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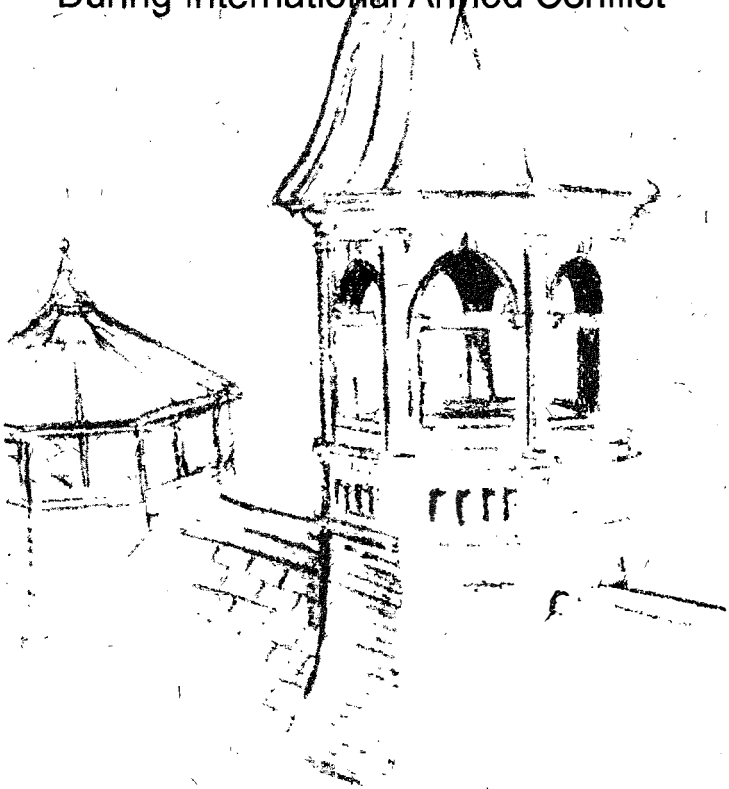
International Environmental Law And Naval War

The Effect of Marine Safety and Pollution Conventions During International Armed Conflict



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International Environmental Law and Naval War

The Effect of Marine Safety and Pollution Conventions During International Armed Conflict

Sonja Ann Jozef Boelaert-Suominen

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Foreword

THE CORNERSTONE OF MODERN INTERNATIONAL ENVIRONMENTAL LAW is the prohibition of transfrontier pollution: states have 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 national jurisdiction. In addition, there is now a substantial body of international treaties laying down detailed régimes for various environmental sectors. Relatedly, recent international conflicts have raised fundamental questions about the relationship between international law and armed conflict. The notion that the rules of general international environmental law continue to apply during armed conflict is now well accepted, but the principles that are usually cited remain at a very high level of abstraction.

Dr. Sonja Ann Jozef Boelaert-Suominen, legal adviser in the Office of the Prosecutor for the International Criminal Tribunal for the former Yugoslavia, in the Hague, the Netherlands, examines the extent to which international law has developed more detailed rules to protect the environment in international armed conflict. After a discussion of the main legal issues, the author focuses on the marine environment, examining the relationship between naval warfare, on one hand, and multilateral environmental treaties on marine safety and the prevention of marine pollution, on the other.

Dr. Boelaert-Suominen argues that the majority of these treaties do not apply during armed conflict, either because war damage is expressly excluded or because the treaties do not apply to warships. As for the treaties that are in principle applicable during armed conflict, her analysis shows that, under international law, belligerent and neutral states have the legal right to suspend those treaties, wholly or in part. The author concludes that very few of the treaties considered take the new law of armed conflict into account and that there remains a need for more detailed rules on environmental standards for military operations.

In 1996, the Naval War College International Law Studies published volume 69 in its "Blue Book" series—*Protection of the Environment during Armed Conflict.* This compilation of papers was written for and presented at the Law of Naval

Warfare Symposium on the Protection of the Environment during Armed Conflict and other Military Operations, held at the Naval War College in 1995. Contributors to this conference suggested the necessity for a thorough study of the relationship between environmental treaties and the laws of war. It is my pleasure, therefore, to publish and commend to our readers Dr. Boelaert-Suominen's *International Environmental Law and Naval War: The Effect of Marine Safety and Pollution Conventions during International Armed Conflict.*

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Finally, the responsibility for the views expressed in this study and for any mistakes either in substance or language is, of course, mine alone.

Sonja A. J. Boelaert-Suominen

Introduction

HISTORICAL EVIDENCE OF GENUINE CONCERN about the impact of war on the human environment can be found since the earliest civilisations. Yet, the history of war is replete with examples of serious devastation of the enemy's land and property.

The relationship between peacetime human activities and the environment is in the stage of advanced public debate and scholarly attention, and much progress has been made in recent years regarding the development of appropriate instruments and institutions pertaining to the protection of the environment in peacetime.

The cornerstone of modern International Environmental Law is the prohibition of transfrontier pollution, according to which, States have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or to areas beyond national jurisdiction. In addition, there is now a substantial body of international treaties laying down detailed rJgimes for various environmental sectors.

Recent international conflicts, such as the 1980–1988 Iran-Iraq and the 1990–1991 Gulf wars, have raised fundamental questions about the relationship between modern International Environmental Law and armed conflict. The notion that rules of general International Environmental Law continue to apply during armed conflict is now well accepted.

In its 1996 Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons*, the International Court of Justice stressed that "the obligations of States to respect and protect the natural environment," applied equally "to the actual use of nuclear weapons in armed conflict."[1]

However, the international legal principles for the protection of the environment in armed conflict which are usually cited, remain at a very high level of abstraction. In the above advisory opinion, the Court offered the following broad statement:

> ... States must take environmental considerations into account when assessing what is necessary and proportionate in the pursuit of legitimate military objectives.

> Respect for the environment is one of the elements that go to assessing whether an action is in conformity with the principles of necessity and proportionality.[2]

Similarly, whilst environmental considerations are increasingly included in military manuals, the ensuing principles remain vague. Thus, the Commander's Handbook on the Law of Naval Operations for the U.S. Navy provides that:

> ... the commander has an affirmative obligation to avoid unnecessary damage to the environment to the extent that it is practicable to do so consistent with mission accomplishment. To that end, and so far as military requirements permit, methods or means of warfare should be employed with due regard to the protection and preservation of the natural environment. Destruction of the natural environment not necessitated by mission accomplishment and carried out wantonly is prohibited.[3]

This thesis examines the extent to which international law has developed more detailed standards to protect the environment in international armed conflict, by concentrating on the law of naval warfare on the one hand and multilateral treaties regarding protection of the marine environment on the other. The reasons why this study concentrates on the marine environment are as follows.

First, it will be seen that the bulk of the existing multilateral environmental agreements relate to the marine environment. They contain among the most detailed norms of current International Environmental Law. This contrasts sharply with the law of naval warfare, which consists primarily of customary rules of international law. Although there have been unofficial initiatives leading to the 1913 *Oxford Manual of Naval War*,[4] and more recently, to the 1994 *San Remo Manual on International Law Applicable to Armed Conflict at Sea*,[5] much of the law of naval warfare is uncodified and in need of update.

Secondly, of all types of armed conflict, naval conflicts are the most likely to affect not only the contending States but also States not directly involved in the hostilities. Therefore, conflicts with an important naval component may reveal State practice and *opinio juris* regarding the legal effect of maritime treaties for contending and non-contending States.

Thirdly, many of the maritime treaties that will be considered in this study have antecedents that go back to the beginning of the twentieth century. This means that they may have been affected by several large inter-State conflicts and may point to rules of international law on the operation of maritime environmental law during international armed conflict.

Finally, many of the modern descendants of the early maritime treaties were concluded under the auspices of the International Maritime Organisation or its predecessor. Institutional memory greatly increases the likelihood of consistency in the interpretation of certain treaty clauses.

This study is divided into two main parts. In the first part, the author examines the main legal questions involved. Chapter I discusses the origins and development of modern International Environmental Law; Chapter II deals with the *lex specialis* and examines the protection of the environment in the law of armed conflict, discussing *jus in bello*, *jus ad bellum* and the law of neutrality; Chapter III examines the operation of general International Environmental Law during armed conflict.

In the second part, the author examines the legal relationship between naval warfare on the one hand and multilateral environmental treaties on marine safety and prevention of marine pollution on the other. Chapter IV deals with the exclusion of war damage from the scope of maritime conventions; Chapter V discusses the contingency clauses which appear in some of the treaties and which specifically address the possibility of war or armed conflict; Chapter VI deals with the exemption of warships from the application of some of the maritime conventions. In Chapter VII, the author formulates conclusions on the relationship between naval warfare and the maritime treaties discussed, whilst Chapter VIII contains general conclusions on the legal effect of environmental treaties during international armed conflict.

Part One

International Environmental Law and Armed Conflict

Chapter I

Modern International Environmental Law and the Principal Environmental Rights and Duties of States

THE MAIN OBJECTIVE OF THIS FIRST CHAPTER is to review the salient features of modern (peacetime) International Environmental Law. After a discussion of the origins and development of the discipline, the author will consider whether it is possible and useful to define the environment. Section two is devoted to an examination of the principal rights and duties of States in relation to their use of the environment. In section three, the territorial scope of the identified environmental rights and duties will be analysed. The conclusions to this chapter are contained in the fourth section.

1.1. The Development and Milestones of Modern International Environmental Law

1.1.1. The Impact of UNCHE and UNCED

The term "International Environmental Law" (hereinafter IEL) will be used throughout this study as a shorthand for the corpus of international law relevant to environmental issues. The definition by Dr. Birnie and Professor Boyle offers a good starting point to describe the field of international law that this study will be concerned with:

> . . . the aggregate of all rules and principles aimed at protecting the global environment and controlling activities within national jurisdiction that may affect another State's environment or areas beyond national jurisdiction.[1]

There is some divergence of opinion in the literature about the historic antecedents of modern IEL. Professor Caldwell dates the earliest international

co-operative efforts inspired by environmental concerns back to 1872, when the Swiss Government proposed an international regulatory commission to protect migratory birds in Europe. He discusses the growth of environmental concern since the Second World War and argues that a first "wave of environmentalism" in the 1960s reached its apex in 1972.[2] Dr. Hohmann distinguishes two main periods in the development of IEL: traditional environmental law, based on economic considerations, from the beginning of this century to 1972, and modern international environmental law, dominated by ecological concerns, from 1972 onwards.[3] Professors Kiss and Shelton regard 1968 as a turning point, for it was then that several international organisations began placing environmental protection on their agendas.[4]

A common denominator in the literature is that modern IEL was formed at the end of the 1960s or in the beginning of the 1970s. It was indeed in the early 1960s that a number of scientific studies raised the alarm regarding the effects of unchecked economic development on the human environment. The works of U.S. marine biologist Rachel Carson (1907–1964) are widely credited with raising public awareness, particularly her book, *Silent Spring* (1962), in which she questioned the widespread use of chemical pesticides. In addition, a series of environmental catastrophes in the 1960s underlined the gravity of the increased threats to the environment and to human health. In Japan, the Chisso Corporation, which for more than 30 years discharged mercury into the Minimata Bay and River, was finally forced into court in 1969. By then the full consequences of the *Minimata disease*—an extreme form of mercury poisoning which caused serious birth defects and ruined the local fishing industry—had come to light. In Europe, the "black tides" off the coasts of France and England caused by the 1967 *Torrey Canyon* disaster were a catalyst in the development of a totally new convention apparatus for marine catastrophes.[5] In 1968 a diverse group of private and public sector experts, worried about environmental decline, formed the Club of Rome. Their 1972 report—entitled "Limits to Growth"[6]—quickly became an international best-seller. Grassroots movements of concerned citizens succeeded in mobilising their governments[7] and various international organisations to take on environmental problems. By 1972, a wide variety of intergovernmental organisations, both within and outside the UN system, and several unofficial bodies had included specific environmental concerns on their agendas.[8]

An early milestone for IEL was the Conference on the Human Environment (UNCHE) convened in Stockholm by the UN General Assembly in 1972. This high profile meeting produced a large number of texts, best known of which are the Stockholm Declaration of Principles for the Preservation and Enhancement of the Human Environment (adopted by acclamation) and the ambitious Action

Plan for the Human Environment, which contains 109 Recommendations.[9] The Stockholm Declaration, which consists of a Preamble and 26 "Principles," contains provisions not only addressed to the traditional subjects of international law—States—but also deals with environmental rights and duties of individuals, organisations, local and national governments, and international institutions. It has been said of the UNCHE that:

> In environmentally conscious circles, the calendar starts in 1972, the year of the Stockholm conference.[10]

Since 1972, the International Law Commission (ILC) and unofficial bodies such as the Institut de Droit International (hereinafter Institut) and the International Law Association (ILA) have made significant contributions to the codification and progressive development of aspects of IEL, mainly in the areas of water resource law and transboundary air pollution.[11] UNCHE is further credited with giving impetus to important regional initiatives, such as the development of environmental protection rules by the EEC.[12] Other regional intergovernmental organisations that have advanced the development of modern IEL are the UN Economic Commission for Europe (UN/ECE), the Council of Europe, and to a lesser extent, the Organisation for Economic Co-operation and Development (OECD).[13]

Apart from the official recognition of the environment as a subject of general international concern, another major outcome of UNCHE was the establishment of the United Nations Environment Programme (UNEP).[14] From rather modest beginnings, UNEP has played an increasingly important role in the promotion and development of IEL. For instance, it initiated a successful regional seas programme and sponsored the conclusion of agreements on the protection of the ozone layer and hazardous waste.[15]

A further important institution for the development of IEL is the International Maritime Organisation (IMO), established initially in 1948 as the International Maritime Consultative Organisation (IMCO). A specialised UN agency concerned with both maritime safety and marine pollution, it promotes important environmental treaties for which it often provides secretariat functions.

In celebration of the 10th anniversary of the Stockholm Conference, the UN General Assembly adopted in 1982 the "World Charter for Nature" with overwhelming support.[16] The Charter is aimed at setting forth "the principles of conservation by which all human conduct affecting nature is to be guided and judged." However, it uses mainly aspirational language and is generally regarded as laying down standards of ethical but not legal conduct.[17]

The 1992 Rio Conference on Environment and Development (UNCED) was timed to coincide with the 20th anniversary of the Stockholm Conference. Delegates from 178 States and 650 non-governmental organisations participated.[18] In terms of international instruments, the Rio Conference adopted two treaties and a set of principles on specific environmental problems[19] in addition to a general Declaration on Environment and Development consisting of 27 Principles aimed at reaffirming and developing the Stockholm Declaration. UNCED also led to a voluminous blueprint for action in the 21st century and beyond, entitled Agenda 21.[20] It comprises 40 chapters and hundreds of programme areas, the implementation of which is the responsibility of governments, with key roles for the UN system, other official and non-official, regional and sub-regional organisations, and with particular attention to broad public participation.[21]

Post-UNCED institutions include the UN Commission on Sustainable Development, a UN Department for Policy Coordination and Sustainable Development, a High-Level Advisory Board of experts on sustainable development, a Global Environmental Facility and an independent, non-governmental Earth Council.[22]

In 1997 the UN General Assembly convened a special session for the purpose of an overall review and appraisal of the implementation of Agenda 21.[23] Apart from a programme for the further implementation of Agenda 21, a "statement of commitment"[24] was adopted in which a number of positive results were acknowledged, but deep concern was expressed that the overall trends for sustainable development[25] were worse in 1997 than they were in 1992. Participants hence committed themselves to ensure greater measurable progress in achieving sustainable development by 2002.

1.1.2. The Environment as a Concept

There is no commonly agreed definition of the concept "environment" in international law. It is a term, as Professor Caldwell writes, which everyone understands but no one is able to define.[26] The International Court of Justice (ICJ) expressed the same sentiment when it stressed in its 1996 Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons* that:

> ... 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.[27]

Many writers tend to shun the task of developing an all-purpose definition of the environment or borrow heavily from the natural sciences.[28] Professors Kiss and Shelton for instance, use the term "biosphere," and define the environment as:

> . . . any point on a continuum between the entire biosphere and the immediate physical surroundings of a person or a group.[29]

The biosphere is a concept that originated in geological circles at the end of the last century and was adopted by UNESCO in 1966.[30] It refers to the relatively thin zone of air, soil and water that is capable of supporting life, comprising the earth itself, a sector of several hundred meters above the earth, and a sector beneath the earth and the oceans.

