". [304]

In relation to Article I of the Outer Space Treaty, it is argued that the 1959 Antarctica Treaty was also mentioned during the negotiations. It influenced the meaning given to the terms found in the Outer Space Treaty.[305] Furthermore, it is observed that the negotiators of the 1967 Treaty were aware of the *res communis* concepts applying to the ocean and were employing this analogy as they drafted the rules to be applied in the exploration, use, and exploitation of the space environment.[306] The function of the mankind principle "has been to unify and promote the terms and goals" of the Outer Space Treaty.[307] Before the adoption of the 1967 Treaty some commentators argued that although the common heritage doctrine is not yet developed to precise definition, it is a substantive doctrine capable of expansion to resolve future controversies.[308] It is further argued that in the field of space law fundamental legal principles, which include treating outer space as commons, preserving it for peaceful purposes, maintaining freedom of access and use, and promoting responsibility and cooperation in its use for the benefit of all are already in existence, should be maintained, the fact of the lack of clear definitions of these principles, and detailed regulations for ensuring their

301 The *Agreement on the Rescue of Astronauts, the Return of Astronauts, and the Return of Objects Launched into Outer Space* (adopted 22 April 1968).

302 Samuel A. Bleicher, 'An Overview of International Environmental Regulation' (1972) 2/1 Ecology L. Q. 1, 66.

303 Ogunbanwo (n. 280) 214.

304 Gorove, 'Freedom of Exploration and Use in the Outer Space Treaty' (n. 282) 105.

305 Christol (n. 141) 39; Lyall and Larsen (n 102) 55-56 (The authors also noted that the 1963 Nuclear Test Ban Treaty was another international instrument affording some guidance in the negotiation and drafting of the 1967 Outer Space Treaty, *id.*, p.56. In the early 1950s Jenks argued: "Space beyond the atmosphere of the earth presents a much closer analogy to the high seas than to the airspace above the territory of a State… Any projection of territorial sovereignty into space beyond the atmosphere would be inconsistent with the basic astronomical facts".); see, Jenks, 'International Law and Activities in Space' (n. 280) 103.

306 Christol (n. 141) 45. (The author added: "Mankind, through the utilization of the principle (of 'province of all mankind') would be able to enjoy the peaceful and orderly use of a *rea communis* resource… This principle is both legally and practically related to the provisions of Article 1, para.2 allowing freedom of access to celestial bodies and the free and equal exploration, exploitation, and use of the entire space environment", *ibid*.)

307 *Ibid* 46.

308 Tennen (n. 102) 153 citing C. Wilfred Jenks, *Space Law*, (1965) 193.

enforcement could not be denied. Furthermore, traditional analogies of the law of the sea and the Antarctica regime will no longer be sufficient.[309]

Further, it may be noted that pursuant to Article VI[310] of the 1967 Outer Space Treaty, Contracting Parties have agreed to accept international responsibility to regulate the activities of their nationals in space and to become international liable therefor. This is same in the 1979 Moon and Other Celestial Bodies Agreement, examined below, (Article 14). Article VII provides that a State is liable for damage caused to another State through its own space activities or of those subject to its jurisdiction, licensing and supervision. In that connection one may recall (para.8) of the 'Declaration of Legal Principles'[311] of 13/12/1963. Thus while Article VI involves "responsibility", Article VII is dealt with "liability" which refers to a legal obligation to make reparation to the victim State for the damage caused by the space object, however the damage may have been caused.[312] It is argued that the responsibility provided by the 1967 Outer Space Treaty imposes a "positive obligation" upon the Parties to ensure that the activities of their nationals in space are conducted in accordance with international law. It follows that "what is forbidden to States cannot be accomplished by private enterprise associations or individuals. The specific provisions of the *corpus juris spatialis* thus are applicable to both public and private entities".[313] Such an extension of responsibility and liability of a State to damage caused by its non-state entities constitutes a significant innovation in international law[314], which subsequently refined in the 1972 Liability Convention.[315]

Similarly, in Preambular paragraph 1 of the 1972 "*Convention on International Liability for Damage Caused by Space Objects*"[316] States Parties recognize "the *common interest of all mankind* in furthering the exploration and use of outer space for peaceful purposes".[317]

309 Goh (n. 280) 356. The author added that "peaceful settlement of disputes arising from contemporary and future activities in outer space must protect the basic principles of space law such as equitable access and military restraint while promoting the exploration and use of outer space for the benefit of all Humanity", *ibid*.

310 Bin Cheng, 'Article VI of the 1967 Space Treaty Revisited: 'International Responsibility', 'National Activities' and 'The Appropriate State' (1998) 26/1 J. Space L. 7-32.

311 The "*Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space*" adopted by the General Assembly resolution 1962 (XVIII) on 13/12/1963 in (para.8) provides that a State which launches or procures the launch of an object into outer space, together with a State from whose territory such an object is launched, is internationally liable for damage to be caused to a foreign State or to its national or juridical persons.

312 Cheng, 'Article VI of the 1967 Space Treaty Revisited' (n. 310) 10.

313 Tennen (n. 102) 153 citing C. Wilfred Jenks, *Space Law*, (1965) 151; Cheng, 'Article VI of the 1967 Space Treaty Revisited' (n. 310) 29.

314 Lyall and Larsen (n. 102) 65-66.

315 Jakhu (n. 102) 52-53.

316 The "*Convention on International Liability for Damage Caused by Space Objects*", adopted by General Assembly resolution 2777 (XXVI), (annex), on 29/11/1971, opened for signature on 29/03/1972, and entered into force on 01/09/1972; available at, <www.oosa.unvienna.org>. The number of State Parties to the 1972 Liability Convention is fewer than the 1967 Outer Space Treaty.

317 Generally see, Lyall and Larsen (n. 102) 105-114.

In accordance with Article 4, paragraph 1, of the 1979 "*Agreement Governing the Activities of States on the Moon and Other Celestial Bodies*"[318], "the exploration and use of the Moon shall be the *province of all mankind* and shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development. Due regard shall be paid to the interests of *present and future generations* as well as to the need to promote higher standards of living and conditions of economic and social progress and development in accordance with the Charter of the United Nations".[319] Pursuant to Article 11, paragraph 1, of the 1979 Moon and Other Celestial Bodies Agreement, "the Moon and its natural resources are *the common heritage of mankind*, which finds its expression in the provisions of this Agreement… "[320] (Emphasis added). Article 11/1 refers to para.5 of the same Article which states that the Parties to this Agreement "undertake to establish an international regime, including appropriate procedures, to govern the exploitation of the natural resources of the moon as such exploitation is about to become feasible". Article 11, paragraphs 2 and 3, of the Agreement forbids establishment of a right of ownership over the surface or the subsurface of the Moon or any areas thereof. In order to secure the implementation of the common heritage principle, Article 11/5 and Article 18 authorize the Parties to the Agreement to establish "an international regime"[321], the main purposes of the regime to be established include the orderly and safe development of the natural resources of the moon; the rational management of those resources and an equitable sharing by all States Parties in the benefits derived from those resources, (Article 11/7).

The principle of *res communis* is also incorporated into Article 11 of the 1979 Moon and Other Celestial Bodies Agreement.[322] Some authors argue that the rules governing space sovereignty are considered prime examples of the formation of instant custom. The rule that national sovereignty over air space does not extend into outer space is now customary international law.[323] It has to be pointed out that the 1979 Agreement, especially in the aforementioned provisions, determines the nature of the common heritage concept "as a legal principle".[324]

318 "*Agreement Governing the Activities of States on the Moon and Other Celestial Bodies*", adopted by General Assembly resolution 34/68, (annex), on 05/12/1979, opened for signature on 18/12/1979, and entered into force on 11/07/1984; available at, <www.oosa.unvienna.org>. For commentary on the 1979 Agreement's entry into force, see, Carl Q. Christol, 'The Moon Treaty Enters into Force', (1985) 79/1 AJIL 163-168.

319 It is significant that Article 2 of the 1979 Agreement refers to, in addition to international law and the Charter of the UN, the "*Declaration on Principles of International Law concerning Friendly Relations and Cooperation among States in accordance with the Charter of the United States*" adopted by the General Assembly resolution 2625 (XXV) of 24/10/1970.

320 For an analysis of "*the common heritage of mankind*" principle in the 1979 Agreement, see, Christol, 'The Moon Treaty Enters into Force', (n. 318); Jakhu (n. 102) 102-106; Lyall and Larsen (n. 102) 193-197.

321 Tennen (n. 102) 153 citing C. Wilfred Jenks, *Space Law*, (1965) 157.

322 Christol, 'The Moon Treaty Enters into Force', (n. 318) 164.

323 Andrew G. Haley, 'Law and the Age of Space' (1958) 5 St. Louis U. L. J. 1, 8; Joyner, 'The Common Heritage of Mankind' (n. 71) 196-197; J. Cameron and J. Abouchar, 'The Precautionary Principle: A Fundamental Principle of Law and Policy for the Protection of the Global Environment' (1991) 14/1 B. C. Int'l & Comp. L. Rev. 1, 19-20; for the "precautionary principle" also see, Daniel Bodansky, 'Deconstructing the Precautionary Principle', in D. D. Caron and H. N. scheiber (eds.) *Bringing New Law to Ocean Waters,* (Koninklijke Brill N. V., 2004) 381-391.

324 Cocca (n. 81) 15; Christol, 'The Moon Treaty Enters into Force', (n. 318) 165.

On the other hand, Article 7, paragraph 1, of the 1979 Moon and Other Celestial Bodies Agreement has to be specifically noted as it requires States Parties to take measures to prevent the disruption of the existing balance of the Moon's environment in exploring and using the Moon, as well as to take measures to avoid harmfully affecting the environment of the Earth through the introduction of extraterrestrial matter. Article 7/1 of the 1979 Agreement in fact reflects the principle expressed in Article IX of the 1967 Outer Space Treaty.

Some commentators, after noting some new trends in the 2000s by several private entities in the U.S. and other countries that are 'selling' pieces of land on the Moon, argued that irrespective of the fact that such 'selling' has no legal basis, global public interest in outer space necessitates that clear rules must be established both at international and national levels. Whatever the substance of the future lunar regime may be, it should include the principle of common heritage of mankind. If this principle could be retained in the UNCLOS, there is no logical reason for excluding this principle from the future legal regime to govern the exploitation of the natural resources of the Moon and other celestial bodies.[325] Since state claims to sovereignty in space cannot exist, neither can title to immovable property on celestial bodies in space. The Moon and other celestial bodies in space as such are not available for ownership either by private individuals or by companies.[326]

g) **The Notion in the Instruments Concerning Nuclear Disarmament, Nuclear Safety and Radioactive Waste Management**

Nuclear disarmament:

In accordance with Article I, paragraph 1, of the "*Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water*"[327] (Nuclear Test Ban Treaty) of 05/08/1963 Parties to this Treaty undertake to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control: (1) in the atmosphere; beyond its limits, including outer space; or under water, including territorial waters or high seas; or (2) in any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted.[328] Preamble paragraph 3 of the 1963 Treaty indicates that in order to achieve the discontinuance of all test explosions of nuclear weapons for

325 Jakhu (n. 102) 105-106.

326 Lyall and Larsen (n. 102) 185.

327 The "*Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water*" (also called as "Limited/ Partial Test Ban Treaty"/PTBT) was signed in Moscow on 05/08/1963, ratified by the US Senate on 24/09/1963, and entered into force 10/10/1963.