There are several important lessons to be drawn from an excursion into the natural sciences. In the first place, natural scientists view the term "environment" as an essentially relative and potentially infinite concept, pointing to objects, chemical processes or lifeforms surrounding another object or lifeform and which stand in relation to it.[31] To ecologists, there are no limits as to size or complexity of the terms "environment" or "ecosystem."[32]

Moreover, the "natural environment" is probably an outdated concept, for it disregards the unique and significant role which humans play in the biosphere.[33] A UNEP Working Group of Experts on environmental damage arising from military activities suggested that the definition of the environment should include natural elements as well as human elements, *i.e.*, not only "abiotic and biotic components, including air, water, soil, flora, fauna, and the ecosystem formed by their interaction," but also "cultural heritage, features of the landscape and environmental amenity."[34]

In the decades since UNCHE, scholars from various disciplines have advocated divergent philosophies as a basis for environmental policy. In an influential article that was published in 1972 and quickly popularised as a book, Professor Stone proposed:

> . . . that we give legal rights to forests, oceans, rivers and other so-called "natural objects" in the environment—indeed to the natural environment as a whole.[35]

These so-called ecorights are radically nature-centred. Their moral ground is the intrinsic good or worth of nature.[36] In legal terms, a thorough nature-centred morality implies that the environment would need to be protected for its own sake in the absence of identifiable human values, rights, or interests.[37] Ecocentrist ideas have been invoked mainly in U.S. courts, with ambiguous results.[38] Some legal scholars have expressed sympathy for according rights to certain sentient species, such as elephants[39] and whales.[40]

Ecocentrist theory holds that no part of the environment can be rationally said to be more important than another.[41] However, it leaves a few serious questions

unanswered. Should free nature be allowed to reign? What about natural objects such as pests and viruses or natural phenomena such as flooding?[42] The theory of interspecies equity is probably an over-reaction to the serious mismanagement of the environment by humans. Recognising that humans are part of a biotic community may be a step in the good direction, but it does not in itself point to guidelines for human behaviour.[43]

The debate between anthropocentrist and ecocentrist positions is reflected in many (peacetime) environmental instruments. The 1972 Stockholm Declaration seems anthropocentric because of its focus on the protection of nature for the benefit of mankind.[44] By contrast, the 1982 World Charter for Nature is seen as ecocentric, for it emphasises the protection of nature as an end in itself:

> Every form of life is unique, warranting respect regardless of its worth to man. . . .[45]

However, there is great ambivalence within the environmental community about the ultimate reasons for protecting the environment. Many recent environmental campaigns continue to appeal to traditional human-centred instincts.[46] Furthermore, it can be argued that the newly developed concepts of inter-generational equity and sustainable development[47] are in essence anthropocentric: they refer, *inter alia,* to interests, entitlements or rights of (future generations) of people.[48] This prevailing ambivalence was not resolved by UNCED. On the contrary, it is possible to regard the Rio Declaration as a step back in the direction of pure anthropocentrism, for the first principle strikingly propounds that:

> Human beings are at the centre of concerns for sustainable development.

The Biodiversity Convention that was adopted at the same conference, by contrast, attempts to combine both anthropocentric and ecocentric values.[49]

While the views of animal rights activists and other inter-species equity theorists have drawn much attention in recent years, most international legal instruments, apart from a few adopted by the Council of Europe,[50] have tended to endorse what has been termed an "environmentalist" view. Instead of claiming that all species should be protected, however adverse their effect on humans or other species, this theory stresses that species need to be protected for ecological reasons, as part an ecosystem.[51]

The better view seems to be that all concern for the environment shows anthropocentric attributes. Many people value protection of the environment, irrespective of its economic worth to mankind. Moreover, the scarcer natural resources become, the more value will be placed on preserving what is left.[52]

Human beings have in the last decades become increasingly aware of the possible long-term effects of environmental degradation on the human population.[53] The growing awareness of the interrelatedness of all life processes on Earth is another reason for extending protection to previously underrated environmental components. Such moderate anthropocentrism should not be viewed as necessarily negative. Non-human components will benefit from the "reflex-function" of norms created by and for humans.[54]

It is nevertheless legitimate to question if it matters in a legal sense that all Nature is subordinated to human considerations. Authors such as Professor Stone claim that it does, particularly with regard to compensation for environmental damage.[55] Furthermore, the subordination of Nature to human claims is more apparent in the law of armed conflict, as will be seen later.[56]

In sum, a scientifically sound, comprehensive, and all-purpose legal definition of the environment would have to stress the relative and potentially infinite character of the concept, the interrelatedness of all environmental components, the primordial role played by mankind in the environment, and possibly also balance anthropocentrist and ecocentrist notions.

Apart from the difficulty to define and restrict the scope of the concept from a legal perspective, there are other reasons why there are few all-purpose legal definitions of the environment. The first one is historic. IEL started from a sectoral approach, dealing with environmental concerns as they arose in relation to specific media and resources, thus obviating the need for a wide definition of the environment. At first, international law-making in this area was also purely reactive—typically in response to a major industrial accident revealing the inadequacy of existing regulations. By contrast, some recent treaties allow for preventive actions to be taken in response to emerging scientific evidence. At the same time, integrated approaches are being developed for transsectoral environmental problems.[57]

There are an impressive number of bilateral and multilateral treaties on the environment.[58] However, the discipline of IEL is hardly codified. Repeated attempts in the 1980s and the 1990s at formulating a comprehensive and binding treaty on the environmental rights and duties of States ended in failure.[59] There is as yet no uniform conceptual approach to environmental regulation.[60] It is safe to state therefore, that the actual content of the environmental rights and duties of States depends significantly on the context and objectives of the treaty instrument at issue, and that it varies according to the sector, media, and type of activity under consideration.[61] It is therefore neither possible nor advisable to search for an all-purpose definition of terms such as environment, pollution, or harm, at least as far as general (peacetime) IEL is concerned.[62]

1.2. The Principal Environmental Rights and Duties of States

Whilst IEL is predominantly treaty-based law,[63] many writers continue to attach great importance to customary international law as an instrument for environmental lawmaking.[64] In the light of the subject of this work, it is important to determine the content of general or customary IEL.[65] In the first part of this section, the most important multilateral environmental agreements will be examined; in the second part, general principles and rules.

1.2.1. Principal Multilateral Environmental Agreements

A great number of multilateral environmental agreements have been adopted at the global and regional level establishing specific obligations in relation to various environmental sectors. As one commentator observes, it seems that for each new environmental problem, a new treaty is negotiated.[66] Some of these receive widespread support and may reflect rules of general or customary international law. Given the subject of this work, the following review will focus mainly on the marine environment.

A. Marine Environment. The majority of environmental treaties deal with protection of the marine environment, containing among the most highly developed norms in the field of IEL. Although the causes of marine pollution are diverse, most treaties deal with the following types of pollution: operational and accidental discharges from ships, pollution arising from the exploration and exploitation of the seabed, land-based pollution, and deliberate dumping of industrial wastes.[67]

Marine pollution is a relatively long-standing concern. In 1926 a draft convention on pollution from ships, limiting discharges of oil and gas into the sea, was drawn up at an international conference convened by the United States. It failed to gain acceptance as did a second draft prepared under the auspices of the League of Nations in 1935 to reduce pollution resulting from tanker-cleaning operations.[68] It was only after the Second World War that agreement was reached on concerted international action. As a result, the 1954 International Convention for the Prevention of Pollution of the Sea by Oil was adopted to prohibit deliberate discharges of oil in specified zones.[69] Shortly thereafter, prohibitions related to pollution of the sea by oil or pipelines, as well as by radioactive wastes, were included in the 1958 UN Convention on the High Seas.[70] A prohibition on pollution by wastes resulting from oil drilling on the continental shelf was incorporated into the 1958 UN Convention on the Continental Shelf.[71]

Following the *Torrey Canyon* accident, IMCO sponsored the adoption in 1969 of two conventions, one concerning civil liability for oil pollution damage and the other related to intervention on the high seas in cases of oil pollution casualties.[72] These were later supplemented by a 1971 Convention creating an additional fund for compensation for oil pollution damage and a 1973 Intervention Protocol for pollution casualties caused by substances other than oil.

Although it was still an *ad hoc* approach for specific environmental problems, several instruments for the protection of the marine environment were adopted as a result of Principle 7 of the Declaration[73] and of the Action plan[74] adopted at the 1972 UNCHE. In its wake a new global treaty was adopted at an intergovernmental conference in London: the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter, dealing primarily with ocean dumping. One year later, the International Convention for the Prevention of Pollution by Ships was concluded at IMCO headquarters. It has as its ambitious objective the complete elimination of all intentional vessel-source pollution and the minimisation of accidental discharges; it lays down detailed rules in six annexes dealing with oil, noxious liquid in bulk, harmful substances in packaged form, garbage, sewage, and most recently, air pollution.[75] It was intended to replace the 1954 Oil Pollution Prevention Convention and was substantially amended and replaced by a 1978 Protocol. Usually referred to as MARPOL 73/78, it has been widely ratified,[76] although the Annexes have received less support.[77]

In 1973, negotiations for the third UN Conference on the Law of the Sea commenced. This resulted nine years later in the adoption of an umbrella convention comprising more than 400 articles, spread over 17 chapters and 9 annexes that form an integral part of the convention. The Montego Bay Convention on the Law of the Sea (1982 UNCLOS) is regarded as the most comprehensive environmental treaty thus far, recording customary law, introducing many innovative provisions, in addition to striking compromises on perennial and newly emerged problems. Intended as a comprehensive restatement of almost all aspects of the law of the sea,[78] it sets a global framework for, *inter alia,* the exploitation and conservation of marine resources and for the protection of the marine environment.[79] It obligates States "to protect and preserve the marine environment" (Article 192) and enacts a framework envisaging all types of pollution of the marine environment, whatever the cause: vessel-source, land-based sources, dumping, exploitation of the seabed, and air pollution (Part XII, Art. 192-237). The convention introduces new provisions aimed at preventing pollution from the exploration and exploitation of the seabed and its subsoil.[80] It also attempts to strike a new balance between the powers of flag States and coastal States, the former extending primarily to freedom of navigation and fishing, the latter to

effective regulation and control. It recognises the competence of coastal States to combat pollution in the territorial sea and in the new jurisdictional area of the Exclusive Economic Zone (EEZ).[81]

As is well-known, the convention entered into force only on 16 November 1994, one year after it had obtained the necessary 60 ratifications[82] and after substantial amendments had been agreed in July 1994 regarding Part XI on deep seabed mining.[83] Many more Western States, including the European Community (EC), have since consented to be bound by the UNCLOS Convention and the 1994 Agreement.[84] As of 12 March 1998, 124 States have ratified the main convention, and 85 the 1994 Agreement.[85] However, most commentators seem to agree that 1982 UNCLOS did not introduce any substantially new provisions on the marine environment of the high seas.[86] Its provisions are seen as the culmination of a number of changes in the international law of the sea that took place earlier. One of these is the fundamental principle that pollution can no longer be regarded as an implicit freedom of the seas.[87] In addition, Part XII of 1982 UNCLOS is largely composed of so-called umbrella provisions[88] that have received widespread and consistent support in State practice, most notably, pursuant to many treaties and international rules that implement or complement Part XII.[89] Agenda 21 endorsed the view that this part of UNCLOS reflects customary international law.[90]

At the same time, a substantial body of regional conventions developed.[91] One series of regional treaties concerns industrial pollution and land-based activities in the North Sea and the North-East Atlantic area. The first of these was the 1969 Bonn Agreement for Co-operation in Dealing with Pollution of the North Sea by Oil, concluded in the wake of the *Torrey Canyon* incident.

Other agreements covering the northern hemisphere are the 1972 Oslo Dumping Convention which applies to the North-East Atlantic, the North Sea, and the adjacent Arctic seas, and the 1974 Paris Convention which deals with land-based pollution in the same area. They were replaced in 1992 by a single comprehensive agreement: the Convention for the Protection of the Marine Environment of the North-East Atlantic (1992 OSPAR Convention).[92] The area is also increasingly covered by measures adopted at a series of International North Sea Conferences and by the growing body of EC law.[93]

Secondly, there are the treaties concluded under UNEP's Regional Seas/Oceans and Coastal Affairs Programme. The programme was inspired by the 1974 Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea Area in which the littoral States agreed to address all forms of marine pollution. The 1974 Convention sets stringent standards for dumping at sea, adopts rules inspired by MARPOL 1973 for vessel-source pollution, and covers airborne and land-based sources of pollution.[94] The UNEP programme was launched in 1978

and focuses primarily on developing countries of the Southern Hemisphere. By 1995, it included 13 regional areas, 8 of which were covered by binding international instruments;[95] the Mediterranean, Persian/Arabian Gulf, Gulf of Guinea, South-East Pacific, Red Sea and Gulf of Aden, Caribbean, Indian Ocean and East Africa, and South Pacific. For each regional sea, a similar flexible and dynamic pattern is followed, which often includes the adoption of an Action Plan for the region and a framework convention applicable to the territorial sea and the EEZ of the State parties. In the framework convention, Parties agree to take appropriate measures to prevent, abate, and combat pollution and protect and enhance the marine environment, and to formulate and adopt protocols on agreed measures, procedures, and standards.[96] This is followed by a series of integrated protocols in which specific problems are tackled. Many of these cover combating oil pollution and other forms of marine pollution in cases of emergency, as well as dumping from ships and aircraft; a few include pollution from exploration and exploitation of the continental shelf, land-based sources of marine pollution, transboundary movement of hazardous wastes, and specially protected areas. In 1992 UNEP assisted the six Black Sea States with the adoption of a similar framework convention and a number of protocols. However, many of the regional sea programmes lack the detailed regulations applying to the Northern Hemisphere, suffer from weak participation by States in some regions, and have a poor record of ratification and implementation.[97]

The legal relationship between all these international instruments may appear complex. As for the relationship between 1982 UNCLOS and other treaties, Article 237 states that Part XII is without prejudice to more specific obligations assumed under earlier or later conventions, provided that these are carried out in a manner consistent with the general principles and objectives of 1982 UNCLOS. It follows that rights and obligations derived from the 1978 Kuwait Regional Convention, and even from specialised maritime conventions such as MARPOL 73/78, "trump" UNCLOS provisions provided that they are consistent with the general rules of the latter.[98] Moreover, many of the regional seas conventions contain provisions on their relationship with other international conventions and rules.[99]

Furthermore, in its provisions on vessel-source pollution, dumping, and seabed operations, 1982 UNCLOS stipulates that States must give effect to international rules and standards as well as recommended practices and procedures, and that they must act through competent international organisations or conferences to establish international global and regional rules.[100] This phraseology may imply that 1982 UNCLOS aims at incorporating conventions such as the 1972 London Dumping Convention, MARPOL 73/78 and possibly other specialised treaties.[101]

The International Maritime Organisation is regarded as the competent international organisation referred to in many of the UNCLOS provisions regarding the regulation of vessel-source pollution.[102] It sponsors internationally recognised common standards for the regulation of shipping safety and environmental protection by coastal and flag States. The resulting treaties are regarded as an essential albeit indirect means of reducing marine pollution.[103] Apart from the IMCO Conventions mentioned earlier, this study will discuss the 1966 International Convention on Load Lines, the 1972 Convention on the International Regulations for Preventing Collisions at Sea, the 1974 Safety of Life at Sea Convention, the 1989 International Salvage Convention, the 1990 Oil Pollution Preparedness, Response and Cooperation Convention concluded in the wake of the *Exxon Valdez* disaster, and the 1996 International Convention on Liability and Compensation for Damage in Connection with Hazardous and Noxious Substances by Sea.

B. Freshwater Resources. The body of international conventional rules on watercourses and other freshwater resources is extensive.[104] However, many are contained in treaties with a more general purpose, such as those regulating boundary matters between States.[105] There are very few agreements devoted exclusively to the protection of waters against pollution. In addition, although there are many examples of regional co-operation, there are no specific regional régimes, apart from the area covered by EC law.

Any discussion of global rules on the protection of freshwater resources will have to include the Convention on the Law of the Non-Navigational Uses of International Watercourses, adopted in 1997 by the UN General Assembly,[106] on the basis of a draft prepared by the ILC over a period of more than 20 years.[107] Its objective is to ensure the utilization, development, conservation, management and protection of international watercourses and the promotion of sustainable utilisation thereof for present and future generations.

As is the case for many recent international instruments, the 1997 Watercourse Convention is a framework agreement. It contains various general principles for the utilisation of international watercourses: equitable and reasonable utilisation and participation, the obligation not to cause significant harm, a general obligation to co-operate and to regularly exchange data and information, and the principle that in the absence of agreement or custom to the contrary, no use of an international watercourse enjoys inherent priority over other uses.[108] The convention also lays down detailed obligations for States to exchange information and consult each other, and if necessary, to negotiate on the possible effects of planned measures regarding the watercourse.[109] It has several specific

environmental protection provisions. Accordingly, watercourse States need to "protect and preserve the ecosystems of international watercourses,"[110] prevent, reduce, and control the pollution of international watercourses,[111] prevent introduction of alien or new species, and take all measures with respect to an international watercourse that are necessary to protect and preserve the marine environment, taking into account generally accepted international rules and standards.[112] Finally, there are provisions on emergency situations,[113] an article on armed conflict,[114] and an annex on arbitration.

A detailed examination of the extent to which this convention codifies customary international law, and which provisions should be regarded as innovative, is beyond the scope of this work. In the literature, the following principles and rules are generally regarded as reflecting customary international law: the principle of common, equitable, and reasonable utilisation of shared water resources,[115] endorsed by the ICJ in the *Gabcíkovo-Nagymaros Project* case,[116] the obligation to prevent (serious) harm to other States, and several principles of transboundary environmental co-operation.[117] Furthermore, there is important international case law relating to international watercourses, some of which will be examined below.[118]

It is noteworthy that there is little support for the view that pollution of international watercourses would be unlawful *per se.* Instead, the modern trend is to require States to regulate and control river pollution, whilst prohibiting only certain discharges and distinguishing between old and new sources.[119] Pollution is only unlawful if it causes (serious) harm to other (riparian) States. For instance, Article 7 of the 1997 International Watercourse Convention stipulates firstly that watercourse States need to take all appropriate measures to prevent the causing of significant harm to other watercourse States; and secondly, should significant harm nevertheless occur, that they need to take all appropriate measures in consultation with the affected State to eliminate or mitigate harm and, where appropriate, discuss compensation.[120] The ILC does not view the causing of significant harm as necessarily unlawful *per se,* but regards equitable utilisation as the overriding guiding principle.[121] This includes cases of pollution, pursuant to Article 21(2) of the convention and the ILC's commentary thereon.[122] As a result, even significant harm may have to be tolerated by a watercourse State.[123]

Nevertheless, the 1997 Convention also contains environmental protection provisions which are not concerned with other riparian States: Article 20 on the obligation to protect and preserve the ecosystems of international watercourses; Article 22 on the introduction of alien or new species, and Article 23 on the protection and preservation of the marine environment. Although the threshold of harm in Articles 20 and 23 is not specified,[124] none of these provisions set absolute

standards, for they are subject to the general principle of equitable utilisation.[125] Whatever their current legal status,[126] it is clear that the benefits of these provisions will extend beyond the interests of riparian States.[127] The inclusion of measures aimed at protecting environmental resources *per se* is an emerging trend in IEL, which, as will be seen below, is developing rules transcending the traditional question of transfrontier pollution.[128]

C. Biodiversity. The body of international rules concerning biological diversity is formed by rules adopted at the local, national, bilateral, sub-regional, regional, and global level. Biodiversity is a recently developed term and is usually understood as comprising three notions: genetic diversity, species diversity, and ecosystem diversity.[129] It covers the older terminology "wildlife" or "living" natural resources, which were distinguished from non-living natural resources by the fact that they are renewable if conserved and destructible if not.[130]

There are important differences between marine and terrestrial régimes. Marine biodiversity is often considered common property or shared resources and particularly vulnerable to over-exploitation. In response, international law tends to stress obligations of conservation and equitable utilisation. Important provisions on marine life can be found in conventions which deal with fisheries conservation such as the 1946 International Whaling Convention,[131] or with an even broader purpose, such as 1982 UNCLOS.[132] International regulation of terrestrial biodiversity is generally more difficult because it requires limiting the principle of States' permanent sovereignty over their natural resources. To justify such interference, international treaties resort sometimes to concepts as "common concern," "common heritage" and even "animal rights."[133]

Until recently, wildlife conservation implied a very partial *ad hoc* approach consisting of targeting wildlife species identified as threatened with extinction. Proper conservation of biodiversity, which implies maintaining viable populations of species is now generally thought of as requiring complex sustainable and flexible strategies, which include plants, animals, micro-organisms, and the non-living elements of the environment on which they depend.[134]

The most important multilateral treaties aimed at habitat preservation are the 1971 Convention on Wetlands of International Importance (Ramsar Convention) and the 1972 Convention for the Protection of the World Cultural and Natural Heritage (World Heritage Convention). Important treaties which focus on species protection are the 1973 Convention on International Trade in Endangered Species (CITES) and the 1979 Conservation of Migratory Species of Wild Animals (Bonn Convention). Finally, the 1992 Biodiversity Convention aims at setting an overall framework for this area of the law.

The purpose of the 1971 Ramsar Convention is the conservation and the enhancement of a particular type of habitat important for waterfowl.[135] Without prejudice to their sovereign rights, State parties must designate at least one wetland of international significance in terms of ecology, botany, zoology, limnology, and hydrology for inclusion in a List of Wetlands of International Importance.[136] The deletion or restriction of listed wetlands is permitted on grounds of "urgent national interest," but must take into consideration the "international responsibilities for the conservation, management and wise use of migratory stocks of waterfowl,"[137] and Parties need to compensate, as far as possible, for any loss of wetland resources, *e.g.*, by creating additional nature reserves.[138] Parties are also under a number of general obligations: to promote the conservation of listed wetlands, and as far as possible, the "wise use of wetlands on their territory," to establish nature reserves, to endeavour to increase waterfowl populations, and to exchange information at the earliest possible time on changes in the ecological character of listed wetlands.[139] Because of their general nature, the provisions of the Ramsar Convention are considered weak and have given rise to problems of interpretation.[140] Nevertheless, by 29 March 1998, the convention had 106 Parties and protected 903 wetland sites.[141]

The World Heritage Convention—adopted in 1972 under UNESCO auspices—also works on the basis of recording sites. Although its provisions are more stringent than the Ramsar Convention, it has more Parties.[142] The convention's guidelines for the identification of natural heritage are based on physical characteristics of outstanding universal value.[143] Each State party needs to identify cultural and natural heritage sites on its territory,[144] but listing is subject to a decision by the World Heritage Committee, which may also consider financial implications.[145] Apart from the main inventories of national and cultural heritage,[146] a list of special "World Heritage in Danger" is maintained for sites threatened by serious and specific dangers, such as the outbreak or threat of armed conflict.[147] As a result of the latter type of threat, the Old City of Dubrovnik in Croatia, the Virunga Natural Park, and the Okapi Wildlife Reserve in the Democratic Republic of the Congo were included in this special list.[148]

Each State party needs to adopt a national programme for the protection of its natural and cultural heritage.[149] In addition, State parties "recognise that such heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to co-operate and to lend their assistance thereto."[150] Importantly, State parties undertake "not to take any deliberate measures which might damage directly or indirectly the cultural and natural heritage situated on the territory of other parties to the convention."[151] The convention further establishes an Intergovernmental Committee and a fund for the

protection of the heritage in question, and procedures under which State parties can request international assistance.[152]

By 1 June 1997, a total of 169 States had become Parties to the 1992 Convention on Biological Diversity.[153] Under this agreement, which applies expressly both within the limits of national jurisdiction and beyond,[154] Parties undertake a number of general obligations. In accordance with their particular conditions and capabilities, they need to develop national strategies, plans or programmes for the conservation and sustainable use of biodiversity, and integrate, "as far as possible and as appropriate," these strategies into other relevant sectoral and cross-sectoral plans.[155] Furthermore, each Party shall, "as far as possible and as appropriate," engage in identification of biodiversity and in monitoring,[156] adopt *in situ* and *ex situ* conservation measures,[157] use components of biological diversity in a sustainable manner,[158] adopt incentive measures,[159] establish programmes for research and training,[160] engage in public education and awareness,[161] introduce environmental impact assessment procedures for proposed projects, and take measures to minimise adverse impacts.[162] In respect of areas beyond national jurisdiction and on other matters of general interest, Parties undertake to co-operate "as far as possible and as appropriate" either directly or through international organisations.[163]

The convention also contains a number of other provisions that have led some States, most notably the United States, to decide initially against signing the convention:[164] Article 19 on the handling of biotechnology and the distribution of its benefits and Articles 20 and 21 on financial resources.[165] Furthermore, Article 22 (1) stipulates that the convention shall not affect rights and obligations of any Contracting Party deriving from any existing international agreement, "except where the exercise of those rights and obligations would cause a serious damage or threat to biological diversity."[166] In the *Gabcíkovo-Nagymaros Project* case, Hungary relied, *inter alia,* on this provision to justify suspension and termination of a bilateral treaty concluded in 1977.[167] Whilst Hungary called this a *jus cogens* type of claim,[168] the ICJ has rejected this argument implicitly.[169] Moreover, it should be noted that Article 22 (2) gives preeminence to the law of the sea with respect to marine biodiversity, thus casting doubt on the alleged peremptory character of the entire provision.[170]

Of particular note are a series of conventions adopted through the Council of Europe, and certain EC regulations. They constitute to date the only international instruments that protect animals from suffering and are inspired—though not exclusively—by ecocentrist and even animal-rights theories. These include the 1968 Convention for the Protection of Animals during International Transport, the 1979 Convention for the Protection of Animals for Slaughter, and the 1987 Convention for the Protection of Pet Animals.

In conclusion, there is an overwhelming number of treaties on wildlife protection, ranging from the local to the global level, addressing a great variety of situations and methods. They have attracted wide differences in international support and are not always implemented and enforced in satisfactory ways.[171] Some authors claim that most States accept the need to co-operate in the protection of living resources, to act in good faith as good neighbours, and that they have to arrange some form of equitable use of shared living resources. There is also considerable agreement on certain conservation strategies and principles. Beyond that, it remains controversial whether general international law requires States to take appropriate steps to protect endangered land-based species.[172] As for marine biodiversity, it has been argued that the consensus underlying the relevant provisions of 1982 UNCLOS and subsequent practice[173] show that States have accepted the general obligation to conserve marine species, but some authors question the effectiveness of the régime.[174]

D. Air Quality, the Atmosphere and Climate Change. The treaty régime in regard to air quality, the atmosphere, and climate change is of recent origin and consists of one specific regional and two global framework agreements. There are mainly three problems that have inhibited the development of a proper legal régime. First, the degradation of the atmosphere and the likelihood of ensuing climate change, as well as its causes, have long remained a subject of debate among scientists.[175] Secondly, the legal status of the atmosphere in international law is unsettled,[176] for it is a fluctuating and dynamic air mass that partly overlaps with the airspace above States territory and which lies partly beyond national airspace, without forming part of Outer Space.[177] Thirdly, control of transboundary air pollution requires both developing and developed States to make difficult choices and sacrifices in terms of economic and industrial policy. It is for the latter reason that until the mid-1980s many States refused to agree to firm measures unless there was clear scientific evidence of harm. Despite these problems, by 1997 the great majority of States had ratified the two global framework agreements, including the attached protocols.

Over thirty countries in the Northern Hemisphere, from both Western and Eastern Europe as well as Canada and the United States, are parties to the Geneva Convention on Long-Range Transboundary Air Pollution (LRTAP), concluded in 1979 under UN/ECE auspices in response to the growing problem of acid rain. The convention provides a framework for co-operation and development of pollution control measures, although the language of many of its commitments is weak.[178] Parties undertake to protect Man and his environment against air pollution and, as far as possible, endeavour to limit, gradually reduce and prevent air

pollution.[179] They agree to exchange information and to review their policies, scientific activities, and technical measures aimed at combating pollution,[180] to engage in consultations at an early stage in cases of actual or significant risk of long-range transboundary air pollution,[181] and to notify of major changes in policy or industrial development likely to cause significant changes in long-range air pollution.[182] The convention is supplemented by four protocols.[183] Despite its many weaknesses, the LRATP Convention is considered a qualified success.[184]

The Vienna Convention for the Protection of the Ozone Layer was concluded in 1985 under UNEP auspices. The convention primarily requests that Parties take appropriate measures to protect human health and the environment against adverse effects resulting or likely to result from human activities that modify or are likely to modify the ozone layer.[185] To this end, and in accordance with the means at their disposal and their capabilities, Parties agree to co-operate in harmonising policies and in formulating agreed measures, procedures, and standards for the implementation of the convention.[186] Like the LRTAP Convention, the Vienna Convention is a compromise between demands by some States for firm commitments and requests by others for further study of the problem.[187] Its significance lies in the fact that it is concerned with the global environment, that it recognises the impact of ozone depletion on climate change,[188] and the importance of ecosystems independent of their utility to Man.[189] It also alludes to the need for precautionary measures, *i.e.*, for preventive action even in the absence of firm proof of harm.[190]

The Montreal Protocol on Substances that Deplete the Ozone Layer—agreed in 1987 following new and alarming scientific evidence—is considered more important than the convention itself: it sets firm targets for reducing and eliminating consumption and production of a number of ozone-depleting substances and has the elimination of (all) ozone-depleting substances as its final objective.[191]

Amendments and adjustments adopted in 1990 and 1992 brought the timetables forward and added new controlled substances. As a result, production and consumption of ozone-depleting substances such as chlorofluorocarbons (CFCs) and halons were to be totally phased out by 1 January 1996. While the Montreal Protocol initially allowed for delayed compliance by developing States, the latter were subsequently given financial and technical incentives to accelerate their compliance.[192] Furthermore, the protocol controversially bans trade in controlled substances with non-parties[193] and contains innovative flexible institutional provisions.[194] It entered into force on 1 January 1989, when 29 countries and the EEC representing approximately 82 percent of world consumption ratified it. By 25 February 1997, 161 States ratified the convention and the protocol.[195]

The 1992 UN Framework Convention on Climate Change acknowledges in its preamble that climate change and its adverse effects are a "common concern of humankind." By 28 February 1998, it counted 174 State parties.[196] While the convention recognises that climate change occurs naturally, its objective is to prevent dangerous anthropogenic interference with the climate system.[197] Guiding principles are set out in Article 3. These are: (1) the protection of the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with the common but differentiated responsibilities and respective capabilities of developed and developing States; (2) the specific needs of developing country Parties; (3) the need to take precautionary measures; (4) the need for sustainable development; and (5) the different socio-economic contexts.

The convention contains a number of general commitments comparable to the Vienna Convention: *inter alia,* development of national programmes, environmental impact assessment, international co-operation, consultation, information exchange and reporting.[198] Although the stringency of the relevant provisions has been a matter of debate,[199] specific commitments were agreed to stabalise greenhouse gases in the atmosphere at a safe level and to limit emissions of these by developing countries in accordance with soft targets and timetables.[200] In December 1997, the Conference of the Parties adopted a first (Kyoto) protocol, containing legally binding emissions targets for developed countries for the post-2000 period.[201]

E. Conclusions. The newest treaty régimes on marine pollution, freshwater resources, biodiversity, and protection of the atmosphere show that IEL is moving away from the sectoral and *ad hoc* approaches of the 1960s and 1970s. Increasingly, more complex environmental challenges are addressed in which difficult scientific, economic, and political questions are intertwined. In response, innovative legal and institutional devices have been developed: *e.g.*, the framework approach whereby the regulation for a specific environmental sector is specified in a dynamic sequence of protocols to the base treaty; or a commitment by the Parties to make use of the "best available technology," or to accept standards and thresholds negotiated internationally at expert level, or to accept lists of toxic or hazardous substances according to variable criteria of acceptability of harm.[202]

For reasons of space, the above overview has primarily been concerned with the regulation of specific environmental media and resources, concentrating on the marine environment. It has not dealt with the special treaty régimes of certain international areas as Outer Space and Antarctica nor with the emerging body of treaties on specific products or particular activities, such as hazardous substances,

nuclear energy, biotechnology, environmental impact assessment, and accident preparedness and response.[203] Nevertheless, many of the latter treaties will be addressed throughout this work.

1.2.2. General Principles and Rules

What I propose to examine in this section are the general environmental rights and obligations of States that flow from principles and rules purportedly common to all environmental sectors.