328 It may be noted that the nuclear test ban provided in Article I/1 of the 1963 Nuclear Test Ban Treaty is the only limitation on the military use of the high seas.

all time as a consequence of the desire "to put an end to the contamination of man's environment by radioactive substances". However, unlike the 1971 Treaty examined below, the 1963 Nuclear Test Ban Treaty did not refer to the notion of 'the common interest of mankind'.

The "*Treaty on the Non-Proliferation of Nuclear Weapons*"[329] (NPT) of 01/07/1968, which aimed at limiting the spread of nuclear weapons globally, was based on the idea that the proliferation of nuclear weapons would seriously enhance the danger of nuclear war and the consequent "devastation that would be visited on all mankind", (Preamble, para.1).[330] Article VII of the 1968 Treaty not only recognizes but in fact encourages any group of States to conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories.

The objective of the "*Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof*"[331] of 11/02/1971 is the prevention of nuclear arms race on the sea-bed and the ocean floor, (Preamble para.2). Thus it aims at the prevention of radioactive contamination of the said environmental areas. The Parties undertake not to place on the sea bed, on the ocean floor or in the subsoil thereof, nuclear weapons or other weapons of mass destruction, or structures for launching, storing, testing or using such weapons, (Article I). The outer limit of the seabed zone is defined as the 12-mile limit referred to in the 1958 Convention on the Territorial Sea and the Contiguous Zone, (Article II). For the present purposes here the 1971 Treaty is noteworthy because the Contracting Parties explicitly recognize "the *common interest of mankind* in the progress of the exploration and use of the sea-bed and ocean floor for peaceful purposes", (Preamble, para.1).

It may also be noted that, some Judges of the International Court of Justice in the "*Request for an Examination of the Situation in accordance with paragraph 63 of the Court's Judgment of 20 December 1974 in the Nuclear Tests* (*New Zealand v. France*)" Order of 22/09/1995[332] referred to the 1971 Treaty in order to support the

329 The "*Treaty on the Non-Proliferation of Nuclear Weapons*" (NPT) was adopted on 01/07/1968 and entered into force on 05/03/1970. Twenty five years after the entry into force of the NPT, at the 1995 NPT Review and Extension Conference held in New York at the United Nations from 17 April to 12 May 1995, States Parties agreed without a vote that "as a majority exists among States party to the Treaty for its indefinite extension, in accordance with Article X, Paragraph 2, the Treaty shall continue in force indefinitely". See, Decision 3 (NPT/CONF.1995/L.6) on 'Extension of the Treaty on the Non-Proliferation of Nuclear Weapons'. It may be added that the NPT does not establish a mechanism for noncompliance. In case of non-compliance with IAEA safeguards, the IAEA Board is to call upon the violator to remedy such non-compliance and should report the non-compliance to the UN Security Council and General Assembly.

330 Stephen Tromans, *Nuclear Law* (Second edition, Hart Publishing, 2010) 266-267.

331 The "*Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof*" (adopted on 11/02/1971, entered into force on 18/05/1972; <www.ecolex.org/server2>.

332 "Dissenting Opinion of Judge Koroma" appended to "*Request for an Examination of the Situation in accordance with paragraph 63 of the Court's Judgment of 20 December 1974 in the Nuclear Tests* (*New Zealand v. France*)", Order of 22/09/1995, ICJ Rep [1995], 378-379.

view that "nuclear testing as such is not only prohibited, but would be considered illegal if it would cause radioactive fallout." The ICJ also refers to the 1971 Treaty, as well as outer space treaties in its Advisory Opinion of 08/07/1996 on "*Legality of the Threat or Use of Nuclear Weapons*".[333]

A further step was taken by the adoption of the "*South Pacific Nuclear Free Zone Treaty*"[334] (Treaty of Rarotonga) of 06/08/1985 in which it is stated that the prohibitions of implantation and emplacement of nuclear weapons on the seabed and the ocean floor and in the subsoil thereof contained in the 1971 Treaty, as well as the prohibition of testing of nuclear weapons in the atmosphere or under water, including territorial waters or high seas, contained in the 1963 Nuclear Test Ban Treaty apply in the South Pacific, (Preamble, paras.8 and 9). In Preamble paragraph 3 it is declared that "all countries have an obligation to make every effort to achieve the goal of eliminating nuclear weapons, the terror which they hold for humankind and the threat which they pose to life on earth".

The adoption of the "*Comprehensive Nuclear Test-Ban Treaty*"[335] (CTBT) of 10/09/1996 (and the Protocol of 24/09/1996) has provided more strengthful legal ground to support the arguments concerning incompatibility of nuclear weapons tests with the international law. Although the 1996 Treaty does not refer to the notions of humankind and present and future generations, the Parties also emphasize that this Treaty could contribute to the protection of environment, (Preamble, para.10).

Nuclear safety and radioactive waste:

In Preamble paragraph (iii) of the "*Convention on Nuclear Safety*"[336], opened for signature on 20/09/1994, the Contracting Parties reaffirm that "responsibility for nuclear safety rests with the State having jurisdiction over a nuclear installation", and in paragraph (v) of the Preamble the Parties declare that they are in aware of

333 "*Legality of the Threat or Use of Nuclear Weapons*", Advisory Opinion of 08/07/1996, ICJ Rep [1996] 248-249, para.58.

334 "*South Pacific Nuclear Free Zone Treaty*" was signed at Rarotonga (Cook Islands) on 06/08/1985 and entered into force on 11/12/1986. Under the 1985 Treaty each Party undertake, *inter alia*, to prevent in its territory the stationing of any nuclear explosive device (Article 5); the testing of any nuclear explosive device (Article 6); not to dump radioactive wastes and other radioactive matter at sea anywhere within the South Pacific Nuclear Free Zone, and to prevent such dumping by anyone in its territorial sea (Article 7). Moreover, the Treaty establishes a control system (Article 8), which includes reports and exchange of information (Article 9), consultations and review (Article 10), the application to peaceful nuclear activities of safeguards by the IAEA (Annex 2), and a complaints procedure, including special inspection carried out by inspectors (Annex 4).

335 The "*Comprehensive Nuclear Test-Ban Treaty*" was adopted on 10/09/1996 and has not entered into force. (General Assembly Resolution 10/09/1996, 35 ILM 1439.) Annex 2 to the Treaty lists the 44 States that must ratify the Treaty for it to enter into force. As of December 2001, 164 nations have signed the CTB and 89 states have ratified the treaty. However, as of 2018, 41 of the 44 Annex 2 states, those that have nuclear weapons or nuclear facilities whose signature and ratification are required to bring the treaty into force, have signed the treaty and 31 of these states have submitted their ratification of the treaty. For the recent developments see, Dieter Fleck, 'Nuclear Disarmament: The Interplay Between Political Commitments and Legal Obligations' (2018) 26/1 New Perspectives 56-62. As of November 2021 the CTBT has not entered into force.

336 The "*Convention on Nuclear Safety*" was adopted on 17/06/1994 by a Diplomatic Conference convened by the International Atomic Energy Agency (IAEA) at its Headquarters from 14-17/06/1994, opened for signature on 20/09/1994 and entered into force on 24/10/1996. As of July 2021 the 1994 Convention has 91 Parties, including EURATOM.

accidents at nuclear installations having the "potential for transboundary impacts". This Convention applies to the safety of nuclear installations, (Article 3). As regards to general obligations each Party undertakes to take, within the framework of its national legislation, the legislative, regulatory and administrative measures for implementing its obligations under the Convention (Article 4) and, to submit for review a report on the measures it has taken to implement such measures (Article 5). Article 9 requires Contracting Parties to ensure that prime responsibility for the safety of a nuclear installation rests with the holder of the relevant licence and shall take the appropriate steps to ensure that each such licence holder meets its responsibility. The 1994 'Nuclear Safety Convention' has been considered as a disappointing instrument both with regard to substantive standards/obligations and to the review system. As to the former the Convention emphasizes that the responsibility for nuclear safety is a domestic matter, it lacks specific provisions with respect to transboundary risks of the use of nuclear power; it contains no specific obligation to carry out environmental impact assessment across borders; it does not impose obligations to achieve a specific result.[337]

Although in Article 1, paragraph (ii), indicates the necessity "to establish and maintain effective defences in nuclear installations against potential radiological hazards in order to protect individuals, society and the environment from harmful effects of ionizing radiation from such installations" as one of the objectives of the 1994 'Nuclear Safety Convention', it does not refer to "the needs and aspirations of the present and future generations" as provided in Article 1, paragraph (ii) of the 1997 'Joint Convention on the Safety'.

The "*Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management*"[338] was adopted on 05/09/1997 and opened for signature on 29/09/1997.[339] The Contracting Parties in Preamble paragraph 15 of the 1997 'Joint Convention on the Safety' recall Chapter 22 of Agenda 21 adopted in 1992, which reaffirms the paramount importance of the safe and environmentally sound management of radioactive waste.

The objectives of the 1997 'Joint Convention on the Safety' are, *inter alia*, to ensure that during all stages of spent fuel and radioactive waste management individuals,

337 Menno T. Kamminga, '*The IAEA Convention on Nuclear Safety*' (1995) 44/4 ICLQ 872-882, 877 (With respect to the review mechanism, the Convention's system is of the most rudimentary type and does not provide for independent verification of compliance, since it simply obliges each State party to submit periodic reports on the measures it has taken to implement its obligations, *ibid* 879; the review process is covered by confidentiality rule; NGOs are not permitted to attend the review meetings, and the Convention's supervisory system is not backed by provisions on non-compliance or any form of compulsory settlement of dispute, *ibid* 880.).

338 The '*Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management'* was adopted on 05/09/1997 by a Diplomatic Conference convened by the IAEA from 01-05/09/1997, opened for signature at Vienna on 29/09/1997, and entered into force on 18/06/2001; available at <TRE/Multilateral/En/TRE001273.txt (English)>. As of February 2022 there are 88 Parties, including EURATOM. Note that Article 39/4 allows international organizations to become Parties to this instrument

339 Tromans (n. 330) 374-375 and 400-401. The author especially discusses the inter-generational equity issues with regard to radioactive waste, *ibid* 374-375.

society and the environment are protected from harmful effects of ionizing radiation, "now and in the future, in such a way that *the needs and aspirations of the present generation are met without compromising the ability of future generations to meet their needs and aspirations*", (Article 1, paragraph ii). Both the safety requirements for spent fuel management (Article 4, paragraphs vi and vii) and radioactive waste management (Article 11, paragraphs vi and vii) require Contracting Parties to take appropriate steps "to avoid actions that impose reasonably predictable impacts on future generations greater than those permitted for the current generation" and to aim "to avoid imposing undue burdens on future generations". The 1997 'Joint Convention on the Safety' also calls on the Contracting Parties to review safety requirements and conduct environmental assessments both at existing and proposed spent fuel and radioactive waste management facilities, (Articles 8 and 15).

h) The Notion in Cultural and Natural Heritage Protection Instruments

The Hague "*Convention for the Protection of Cultural Property in the Event of Armed Conflict*"[340] of 14/05/1954 recognizes that "damage to cultural property belonging to any people whatsoever means damage to the cultural heritage of all mankind", (Preamble, para.2). Article 1/a-c, of the 1954 Convention provides definition of cultural property. However, the 1954 Convention had failed to establish an effective international protection system. This gap was filled by the adoption of the Second Protocol[341] to the 1954 Convention on 26/03/1999.