A. Principle 21 of UNCHE. There is widespread agreement that the cornerstone of modem IEL is formed by two important rules addressed to States, enunciated by Principle 21 of the Stockholm Declaration:

> States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that the 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.

The first part of this provision captures one of the basic tenets of international law and applies it to the environment: it is the sovereign right of States to control and regulate the exploitation of resources within their territory. This proclamation finds its origin in numerous General Assembly resolutions and international instruments dealing with the right to self-determination of States. In accordance with these, self-determination includes, of necessity, "permanent sovereignty over their natural wealth and resources."[204] The second element of the principle places an important limit on the seemingly broad interpretation of State sovereignty over their resources. It balances States' rights over their own environment with the responsibility towards the environment of other States and areas beyond national jurisdiction.

The Stockholm Declaration is a non-binding text, but Principle 21 is regarded as customary international law. In fact, many believe that it reflected existing international law at the time of its formulation, in 1972.[205] Indeed, the second (limiting) element of Principle 21, which prohibits transfrontier pollution, is generally regarded as descending from general concepts of the rights and duties of States. It derives in the first place from the general principle of international law—applied by Huber in the 1928 *Island of Palmas* case—[206]that every State must respect the sovereignty and territorial integrity of other States.

The prohibition of transfrontier pollution is also based on the doctrine which prohibits abuse of rights[207] and the general principle of law of good neighbourliness: *sic utere tuo ut alienum non laedas* ("so use your own property that you do not injure the property of another").[208]

In addition, the prohibition of transfrontier pollution is generally regarded as firmly rooted in the conclusions or *obiter dicta* of certain long-standing and well-known judicial precedents. First and foremost among these is the *Trail Smelter* award rendered on 16 April 1938 by the U.S.-Canada International Joint Commission. One of the first judicial decisions to deal with transboundary air pollution, it concerned a long-running dispute over damage to crops, pasture, land, trees, and agriculture on U.S. territory caused by sulphur dioxide emissions from a smelting plant in Canada. Relying on the *Palmas* case award, the tribunal held in an oft-quoted passage that:

> . . . no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence. . . .[209]

It should be noted though, that the precedential value of this statement was somewhat diminished since Canada had previously acknowledged responsibility for the damage in the arbitral *compromis*. The main task of the tribunal was to assess and measure the damage and to determine a means of redress, but not to determine legal responsibility.

Other legal antecedents for Principle 21 can arguably be found in the *Corfu Channel* case, the *Lac Lanoux* arbitration and the *Gut Dam Claims* arbitration. In the first of these, the ICJ was requested to consider, *inter alia*, an incident in which war vessels belonging to the UK were struck by mines while passing through the Corfu Channel, a strait in Albanian waters used for international navigation. Albania knew that the strait was mined but failed to prevent or remedy the situation and did not notify other States of the danger. In a famous *obiter dictum*, the ICJ held that every State is under the obligation:

> . . . not to allow knowingly its territory to be used for acts contrary to the rights of other States.[210]

The *Lac Lanoux* arbitration (1957) concerned a dispute between France and Spain over a proposal by the former to permit the construction of a barrage on an international waterway on its territory. Spain claimed infringement of her rights

as a downstream State because the project would involve diversion of upstream waters, and argued that France should obtain Spain's prior authorisation. The tribunal, while holding that the proposed works did not infringe Spanish rights, stated nevertheless that:

> . . . there is a principle which prohibits the upstream State from altering the waters of a river in such a fashion as seriously to prejudice the downstream State. . . .[211]

Much the same principles were at issue in the *Gut Dam* claims arbitration. With U.S. permission, Canada had embarked in 1903 on the ill-fated construction of a dam on the St. Lawrence Seaway. Over the years the dam would cause extensive erosion and flooding on both Canadian and U.S. territory. The resulting claims for damages by the United States would fester until 1965, when the Lake Ontario Claims Tribunal was established to resolve the matter. The tribunal relied heavily on the prior authorisation of the project by the United States, but also on the acknowledgement of responsibility by Canada. It declared Canada liable, *inter alia,* for the injuries sustained by U.S. citizens without, however, finding fault or negligence on its part.[212]

The principles identified in the "Trail Smelter" case also received support from the practice of States before 1972. In 1966 Austria lodged a strongly worded diplomatic protest over damage caused by mines laid close to the Austrian border, accusing Hungary of:

> . . . violating the uncontested international legal principle according to which measures taken in the territory of one State must not endanger the lives, health and property of citizens of another State.[213]

In another incident prior to 1972 UNCHE, Canadian beaches were polluted by an accidental oil spill of 12,000 gallons of crude oil into the sea at Cherry Point in the State of Washington. Turning the tables on the United States, the Canadian government pointed to the "principle established in the Trail Smelter arbitration," claiming that it had been accepted by a considerable number of States and expressing hope that it would be accepted at UNCHE as "a fundamental rule of international environmental law."[214]

The formula of Principle 21 has, since UNCHE, been repeated—often *verbatim*—in numerous binding[215] and non-binding international instruments.[216] Therefore, unlike for some of the other principles which will be discussed below, the majority of the current specialist doctrine has little difficulty with the customary law status of Principle 21.[217]

In connection with the requests by the World Health Organisation and the UN General Assembly for an advisory opinion regarding the *Legality of Nuclear Weapons*, several States had sought to minimise the importance of Principle 21 by stressing that it formed part of a non-binding text.[218] Their opponents maintained that the Principle formed part of customary international law.[219] In reply to these submissions, the ICJ held that:

> The existence of the general obligation 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.[220]

Whilst the Court had already recognised in an earlier case that States are under the obligation to "respect and protect the natural environment,"[221] the above statement is significant for it was made by the Court in a legal opinion on armed conflict and the use of nuclear weapons. The ICJ believes that even in these extreme circumstances the environmental obligations in question continue to be binding upon States. Nevertheless, the Court's formulation does not correspond *verbatim* to the wording of Principle 21. While the latter deals with the obligation to avoid *damage to* the environment of other States or of areas beyond national control, the Court uses a more general formula stressing the obligation to ensure *respect for* these environments. Whether this distinction will be perceived as significant remains to be assessed. In any event, the Court repeated its view on the matter in its decision on the *Gabcíkovo-Nagymaros Project* case.[222]

B. Corollary Principles. The "acquis" of customary IEL, as laid down in the second part of Principle 21, entails several corollary duties for States. In the first place there exists a duty, variously described as the "no-harm principle" or the "principle of harm prevention,"[223] or the "principle of preventive action,"[224] according to which States are obliged to prevent environmental harm before it occurs, and reduce and control pollution and environmental harm when it occurs. While the prior customary rule obligated States to make reparation for *actual* transboundary harm, the harm prevention principle demands that States first and foremost, take suitable preventive measures, *e.g.*, through national legislation, to protect the environment.[225]

Secondly, there is the "principle of co-operation,"[226] sometimes referred to as the "principle of transboundary cooperation in cases of environmental risk,"[227] or more generally as the "principle of good neighbourliness" and "international co-operation."[228] The duty of international cooperation can be said to underlie all

international (environmental) law. Pursuant to this requirement, States need to co-operate in mitigating environmental risks and emergencies. This is now understood as entailing several procedural duties such as the requirement to notify other States and to consult with other States in cases of transboundary risk of environmental damage, and particularly in the case of accidents and emergencies likely to cause transboundary harm.[229] It may also entail specific commitments such as the duty to conduct an environmental impact assessment (EIA), and the duty to exchange information.[230] The principle of co-operation and its corollary principles of prior consultation based on adequate information are particularly firmly established in the law of international watercourses.[231]

However, it should be noted that the universality and the scope of these procedural requirements is not beyond controversy.[232] The purported duty to conduct an EIA has been invoked before the ICJ in two recent cases. In 1995, New Zealand filed a request for an *Examination of the Situation in Accordance with Paragraph 63 of the Court's 1974 Judgement in the Nuclear Tests* case, accompanied by a request for provisional measures. The basis of New Zealand's petition was that a series of nuclear tests planned by France would lead to the same sort of radioactive contamination that had been brought before the Court in 1973. New Zealand claimed, *inter alia,* that it was unlawful for France to conduct further underground nuclear tests before undertaking an EIA "according to accepted international standards," and that unless such an assessment established that the tests would not give rise, directly or indirectly, to radioactive contamination of the marine environment, the rights under international law of New Zealand, as well as the rights of other States, would be violated. The Court was also requested to order France to conduct such an EIA and, unless this process established that the tests would not give rise to radioactive contamination of the marine environment, to order France to refrain from conducting the disputed tests.[233]

In its order of September 22, 1995, the Court dismissed New Zealand's action without entering into the merits of these claims. It held that whilst the 1974 case dealt with atmospheric nuclear tests, the case at hand concerned underground nuclear tests and that it followed that the latter could not be linked to the former.[234] Nevertheless, in his dissenting opinion, Judge Weeramantry argued that the "principle of continuing environmental impact assessment" was gathering strength and international acceptance and that it had reached "the level of general recognition at which the ICJ should take notice of it."[235] Likewise, in his dissenting opinion, Judge Palmer claimed that EIA was a process to comply with the international legal duty to establish that a planned activity does not involve unacceptable environmental risks.[236]

In the 1997 *Gabcíkovo-Nagymaros Project* case, Slovakia claimed that the purpose of an EIA was merely to provide decision makers with information on potential environmental impacts, and that it was still in the process of development—even in Europe.[237] Hungary, by contrast, called it a procedural norm that by 1989 had become "an accepted means" for ensuring that projects of the disputed type did not cause "untoward environmental damage."[238] In its judgement, the Court did not dwell on the issue of EIA directly. But having observed that the disputed project's impact upon, and its implications for the environment were a key issue, the Court held that in order to evaluate its environmental risks, "current standards must be taken into consideration."[239]

C. Contribution of the Rio Declaration. The Rio Declaration reaffirmed and developed—albeit in qualified terms—Principle 21 of the Stockholm Declaration. Principle 2 of the 1992 Declaration reads:

> States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and 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.

The difference between Principle 21 and Principle 2 is that, while according to the former, States have the sovereign right to exploit their own resources according to their *own environmental policies,* the Rio Declaration adds the phrase "pursuant to their own developmental policies."[240] Whether this addition strengthened or weakened the earlier formulation is unsettled.[241] Several international instruments adopted at the Rio Conference and others thereafter have kept to the earlier formula of Principle 21,[242] thereby casting doubt on the general acceptance and therefore on the legal status of its Rio update.

Although the Stockholm Declaration also addressed development issues,[243] the Rio Declaration will be remembered for elevating, amongst others, the principle of sustainable development to a fundamental concept of environmental policy. The need for "sustainable development" was one of the centrepieces of the 1987 report produced by the World Commission on Environment and Development (WCED), also known as the "Brundtland Commission."[244] In this report, entitled *Our Common Future,* WCED synthesised and defined sustainable development as:

> . . . development that meets the needs of the present wtihout compromising the ability of future generations to meet their own needs."[245]

In the *Gabcíkovo-Nagymaros Project* case, both Hungary and Slovakia claimed to be concerned with ensuring sustainable development. The former called it a concept that only emerged as a legal term in 1987, following the WCED report, and given formal and widespread legal recognition by the 1992 Rio Declaration.[246] Slovakia suggested that the principle was devoid of legal status[247] and that all it entailed was a new approach to reconciling economic development with environmental protection.[248] In its judgement, the Court gave no more than a moral boost to the concept of sustainable development when commenting on mankind's constant interference with nature. It explained that the need:

> . . . to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development. . . .[249]

There are other important principles of public policy which have been put in relief on a global level with respect to all environmental sectors in the Rio Declaration, among which: inter-generational equity,[250] public participation at the relevant level,[251] the precautionary approach,[252] a qualified version of, the polluter pays principle,[253] and the principle of common but differentiated responsibility of developed and developing States.[254] All of these principles had previously received recognition to varying degrees through adoption in declarations of principles, programmes of action, and even in some international treaties. On this basis, the "polluter pays" principle is regarded as regional custom, because of the strong support it has received in most OECD and EC countries.[255]

Furthermore, a case is sometimes made that the precautionary principle constitutes (emerging) customary law.[256] However, it is doubtful whether the principle forms part of present international law.[257] First, there seems to be no uniform understanding of its meaning beyond the basic premise that it reflects a "better safe than sorry approach" to counter the belief that States are not bound to act until there is clear and convincing scientific proof of actual or threatened harm to the environment.[258] Three possible interpretations of the precautionary principle are advocated. At its most restricted, it represents a more developed form of the preventive principle: States are to act carefully and with foresight in taking decisions concerning activities that may have adverse environmental consequences.[259] A wider interpretation is that it lowers the threshold of proof, requiring State action in the face of foreseeable harm, even if there is no 100 percent scientific certainty.[260] The most radical construction implies a complete reversal of the burden of proof: it would become impermissible for a State to carry out an activity unless it can be shown that this will not lead to unacceptable harm to the environment.[261]

Secondly, it is significant that after much debate, the UNCED delegates decided to settle for the term precautionary *approach* instead of *principle*, thereby casting doubt on its legal status. They nevertheless agreed on a formulation in line with the above view regarding the lowering of the burden of proof. Principle 15 of the Rio Declaration reads:

> In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious irreversible damage, lack of full scientific certainty shall not be used as reason for postponing cost-effective measures to prevent environmental degradation.

The precautionary principle has been relied on in two recent cases brought before the ICJ. In her 1995 request for an *Examination of the Situation*, New Zealand invoked the most radical interpretation of the principle, arguing that it required France to carry out an EIA as a precondition for undertaking nuclear tests and to demonstrate that there was no risk associated with them.[262] The Court did not enter into the merits of this assertion, but in their dissenting opinions, Judges Weeramantry and Palmer maintained that the principle constituted emerging customary law.[263]

In the 1997 *Gabcíkovo-Nagymaros Project* case, Hungary claimed that the precautionary principle formed part of customary international law and that it had evolved into an *erga omnes* obligation of prevention of damage, precluding her from performing a treaty concluded in 1977 with Czechoslovakia.[264] Given the "scientific uncertainty," but "with credible risks and damages," and with "valid concerns over vital interests," Hungary maintained that in the light of "the preventive and precautionary approach," her fears for future damage constituted the "grave and imminent peril" required for the state of necessity under international law.[265] Slovakia urged more caution with respect to the legal status of the principle, emphasising that it was never intended to disrupt treaty relations, and entailed at most a lowering of the threshold of proof in the face of foreseeable serious or irreversible damage.[266]

In its judgement, the Court noted first that neither Party claimed that new peremptory norms of environmental law had emerged since 1977.[267] The Court may thus have accepted Slovakia's argument that the precautionary approach/principle, even if it reflects customary international law, does not prevail over treaty obligations. Furthermore, it rejected Hungary's assertion that the many uncertainties regarding the ecological impact of putting in place the disputed barrage system, however serious they might have been, fulfilled the objective requirements of a "state of (ecological) necessity" under international law.[268] The Court

did not accept that in environmental matters the standard of proof in international law regarding the foreseeability of harm or damage should be lowered.

In conclusion, it should be noted that the majority of the specialist doctrine is cautious about the legal status of the principles (apart perhaps from Principle 2 insofar as it affirms Principle 21) enunciated in the Rio Declaration. They are neither general principles of law nor are they considered to be universal principles of customary international environmental law. Some may be no more than expressions of desirable public policy, others may be binding only as a matter of treaty law while still others may constitute emerging international law. On the whole, whether they give rise to actionable obligations of a general nature is open to question.[269] The uncertain legal status of the principles of the Rio Declaration was confirmed in a document prepared for the 1997 UN General Assembly Special Session.[270]

It was seen earlier that the international community has repeatedly failed to agree on a uniform set of legal principles of environmental protection.[271] It may therefore not come as a surprise that the above review shows that there are very few general principles and rules that cover all environmental sectors. The only undisputed set of rules that may be said to have achieved such a status are the obligations reflected in Principle 21 of the Stockholm Declaration, and in particular, the prohibition of transfrontier pollution.