While Preamble paragraph 2 of the UNESCO "*Convention Concerning the Protection of the World Cultural and Natural Heritage*"[342] of 23/11/1972[343] recognizes that "deterioration and disappearance of any item of the cultural and natural heritage constitutes a harmful impoverishment of the heritage of all nations of the world"[344], paragraph 6 stresses "that parts of the cultural or natural heritage are of outstanding interest and therefore need to be preserved as part of the *world heritage of mankind as a whole*". Pursuant to Article 4 of the 1972 World Heritage Convention each State

340 The "*Convention for the Protection of Cultural Property in the Event of Armed Conflict*" was adopted at the Hague on 14/05/1954 and entered into force on 07/08/1956; available at, <http://www.unesco.org>; reproduced in, Dietrich Schindler and Jiri Toman (eds.), *The Laws of Armed Conflict*, (Martinus Nijhoff Publishers 1988) 745-767.

341 The "*Second Protocol to the Convention for the Protection of Cultural Property in the Event of Armed Conflict*" was adopted at the Hague on 26/03/1999 and entered into force on 09/03/2004; available at, <http://www.unesco.org>.

342 Generally see, Francesco Francioni (ed.) The 1972 World Heritage Convention: A Commentary (Oxford University Press, 2008); also see, Maffei, 'Evolving Trends in the International Protection of Species' (n. 54) 140-142; Sands, *Principles of International Environmental Law*, (n. 22) 611-615.

343 The "*Convention Concerning the Protection of the World Cultural and Natural Heritage*" was adopted by the UNESCO General Conference at its seventeenth session on 16/11/1972, done on 23/11/1972 and entered into force on 17/12/1975; available at, <http://www.unesco.org>; *reproduced in*, Francioni (ed.) *The 1972 World Heritage Convention* (n. 342) 411-424.

344 In relation to Preamble para.2 of the 1972 World Heritage Convention one commentator argues that this "gives legal form to the anthropological notion that all humanity shares a common origin from *Homo sapiens* and a common natural environment that permits life on the planet". See, Francesco Francioni, '*The Preamble*', in Francioni (ed.) *The 1972 World Heritage Convention* (n. 342) 11, 15.

Party undertakes the "duty of ensuring the identification, protection, conservation, presentation and transmission to *future generations* of the cultural and natural heritage".

In relation to the notion of 'future generations' in Article 4 of the 1972 World Heritage Convention one may also refer to the UNESCO "*Recommendation concerning the Protection, at National Level, of the Cultural and Natural Heritage*" adopted on 16/11/1972. The 1972 Recommendation, unlike Articles 1 and 2 of the 1972 Convention which use the words "outstanding universal value", identifies cultural and natural heritage as of "special value" (Rec., paras.1 and 2). Moreover, the 1972 Recommendation in its Preamble paragraph 5 states that "every country in whose territory there are components of the cultural and natural heritage has an obligation to safeguard this part of mankind's heritage and to ensure that it is handed down to future generations".

The notion of heritage within the meaning of the 1972 World Heritage Convention includes monuments, groups of buildings, sites (including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view[345]), natural features, geological and physiographical formations, and natural sites or precisely refined areas of outstanding universal value from the point of history, art, science, natural beauty or conservation, (Article 1 "cultural heritage" and Article 2 "natural heritage").

Attention may be drawn to the fact that Article 4 of the 1972 World Heritage Convention recognizes that such heritage "belongs primarily to the State" where they are situated on its territory. Furthermore, Article 6, paragraph 1, of the 1972 Convention reads as follows: "Whilst fully respecting the sovereignty of the States on whose territory the cultural and natural heritage mentioned in Articles 1 and 2 is situated, and without prejudice to property right provided by national legislation." It is argued that "in spite of the broad language of the Preamble and of Article 6, paragraph 1, the Convention does not raise obligations for third states (unless they express their consent in this regard), and as such these states cannot breach an obligation that is not binding upon them".[346]

Some authors argue that since the properties constituting 'world heritage' remain strictly under the jurisdiction of each State on whose territory they are situated, it means that the concept of 'world heritage' is something different from the concept of

345 *Compare* Article XIV of the "*Treaty for Amazonian Cooperation*" of 03/07/1978, which requires the Contracting Parties to take effective measures for the conservation of ethnological and archeological wealth of the Amazon region, and to cooperate to that end.

346 Guido Carducci, 'Articles 4 - 7: National and International Protection of the Cultural and Natural Heritage', in Francioni (ed.) *The 1972 World Heritage Convention* (n. 342) 102-145, 142.

'common heritage of mankind', which is regulated by different principles.[347] In view of some commentators, it is clear that the concept of 'common heritage' appears to be broader than is usually understood.[348] It may be added that, in accordance with Article 6/1 of the 1972 World Heritage Convention, the States Parties also recognize that "such heritage constitutes a *world heritage* for whose protection it is the duty of the international community as a whole to co-operate." In that connection the emphasis on "belongs primarily" provided in Article 4 is noteworthy. Thus for the first time what is only 'heritage' under Articles 1 and 2 of the Convention becomes 'world heritage' in Article 6/1, which subsequently appears in Articles 7, 11/2 and 11/4.[349]

The 1972 World Heritage Convention is administered by the World Heritage Committee[350] (composed of 21 members) (Articles 8-11)[351], and a secretariat at UNESCO, and the General Assembly of States parties, (Articles 14, 16/1). Furthermore, the Convention establishes a World Heritage Fund, (Articles 13/6, 15 to 18).

With respect to the concept of 'cultural heritage' it may be added that Article 7 of the UNESCO "*Declaration on the Responsibilities of the Present Generations towards Future Generations*"[352] of 12/11/1997 explicitly indicates the responsibility of the present generations to identify, protect and safeguard the tangible and intangible cultural heritage, as well as to transmit this common heritage to future generations. Note that the "*UNESCO Universal Declaration on Cultural Diversity*"[353] of 02/11/2001 in Article 1 after noting that "cultural diversity is as necessary for humankind as biodiversity is for nature", adds that "it is the common heritage of humanity and should be recognized and affirmed for the benefit of present and future generations".

The "*UNESCO Declaration concerning the Intentional Destruction of Cultural Heritage*"[354] was adopted on 17/10/2003 as a response of the international community

347 Maffei, 'Evolving Trends in the International Protection of Species' (n. 54) 141, note 33.

348 Kiss 'Conserving the Common Heritage of Mankind' (n. 71) 775; Thorme (n. 54) 325; Bernard K. Schafer, 'The Relationship Between the International Laws of Armed Conflict and Environmental Protection: The Need to Reevaluate What Types of Conduct are Permissible During Hostilities' (1989) 19/2 Cal. W. Int'l L. J. 287-325, 290.

349 Carducci (n. 346) 120 (The author added that through Article 6/1 "States Parties recognize the duty of the international community as a whole to cooperate for the protection of world heritage, at least in terms of general statements and philosophy of the instrument, and that the protection of heritage of outstanding universal value is a concern which goes beyond the territorial state concerned", *ibid* 121-122).

350 The full title is as follows: "Intergovernmental Committee for the Protection of the Cultural and Natural Heritage of Outstanding Universal Value".

351 Tullio Scovazzi, '*Articles 8 - 11: World Heritage Committee and World Heritage List'*, in Francioni (ed.) The 1972 World Heritage Convention (2008) 147-199, 149-154 (Article 8).

352 The "*Declaration on the Responsibilities of the Present Generations Towards Future Generations*" was adopted on 12/11/1997 by the General Conference of the UNESCO, meeting in Paris from 21 October to 12 November 1997 at its 29th session.

353 The "*UNESCO Universal Declaration on Cultural Diversity*" was adopted on 02/11/2001 by the General Conference of the UNESCO, meeting in Paris at its 31st session.

354 The "*UNESCO Declaration concerning the Intentional Destruction of Cultural Heritage*" was adopted on 17/10/2003 by the General Conference of the UNESCO, meeting in Paris at its 32nd session.

against the tragic destruction of the Buddhas of Bamiyan in Afghanistan. In Article I it is provided that "the international community recognizes the importance of the protection of cultural heritage and reaffirms its commitment to fight against its intentional destruction in any form so that such cultural heritage may be transmitted to the succeeding generations."[355]

iv-) The Notion of 'Present and Future Generations' in the International Jurisprudence

In addition to normative grounds for the notion of rights of future generations and consequently the obligations of present generations to future generations for the preservation of the environment that may be found in various international instruments, it is now beyond doubt that the said concepts have been recognized by judicial decisions of international courts and tribunals.

For instance, in his Separate Opinion appended to "*Jan Mayen* (*Denmark v. Norway*)" Judgment of 14/06/1993 Judge Weeramantry when analyzing the concept of equity and intergenerational equity in international law stated that "the concept of wise stewardship (of natural resources), and their conservation for the benefit of future generations", (para.235).[356] He added that "respect for these elemental constituents of the inheritance of succeeding generations dictated rules and attitudes based upon a concept of an equitable sharing which was both horizontal in regard to the present generation and vertical for the benefit of generations yet to come", (para.242).[357]

Again Judge Weeramantry in his Dissenting Opinion appended to "*Request for an Examination of the Situation in the Nuclear Tests* (*New Zealand v. France*)" Order of 22/09/1995 stated that "the case before the Court raises, as no case before the Court has done, the principle of intergenerational equity - an important and rapidly developing principle of contemporary environmental law… The Court has not thus far had occasion to make any pronouncement of this rapidly developing field… (The case) raises in pointed form the possibility of damage to generations yet unborn".[358] Judge Palmer who was also dissident in the same case stated that "in its essence

355 In so far the protection of natural environment may be connected with the protection of cultural heritage of mankind, one may recall Articles 8/(2)(b)(ix) and 8/(2)(e)(iv) of the Rome Statute of the ICC, and Article 3(d) of the Statute of the International Criminal Tribunal for the former Yugoslavia, which involve the intentional destruction of cultural heritage.

356 Separate Opinion of Judge Weeramantry appended to Maritime Delimitation in the Area between Greenland and Jan Mayen (*Denmark v. Norway*) [1993] ICJ Rep 211-279, 274, para.235. Judge Weeramantry added: "What emerges is a notion of equity broad-based upon global jurisprudence which speaks therefore with greater authority. Notions of the supremacy of international law, its impregnation with concepts of righteousness, the sacrosanct nature of earth resources, harmony of human activity with the environment, respect for the rights of future generations, and custody of earth resources with the standard of due diligence expected of a trustee are equitable principles stressed by those traditions – principles whose fuller implications have yet to be woven into the fabric of international law…", *ibid* 276-277, para.240.

357 *Ibid* 277, para.242.

358 Dissenting Opinion of Judge Weeramantry appended to *Request for an Examination of the Situation in accordance with paragraph 63 of the Court's Judgment of 20 December 1974 in the Nuclear Tests* (*New Zealand v. France*) [1995] ICJ Rep 288, 341-342.

this case has to be understood as an environmental case. New technology has given humankind massive ability to alter the natural environment. The consequences of these activities need to be carefully analyzed and examined unless we are to imperil those who come after us", (para.114).[359]

The ICJ in its "*Legality of the Threat or Use of Nuclear Weapons*" Advisory Opinion of 08/07/1996, pronounced the great significance that it attaches to respect for the environment, not only for States but also *for the whole of mankind* in the following words: "The environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, *including generations unborn*. The existence of the general obligations of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment", (para.29).[360] (Emphasis added). In the "*Legality of the Threat or Use of Nuclear Weapons*" Advisory Opinion of 08/07/1996, the Court also stated that "the use of nuclear weapons would be a serious danger to future generations. Ionizing radiation has the potential to damage the future environment, food and marine ecosystem and to cause genetic defects and illness in future generations", (para.35).[361]

In his Dissenting Opinion appended to the "*Legality of the Threat or Use of Nuclear Weapons*" Advisory Opinion of 08/07/1996, Judge Weeramantry stated that "at any level of discourse, it would be safe to pronounce that no one generation is entitled, for whatever purpose, to inflict such damage on succeeding generations… This Court, as the principal judicial organ of the United Nations, empowered to state and apply international law… must, in its jurisprudence, pay due recognition to the rights of future generations… The rights of future generations have passed the stage when they were merely an embryonic right struggling for recognition. They have woven themselves into international law through major treaties, through juristic opinion and through general principles of law recognized by civilized nations".[362]

The ICJ in (para.53) of the "*Gabcikovo-Nagymaros Project*" Judgment of 25/09/1997 recalled its dictum stated in "*Legality of the Threat or Use of Nuclear Weapons*" Advisory Opinion of 08/07/1996.[363] Furthermore, in "*Gabcikovo-Nagymaros Project*"

359 Dissenting Opinion of Judge Sir Geoffrey Palmer appended to Request for an Examination of the Situation in accordance with paragraph 63 of the Court's Judgment of 20 December 1974 in the Nuclear Tests (New Zealand v. France) [1995] ICJ Rep 419, para.114.

360 *Legality of the Threat or Use of Nuclear Weapons,* Advisory Opinion of 08 July 1996, [1996], ICJ Rep 241-242, para.29.

361 *Ibid* 244, para.35.

362 Dissenting Opinion of Judge Weeramantry appended to Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion of 08 July 1996, [1996] ICJ Rep 455. Judge Weeramantry added that "the ideals of the United Nations Charter do not limit themselves to the present, for they look forward to the promotion of social progress and better standards of life, and they fix their vision, not only on the present, but on 'succeeding generations'. This one factor of impairment of the environment over such a seemingly infinite time span would by itself be sufficient to call into operation the protective principles of international law which the Court, as the pre-eminent authority empowered to state them, must necessarily apply", *ibid* 456; also see 502.

363 Gabcikovo-Nagymaros Project (Hungary v. Slovakia), [1997], ICJ Rep 41, para.53.

Judgment the Court also stated that "owing to new scientific insights and to a growing awareness of the risks for mankind - *for present and future generations* - of pursuit of such interventions at an unconsidered and unabated pace, new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past. This need to reconcile economic development with protection of the environment is aptly expressed in the concept of *sustainable development*", (para.140). (Emphasis added).

v-) Inter-Generational Equity and Intra-Generational Equity

All these legally binding instruments refer to the principle of protecting the natural environment for *future generations*, as well as the notion of *common but differentiated responsibility*. Subsequently the concept of *common concern of humankind* has been developed. The latter concept has been linked to areas of the global commons and to areas falling only within a State jurisdiction. This concept implies a common responsibility to the issue based on its paramount importance to the international community as a whole.[364]

The concept of 'common concern of humankind' has been referred to in UN General Assembly resolutions[365] and the preambles of conventions. As one commentator observed "it is conceded that, if and once the concept of common concern of mankind becomes widely and unequivocally accepted, rights and obligations are bound to flow from it, then one is led to consider as its manifestation or even materialization the right to a healthy environment: within the ambit of the *droit de l'humanite*, the common concern of humankind finds expression in the exercise of the recognised right to a healthy environment, in all its dimensions…"[366]

364 Laura Horn, 'The Implication of the Concept of Common Concern of a Human Kind on a Human Right to a Healthy Environment', (2004) 1/2 MqJICEL 233-268, 244.

365 For example, see, the UN GA Resolution 43/53 of 27/01/1989 on "*Protection of global climate for present and future generations of mankind*", adopted at 70th plenary meeting; reproduced in, 'Selected International Legal Materials', (1990) 5 Am. U. J. Int'l L. & Pol. 525-528; see, Durwood Zaelke and James Cameron, 'Global Warming and Climate Change - An Overview of the International Legal Process' (1990) 5 Am. U. J. Int'l L. & Pol. 249-290, 269, 272. In (para.1) of the Resolution 43/53 the GA "recognizes that climate change is a common concern of mankind, since climate is an essential condition which sustains life on earth", and in (para.2) "determines that necessary and timely action should be taken to deal with climate change within a global framework". Further see, the UN GA Resolution 44/207 on "*Protection of global climate for present and future generations of mankind*" was adopted on 22/11/1989, at its 85th plenary meeting. Under the same heading, the UN GA Resolution 45/212 was adopted on 21/12/1990 at its 71st plenary meeting. In the Resolution 45/212 the GA *reaffirms* its previous two resolutions (43/53 of 1988 and 44/207 of 1989) cited above. Furthermore, in the UN GA Resolution 46/169 on "*Protection of global climate for present and future generations of mankind*", adopted on 19/12/1991 at its 78th plenary meeting, and the UN GA Resolution 47/195, adopted on 22/12/1992 at its 93rd plenary meeting, the General Assembly *recalls* its resolutions 43/53 of 1988 and 44/207 of 1989 in which it recognized climate change as a common concern of mankind. Also see, above noted resolution, i.e. the General Assembly resolution 63/32 on "*Protection of global climate for present and future generations*" was adopted on 26/11/2008 at its 60th plenary meeting.

366 Antonio Augusto Cançado Trindade, '*The Contribution of International Human Rights Law to Environmental Protection, with special reference to Global Environmental Change'*, in B Weiss (ed.) Environmental Change and International Law: New Challenges and Dimensions (United Nations University Press, 1992) 245, 254; also see, Horn (n. 364) 260.

The concept of common heritage of mankind is mainly a concept of conservation and of transmission of a heritage to the future generations.[367]

Thus these principles are incorporated into international law. It seems that discussions on the appropriateness[368] of such conceptions as appeared in the 1980s and 1990s are now resolved in one way or another. As Weiss put in 1989: "We, as a species, hold the natural and cultural environment of Our planet in common, both with other members of the present generation and with other generations, past and future. At any given time, each generation is both a custodian or trustee of the planet for future generations and a beneficiary of its fruits. This imposes obligations upon us to care for the planet and gives us certain rights to use it".[369] Weiss emphasized that "the use of equity to provide equitable standards for allocating and sharing resources and benefits lays the foundation for developing principles of intergenerational equity. These principles can build upon the increasing use by the International Court of Justice of equitable principles to achieve a result that the Court views as fair and just".[370]

Weiss suggested the notion of "intergenerational equity" which "calls for equality among generations in the sense that each generation is entitled to inherit a robust planet that on balance is at least as good as that of previous generations".[371] The notion of intergenerational equity, on the one hand, outlines the responsibility of each generation to be fair to future generations in the use they make of their natural and cultural resource base", which is referred to as "inter-generational equity", and on the other hand, "refers to fair dealing in the consumption and exploitation of resources among and between members of the present generation" which is referred

367 Kiss 'Conserving the Common Heritage of Mankind', (n. 71) 776.

368 For example, see, Anthony D'Amato, 'Do We Owe a Duty to Future Generations to Preserve the Global Environment?'(1990) 84/1 AJIL 190-198.

369 Edith Brown Weiss, *In Fairness to Future Generations: International Law, Common Patrimony and Intergenerational Equity*, (Transnational, United Nations University, 1989) 17.

370 *Ibid* p.37.

371 Edith Brown Weiss, 'Our Rights and Obligations to Future Generations for the Environment' (1990) 84/1 AJIL 198-207, 200 (The author proposed three basic principles of intergenerational equity. "First, each generation should be required to conserve the diversity of the natural and cultural resource base, so that it does not unduly restrict the options available to future generations in solving their problems and satisfying their own values, and should also be entitled to diversity comparable to that enjoyed by the previous generations. This principle is called 'conservation of options'. Second, each generation should be required to maintain the quality of the planet so that it is passed on in no worse condition than that in which it was received, and should also be entitled to planetary quality comparable to that enjoyed by previous generations. This is the principle of 'conservation of quality'. Third, each generation should provide its members with equitable rights of access to the legacy of past generations and should conserve this access for future generations. This is the principle of 'conservation of access'…", *ibid* 201-202. According to the author, "intergenerational planetary rights may be regarded as group rights, as distinct from individual rights, in the sense that generations hold these rights as groups in relation to other generations- past, present and future. They exist regardless of the number and identity of individuals making up each generation", *ibid* 203.); for the same arguments, also see, Weiss, 'In Fairness to Future Generations and Sustainable Development' (n. 369) 19, 22-24; further see, Lothar Gündling, '*Our Responsibility to Future Generations*' (1990) 84/1 AJIL 207-212; Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law and the Environment*, (Third Edition, Oxford University Press 2009) 119-122.

to as "intra-generational equity".[372] The theory of inter-generational equity "requires each generation to use and develop its natural and cultural heritage in such a manner that it can be passed on to future generations in no worse condition than it was received. Central to this idea is the need to conserve options for the future use of resources, including their quality, and that of the natural environment".[373] Schachter stated the following as minimum entailed by "intra-generational" equity: "It has become virtually platitudinous to suggest that everyone is entitled to the necessities of life: food, shelter, health care, education, and the essential infrastructure for social organization… It is scarcely startling to find that a similar principle has been advanced on the international level".[374] Unlike inter-generational equity, intra-generational equity deals with inequity within the existing economic system.[375]

Furthermore, rights of future generations have also been approached from the perspective of human rights. According to Alexandre Kiss, "the link between human rights and environment conservation is clear: human rights must be guaranteed also for the future, to the coming generations, and this implies the management of natural resources with the aim of not exhausting them. This applies, in particular, to economic and social rights. No State is entitled to behave in such a way that its actions deprive future generations of economic and social rights or annihilate all hope for future generations to achieve the objectives which, unfortunately, are all that these rights represent at the moment for a large part of mankind".[376]

The UNESCO "*Declaration on the Responsibilities of the Present Generations towards Future Generations*"[377], adopted on 12/11/1997, in its Preamble paragraph 6 emphasizes "the necessity for establishing new, equitable and global links of partnership and *intragenerational solidarity*, and for promoting *inter-generational solidarity* for the perpetuation of humankind". Thus the concepts of intragenerational equity and intergenerational equity innovated and developed by the international legal doctrine have been transformed into an international instrument.