D. The Prohibition of Transfrontier Pollution in State Practice. The next step is to look at the implementation of the prohibition of transfrontier pollution in State practice. A traditional indicator of the extent to which States implement international law is to examine what happens when the law is violated.[272] According to the law of State responsibility,

> Every internationally wrongful act of a State entails the international responsibility of that State.[273]

Furthermore, in accordance with the well-known holding of the *Chorzow Factory (Indemnity)* case, the consequence of State *responsibility* is State *liability,* meaning the duty to make reparation:

> It is a principle of international law, and even a general conception of law, that any breach of an engagement involves an obligation to make reparation. . . .[274]

Although the body of multilateral environmental agreements is growing, it is clear that not every instance of environmental harm will be covered by a

specialised treaty.[275] In addition, even if there is a relevant treaty, it is often the case that the author State is not a party to it, or that the treaty places no binding obligation on the State to prevent such damage.[276] In such instances, the customary principles of IEL should provide a safety net. The law of State responsibility covers both hypotheses: States must make reparation, including the payment of compensation, for damage caused by any wrongful act, regardless of the source of the obligation (treaty or custom).[277]

In application of the above, State practice should indicate that breach of any of the identified "environmental" obligations entails the responsibility of the author State, as well as its duty to make reparation. Yet it seems that States are extremely reluctant to recognise responsibility for transbounary harm on the basis of the above rules of customary international environmental law.[278] States have even been surprisingly reticent about pursuing claims *inter se* for particular grievous instances of transfrontier damage.[279]

Following the April 1986 accident at the Chernobyl nuclear power station in the Ukraine, radioactive air pollution was caused over the territory of some twenty countries, with noticeable impacts across the whole of Europe from southern Italy to northern Scotland and Scandinavia. Although several European States—including the UK and the FRG—reserved their right to do so, none has presented a claim to the former USSR for the serious transboundary nuclear contamination caused by the accident.[280]

The implementation of the above principles of customary international law is equally hesitant in treaty practice. The 1979 LRTAP Convention famously contains a footnote stating that it "does not contain a rule on state liability as to damage." Traditionally, States have been willing to consider environmental damage liability régimes only on a case-by-case basis, and only when it proved indispensable for the economic viability of a specific risk-creating activity, such as the nuclear industry and maritime transport of oil.[281] This *ad hoc* approach was set aside only recently in a regional instrument, the 1993 Council of Europe Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment (Lugano Convention). Significantly though, this treaty proves remarkably unsuccessful. Although it requires only three ratifications for its entry into force, by April 1998 not a single State had done so.[282]

Furthermore, State intervention in the area of environmental damage has rarely resulted in the establishment of a compensation régime based on State liability. There is only one treaty that establishes clear rules of *State* liability in case of environmental damage: the 1972 Convention on International Liability for Damages Caused by Space Objects (Space Objects Liability Convention), which stipulates unlimited or "absolute" international State liability for damage caused

on the surface of the earth or to aircraft in flight.[283] This is, however, a unique treaty that deals with highly sensitive political and military matters. Its conclusion should not be taken as proof that States are generally willing to accept liability for environmental damage.[284]

In the overwhelming majority of cases, State intervention has resulted in the setting up of a régime of "civil liability." A "civil liability" régime is one in which liability for environmental damage is channelled to private operators or other sections of the industry, leaving the issue of State liability frequently unanswered, except when States themselves act as private operators. Good examples of this are the conventions concluded in the aftermath of the *Torrey Canyon* disaster. In accordance with the 1969 Civil Liability Convention and the 1971 Fund Convention, liability for maritime transport of oil is currently borne entirely by the profit gaining industry.[285] The most ambitious example of a pure civil liability régime, in terms of scope of activities, is the above-mentioned 1993 Lugano Convention.

International negotiations have less frequently led to mixed State/civil liability régimes.[286] This is the case of the nuclear industry, where States have agreed to complement private operator liability in response to industry demands.[287] It is noteworthy though that many of these conventional mixed régimes have either not entered into force or have, at best, a marginal relevance in practice because of the limited number of contracting Parties.[288]

It is safe to state that there are still many difficulties in translating States' environmental obligations—i.e., State responsibility—into principles and standards of liability.[289] This is due partly to many fundamental legal and technical problems that remain unresolved.[290] Thus, it is still a matter of serious controversy whether State liability arises only upon breach of a "primary obligation" of States or whether liability is contingent upon the causing of damage, irrespective of breach of a primary obligation.[291] Another unresolved issue relates to the nature of this primary obligation: is it a standard of *due diligence* that should be required from States or, instead, an *absolute duty* to prevent damage? If possible defences are allowed, the options for standards of care with respect to State environmental obligations include: (a) a fault-based standard covering both intention or negligence; (b) strict liability, which is a *prima facie* responsibility allowing for various qualifications and defences and (c) absolute liability, which does not allow for any exculpation.[292]

Finally, a large volume of literature is devoted to the threshold question.[293] As recognised by the above-mentioned Working Group on environmental damage arising from military activities, defining "environmental damage" remains a complex issue and requires a two-State approach: defining the environment, and then determining what constitutes compensable damage.[294]

A recent EC Commission Green Paper on Environmental Liability has identified a whole range of possibilities for the determination of the level at which environmental damage triggers liability.[295] Treaty practice,[296] case law,[297] and doctrine[298] have suggested that environmental damage must be "significant," "substantial," or possibly "appreciable." Even if there are no agreed international standards, State practice seems to indicate that the threshold for liability involves a relatively high level of environmental damage.[299]

1.3. The Territorial Scope of the Prohibition of Transfrontier Pollution

1.3.1. Bilateralism—at the Root of IEL

Traditionally, international law was a separate legal system with special rules aimed only at relations between States.[300] Similarly, early IEL was premised on an inter-State bilateral focus and concerned primarily with transfrontier pollution caused by activities in the territory or under the jurisdiction of one State, affecting an area under the jurisdiction of another State.[301] The origins of this cross-border approach seem to lie with the customary principle of "good neighbourliness," which is in turn based on the above-mentioned general legal principle "*sic utere tuo ut alienum non laedas*." Gradually the requirement of "neighbourliness" was widened to include a criterion of adjacency or at least of geographical proximity. However, seen against the background of the development of international law as a whole,[302] it is no surprise that IEL continues to contain the firmest rules when dealing with concerns of environmental harm between two States or with shared national resources, such as international watercourses.[303]

Still, understanding of the laws and mechanisms of nature and of the effects of pollution have grown considerably in the last decades. As already noted earlier,[304] rules dealing with the environment in general, irrespective of where natural resources are located, are emerging.

1.3.2. International Areas and Principle 21

Currently, the high seas and the seabed as well as the maritime subsoil beyond national jurisdiction (or the "Area" according to 1982 UNCLOS), the air column above all these, in addition to Outer Space, and Antarctica and even the ozone layer are areas variously designated in the literature as: "the commons" or "global commons,"[305] "common space areas,"[306] "common spaces,"[307] "international commons,"[308] "international areas,"[309] "internationalised spaces,"[310] "*res*

communis," (or common amenities.)[311] One can only agree with Professor Brownlie that not too much importance should be attached to terminology, for none of these concepts is capable of conveying precisely what the legal status of a particular area is.[312] In the present study the general term "international areas" will be used as a shorthand for all areas that are considered to be beyond national jurisdiction, in addition to Antarctica.[313]

Taking the *locus* of damage as criterion, three hypotheses should be discussed in relation to international areas; first, damage may be caused to the environment of other States by activities of one or more States conducted in areas beyond national jurisdiction; second, activities of one or more States in areas beyond national jurisdiction may cause damage to rights or interests of other States in these areas; third, damage may be caused to the environment of areas lying beyond national jurisdiction through activities of one or more States—conducted within or outside their jurisdiction—without any immediate noticeable effects for third States.

As mentioned above, the "harm prevention" component of Principle 21 does not merely include "the environment of other States," but also "areas beyond the limits of national jurisdiction": there is no suggestion of a territorial or any other spatial limitation to the conduct to which this obligation applies. Furthermore, by focusing not only on activities within a State's *jurisdiction*, but also to activities within State *control*, the Principle covers activities by persons or ships under State control, wherever they may act.[314]

Under present international law therefore, a State's obligation to prevent environmental harm (to other States)[315] applies in any *locus* over which it possesses a measure of legal authority, including in international areas.[316] It follows that States are no longer free to pollute or degrade international areas and that they are obliged to take suitable preventive measures to protect these environments.[317]

However, the above deduction contains two important qualifications: the requirement of "harm" on the one hand and the rights or interests of "other States" on the other hand. This means that only two of the above hypotheses are covered by the international areas provision of Principle 21: extraterritorial activities by a State (or its nationals) causing damage to the environment or territory of another state (or its nationals), and damage to interests or rights that other States (or their nationals) have in international areas caused by extraterritorial activities under the jurisdiction or control of another State.

Indeed, while damage or injury is not considered a constitutive element in the general law of State responsibility,[318] State practice indicates that with respect to extra-territorial activities, proof of material injury to States' rights or interests is required. This is especially the case when the pollution-generating conduct is not governed by a specific rule of international law.[319]

The above qualifications have important consequences, for environmental harm that cannot be construed as direct material damage to States' rights or interests is rarely remedied. In the *Nuclear Tests* cases, neither Australia nor New Zealand sought reparation for proven damage, but they asked the Court to order France to stop atmospheric and other tests in the Pacific. There was evidence of radioactive fallout but no proof of harm. Australia argued, *inter alia*, that the nuclear fallout on its territory constituted a violation of its sovereignty, that it could be potentially dangerous for the country and its citizens, and that the interference with ships and aircraft on the high seas by radio-active fallout constituted infringements of the freedom of the high seas.[320] New Zealand's claim was more broadly cast: she also invoked "the rights of all members of the international community" to be free from nuclear tests giving rise to radioactive fallout and the right to be preserved from "unjustified artificial radioactive contamination of the terrestrial, maritime and aerial environment."[321] Although the merits of these claims were never addressed by the Court, there is scepticism in the literature about whether such claims can succeed in the absence of proof of direct material damage to State's territories.[322]

The scarce international case law that exists on environmental damage in international areas deals almost exclusively with the transboundary effects to the environment "belonging" to States, or with damage which, though arguably sustained by the environment as such, has been invariably reduced to damage to property or economic rights of States or their nationals.[323] In addition, this sort of inter-State claim tends to be resolved "out of court" via diplomatic channels. All too frequently this involves protracted and secretive bargaining in which legal principles play only a minor role. There are a few instances where States have made *ex-gratia* payments or taken remedial measures without, however, recognising liability for damage sustained within and arguably also by resources of international areas: *e.g.*, the 1954 *Diago Fukuru Maru*[324] and the 1966 *Palomares*[325] incidents.

As seen above, the Space Objects Liability Convention is the only treaty to contain a clear régime of State liability for damage sustained, *inter alia*, "on the surface of the earth."[326] But while the latter expression conceivably covers international areas as well, the definition of damage retained by the treaty does not seem to cover damage to the environment as such.[327] Thus far the Space Objects Liability Convention has been invoked in one case. When in 1979 the Soviet Cosmos 954 satellite crashed in a remote area of Canada, the latter presented a claim for more than $6 million dollars to the USSR. While expressly invoking the principles of the aforementioned convention, Canada did not claim compensation for physical, environmental, or property damage, but only for part of the cost of locating,

removing, and testing the debris and for subsequent cleanup efforts.[328] In a diplomatic settlement reached in 1981, the USSR agreed to pay a lump sum of only $3 million, and never expressly recognised liability.[329]

Significantly, in 1991 several ILC members raised the issue of whether damage to the "global commons" should be addressed by the commission in its work on international liability. But a decision on this was deferred and the ILC's 1994 report proclaims firm adherence to the strict bilateral transboundary conception of the study.[330]

Yet, the duty to protect the environment as such, irrespective of *locus*, appears to be addressed by a growing number of multilateral international instruments, which phrase States' environmental rights and duties in general terms without territorial or spatial references.[331] What these instruments show, at a minimum, is that the balance between State sovereignty and the environment is probably changing in favour of the latter. This expanding international interest in environmental resources, wherever situated, is supported by the growing scientific evidence of the integrity and the unity of the environment.[332] The growing evidence of the interrelatedness of all life processes is legally significant. For if the earth's biosphere represents a single indivisible system characterised by the interrelation of its various functional and ecological subsystems, the disruption of any one of these subsystems promotes the breakdown and destabilization of another.[333]

In the present international legal constellation in which States continue to remain prime actors, the key to protecting the environment beyond the limits of national jurisdiction lies in giving "third States" legal standing to enforce protection and preservation of this environment. In this context, the concepts of *erga omnes* obligations and the *actio popularis* need to be discussed. In the 1966 *South West Africa* case, the World Court rejected the notion of *actio popularis,* thereby dismissing the claim that any member of a community had a right to take legal action in vindication of a public interest.[334] This judgement was widely criticised in the literature, and a few years on, the ICJ acknowledged in the *Barcelona Traction* case that there existed:

> . . . obligations of a State towards the international community as a whole, which by their very nature . . . are the concern of all States. In view of the importance of the rights involved, all States can be held to have a legal interest in their protection; they are obligations *erga omnes*.[335]

While this oft-quoted passage is only an *obiter dictum,* it was hailed as a clear progression from the uncompromising stance expressed in the *South West Africa* case. The types of obligations mentioned by the Court in the *Barcelona Traction*

case were the outlawing of acts of aggression in international law and human rights.

In the 1973/74 *Nuclear Tests* cases it was argued by both Australia and New Zealand that such obligations *erga omnes* exist in addition with regard to the preservation of the high seas marine environment.[336] As seen above, their petition was not only based on the alleged violation of their States' sovereignty but on the infringements of the principle of the freedom of the high seas and on the violation of "the rights of all members of the international community" to be free from nuclear tests.[337] Unfortunately, the merits of these claims were never addressed by the Court,[338] although several justices supported an examination of these claims suggesting that the notions of *erga omnes obligations* and *actio popularis* are closely linked.[339]

As seen earlier, in 1995 New Zealand filed a request with the ICJ based on paragraph 63 of the Court's 1974 judgement in its case against France. Here again New Zealand asserted that it had legal standing to enforce not only its own but also other States' rights in the marine environment.[340] Although New Zealand's application found favour with three judges,[341] the majority of the Court held that the 1974 and 1995 cases were substantially different.[342]

In his treatise on *State Responsibility and the Marine Environment*, Dr. Smith suggests an interesting way out of the *actio popularis* impasse.[343] He argues that international law need not go as far as recognising an *actio popularis;* it would suffice to better identify the legal rights and interests of all States in the preservation of the marine environment. The author proposes a distinction between multilateral and bilateral *erga omnes* obligations. He asserts that while no individual State has a right or interest in human rights cases other than as a member of the international community, the high seas marine environment presents a different case: the legal interest of each State in the obligation to prevent injury to this area would lie within the "subset of duties owed to each state and not just to the personified community."