It is argued that "despite the recognition of the common but differentiated responsibility principle, and the principles of intra and intergenerational equity

372 Maggio (n. 156) 163; also see, Alam (n. 56) 633 (The author added that "despite the recognition of the common but differentiated responsibility principle, and the principles of inter and intergenerational equity by the legal instruments dealing with sustainable development, the international community has done little to assist in the realization of these principles beyond mere pronouncements in the preambles of treaties and other documents", *ibid* 634.).

373 Birnie, Boyle and Redgwell (n. 371) 119.

374 Maggio (n. 156) 164 citing Oscar Schachter, *Sharing the World's Resources,* (Columbia University Press 1977) 16.

375 Birnie, Boyle and Redgwell (n. 371) 122.

376 Alexandre Kiss, 'Concept and Possible Implications of the Right to Environment', in K.H. Mahoney and P. Mahoney (eds.) *Human Rights in the Twenty-first Century, (*Kluwer Academic Publishers, 1993) 551-559, 553.

377 The "*Declaration on the Responsibilities of the Present Generations Towards Future Generations*" was adopted on 12/11/1997 by the General Conference of the UNESCO, meeting in Paris from 21 October to 12 November 1997 at its 29th session. In Preamble para.5 of the 1997 Declaration it is further stressed that "full respect for human rights and ideals of democracy constitute an essential basis for the protection of the needs and interests of future generations."

by the legal instruments dealing with sustainable development, the international community has done little to assist in the realization of these principles beyond mere pronouncements in the preambles of treaties and other documents".[378] The essence of the question with respect to the theory of inter-generational equity is the one focused on implementation.[379] While the general concept of an obligation to act responsibly with respect to the interests of future generations is understandable, "it does not in itself help to resolve the practical issues of how it is to be implemented".[380]

2. Sustainable Development

i-) Recognition and Scope of the Principle in Soft and Hard Law Instruments and International Jurisprudence

Article 1(1) of the "*Declaration on the Right to Development*"[381] of 04/12/1986 provides that "the right to development is an inalienable human right".[382] The Preamble to the Declaration on the Right to Development of 1986 clarifies the notion of development by stating that "development is a comprehensive, economic, social and cultural process which aims at the constant improvement and well-being of the entire population and of al1 individuals on the basis of their active, free and meaningful participation in development and in the fair distribution of the benefits resulting therefrom", (Preamble, para.2). According to Rosas, although the 1986 Declaration is not a binding instrument, "one could assert that the Declaration reflects general international law".[383] However, there are views which find the legal status of the right to development has been doubtful.[384]

The UN General Assembly, in its Resolution 42/186 of 11/12/1987, adopted the "*Environmental Perspective to the Year 2000 and Beyond*", which had been prepared by the Governing Council of UNEP. In this document, paragraph (a) emphasizes that "the achievement over time of such a balance between population and environmental

378 Alam (n. 56) 634.

379 Gündling (n. 371) 207-212.

380 Tromans (n. 330) 375.

381 The "*Declaration on the Right to Development*" was adopted by General Assembly resolution 41/128 on 04/12/1986; reproduced in, UNHCHR, Human Rights - A Compilation of International Instruments, Vol I (First Part, 2002) 454-458. The UN GA resolution 41/128 was adopted by 146 votes to 1 (USA) with 8 abstentions (Denmark, FRG, Finland, Iceland, Israel, Japan, Sweden and the UK). Preambular (para.11) reads as follows: "Considering that international peace and security are essential elements for the realization of the right to development".

382 See generally, Philip Alston and Mary Robinson (eds.), *Human Rights and Development: Towards Mutual Reinforcement*, (Oxford University Press, 2005); Bard A. Andreassen and Stephen P. Marks (eds.), *Development as a Human Right: Legal, Political and Economic Dimensions*, (Second edition, Intersentia, 2010).

383 Allan Rosas, '*The Right to Development*', in A. Eide, C. Krause and A. Rosas (eds.) *Economic, Social and Cultural Rights,* (Second edition, Martinus Nijhoff Publishers, 2001) 119-130, 123; also see, Philip Alston, 'Making Space for New Human Rights: The Case of the Right to Development', (1988) 1 Harv. Hum. Rts. Y.B. 3-40, 21 (According to Alston "while the Declaration on the Right to Development reflects a wide range of political compromises hammered out over a five year period, it has succeeded more in restating and enshrining the competing and often contradictory visions of the different groups than in resolving them".).

384 Birnie, Boyle and Redgwell (n. 371) 118.

capacities as would make possible sustainable development, keeping in view the links between population levels, consumption patterns, poverty and the natural resource base..."

Some of the provisions of the 1992 Rio Declaration clearly refer to the concept of sustainable development. For example, Principle 1 states that "human beings are at the center of concerns for *sustainable development*". The wording of Principle 1 demonstrates that "the drafters' position is anthropocentric –man and his associated cultural endeavors are at the vital center of the sustainable development Project".[385] Principle 4 provides that "in order to achieve sustainable development, environmental protection shall constitute an integral part of the development process". According to one commentator "Principle 4 is the closest the Rio Declaration comes to a definition of 'sustainable development, generally succeeding at finding the balance between development and environment considerations. The principle reflects a more action-oriented approach toward defining sustainable development than many of the Declaration's other principles".[386] Pursuant to Principle 27, States and people shall cooperate in good faith and in a spirit of partnership in the fulfillment of the principles embodied in this Declaration and in the further development of international law in the field of sustainable development.

Furthermore, Principle 12[387] of the Rio Declaration of 1992 provides the following: "States should cooperate to promote a supportive and open international economic system that would lead to economic growth and *sustainable development in all countries*, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. *Unilateral actions*[388] to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus." (Emphasis added).

385 Batt & Short, (n. 69) 250.

386 Kovar, (n. 68) 127.

387 Kuei-Jung Ni, 'Contemporary Prospects for the Application of Principle 12 of the Rio Declaration', (2001) 14/1 Geo. Int'l Envtl. L. Rev. 1-33 (The author observed that "the WTO decisions suggest that the non-legally binding character of Principle 12 of the Rio Declaration does not prevent it from being a useful tool. It could be used to supplement the judgments that are required to take into account environmental protection. Hence, the Principle no longer remains a purely soft law, but has already been hardened by the relevant tribunals", *ibid* 32-33.).

388 With regard to the concept of "unilateral actions" in environmental law, see as an early analysis, Richard B. Bilder, 'The Role of Unilateral State Action in Prevention International Environmental Injury', (1981) 14/1 Vand. J. Transnat'l L. 51 (This article was initially written in 1973. The author defined unilateral action "as any action which a state takes solely on its own, independent of any express cooperative arrangement with any other state or international institution", ibid53. The author concluded that "unilateral state action to prevent international environmental injury is likely to play an important and continuing role in efforts to deal with international environmental problems… While multilateral actions seem generally preferable to unilateral action, effective multilateral arrangement in many cases may not be practically attainable. Unilateral action may be the only feasible alternative to inaction", ibid 95.); further see, Alfred P. Rubin, 'The International Legal Effects of Unilateral Declarations', (1977) 71/1 AJIL 1-30 (The author particularly focused on the ICJ's Judgment rendered in the *Nuclear Test* cases of 1974.); also see, Oscar Schachter, 'The Emergence of International Environmental Law', (1990) J. Int'l Aff. 457-493, 489.

Sustainable development is defined in the Brundtland Commission's report[389] as "development that meets the needs… of the present without compromising the ability of future generations to meet their own needs".[390] Brown Weiss has stated that "sustainable development implies that future generations have as much right as the present generation to a robust environment with which to meet their own needs and preferences… The notion that future generations have rights to inherit a robust environment provides a solid normative underpinning for environmentally sustainable development. In its absence sustainable development might depend entirely on a sense of noblesse oblige of the present generation".[391]

Article 3, paragraph 4, of the UN "Framework Convention on Climate Change" of 09/05/1992 provides that the Parties have a right to, and should, promote sustainable development. Article 3, paragraph 5, of the UNFCCC mandates that "the Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change…" As one commentator observed "this language merely repeats the first and second clause of Principle 12 of the Rio Declaration, and slightly changes certain words in order to accommodate the particular needs of this convention".[392]

In addition to some preambular paragraphs, Article 6 (conservation and sustainable use of biological diversity) and Article 10 (sustainable use of components of biological diversity), as well as Articles 8, 11-12, and 16-18, of the "Convention on Biological Diversity" of 05/06/1992 recognize the same concept. Pursuant to Article 1.1 of the "*International Treaty on Plant Genetic Resources for Food and Agriculture*" (ITPGRFA) the objectives of this Treaty are the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity, for sustainable agriculture and food security. Article 6.1 of the "ITPGRFA" provides that "the Contracting Parties shall develop and maintain appropriate policy

389 Brundtland Report, *Report of the World Commission on Environment and Development, Our Common Future* (1987) 43.

390 Strong (n. 16) 22 (According to the author, "in compelling terms the (Brundtland) Commission documented the case for sustainable development – the full integration of environmental and economic development – as the only sound means of ensuring both our environmental and our economic future".); Max V. Soto, 'General Principles of International Environmental Law', (1996) 3/1 ILSA J. Int'l & Comp. L. 193, 205-206; Maggio (n. 156) 162; Ida L. Bostian, 'Flushing the Danube: The World Court's Decision Concerning the Gabcikovo Dam', (1998) 9/2 Colo. J. Int'l Envtl. L. & Pol'y 401-427, 426.

391 Edith Brown Weiss, 'Environmentally Sustainable Competitiveness: A Comment', (1993) 102/ 8 Yale L. J. 2123-2142, 2123, 2124 (The author added that "actions today irreversibly degrade the environment, or impose such high remedial costs that degradation is effectively irreversible, burden future generations in that they will have fewer resources to meet increasing demands. No country should have the right to degrade the environment irreversibly for future generations in the name of national competitiveness", *ibid* 2126-2127. The author also stated that "environmentally sustainable development has become a criterion for evaluating all development efforts, whether in industrialized or in developing countries", *ibid* 2128.).

392 Ni (n. 387) 25.

and legal measures that promote the sustainable use of plant genetic resources for food and agriculture".[393]

Similarly, Article 3, paragraph 2 and Article 4, paragraphs 1-3, of the "Barcelona Convention" of 10/06/1995 also refer to the concept of sustainable development. Preambular paragraph 2 of the "Industrial Accidents Convention" of 17/03/1992 recognizes "the importance and urgency of preventing serious adverse effects of industrial accidents on human beings and the environment, and of promoting all measures that stimulate the rational, economic and efficient use of preventive, preparedness and response measures to enable *environmentally sound and sustainable economic development*". (Emphasis added).