But even if the need for an *actio popularis* could be avoided through recognition of "bilateral" *erga omnes* obligations, enforcement before international tribunals may remain problematic. This is especially the case when the author State refuses consent to jurisdiction. In 1995 Portugal brought a case against Australia concerning a 1989 treaty between Australia and Indonesia regarding the exploitation of the continental shelf of the so-called "Timor Gap." No case was brought against Indonesia, since the latter had not consented to the ICJ's jurisdiction. In its application, Portugal sought to overcome this obstacle by claiming, *inter alia,* that in taking measures to apply the Timor Gap Treaty, Australia had violated the rights of the people of East Timor to self-determination.[344] Portugal maintained that

Australia thus breached rights *erga omnes* and that accordingly it had *jus standi* to require Australia, individually, to respect them regardless of whether or not another State (*i.e.*, Indonesia) had conducted itself in a similarly unlawful manner.[345]

In its judgment of 30 June 1995, the ICJ characterised Portugal's assertion that the right of peoples to self-determination has an *erga omnes* as "irreproachable."[346] It found, however, that it could not decide on Australia's conduct without first deciding why Indonesia could not lawfully have concluded the Timor Gap Treaty.[347] It recalled in this respect that one of the fundamental principles of its Statute (Article. 36 (2)) was that it cannot decide a dispute between States without the consent of those States to its jurisdiction[348] confirming that this applied even if the obligations involved had an *erga omnes* character.[349]

The effect of this holding is undoubtedly, as Judge Weeramantry wrote, to inhibit the "practical operation of the *erga omnes* doctrine."[350] Judge Ranjeva regretted that the Court had avoided the many questions raised by the existence of positive objective law such as rights opposable *erga omnes* and *jus cogens.* He wondered whether the effect of the Court's judgement was not to limit the domain of the Court's jurisdiction *ratione materiae* solely to disputes involving subjective rights.[351]

The same problem was broached by Judge Weeramantry into the *Gabcíkovo-Nagymaros Project* case. After having observed that the dispute in question involved only issues *inter partes,* he speculated that the Court may in the future be faced with environmental litigation that raises *erga omnes* issues of sufficient importance. He stressed that the Court's current *inter partes* adversarial procedures may need to be reconsidered "if ever a case should arise of the imminence of serious or catastrophic environmental danger, especially to parties other than the immediate litigants."[352]

A step towards better recognition of the interests of the international community regarding the environment was taken by the ILC when it proposed to include serious instances of pollution in its list of "international crimes" committed by States:

> . . . a serious breach of an international obligation of essential importance for the safeguarding and preservation of the human environment such as those prohibiting massive pollution of the atmosphere or of the seas.[353]

The term "massive" denotes a very high threshold, beyond the terms "significant" or "substantial" mentioned above. However, the reaction of States to these proposals was rather negative. Not only is there much controversy about the

notion of "State criminality" as such,[354] many governments and scholars seem to regard the ILC proposals on massive pollution at most as a prospect *de lege ferenda*.[355] Probably for much the same reasons, the ILC's proposal to include the "wilful causing or ordering" of "widespread, long-term and severe damage to the natural environment" as a separate crime into its draft for a Code of Crimes against the Peace and Security of Mankind[356] encountered resistance and was eventually dropped.[357]

It is sometimes claimed that certain environmental norms have achieved the status of *jus cogens*. This peremptory character has been attached to the prohibition of "serious damage or threat to biological diversity," following Article 22 (1) of the Biodiversity Convention,[358] to "the basic principles" of 1982 UNCLOS, following Article 311 (3),[359] to the "procedural principles of co-operation" inherent in Principle 21, and to the prevention of climate change, acid rain, and depletion of the ozone layer.[360] Furthermore, the ILC regards the category of international crimes of States as much broader than the list of peremptory obligations, viewing the prohibition against "massive pollution of the atmosphere or the seas" as peremptory.[361] Even States that refuse to regard violation of this norm as an international State crime may not oppose its *jus cogens* character.

Leaving the other requirements of the concept aside, it should be noted that an obligation can only be peremptory if no derogation is allowed.[362] One of the circumstances that needs to be examined with regard to environmental norms is armed conflict: if a State may deviate from such a norm on the basis of self-defence or military necessity, the norm would be derogable under certain circumstances, thus refuting its alleged "peremptory" status.

In conclusion to this subheading, it seems safe to state that the extent to which international law currently imposes on States an obligation of conservation and sustainable development with respect to the environment in general, and the question to whom such a duty would be owed, remain controversial.[363]

1.3.3. Damage to a State's Own Environment

Another question that needs to be addressed is whether international legal responsibility attaches to damage caused by a State to its own environment when there are no immediate deleterious effects for other States, nor for areas beyond national jurisdiction. Can the preventive obligations implicit in Principle 21 be held to apply to the environment contained within States? Here the first element of that Principle poses a serious stumbling block: it holds that State sovereignty, one of the basic tenets of international law, confers on each State the independent right to control and regulate its natural resources. A further problem arises upon

examination of the second element of Principle 21, which mentions only "other States" and international areas as protected spheres; this phrase cannot be stretched to include international legal responsibility for environmental resources within a State's own territory. The ILC made this much clear in 1982 when it held that State liability does not exist when both the activity causing harm and the injury itself occur in the territory of the same State.[364] Even the most recent update of Principle 21, *i.e.*, Principle 2 of the 1992 Rio Declaration, reflects the orthodox view regarding responsibility for damage to a State's own environment.[365]

Nonetheless, it was seen above that international interest in the preservation of the environment, wherever it may be situated, is growing. International concern for the environment that lies within a State's own borders may be justified on scientific grounds. Because of the ecological unity of the global environment, any act of pollution, even if it does not immediately threaten the environment of other States or international areas, can have several systemic consequences: for instance, it may reduce the overall assimilative capacity of the global environment and may affect migratory species.[366] Seen in this way, any act of pollution or even any failure to take preventive action by a State with regard to its own natural resources, creates risks for the entire world community and can potentially affect rights and interests of all States in the environment. It is for those reasons that some have proposed to add a further element to Principle 21 Stockholm/Principle 2 Rio according to which States would have the obligation:

> . . . to protect and preserve the environment within the limits of their national jurisdiction.[367]

A second avenue to justify international interest in the environmental resources contained within a State is a human rights approach. The 1972 Stockholm Declaration already mentions in its very first preambular paragraph that there is a link between human rights and environmental protection:

> Both aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights—even the right to life itself.

The first Principle of the Declaration then goes on to state:

> 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.

However, the *travaux préparatoires* of the Declaration indicate that the question of an environmental human right was contentious and that the wording of the preamble and of Principle 1 was the result of a compromise.[368] This explains perhaps the continuing disagreement on the meaning of Principle 1.[369] Principle 1 of the 1992 Rio Declaration can be seen as continuing the doctrinal controversy about the existence of a human right to environment, for it proclaims that human beings:

> . . . are entitled to a healthy and productive life in harmony with nature.

The literature remains divided on the status of an environmental human right.[370] The fact remains that apart from general proclamations,[371] the practical and procedural implementation of this purported human right to a decent environment in international law has been rather hesitant; for example, despite the fact that the constitutions of more than 60 nations grant citizens a right to a decent environment, thus far no minimum standard of environmental quality to which individuals would be entitled has emerged.[372]

At the far end of the spectrum of this debate stands Judge Weeramantry of the ICJ. In his separate opinion to the *Gabcíkovo-Nagymaros Project* case he argued that:

> Environmental rights are human rights. Treaties that affect human rights cannot be applied in such a manner as to constitute a denial of human rights at the time of their application.

The link between IEL and human rights was also debated in connection with the requests for an advisory opinion from the ICJ on the *Legality of Nuclear Weapons.* Proponents of the illegality of these weapons argued that their threat or use would violate, *inter alia,* "the Human Right to Environment."[373] In its Opinion on the General Assembly request, the ICJ may have accepted at least a general link between human rights and the environment insofar as it observed, as mentioned before, that the environment represents "the living space, the quality of life and the very health of human beings, including generations unborn."[374]

Still, it should be realised that the human rights approach to environmental protection may have its drawbacks. Environmental protection requires more than the piecemeal approach that can be offered through the rather individualistic approach of human rights litigation.[375] On the other hand, those writers who believe that a right to a decent environment has already been added to the catalogue of human rights, will more easily accept that the balance between State sovereignty and environmental integrity is changing in favour of the latter.

1.4. Conclusions to Chapter I

Public concern about the impact of human activities on the environment rapidly found its way into international fora at the end of the 1960s. The ensuing discipline of modern international environmental law (IEL) has moved from an inter-State focus based on transfrontier pollution onto dealing with the environment situated beyond national jurisdiction, and more recently, with the environment in general, irrespective of *locus*.

IEL is primarily treaty-based law. An impressive number of agreements establish detailed obligations for States in regard to separate environmental components such as the marine environment, freshwater resources, and wildlife. Since the 1980s, several instruments have been concluded to deal with problems across several environmental sectors in a comprehensive manner. In addition, new treaty techniques have been developed for tackling complex scientific issues such as loss of biodiversity, ozone depletion and climate change.

Although there are principles, rules and techniques common to many environmental sectors, there exists as yet no international common law of the environment. Nevertheless, it was argued in this chapter that Principle 21 of the Stockholm Declaration can be regarded as the cornerstone of modem IEL. Its first element holds that States have the sovereign right to exploit their natural resources according to their own environmental policies; its second element that activities under the jurisdiction or control of States, both within and outside their own territory, are subject to the prohibition of transfrontier pollution, the implications and limits of which have been discussed above.

Although Principle 21 is regarded as reflecting customary international law, it was seen that States are generally reluctant to recognise or pursue claims *inter se* of State Responsibility based on breach of the Principle. Furthermore, there is controversy on the standard of care required from States as well as uncertainty regarding the level of prohibited damage, although the latter is probably relatively high.

Two other problems that have been discussed in this chapter relate to environmental damage caused in international areas and within a State's own jurisdiction. International interest in these environments can be justified on scientific grounds. However, State practice indicates that environmental damage in international areas will rarely be remedied or compensated unless there is proof of damage to other States' legal rights or interests. In addition, the principle of State sovereignty inhibits outside interference when environmental damage remains confined within State borders. Furthermore, it is still a matter of controversy whether there exists at present a human right to a decent environment and whether this offers appropriate means of ensuring environmental protection.

In conclusion, its seems appropriate to quote and slightly amend an observation made by Professor Shearer in 1996:

> Probably the only clearly established customary law principle of the natural environment is that no State may conduct activities, or permit the conduct of activities, on its territory [or in international areas] that cause harm to the territory of another State, if that harm is of serious consequence and is established by clear and convincing evidence.[376]

Chapter II

Protection of the Environment in the Laws of Armed Conflict

2.1. Introduction

THIS CHAPTER WILL REVIEW THE ENVIRONMENTAL IMPLICATIONS of the *lex specialis, i.e.*, the laws of armed conflict, applicable to the marine environment. Space permits only brief comments on many relevant issues. In particular, only international armed conflict will be addressed, whilst disarmament law and weapons of mass destruction will not be dealt with in detail. Since the law of neutrality raises issues of general peacetime (including environmental) law, some of the issues raised in this chapter will also arise in the next.

In contrast to the relatively recent origins of IEL, the laws of armed conflict are of much older vintage.[1] Mankind has long sought to restrain war through law by prescribing both when war is permissible and what is permissible in war if and when it has begun.

The contemporary law of armed conflict still encompasses this classical dichotomy. Any use of armed force in international relations is subject to a two-tier scrutiny of rules regulating the resort to armed force (*jus ad bellum*) on the one hand, and rules governing the use of armed force (*jus in bello*) on the other.[2] The former is aimed at preventing the outbreak of armed conflict while the purpose of the latter is to moderate or humanise armed conflict. This difference in legal objective leads to a crucial difference: *jus ad bellum* allows the international community to pass judgement on the merits of resort to armed force and necessarily distinguishes between victims and aggressors. By contrast, *jus in bello* applies equally to all parties to an armed conflict, regardless of the legality of their actions under *jus ad bellum*[3] However, the theoretical independence of these disciplines

and the equality of all belligerents under *jus in bello* have recently come under scrutiny.

While *jus ad bellum* and *jus in bello* chiefly regulate relations between belligerents, relationships between belligerents and third States that do not wish to become involved in the conflict are governed by the customary law of neutrality. However, since positions of neutrality *vis-à-vis* unlawful uses of force are incompatible with the UN Charter, the international law on the relations between belligerents and third States is unsettled.

Warfare, as Kalshoven observed, cannot fail to damage the natural environment, and it is therefore important to know what damage must be deemed to be unacceptable.[4] Many conflicts this century, in Europe and elsewhere, led to serious and probably long-lasting environmental destruction.[5] Even if not all damage was inflicted intentionally, history shows that belligerents have never shied away from attempting to secure military advantage by using the forces of nature.[6] Therefore, the problem of environmental damage during warfare is hardly new, and rules aimed at controlling the impact of warfare on the human environment can be found from the earliest civilisations. Thus, ancient norms prohibited the wanton destruction of forests, orchards, fruit trees, and vines, or the poisoning of wells, springs, and rivers.[7]

If environmental damage during warfare is a perennial problem, the extent and depth of public concern about it is a relatively recent phenomenon.[8]

The destructive potential of means of warfare increased dramatically after World War II through the advent of nuclear weapons. In 1956 the International Committee of the Red Cross (ICRC) unsuccessfully proposed express humanitarian legal provisions for these weapons.[9] Today, even Nuclear Powers do not dispute that their use is governed by the laws of armed conflict.[10] They continue to insist however, that these and other "weapons of mass destruction" are best dealt with in arms control fora.[11]

The Second Indochina War (1961-1975), (Vietnam War), coincided with the surge of environmental awareness in the 1970s. Initially, public criticism focused primarily on the unprecedented scale of the use of herbicides by the United States and its South Vietnamese allies.[12] Soon however, the finger was pointed at the combined effect of the vast array of so-called conventional weapons and techniques used by the United States; it was alleged that they had long-term or even irreversible effects on the environment.[13] While most of the environmental damage caused during the two World Wars is said to have been "collateral" in nature, during the Vietnam War, the environment itself allegedly became a major target of the U.S. military.[14]

Towards the end of the 1960s, claims surfaced that the United States had also experimented with weather modification (rainmaking) for military purposes.[15]

Appeals were launched for the outlawing of this new crime of "ecocide" in international law.[16] As will be seen later, the 1972 Stockholm Conference dealt only half-heartedly with the matter of environmental damage during armed conflict.[17] By contrast, the Vietnam War was pivotal for the development of the environmental *jus in bello.*

Aspects of the Vietnam legacy were dealt with by the Geneva Disarmament Conference, which adopted the 1972 Biological Weapons Convention and the 1977 Convention on the Prohibition of Military or Other Hostile Use of Environmental Modification Techniques. Subsequently, the Geneva Diplomatic Conference, tasked with reviewing and developing humanitarian law (hereinafter 1974–1977 GDC), adopted general principles and a threshold for the protection of the environment in international armed conflict. Protection of the environment was also dealt with by the 1980 "Inhumane Weapons Convention,"[18] a treaty containing elements of *jus in bello* and disarmament law. Finally, with the adoption in 1993 of the Chemical Weapons Convention, the use of herbicides in armed conflict has been further circumscribed.[19]

Recent conflicts have highlighted the role of oil in armed conflict. However, oil fields, oil installations and oil tankers have always been a prime target for belligerents.[20] During World War I, British and Rumanian Forces destroyed oil fields in Rumania in order to deny them to the Axis Powers.[21] The destruction of the German oil production capacity was a key factor in the outcome of World War II.[22]

The systematic destruction of Egyptian oil fields by Israel in the 1967 conflict prompted Arab nations to propose during the 1974–1977 GDC that attacks upon such installations be forbidden.[23] This initiative failed and oil installations and oil tankers were again heavily targeted by belligerents in the 1980–1988 Iran-Iraq war. In spite of the intensity of the "Tanker war,"[24] there are no reports of significant pollution resulting from the attacks on tankers.[25] By contrast, repeated Iraqi attacks throughout 1983 on the Iranian Nowruz oil field led to major environmental damage in the Gulf region.[26] Unlike the Vietnam War, however, it did not lead to new treaty provisions aimed at protecting the environment. Nonetheless, the Nowruz incident did inspire the first academic study on the subject of the operation of IEL during armed conflict.[27]

Another conflict of major importance for the subject of environmental damage during warfare is the 1990–1991 Gulf conflict. Two of its more enduring images were the seemingly apocalyptic effects generated by the burning of some 600 oil wells on Kuwaiti land[28] and the release of millions of barrels of crude oil, which created one of the largest oil spills in history.[29] As a result, massive damage was caused in that region to coastal marshlands, wildlife, coastal flora, fishing, offshore oil operations, and the tourist industry.[30] The Saudi-Arabian coast was

affected along a stretch of more than 400 kilometres, and there were impacts on the Kuwaiti, Iraqi, and Iranian coasts.[31] The atmospheric pollution caused by the burning oil wells did not have the apocalyptic effects predicted at first, although it was noticeable far beyond the battlefield.[32] Whether there are any long-lasting impacts on human health and the environment of the region as a consequence of these actions is still a matter of debate.[33]

There is little doubt that Iraq orchestrated both aforementioned disasters[34] for military purposes which are hitherto unconfirmed, but generally regarded as highly questionable.[35] It transpired later that some 34 oil wells were accidentally set ablaze by Coalition attacks, while the oil spill was at least partly caused by intentional or unintentional Coalition actions.[36]

Echoing the charges made during the Vietnam War, the Iraqi actions were heavily criticised and called a "crime against the environment."[37] Some asserted that the conflict showed that a new treaty was needed for the protection of the environment.[38] In the months following the 1990–1991 Gulf conflict, a number of international meetings were held at which the adequacy of the environmental aspects of mainly *jus in bello* were evaluated.[39] The relationship between military activities, including armed conflict, and the environment was also briefly addressed at 1992 UNCED in Rio.[40]

In addition, the matter was placed on the agenda of the UN General Assembly, which adopted Resolution 47/37 (1992) on the subject.[41] At the request of the Assembly, the ICRC submitted two reports in which it reviewed the existing *jus in bello* provisions on the protection of the environment, as well as proposals for their reform, and suggested a series of outstanding problems for consideration by the UN Sixth (Legal) Committee. The ICRC also drafted a model set of instructions to the military, entitled *Guidelines for Military Manuals and Instructions on the Protection of the Environment in Time of Armed Conflict.*[42]

2.2. Jus in Bello *and Environmental Protection*

In sharp contrast to the relative simplicity of *jus ad bellum, jus in bello* may appear as a daunting list of successive and ever more elaborate treaty instruments that reflect the many attempts by the international community to restrain the worst excesses of past armed conflicts.[43] Many argue that the overriding majority of these provisions are peremptory (*jus cogens*) under international law.[44] In its recent Advisory Opinion on the *Legality of Nuclear Weapons,* the ICJ took note of this argument but found that there was no need for it to address this issue.[45] Nonetheless, the Court observed that the great majority of these provisions had already

become customary law, that they reflected the most universally recognized humanitarian principles, and that they constituted "intransgressible" norms.[46]

It should be noted that the overriding majority of *jus in bello* treaty provisions deal either with armed conflict on land or with the effects of armed conflict on land. There are very few treaties in force concluded especially for armed conflict at sea, and almost none for aerial warfare.[47] Thus, there is no naval equivalent for the 1907 Hague Convention (IV) and Regulations respecting the Laws and Customs of War on Land.[48] There have been several unsuccessful attempts at codification, *inter alia,* by the Institut, which published the 1913 *Oxford Manual of Naval War.*[49] The most recent attempt at restatement of relevant law was done under the auspices of the International Institute of Humanitarian Law, which prepared the 1994 *San Remo Manual on International Law Applicable to Armed Conflicts at Sea* (1994 San Remo Manual).[50]

Because the law of armed conflict differs according to the location of the conflict, the protective cover of certain rules may make little sense from an environmental perspective. On the other hand, precisely because environmental damage knows no borders, it will be seen below that non-terrestrial environments and natural resources may be protected through provisions in instruments dealing with armed conflict on land.