Note that in the "*Gabcikovo-Nagymaros*" Judgment of 25/09/1997, the ICJ explicitly referred to the concept of sustainable development.[394] The ICJ's reliance on the principle of sustainable development in this case was identified as an example how a "principle" soft in character in a treaty but laying down parameters which affect the way courts decide cases had been used.[395]

In his Dissenting Opinion[396] appended to the "*Gabcikovo-Nagymaros*" Judgment of 25/09/1997, Judge Oda recognizes that "concern for the preservation of the environment has rapidly entered the realm of international law and that a number of treaties and conventions have been concluded on either a multilateral or bilateral basis, particularly since the Declaration on the Human Environment was adopted in 1972 at Stockholm and reinforced by the Rio de Janeiro Declaration in 1992, drafted 20 years after the Stockholm Declaration. It is a great problem for the whole of mankind to strike a satisfactory balance between more or less contradictory issues of economic development on the one hand and preservation of the environment on the other, with a view to maintaining sustainable development. Any construction work relating to economic development would be bound to affect the existing environment to some extent but modern technology would, I am sure, be able to provide some acceptable ways of balancing the two conflicting interests".

393 With regard to settlement of a dispute concerning the interpretation or application of the "ITPGRFA", the parties concerned shall seek solutions by negotiation, (Article 22.1). Article 22.3 provides that a Contracting Party may declare at any time that if a dispute not resolved in accordance with Article 22.1, it accepts one or both of the following means of dispute settlement as compulsory: (a) Arbitration in accordance with the procedure laid down in Part 1 of Annex II to this Treaty; (b) Submission of the dispute to the International Court of Justice. Under "*Annex II - Part 1. Arbitration*" of the "ITPGRFA" Article 6 provides: "The arbitral tribunal may, at the request of one of the parties to the dispute, recommend essential interim measures of protection".

394 Gabcikovo-Nagymaros Project Case [1997] ICJ Rep 77-78, para.140. The Court stated that "such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past. This need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development".

395 Boyle, 'Reflections on Treaties and Soft Law' (n. 1) 907, note 33.

396 Dissenting Opinion of Judge Oda appended to Gabcikovo-Nagymaros Project Case [1997] ICJ Rep 160-161, para.14.

It appears that the international community now reached a consensus that the States must pursue development which is environmentally, socially and economically sustainable. However, perspectives differ on addressing current needs within this paradigm without also prejudicing future needs; viewpoints diverge on the methodology for balancing the three phenomena.[397]

ii-) Concept of Sustainable Development in the EU Instruments

Prior to 1987, the EEC Treaty contained no mention of environmental protection. This does not mean that the Community did not produce legislation concerning the environment and its protection. In the period between 1973 and 1987, the Community passed over 150 environmental legislative acts.[398]

"**Single European Act**" of 1986:

The "*Single European Act*"[399] (SEA), which signed in February 1986 and entered into force on 01/07/1987, granted the EEC express environmental policy-creating and law-making powers.[400] The SEA introduced Title VII on the Environment, consisting of Articles 130r, 130s and 130t, into the Treaty of Rome.

Under "*Title VII – Environment*" (Article 130r, para.1) reads as follows: "Action by the Community relating to the environment shall have the following objectives: to preserve, protect and improve the quality of the environment; to contribute towards protecting human health; to ensure a prudent and rational utilization of natural resources."

These three objectives are accompanied by a number of policy maxims, such as the principle to take preventive action; the principle to rectify environmental damage, as a priority, at source, and "polluter pays" principle. They are not only to govern merely environmental activities, but environmental protection requirements are to be a component of the Community's other policies, (Article 130r, para.2).

Furthermore, when the Community prepares environmental measures it is required that the following considerations are to be taken into account: (i) available scientific and technical data; (ii) environmental conditions in the various regions of the Community; (iii) the potential benefits and costs of action or of lack of action, and (iv) the economic and social development of the Community as a whole and the balanced development of its regions, (Article 130r, para.3).

397 Maggio (n. 156) 170-171.

398 Christian Zacker, 'Environmental Law of the European Economic Community: New Powers Under the Single European Act', (1991) 14/2 B. C. Int'l & Comp. L. Rev. 249-278, 261; David Freestone, '*European Community Environmental Policy and Law*', (1991) 18/1 J. L. & Soc'y. 135.

399 The "*Single European Act*" (SEA) was signed in Luxembourg on 17/02/1986 and in The Hague on 18/02/1986, and entered into force on 01/07/1987; (OJ, L 169/1, (29/06/1987).

400 Davidson, J. Scott, 'The Single European Act and the Environment', (1987) 2/4 Int'l J. Estuarine & Coastal L. 259-263; Eileen Barrington, 'European Environmental Law: Before and After Maastricht', (1993) 2 U. Miami YBIL 79-89, 81-84.

But pursuant to (Article 130r, para.4), the Community shall take action in environmental matters if the above mentioned objectives can be attained better at Community level than at the level of the individual Member States. The second sentence in (para.4) is as follows: "Without prejudice to certain measures of a Community nature, the Member States shall finance and implement the other measures". Finally, (Article 130r, para.5) deals with the relationship of the Community and its member states vis-a-vis third countries and international organizations.

Consequently, (Article 130r) establishes Community policy and objectives concerning environmental matters. It is observed that "although the objectives in Article 130r are compulsory, they are not always mutually compatible. For example, an improvement of the quality of the environment does not necessarily result in rational utilization of natural resources".[401] The specific objectives enumerated in (Article 130r, para.1) are limited since they are exhaustive.[402] The criteria laid down in Article 130r, para.1, clearly provided not just the preservation of the environmental status quo, but also its improvement. Consequently, the improvement element essentially requires positive action by the EC and Member States.[403]

(Article 130s) clarifies the procedure for the Council in deciding the action to be taken by the Community. The Council, acting unanimously on a proposal from the Commission of the European Communities and after consulting the European Parliament and the Economic and Social Committee, decides on the actions to be taken by the Community. Sub-paragraph 2 of the same Article provides that the Council, by unanimous vote, defines those matters on which decisions are to be taken by a qualified majority.

The same Title, (Article 130t) provides that "the protective measures adopted, in common pursuant to Article 130s shall not prevent any Member State from maintaining or introducing more stringent protective measures compatible with this Treaty." Action taken under Article 130 was subject to the principle of subsidiarity and to the general safeguard provision in Article 130T.[404]

Articles 130r to 130t made a significant contribution to the EC's environmental competences since it made it easier for the Community to pursue a proper environmental policy with its own objectives and criteria, as opposed to a mere harmonization of national policies. Perhaps the most important provision of the Treaty's new Title "Environment" is (Article 130r, para.2) as it makes environment

401 Dietrich Gorny, 'The European Environment Agency and the Freedom of Environmental Information Directive: Potential Cornerstones of EC Environmental Law', (1991) 14/2 B. C. Int'l & Comp. L. Rev. 279, 281.

402 Zacker (n. 398) 265.

403 Scott (n. 400) 261.

404 Freestone, '*European Community Environmental Policy and Law*' (n. 398) 137.

protection requirements a component of all other Community policies.[405] Up to 1987, the EEC Treaty did not mention the term "environment", although the Community has produced some important directives in the field, as well as ratified a considerable number of international environmental conventions.[406]

The SEA also added Article 100a to the Treaty, which was integrated into Part Three ("Policy of the Community"), under Title I-Common Rules. In adopting measures which have as their object the establishment and functioning of the internal market, the Council is required to decide by way of qualified majority and according to the co-operation procedure, (Article 100a, para.1). Paragraph 3 of the same Article indicates that the Commission, in its proposals involving environmental protection, will take as a base a high level of protection.[407] The ECJ in its 'Titanium Dioxide' case judgment of 1991[408], while set aside the Council Directive 89/1428 on waste from titanium dioxide industry, held, *inter alia*, that Article 100a, para.3, obliges the Commission, in the field of environmental protection, to take as a base a high level of protection.[409]

Soon after the entry into force of the SEA on 01/07/1987, the Council Regulation (EEC) No 2242/87 of 23/07/1987 on "*Action by the Community relating to the environment*" was issued.[410] The purpose of the Regulation was to draw a framework for the Community's financial contribution in carrying out certain specific measures under this Regulation. While Preambular paragraph 1 of the Council Regulation 2242/87 refers to, in particular, Article 130s of the SEA, paragraph 6 states that "action by the Community relating to the environment should have as its objective to preserve, protect and improve the quality of the environment, to contribute towards protecting human health, and to ensure a prudent and rational utilization of natural resources".

"**Declaration on the Environment**" of 1988:

The European Council meeting at Rhodes on 2 and 3 December 1988 issued a "Conclusions of the Presidency – European Council".[411] As stated in the Conclusions

405 Thomas Bunge, 'European Environmental Law: Community Legislation and Member States' Competences under the EEC Treaty', (1990) 59/4 Rev. Jur. U.P.R. 669-692, 682; Freestone, '*European Community Environmental Policy and Law*', (n. 398) 137.

406 Bunge (n. 405) 671-672.

407 Barrington (n. 400) 82.

408 Case C 300/89, (Commission of the European Communities v. Council of the European Communities) [1991] E.C.R. 2867, para.24. In this case the Council Directive 89/1428 had been adopted in accordance with Article 130s (unanimity and consultation), the Commission had proposed Article 100a (qualified majority and co-operation procedure) as its legal basis. The ECJ held that these two provisions could not be applied cumulatively, and under the circumstances of the case Article 100a was the proper legal basis, (Judgment, paras.21, 25).

409 Barrington (n. 400) 82-83.

410 Council Regulation (EEC) No 2242/87 of 23/07/1987 on 'Action by the Community relating to the environment'; OJ, L 207/8, (29/07/1987).

411 Available at, <http://www.europarl.europa.eu/summits/rhodes/rh1_en.pdf>

the Council "considers that protection of the environment is a matter of vital significance to the Community and to the rest of the world, and urges the Community and Member States to take every initiative and all essential steps, including at international level, in accordance with the fundamental lines of the statement set out in Annex I."

The Council in the aforementioned Annex I, titled "Declaration on the Environment"[412], placed the environment issue high on its own agenda and urged the Community to redouble its efforts in this field.

In paragraph 2 of that Declaration, it was stated that "the goals of the environmental protection laid down for the Community have recently been defined by the Single European Act. Some progress has been made in reducing pollution and in ensuring prudent management of natural resources. But these activities by themselves are not enough. Within the Community, it is essential to increase efforts to protect the environment directly and also to ensure that such protection becomes an integral component of other policies. *Sustainable development must be one of the over-riding objectives of all Community policies*". (Emphasis added).

"**Maastricht Treaty**" of 1992:

In Preambular paragraph 7 of the Maastricht Treaty ("Treaty on European Union")[413] of 07/02/1992, the signatories declare that they are "Determined to promote economic and social progress for their peoples, within the context of the accomplishment of the internal market and of reinforced cohesion and environmental protection…" Under Title I "Common Provisions" of Article B indicates the promotion of "economic and social progress which is balanced and sustainable" as one of the objectives of the Union.

The "Maastricht Treaty" ("*Provisions Amending the Treaty Establishing the European Economic Community with a View to Establishing the European Community*") of 07/02/1992[414] amended Article 2 to include as one of the Community's tasks the promotion of "sustainable and non-inflationary growth respecting the environment". Pursuant to Article 3(k), the activities of the Community include "a policy in the sphere of the environment".

The Maastricht Treaty also amends Articles 130r, 130s and 130t of the Treaty of Rome. In the amended Articles the new phrase Community's "policy on the environment" has been used, while it was "action by the Community relating to

412 Available at, <http://www.europarl.europa.eu/summits/rhodes/rh2_en.pdf>.

413 David Wilkinson, 'Maastricht and the Environment: The Implications for the EC's Environment Policy of the Treaty on European Union', (1992) 4/2 J. Envtl. L. 221-239; Barrington (n. 400) 84-89.

414 The "*Maastricht Treaty*" was adopted on 07/02/1992 and entered into force on 01/11/1993; OJ, C 191 (29/07/1992); available at, <http://www.eurotreaties.com/maastrichtec.pdf>.

environment" in the 1987 SEA and subsequent the Council Regulation (EEC) No 2242/87 of 23/07/1987.

Under "*TITLE XVI – Environment*" of the *Maastricht Treaty*, (Article 130r, para.1) added a new fourth objective relating to the Community's environmental actions: "promoting measures at international level to deal with regional or world-wide environmental problems". As shown above, *the Single European Act* of 1986 (Art.130r, para.1) sets out only three objectives. The added fourth objective in Article 130r, para.1, of the *Maastricht Treaty*, shows not only awareness with respect to global nature of environmental issues, but also indicates the intention of the Community to play a global role in this area.

With regard to policy maxims, in addition to previously indicated three principles, namely preventive action, rectification of environmental damage and polluter pays principle, the amended (Article 130r, para.2) of the 1992 *Maastricht Treaty* provides important contribution: The Community policy on the environment "shall aim at a high level of protection". The same provision further indicates that the policy on the environment "shall be based on the *precautionary principle*", which was lacking in (Art.130r, para.2) of the 1986 *SEA*.

Although there is some unclarity with respect to the application of the precautionary principle, some authors suggested that it might, for example, include "the requirement that protective measures should be developed before specific environmental hazards are evident, and that the onus of proof that environmental damage will not occur should be placed on the polluter. However, developing policies to counter an environmental threat before its cause has been established beyond doubt can be both technically and politically problematic".[415]

(Article 130r, para.2) of the *Maastricht Treaty* also provides another significant contribution. In order to understand that contribution one may recall (Article 130r, para.2) of the *Single European Act* of 1986 which only stated that "environmental protection requirements are to be a component of the Community's other policies", the same provision in the *Maastricht Treaty* provides clarification to this requirement, as well as extends its scope in the following words: "Environmental protection requirements must be integrated into the definition and implementation of other Community policies. In this context, harmonization measures answering these requirements shall include, where appropriate, *a safeguard clause allowing Member States to take provisional measures*, for non-economic environmental reasons, subject to a Community inspection procedure."[416] (Emphasis added).

415 Wilkinson (n. 413) 224.

416 However, some authors expressed their concerned that "it is difficult to know in advance wat 'non-economic environmental reasons' the Commission will accept without some guide-lines given by the case law of the ECJ or by a Communication of the Commission", see, Barrington (n. 400) 86.

With regard to elements to be taken into account in preparing environmental measures (Article 130r, para.3) of both the Single *European Act* of 1986 and *Maastricht Treaty* of 1992 are identical.

It seems that (Article 130r, para.4) of the *Maastricht Treaty* of 1992, without making significant change, simply combines (Article 130r, paras.4 and 5) of the *Single European Act* of 1986 which has been shown above.

Finally, (Article 130t) of the *Maastricht Treaty* of 1992 reads as follows: "The protective measures adopted pursuant to Article 130s shall not prevent any Member State from maintaining or introducing more stringent protective measures. Such measures must be compatible with this Treaty. They shall be notified to the Commission."

In light of (Article 130r, para.2) of the *Maastricht Treaty* of 1992, it is understood that it was the first time that an explicit provision concerning provisional measures for environmental protection purposes was included into the European Community legislation. It introduced important changes to the principles underlying European Community policy, and the way in which environmental legislation is decided and implemented.[417]

"**Amsterdam Treaty**" of 1997:

Under "*TITLE XIX – Environment*" of the *Amsterdam Treaty* of 1997[418], with regard to the Community policy on the environment (Article 174, para.1) lists four objectives. This provision is identical with the *Maastricht Treaty* of 1992 (Article 130r, para.1).

(Article 174, para.2) of the *Amsterdam Treaty* reads as follows:

> **2.** Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the *precautionary principle* and on the *principles that preventive action* should be taken, that *environmental damage* should as a priority be *rectified at source and that the polluter should pay*.
>
> In this context, harmonisation measures answering environmental protection requirements shall include, where appropriate, a safeguard clause allowing Member States to take provisional measures, for non-economic environmental reasons, subject to a Community inspection procedure. (Emphasis added).

417 Wilkinson (n. 413) 222.

418 The "*Consolidated Version of the Treaty Establishing the European Community*" (97/C 340/03) (Treaty of Amsterdam Amending the Treaty on European Union, the Treaties Establishing the European Communities and Related Acts) [1997] OJ C 340.

As seen, the content of (Article 174, para.2), including its subparagraph 2, of the *Amsterdam Treaty* is again identical with (Article 130r, para.2) of the *Maastricht Treaty* of 1992. It may be added that under "Section 4 – The Court of Justice" of the *Amsterdam Treaty* (Article 243) (*ex Article 186*) provides that "the Court of Justice may in any cases before it prescribe any necessary interim measures."

With regard to elements to be taken into account in preparing environmental measures (Article 130r, para.3) of both the 1986 *Single European Act* and the 1992 *Maastricht Treaty* and (Article 174, para.3) of the 1997 *Amsterdam Treaty* are identical: (i) available scientific and technical data; (ii) environmental conditions in the various regions of the Community; (iii) the potential benefits and costs of action or of lack of action, and (iv) the economic and social development of the Community as a whole and the balanced development of its regions.

(Article 174, para.4) of the *Amsterdam Treaty* of 1997 likewise repeats (Article 130r, para.4) of the *Maastricht Treaty* of 1992. The same similarity also appears in (Article 175)[419] of the *Amsterdam Treaty* of 1997 and (Article 130s) of the *Maastricht Treaty* of 1992.

Finally, (Article 176) of the *Amsterdam Treaty* of 1997 is same with (Article 130t) of the *Maastricht Treaty* of 1992, except the difference that while in the 1997 Treaty reference was made to (Article 175), in the 1992 Treaty it was (Article 130s).

In the preamble paragraph 8 of the "Consolidated Version of the Treaty Establishing the European Community" (97/C 340/03) ("*Treaty of Amsterdam*") it is provided that the signatories were "*Determined* to promote economic and social progress for their peoples, *taking into account the principle of sustainable development* and within the context of the accomplishment of the internal market and of reinforced cohesion and *environmental protection*, and to implement policies ensuring that advances in economic integration are accompanied by parallel progress in other fields".

419 Some provisions of Article 175 of the Amsterdam Treaty of 1997 reads as follows:
Article 175 (*ex Article 130s*)
2. By way of derogation from the decision-making procedure provided for in paragraph 1 and without prejudice to Article 95, the Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament, the Economic and Social Committee and the Committee of the Regions, shall adopt:
- provisions primarily of a fiscal nature;
- *measures concerning town and country planning, land use with the exception of waste management and measures of a general nature, and management of water resources*;
- measures significantly affecting a Member State's choice between different energy sources and the general structure of its energy supply.
The Council may, under the conditions laid down in the preceding subparagraph, define those matters referred to in this paragraph on which decisions are to be taken by a qualified majority. (...)
4. Without prejudice to certain measures of a Community nature, the Member States shall finance and implement the environment policy.
5. *Without prejudice to the principle that the polluter should pay*, if a measure based on the provisions of paragraph 1 involves costs deemed disproportionate for the public authorities of a Member State, the Council shall, in the act adopting that measure, lay down appropriate provisions in the form of:
- temporary derogations, and/or
- financial support from the Cohesion Fund set up pursuant to Article 161.

The "*Consolidated Version of the Treaty Establishing the European Community*", under "Part One – Principles", Article 2 provides the following: "Article 2 – (*ex Article 2*) - The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing common policies or activities referred to in Articles 3 and 3a, to promote throughout the Community *a harmonious, balanced and sustainable development* of economic activities, a high level of employment and of social protection, equality between men and women, sustainable and non-inflationary growth, a high degree of competitiveness and convergence of economic performance, *a high level of protection and improvement of the quality of the environment*, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States". In accordance with Article 6 (*ex Article 3c*), *environmental protection requirements* must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular *with a view to promoting sustainable development*. (Emphasis added).[420]

"**Charter of Fundamental Rights of the EU**" of 2000:

Article 37 ("Environmental protection") of the "*Charter of Fundamental Rights of the European Union*"[421] of 07/12/2000 provides that "a high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of *sustainable development*." (Emphasis added).

Note that under the ECHR system the European Court of Human Rights has also made references to Article 37 of the 'EU Charter'.[422]

2001-2006 period documents:

"*Presidency Conclusions – Goteborg, European Council, 15 and 16 June 2001*"[423] agreed on a strategy for sustainable development and added an environmental

420 The "Consolidated Version of the Treaty Establishing the European Community" (97/C 340/03) (Treaty of Amsterdam Amending the Treaty on European Union, the Treaties Establishing the European Communities and Related Acts [1997] OJ C 340 "Article 95 (*ex Article 100a*)", paragraphs 3 to 5 reads as follows: "**3.** The Commission, in its proposals envisaged in paragraph 1 concerning health, safety, *environmental protection* and consumer protection, *will take as a base a high level of protection, taking account in particular of any new development based on scientific facts*. Within their respective powers, the European Parliament and the Council will also seek to achieve this objective. **4.** If, after the adoption by the Council or by the Commission of a harmonisation measure, a Member State deems it necessary to maintain national provisions on grounds of major needs referred to in Article 30, or relating to the *protection of the environment* or the working environment, it shall notify the Commission of these provisions as well as the grounds for maintaining them. **5.** Moreover, without prejudice to paragraph 4, if, after the adoption by the Council or by the Commission of a harmonisation measure, a Member State deems it necessary to introduce national provisions based on *new scientific evidence relating to the protection of the environment* or the working environment on grounds of a problem specific to that Member State arising after the adoption of the harmonisation measure, it shall notify the Commission of the envisaged provisions as well as the grounds for introducing them." (Emphasis added).

421 The Charter of Fundamental Rights of the European Union, [2007] OJ, C 303.

422 For example, see, Separate Opinion of Judge Costa appended to *Hatton and Others v. the United Kingdom* (2001) ECtHR; also see, Joint Dissenting Opinion of Judges Costa, Ress, Türmen, Zupancic and Steiner (para.1) appended to the *Hatton and Others*, (GC) Judgment.

423 The Council of the European Union, 'Presidency Conclusions – Göteborg, European Council, 15 and 16 June 2001' <http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/00200-r1.en1.pdf>.

dimension to the Lisbon process for employment, economic reform and social cohesion. Under Title II "A Strategy For Sustainable Development",(para.19) states that "Sustainable development – to meet the needs of the present generation without compromising those of future generations – is a fundamental objective under the Treaties. That requires dealing with economic, social and environmental policies in a mutually reinforcing way. Failure to reverse trends that threaten future quality of life will steeply increase the costs to society or make those trends irreversible". In (para.20) the Council declared that with respect to a strategy for sustainable development it added a third element, i.e. "environmental dimension to the Lisbon strategy" and established "a new approach to policy making". Furthermore, "the Council is invited to finalize and further develop sector strategies for integrating the environment into all relevant Community policy areas with a view to implementing them as soon as possible", (para.32).