2.2.1. Underlying Principles of the Law of Armed Conflict

There seems to be a wide consensus internationally on the identity and content of a few cardinal customary principles of the law of armed conflict. The most basic foundation is the principle, expressed in Article 22 of the Regulations attached to the 1907 Hague Convention (IV) on Land Warfare and elsewhere,[51] that:

> The right of belligerents to adopt means of injuring the enemy is not unlimited.

Although there are slight variations in expression and content, the current principles of the law of armed conflict are usually summarised as the principles of discrimination, proportionality, necessity and humanity.[52] The principle of *discrimination* demands that weapons and tactics clearly distinguish between military and non-military targets. *Proportionality* requires that the degree of force used be proportional to the adversary's actions or to the anticipated military value of the belligerent's own actions. *Necessity* demands that the degree of force used be reasonably necessary to the attainment of the military objective and finally, *humanity*, that no weapon, or tactic, should be employed if it causes unnecessary suffering to its victims.

Although they may not carry the same weight in all types of warfare, current doctrine accepts that these principles are universal.[53] In its 1996 Advisory Opinion on the *Legality of Nuclear Weapons*, the ICJ confirmed that many of these were among the cardinal principles constituting the fabric of humanitarian law.[54]

Since they place limitations on the means and methods of warfare, the principles of discrimination, proportionality, necessity and humanity are relevant for the protection of the environment in armed conflict. This is also the view of the ICRC, who suggested that they be included into military manuals as guidelines for environmental protection.[55]

However, these are general and abstract principles which leave much discretion to the military commander[56] and were formulated with the protection of humans—i.e., combatants and/or civilians—in mind. As for the principle of discrimination, although contrary views are sometimes expressed,[57] there is no State practice to support the view that the natural environment may never constitute a military objective. The UK declared in relation to Additional Protocol I of 1977 that:

> *. . . a specific area of land may be a military objective if, because of its location or other reasons specified in the Article, its total or partial destruction . . . offers a definite military advantage. . . .*[58]

Italy,[59] the Netherlands[60] and New Zealand[61] all filed similar reservations. Similarly, there is evidence from the *travaux préparatoires* of Additional Protocol I that the practice of "interdiction fire," namely targeting of an area where enemy troops are about to pass, even when enemy troops are not yet there, is considered legal.[62] For instance, the United States reserves the right to bombard certain geographic targets like mountain passes.[63]

The customary principle of proportionality was historically a norm developed to protect combatants, but since World War I, protection of the civilian population from excessive losses has gradually become the dominant concern.[64] It is now generally accepted that the proportionality rule serves to protect the environment as well.[65] The decisive question, however, is what kind of damage can be considered excessive. Unfortunately, the customary rule of proportionality does not include any concrete guidelines to this effect. Many consider that the definition of disproportionate collateral damage to the environment is one of the more pressing contemporary questions.[66]

The customary law principle of humanity is undeniably a norm directed at humans, *i.e.*, primarily combatants, although some scholars consider the civilian population included.[67] The indirect environmental benefits can nevertheless be important, particularly when the application of the principle leads to the ban of certain inhumane weapons.

As for the principle of necessity, it has long been accepted that actions involving punitive or vindictive destruction not serving a useful military purpose are impermissible. The prohibition of deliberate or wanton destruction of civilian property and inhabited areas is one of the oldest rules of warfare, and has been recorded in one form or another in many *jus in bello* instruments.[68] A provision to this effect has been included in the 1907 Hague Regulations and the 1949 Geneva Conventions.

Article 23 (g) of the 1907 Regulations forbids destruction or seizure of the enemy's property unless "imperatively demanded by the necessities of war." Evidently, the environmental merits are limited because of the terms "enemy" and "property."[69]

The Geneva Conventions of 1949 contain an identically worded provision according to which the "extensive" destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly qualify as a grave breach.[70] Although the norm forms part of the enforcement measures, its significance cannot be underestimated. The grave breach provision has a wide scope, for it is not limited to a specific category of property nor to any particular period in the course of armed conflict. However, the destruction involved needs to be extensive for it to be qualified as a grave breach, and malicious intent needs to be proved.[71]

The prohibition of wanton devastation has received such wide acceptance that some regard it as peremptory, at least insofar as international armed conflicts are concerned.[72] However, the historical context of the norm indicates that it is intended to cover those parts of the human environment that can be considered real and tangible property, such as villages, towns, districts, and agricultural areas. Parts of the environment which may be affected by armed conflict but which do not "belong" to any of the parties involved would not be covered by the norm. This excludes migratory species to which a State does not retain exclusive property rights as well as natural resources in international areas.[73]

Nevertheless, since the 1990–1991 Gulf war, the prohibition of wanton devastation has often been invoked in a broader context in relation to the environment in general.[74] This is the position taken by the UN General Assembly in Res. 47/73[75] and by the ICRC guidelines.[76] In its 1996 Advisory Opinion on *Nuclear Weapons*, the ICJ may have confirmed this position. Citing the above mentioned resolution the Court affirmed that:

> . . . destruction of the environment, not justified by military necessity and carried out wantonly, is clearly contrary to existing international law.[77]

It is unclear, however, what threshold of environmental damage this wider norm may involve. The ILC has proposed that the use of means and methods of warfare with the intent to cause environmental damage, when not justified by military necessity, be classified as a crime against peace and security of mankind.[78] However, the suggested threshold has been set at a very high level. The war crime needs to have been committed "in a systematic manner or on a large scale." In addition, the level of environmental damage was taken from Additional Protocol I of 1977 and should therefore be regarded as extremely high.[79] Furthermore, the suggested provision has been cast in openly anthropocentric terms.

By setting close to 600 oil wells alight and by deliberately causing a catastrophic oil spill in the 1990–1991 Gulf conflict, Iraq is widely regarded as having violated at least the customary prohibition on wanton devastation. As mentioned before, to this day the reasons for these actions remain unclear; they may have served military purposes, but they were largely unsuccessful. However, State practice and courts have in the past required a very high standard of proof for the war crime of devastation beyond military necessity.[80] After World War II, several German generals were charged with the war crime of wanton devastation of villages and cities. In the face of advancing Soviet troops, they had issued orders for scorched earth policies in Northern Norway and the USSR. General Jodl was found guilty of such practices by the main Nüremberg Tribunal.[81] However, in the trial of *US v. Von Leeb,* seven commanders were cleared by the U.S. Military Tribunal. It held that "a great deal of latitude must be accorded" to military commanders and that "devastation beyond military necessity" in these situations requires "detailed proof of an operational and tactical nature."[82]

In the case of *US v. List* (hostages case), German General Rendulic was charged with wanton devastation in the Norwegian Province of Finnmark. Although he admitted his actions, he argued that they were taken in the belief that Russian forces were in hot pursuit of his retreating units. The court acquitted the defendant on the grounds that the defendant may have erred in believing that there was military necessity for this destruction and devastation, but that he was guilty of no criminal act.[83] This judgement was extremely controversial in Norway, for there was evidence that the general had enough information to decide against the need for a scorched earth policy.[84] Nevertheless, what became known as the "Rendulic" rule has since been adopted as an important guideline on "hindsight" by some military forces. It has been invoked in defence of two controversial air-raids made by the U.S. Air Force during the 1991 Desert Storm to excuse possible reliance on information which, with hindsight, proved insufficient.[85]

In conclusion, the environmental benefits of the application of the underlying principles of *jus in bello* is not unqualified. Nevertheless, as Professor Roberts

points out, taken together, the underlying principles of the law of armed conflict strongly point to the conclusion that actions resulting in massive environmental destruction, especially where they do not serve a clear and important military purpose, would be questionable on many grounds.[86]

In addition, the principles may provide a safety net in conflicts such as the 1990–1991 Gulf War, where few of the participants were party to *jus in bello* treaties containing norms specifically directed at the environment.[87]

2.2.2. The Martens Clause

The Martens Clause finds its origins in a paragraph inserted in the preamble to Hague Conventions (IV) of 1899 and 1907. It has since been inserted in one form or another as a separate article in many *jus in bello* conventions after World War II.[88] It states that if a particular rule is not expressly found in treaty law, belligerents (and recently also civilians) remain under the protection of customary law, the principles of humanity, and the dictates of public conscience.

It is generally accepted that the clause serves as a powerful reminder of the role of customary international law and that it warns that even if an issue is not addressed by a specific treaty provision, it may still be regulated by international law.[89] However, there is disagreement on the significance of the terms "principles of humanity and dictates of public conscience." It is debated whether this formula refers to separate sources of (legal) rules governing belligerent conduct, or whether it only offers moral guidelines.[90]

The possible interpretations of the Martens Clause were extensively dealt with in submissions of States in connection with the WHO and UN General Assembly requests for an advisory opinion on the legality of nuclear weapons. Among the proponents of their legality, the Russian Federation argued that the clause was redundant,[91] whilst the UK held the view that the clause was a mere reminder of the existence of customary law.[92] States opposing these views argued that, even if not expressly prohibited by a treaty norm, nuclear weapons were forbidden because their use violates the principles of humanity and public conscience.[93]

In its 1996 Advisory Opinion on the General Assembly request, the ICJ refuted the Russian position and affirmed the importance of the Martens Clause explicitly by holding that its "continuing existence and applicability cannot be doubted" and that it reflected customary law predating Additional Protocol I. However, the Court would not be drawn any further on the meaning of this clause other than observing that it has proved to be an effective means of addressing the rapid evolution of military technology and that the fact that certain weapons were

not specifically dealt with by the 1974–1977 GDC does not permit any legal conclusions relating to substantive issues raised by the use of such weapons.[94]

Although the Martens Clause is undoubtedly anthropocentric, it has been argued that:

> *The customary laws of war, in reflecting the dictates of public conscience, now include a requirement to avoid unnecessary damage to the environment.*[95]

Insofar as the underlying principles of the law of armed conflict already amount to a prohibition of unjustifiable damage to the environment, this interpretation of the Martens Clause adds little new to its protection.[96] The statement may nevertheless serve to emphasise that since environmental degradation is now undeniably of major public concern, it would be unacceptable for the military to neglect these values during armed conflict.[97]

2.2.3. Treaty Provisions until 1977

Until the mid-1970s, the conventional *jus in bello* did not mention the environment by name, although it contained a series of norms with environmental implications. One can distinguish five types of such norms: (1) provisions aimed at civilians, since these imply protection of the environment on which the civilians depend; (2) provisions prohibiting unnecessary destruction of civilian property; (3) prohibitions of attacks on certain objectives and areas; (4) prohibitions and restrictions on the use of certain weapons and (5) prohibitions and restrictions on certain methods of war.[98] The analysis below will be restricted to norms which are most relevant for the rest of this study.

A. Treatment of Private, Semi-public and Public Property. Apart from rules on wanton devastation of property, which were discussed above, both the 1907 Hague Regulations and the 1949 Geneva Conventions contain rules for the treatment of private, semi-public, and public property during belligerent occupation.

The 1907 Hague Regulations on Land Warfare reflect customary law and constitute the principal source for the status of property during belligerent occupation.[99] The four Geneva Conventions are in many respects the most important source of international humanitarian law. They have achieved virtually universal participation of all States, consistently attracting more adherents than the UN Charter.[100]

According to Articles 46 and 56 of the 1907 Hague Rules, private and municipal property as well as holdings of religious, cultural, educational and scientific

institutions are immune from interference by the occupier. The latter is furthermore obligated by Article 43—unless absolutely prevented—to respect the national laws in force in the occupied territory. On the basis of Article 46, an occupier would not be allowed to take possession of privately owned natural resources, such as forests. A case can also be made that officially established nature reserves, regardless of ownership structure, are given immunity by Articles 43 and 56. This may apply to habitats listed, *e.g.*, under the 1971 Ramsar Convention on Wetlands of International Importance and to sites designated under the 1972 UNESCO Convention for the Protection of World Cultural and Natural Heritage.[101]

Pursuant to Article 55, the occupying State may take possession of government real estate holdings but is obligated to respect the rules of usufruct when administering these. Article 55 reads:

> The occupying State shall be regarded only as administrator and usufructuary of public buildings, real estate, forests, and agricultural estates belonging to the hostile State, and situated in the occupied country. It must safeguard the capital of these properties, and administer them in accordance with the rules of usufruct.

By its very language, Article 55 seems capable of being read as protecting large portions of the human environment, including in particular, agricultural lands and forests.[102] The old Hague rule can be seen as an early expression of the duty to use natural resources in sustainable ways. An application of this principle is the *Polish Forests* case in which a number of former German civilian administrators were convicted of war crimes committed during the occupation of Poland. They were found to have caused:

> . . . the wholesale cutting of Polish Timber to an extent far in excess of what was necessary to preserve the timber resources of the country.[103]

The status of certain property during belligerent occupation is regulated also by Article 53 of the fourth Geneva (civilians) Convention, which stipulates that:

> Any destruction by the Occupying Power of real or personal property belonging individually or collectively to private persons, or to the State, or to other public authorities, or to social or to cooperative organizations, is prohibited, except where such destruction is rendered absolutely necessary by military operations.

The *travaux préparatoires* show that the principal goal of this provision was to protect all private or public property of immediate "domestic" value to citizens,

but not public property with a general military value such as airfields and bridges. The difficulty lies in identifying what kinds of state-owned property mainly serve the needs of the individuals. In the opinion of one commentator, the Kuwaiti Oil Fields, which were destroyed by Iraq in the closing stages of the 1990–1991 Gulf Conflict, do not qualify as a such.[104] Furthermore, it has been argued that the provision was only intended to apply during uncontested military occupation.[105]

Unlike Articles 46 and 56 of the Hague Regulations, Article 53 of Geneva Convention (IV) allows destruction when "rendered absolutely necessary by military operations." Since forests and nature reserves arguably rarely serve immediate domestic civilian needs, Article 53 does not diminish the protection which private ecological property and nature reserves derive from the Hague Regulations.