"Renewed EU Sustainable Development Strategy" of 2006:

In 2006, the Council adopted a document entitled "*Renewed EU Sustainable Development Strategy*"[424], which sets out a single, coherent strategy on how the EU will more effectively live up to its long-standing commitment to meet the challenges of sustainable development. Pursuant to paragraph 1 of this document "*Sustainable development means that the needs of the present generation should be met without compromising the ability of future generations to meet their own needs*", the formulation of which is an "objective" that governs "all the Union's policies and activities". (Emphasis added). It goes on saying that it aims at "the continuous improvement of the quality of life and well-being on Earth for present and future generations", and that it promotes, *inter alia,* the "environmental protection".

Under Title "Key Objectives" of the "*Renewed EU Sustainable Development Strategy*" of 2006, the first objective indicated to be focused on is "Environmental Protection". It reads: "Safeguard the earth's capacity to support life in all its diversity, respect the limits of the planet's natural resources and ensure a high level of protection and improvement of the quality of the environment. Prevent and reduce environmental pollution and promote sustainable consumption and production to break the link between economic growth and environmental degradation".

The "*Renewed EU Sustainable Development Strategy*" of 2006 under Title "Policy Guiding Principles" also lists a series of principles, which include, for example, "Solidarity within and between generations"; "Open and democratic society" (that refers also to guarantee citizens' right of access to information); "Involvement of citizens" (that includes enhancement of the participation of citizens in decision-

424 The Council of the European Union, 'Review of the EU Sustainable Development Strategy (EU SDS)|Renewed Strategy' Brussels 10117/06, 9 June 2006, <http://register.consilium.europa.eu/pdf/en/06/st10/st10117.en06.pdf>.

making, as well as informing citizens about their impact on the environment and their options for making more sustainable choices); "Policy Integration" (that refers to the notion of "balanced impact assessment"); and "Precautionary Principle" (that is formulated as "Where there is scientific uncertainty, implement evaluation procedures and take appropriate preventive action in order to avoid damage to human health or to the environment"), as well as "Makes Polluters Pay" (which means that "polluters pay for the damage they cause to human health and the environment").

"**Lisbon Treaty**" of 2007:

The "*Treaty of Lisbon*" was signed on 13/12/2007 and entered into force on 01/12/2009.[425] Amendments to the Treaty on European Union and to the Treaty Establishing the European Community are as follows:

The amended Article 2, paragraph 3, reads as follows: "The Union shall establish an internal market. *It shall work for the sustainable development of Europe* based on balanced economic growth and price stability, a highly competitive social market economy, *aiming at* full employment and social progress, and a high *level of protection and improvement of the quality of the environment*. It shall promote scientific and technological advance".

A new Chapter 1 "General Provisions on the Union's External Action" and Articles 10A and 10B were inserted: Article 10A, paragraph 2(d) and (f) states that "2. The Union shall define and pursue common policies and actions, and shall work for a high degree of cooperation in all fields of international relations, in order to: (…) (d) *foster the sustainable* economic, social and *environmental development* of developing countries, with the primary aim of eradicating poverty", "(f) help *develop international measures to preserve and improve the quality of the environment and the sustainable management of global natural resources, in order to ensure sustainable development*".

A new Title I "Categories and Areas of Union Competence" and new Articles 2 A to 2 E were inserted. Article 2 B, paragraph 2 (e) indicates that "Shared competence between the Union and the Member States applies in the following principal areas: (…) (e) environment".

Under Title "Environment (Climate Change)" Article 174 was amended and in paragraph 1, the fourth indent was replaced by the following: "promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change". (Emphasis added).

425 The "*Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community*" was signed at Lisbon on 13/12/2007 and entered into force on 01/12/2009, after being ratified by all the Member States; OJ 2007/C 306/01 (17/12/2007).

Article 175, paragraph 2, the second sub-paragraph was amended as follows: "The Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament, the Economic and Social Committee and the Committee of the Regions, may make the ordinary legislative procedure applicable to the matters referred to in the first subparagraph."

"**Consolidated Version of the Treaty on European Union**" of 2010:[426]

Preambular paragraph 9 states the following: "Determined to promote economic and social progress for their peoples, *taking into account the principle of sustainable development* and within the context of the accomplishment of the internal market and of *reinforced cohesion and environmental protection*, and to implement policies ensuring that advances in economic integration are accompanied by parallel progress in other fields".

Article 3 (ex Article 2 TEU), paragraph 3 provides that "The Union shall establish an internal market. It shall work for the *sustainable development* of Europe based on balanced economic growth and price stability, a highly competitive social market economy, *aiming at* full employment and social progress, and *a high level of protection and improvement of the quality of the environment*. It shall promote scientific and technological advance".

Under Title V, Chapter 1 "General Provisions on the Union's External Action", Article 21, paragraph 2(d) and (f) read as follows: "2. The Union shall define and pursue common policies and actions, and shall work for a high degree of cooperation in all fields of international relations, in order to: (…) (d) foster the *sustainable* economic, social and *environmental development* of developing countries, with the primary aim of eradicating poverty; (…) (f) help *develop international measures to preserve and improve the quality of the environment and the sustainable management of global natural resources, in order to ensure sustainable development*". (Emphasis added).

"**Consolidated Version of the Treaty on the Functioning of the European Union**" of 2010:[427]

Under Title I "Categories and Areas of Union Competence", while pursuant to Article 3(d) the Union shall have exclusive competence in the area of "the conservation of marine biological resources under the common fisheries policy",

426 The "*Consolidated Version of the Treaty on European Union*" [2010] OJ C 83/13.

427 The Consolidated Version of the Treaty on the Functioning of the European Union [2010] OJ C 83/47.

in accordance with Article 4, paragraph 2 (e) shared competence between the Union and the Member States applies in the principal areas, including "environment".[428]

Under Title II "Provisions Having General Application", Article 11 (ex Article 6 TEC) indicates that "*Environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development*."

Under Title XX "Environment" Articles 191 to 193 take place. Article 191 (ex Article 174 TEC) lists four objectives. The only new element in Article 191, paragraph 1, is the reformulated fourth objective which reads as follows: "*promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change*". (Emphasis added).

Except the replacement of term "Union" instead of the term "Community" used in the previous texts (see, Article 174, para.2, of the *Amsterdam Treaty* of 1997 and Article 130r, para.2 of the *Maastricht Treaty* of 1992), Article 191, paragraph 2, including its subparagraph 2, of the "Consolidated Version of the Treaty on the Functioning of the European Union" of 2010 remains the same.

Consequently, an important element for the purposes of this study, i.e. emphasis on "provisional measures" ("environmental protection requirements shall include, where appropriate, a safeguard clause allowing Member States *to take provisional measures*") has been kept in force.

With regard to elements to be taken into account in preparing environmental measures, namely (i) "available scientific and technical data"; (ii) "environmental conditions in the various regions of the Union"; (iii) "the potential benefits and costs of action or of lack of action", and (iv) "the economic and social development of the Union as a whole and the balanced development of its regions" as appeared in Article 191, para.3, of the "Consolidated Version of the Treaty on the Functioning of the European Union" of 2010 are also the same (save the change of the term "Union")

428 Pursuant to Article 114 (ex Article 95 TEC), paragraph 3, of the "Consolidated Version of the Treaty on the Functioning of the European Union", the Commission, "in its proposals concerning health, safety, *environmental protection* and consumer protection, *will take as a base a high level of protection*, taking account in particular of any *new development based on scientific facts*. Within their respective powers, the European Parliament and the Council will also seek to achieve this objective". (Emphasis added). This provision seems to serve to strengthen the precautionary principle. Article 114, paragraph 4 states that "if, after the adoption of a harmonization measure by the European Parliament and the Council, by the Council or by the Commission, a Member State deems it necessary to maintain national provisions on grounds… relating to the protection of the environment… it shall notify the Commission of these provisions as well as the grounds for maintaining them". Moreover, in accordance with paragraph 5 of the same Article, "if, after the adoption of a harmonization measure by the European Parliament and the Council, by the Council or by the Commission, a Member State deems it necessary to introduce national provisions based on new scientific evidence relating to the protection of the environment… on grounds of a problem specific to that Member State arising after the adoption of the harmonization measure, it shall notify the Commission of the envisaged provisions as well as the grounds for introducing them". Furthermore, Article 177, subparagraph 2, provides that "A Cohesion Fund , set up in accordance with the same procedure shall provide a financial contribution to projects in the fields of environment and trans-European networks in the area of transport infrastructure". The importance of Articles 114 and 177 emanate from the fact that, Article 192 (Title XX "Environment"), paragraphs 2 and 5, refer to the mentioned provisions.

with the former texts, (see, Article 130r, para.3, of both the 1986 *Single European Act* and the 1992 *Maastricht Treaty* and Article 174, para.3, of the 1997 *Amsterdam Treaty*).

Coming to Article 192 (ex Article 175 TEC) of the "Consolidated Version of the Treaty on the Functioning of the European Union" of 2010, one may observe some noteworthy changes.

For instance, Article 192, paragraph 2(b) provides the following: "2. By way of derogation from the decision-making procedure provided for in paragraph 1 and without prejudice to *Article 114* (in the former text, reference was made to "Article 95"), the Council acting unanimously in accordance *with a special legislative procedure* (in the former text, "on a proposal from the Commission")… shall adopt: (…) (b) measures affecting: (…) *quantitative management of water resources or affecting, directly or indirectly, the availability of those resources*" (in the former text, "measures of a general nature, and management of water resources").

Final subparagraph of paragraph 2 reads as follows: "The Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament, the Economic and Social Committee and the Committee of the Regions, may make the ordinary legislative procedure applicable to the matters referred to in the first subparagraph". (In the former text, "The Council may, under the conditions laid down in the preceding subparagraph, define those matters referred to in this paragraph on which decisions are to be taken by a qualified majority").

Pursuant to Article 192, paragraph 5, "Without prejudice to the principle that the polluter should pay, if a measure based on the provisions of paragraph 1 involves costs deemed disproportionate for the public authorities of a Member State, such measure shall lay down appropriate provisions in the form of: — temporary derogations, and/or — financial support from the Cohesion Fund set up pursuant to Article 177".

Finally, except the change of the Article numbers referred to, Article 193 of the "Consolidated Version of the Treaty on the Functioning of the European Union" of 2010 ("The protective measures adopted pursuant to Article 192 shall not prevent any Member State from maintaining or introducing more stringent protective measures. Such measures must be compatible with the Treaties. They shall be notified to the Commission"), Article 176 of the *Amsterdam Treaty* of 1997 and Article 130t of the *Maastricht Treaty* of 1992 are the same.

Apart from the provisions regulated within the framework of specific Title "Environment", there are also some other provisions under different Titles in which environmental considerations have also been emphasized. For instance, under Title XXI "Energy", Article 194, paragraph 1, states that "in the context of the establishment

and functioning of the internal market and with regard to *the need to preserve and improve the environment*, Union policy on energy shall aim, in a spirit of solidarity between Member States…"

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