There are several limitations inherent in the above provisions that may adversely affect their relevance for environmental protection. By requiring that natural resources "belong" to the occupied State, parts of the natural environment which cannot be considered property of a particular State are excluded.[106]

It is important to note also that the above provisions do not apply during combat. Since 1907, the status of cultural property during hostilities has been addressed in several instruments, none of which extend firm protection to natural sites. Thus, the 1954 Hague Convention on Cultural Property and its protocol protect a broad range of objects from destruction, damage and pillage, but its provisions and subsequent State practice indicate that it applies only to built environs containing large amounts of cultural property. During a recent review of the convention, a suggestion to include natural sites was rejected as impractical and counterproductive.[107]

During the 1974–1977 GDC, it was confirmed that States do not want to commit themselves to any protection for natural sites in armed conflict. Article 53 of 1977 Additional Protocol I prohibits acts of hostility against historic monuments, works of art, or places of worship which constitute the cultural or spiritual heritage of peoples. Although this formulation is not exclusively concerned with the man- made or built environment, and may conceivably include natural sites, the *travaux préparatoires* of the provision make it clear that a proposal to protect any and all places of worship was rejected for reasons of practicality and that there has to be more than local fame about protected places.[108]

In addition, at least two proposals were tabled to protect specially designated nature reserves.[109] One of these proposals read as follows:

> Nature reserves with adequate markings and boundaries declared as such to the adversary shall be protected and respected except when such reserves are used specifically for military purposes.[110]

None of these proposals were retained, and consequently, there is as yet, no *jus in bello* instrument that protects nature reserves during combat.[111]

The absence of any such restriction makes it unsurprising that military hostilities took place in the Kuwaiti National Forest during the 1991 *Desert Storm* campaign,[112] and that the Sava Wetlands in Croatia, which had been included in UNESCO's Biosphere programme, were disturbed during the recent conflict in Yugoslavia.[113]

B. Provisions for Naval Warfare. The Hague Regulations apply only to land warfare, and there is no equivalent instrument for armed conflict at sea. Consequently, while the more traditional type of terrestrial nature reserve may be immune under the regulations, the same cannot be said to apply to more novel types: those with a land-ward and a sea-ward component, or those entirely located at sea.[114] Arguably, it would appear illogical to extend immunity to terrestrial components of nature reserves, but not to coastal or marine components. However, insofar as reliance has to be placed on the "pre-ecological" 1907 Hague Regulations, firm legal ground is lacking. This is, *a fortiori*, the case for marine sanctuaries.

There is, *a fortiori*, no legal immunity for marine sanctuaries during armed conflict. During the discussions in preparation for the 1994 San Remo Manual, it became clear that no consensus could be reached on the creation of a legal obligation in this respect. Nevertheless, the manual encourages belligerent States to conclude special agreements not to conduct hostile actions in marine areas containing:

(a) rare or fragile ecosystems; or

(b) the habitat of depleted, threatened or endangered species or other forms of marine life.[115] And to make use of lists such as those maintained, *inter alia*, under the World Heritage Convention.[116]

Finally, it is undeniable that mines laid at sea have the potential to affect the freedom of navigation of many States, whether belligerent or neutral, and that unrecovered and unexploded mines may lead to serious pollution incidents after the end of naval conflicts.[117] Apart from the 1971 Seabed Arms Control Treaty,[118] and Protocol II of the 1980 "Inhumane" Weapons Convention,[119] the only international legislation governing the problem of mine warfare at sea is contained in Hague Convention (VIII) Relative to the Laying of Automatic Contact Mines.[120] The material scope of the latter is limited to automatic submarine contact mines and torpedoes. It contains neither a general prohibition nor a specific geographical limitation of the use of such devices, and is regarded as one of the least successful texts to emerge from the 1907 Peace Conference. [121] Because of the

unrestricted mine warfare of the two World Wars and the technical development of naval mines, its continued legal relevance became a matter of dispute.[122] Still, it is said to reflect customary law for the use of automatic contact mines.[123]

The 1994 San Remo Manual suggests a series of much needed improvements to the legal régime of all types of mine warfare at sea, drawing, *inter alia,* on principles of the 1980 "Inhumane" Weapons Convention for mine warfare on land.[124] The suggested rules include, for example, the interdiction to use free-floating mines, unless (a) they are directed against a military objective and (b) they become harmless within an hour after loss of control over them;[125] the obligation for belligerents to record the location where they have laid mines;[126] and after the cessation of hostilities, to do their utmost to remove or render harmless the mines they have laid.[127]

2.2.4. The 1977 ENMOD Convention

The ENMOD Convention (hereinafter ENMOD) was concluded against the backdrop of the Vietnam war, which involved massive use of herbicides as well as allegations of attempted weather modification for military purposes.[128] In 1972, the United States formally renounced the use of climate modification techniques as a matter of policy[129] and agreed to negotiate a treaty to this effect with the USSR.[130] The treaty was eventually concluded under the auspices of the Conference of the Committee of Disarmament, and adopted by General Assembly Resolution GA Res. 31/72.[131]

Article I of the ENMOD reads:

> Each State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.

Article II provides the following clarification:

> The term "environmental modification techniques" refers to any technique for changing—through the deliberate manipulation of natural processes—the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space.

The Disarmament Conference transmitted a series of common understandings of various articles to the General Assembly.[132] These were not formally annexed

to the convention, and although they probably reflect the drafters' intentions, their legal status is ambiguous.[133]

The understanding to Article I includes a non-exhaustive list of examples such as:

> . . . earthquakes, tsunamis, an upset in the ecological balance of a region, changes in weather patterns, changes in climate patterns, changes in ocean currents, changes in the state of the ozone layer, and changes in the state of the atmosphere.[134]

There is, as yet, no proof that the United States did engage in weather modification in Vietnam.[135] Furthermore, whether the types of geophysical warfare the ENMOD drafters had in mind are realistic is a matter of debate.[136] On the other hand, weather modification is currently being used for peaceful purposes,[137] and the convention encourages development and testing of these techniques for peaceful purposes.[138]

Furthermore, ENMOD may now be applicable to a broader range of situations than originally intended. After the 1990–1991 Gulf war, it became controversial whether the setting alight of Kuwaiti oil wells and the engineering of the Gulf war oil spill came within the ambit of the convention. Some claimed that these deliberate acts, although they were "low-tech," induced proscribed environmental modification of natural processes.[139] Others objected that ENMOD was intended to ban only advanced technological techniques aimed at changing the "dynamics, composition and structure of the Earth." During the Second Review Conference of ENMOD, held in September 1992, State parties failed to solve this controversy. They agreed only to study the possibility of clarifying the scope of ENMOD with the aim of prohibiting also low-tech environmental modification.

Surprisingly, however,[140] the final conference declaration, adopted by consensus, declares that the "military or any other hostile use of herbicides" is an environmental modification technique within the ambit of the convention.[141] This can only be explained by the fact that the U.S. government had already earlier acknowledged that the use of herbicides was covered by ENMOD.[142] In addition, by 1992, a general consensus was emerging within the UN Disarmament Conference that the use of herbicides in armed conflict should be banned by the Chemical Weapons Convention.[143]

These recent developments notwithstanding, ENMOD is generally considered of limited value for the protection of the environment in armed conflict.[144] It is a disarmament treaty that does not outlaw environmental damage as such, but prohibits certain uses of the forces of nature as weapons in armed conflict. Furthermore, it is debated whether ENMOD requires the actual causing of such damage.[145]

In addition, the threshold of prohibited damage in ENMOD is high, although not as high as for the provisions of Additional Protocol I, which will be discussed further below. Article I of ENMOD uses the terms "widespread, long-lasting or severe effects," and it is important to note that because of the disjunctive "or," these are meant to be alternatives. A technique meeting any of the threshold criteria will be prohibited. The common understanding of this article gives the following interpretation:

(a) widespread: encompassing an area of several hundred square kilometres;

(b) long-lasting: lasting for a period of months, or approximately a season;

(c) severe: involving serious or significant disruption or harm to human life, natural and economic resources or other assets;[146]

The term "widespread" is meant as an absolute standard, which may exceed the surface area of some States.[147] Suggestions that a relative standard, taking into account States' surface areas would be fairer for small nations were rejected during the negotiations.[148]

Many consider it likely that the environmental damage caused by the 1991 oil-well fires and the oil slick—assuming that they were environmental modification techniques—crossed at least one of the ENMOD thresholds.[149] However, neither Iraq nor several coalition States were a party to the convention at the relevant time.[150] ENMOD broke undoubtedly new ground in 1977, and by 1992 it counted only 55 parties. It is unlikely to reflect customary law.[151]

Furthermore, the wording of Article I is so strained that some doubt whether ENMOD was intended to cover the concept of environmental damage at all.[152] Importantly, environmental damage as such is not outlawed, only the use of certain techniques which may cause destruction, damage, or injury to State parties. This formulation excludes application of ENMOD not only to non-parties but also to the environment lying beyond the national jurisdiction of State parties. This means that ordinarily, environmental damage caused by environmental modification techniques on the high seas will not be covered unless damage of the forbidden threshold is caused to the land or sea areas covered by a State party's sovereignty.[153]

A final observation is that the convention's remedial measures have never been used and that its enforcement mechanisms are regarded as unsatisfactory.[154]

2.2.5. Additional Protocol I

Protocol I Additional to the four Geneva Conventions was concluded shortly after ENMOD. It regulates primarily international armed conflict on land, but includes the effects of other types of armed conflict on land under certain conditions.[155] By 22 January 1998, Additional Protocol I had 149 State parties.[156]

Nevertheless, this protocol remains controversial. The United States, for example, has major objections to the status which it gives to liberation movements, and disagrees with other provisions which she sees as unduly restricting military operations. These include the provisions on the natural environment.[157]

Additional Protocol I contains several articles dealing with protection of the environment. Of these, two deal explicitly with protection of the natural environment, the others with separate components of the human environment: agricultural areas, cultural and religious property and industrial installations. Following the 1990–1991 Gulf conflict, literature on the legal significance of these provisions has abounded.[158]

A. Articles 53, 54 and 56. Article 53 of Additional Protocol I, which was already mentioned above, deals with the protection in armed conflict of historic monuments, works of art or places of worship which constitute the cultural or spiritual heritage of peoples. The *travaux préparatoires* show that the term "peoples" was used intentionally to convey a broad purpose. It is noteworthy that Article 53 prohibits attacks against certain monuments even if the health and survival of the population are not affected.[159]

Article 54 of Additional Protocol I forbids warfare by starvation and deals with the protection of objects indispensable to the survival of the civilian population such as "foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works." However, the article permits important exceptions. The first one (paragraph 3) relates to objects which are either used solely by the military or in direct support of military action.

The second exception (paragraph 5) allows Parties to engage in scorched earth policies on their own territory under the following conditions:

> In recognition of the vital requirements of any Party to the conflict in the defence of its national territory against invasion, derogation from the prohibitions contained in paragraph 2 may be made by a Party to the conflict within such territory under its own control where required by imperative military necessity.

This is an important exception. It was argued above that States are under no firm international legal obligation to protect the environment within their own borders.[160] Even if some might disagree with the general principle, Article 54(5) proves that at least in international armed conflict, States may resort to extensive destruction of their own territories under certain conditions.[161]

Another provision with environmental implications is Article 56, which forbids attacks on "works or installations containing dangerous forces, namely

dams, dykes and nuclear electrical generating stations," even if in principle they constitute military targets. Paragraph 2 of the article defines the conditions under which this special immunity might cease: in general, the protection may cease only when the works or installations are used in regular, significant and direct support of military operations, and if the attack is the only feasible way to terminate such support.

It is important to observe that the enumeration of dangerous installations in this provision is meant to be exhaustive. In particular, as mentioned before, a proposal that oil installations be given special immunity as well, failed.[162] States are nevertheless encouraged to conclude further agreements providing additional protection for objects containing dangerous forces.[163]

Finally, the provision is unlikely to reflect customary international law.[164] This is confirmed by the 1997 International Watercourse Convention. Although Article 29 states that watercourse installations remain under the protection of the laws of armed conflict, it omits to mention Article 56 by name.[165] During the adoption of the treaty by the General Assembly it was stressed that:

> *Just as article 29 does not alter or amend existing law, it does not purport to extend the applicability of any instrument to States not parties to that instrument.*[166]

B. Articles 35(3) and 55. The 1974–1977 GDC was preceded by two preparatory expert meetings convened by the ICRC. During the last of these, in 1972, calls were made for the inclusion of provisions on the protection of the environment.[167] For reasons that are unclear, the ICRC decided to retain none of these proposals. Yet, at the 1974–1977 GDC, several delegations brought the issue up from the very beginning.[168] However, differences of opinion emerged quickly. Some delegates believed that the protection of the environment in time of war was an end in itself; others considered the continued survival of the civilian population to be its purpose.[169] Various proposals were formulated, many of which went through several stages of deliberations at the Conference.[170] In the end, no agreement was reached on a definition of the environment nor on a single course of action. An official Working Group came up with two proposals for a provision on the "natural" environment. The Conference accepted both, and as a consequence, the text of Additional Protocol I contains two provisions on the natural environment, each with their own rationale and scope.

The first provision, Article 35(3), appears under the heading "Basic Rules" and deals with means and methods of warfare. It states that:

> It is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment.

The second provision, Article 55, appears in Part IV on the Protection of the Civilian Population and reads:

> (1) Care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health and survival of the population.
> (2) Attacks against the natural environment by way of reprisals are prohibited.

These provisions are not a model of clarity. Their scope and contents, mutual relationship as well as the link, if any, with the strikingly similarly worded provision of the 1977 ENMOD Convention are hotly debated.[171]

Neither of the provisions defines the term "natural environment." The Biotope group, which elaborated the proposal, thought its meaning to be self-evident, but this is disproved by the comments which the provisions elicited even during the conference. The ICRC commentary to the provisions claims that the term "natural environment" should be interpreted broadly, covering, *inter alia,* objects indispensable to the survival of the civilian population, mentioned in Article 54.[172] Support for this position can be found in the *travaux préparatoires.* These show that an Australian proposal, according to which a State's own territory would be exempted from the prohibition (later) contained in Article 55, was dropped.[173] What this means is that Article 55 sets a limit to the defensive scorched earth policies permitted by Article 54(5).[174]

The literature is divided on the meaning of the terms "natural environment" in Articles 35(3) and 55. Some believe that both provisions share the same objective, but disagree on its content.[175] The majority of writers, however, argue that Article 35(3) aims at protecting the environment per se and that Article 55 protects the environment for the sake of the health and survival of the population.[176]

In view of the above controversies, it is perhaps not surprising to note that doctrinal opinion is divided also on the ultimate scope of the articles. Unlike ENMOD, Articles 35(3) and 55 Additional Protocol I do not require that the (actual or threatened) damage causes injury to a State party. However, does this omission mean that the environment of all States is covered by the provision, regardless of

whether they are parties to the convention and regardless of their status in the conflict?

Dr. Fisher regards Article 35(3) as a rule acknowledging the impact of modern warfare on non-belligerent countries.[177] Professor Lagoni writes that the article has three purposes: to protect the environment as such; to protect the civilian population from long-term and severe damage and to protect the territory of States not parties to the conflict from "widespread" damage to the environment.[178] Others reject such views on the ground that Additional Protocol I intends to regulate international armed conflict only between State parties.[179]

The legal effect of Articles 35(3) and 55 for areas beyond belligerents' territory—third States and international areas—is a complex matter. It cannot be resolved without determining: (a) what level of protection exists for these areas under general (peacetime) international law; (b) what threshold of environmental damage is intended by Articles 35(3) and 55;(c) whether Articles 35(3) and 55 were innovative at the time of their adoption; and (d) what their current legal status is.

While the relationship between belligerent States and third States will be further dealt with below,[180] some of the above questions can be answered briefly. As to question (a), it was argued earlier that under general international law, States are under a duty not to cause "severe" damage to the territory of other States or of areas beyond national jurisdiction, and that there is no firm obligation with regard to the environment within a State's own borders.[181]

As for (b), it is generally assumed that Articles 35(3) and 55 only cover very significant damage. Although the terms used in Additional Protocol I resemble those of ENMOD, the threshold indicated by the two instruments is fundamentally different.[182] Unlike in ENMOD, the adjectives "widespread, long-term, and severe" used in Additional Protocol I are joined by the word "and," meaning that it is a triple, cumulative standard that needs to be fulfilled.

There are no "understandings" comparable to ENMOD for the threshold adjectives of Additional Protocol I, although some indications can be found in the conference records. Some of these suggest that while the duration of the term "long-lasting" in ENMOD was a few months, the adjective "long-term" in Additional Protocol I would need to be measured in decades, rather than months, and that ordinary battlefield damage of the kind caused to France in World War I is not covered. However, some delegates argued that it was not possible to say with certainty what period of time might be involved.[183] There was no explicit clarification of the terms "widespread" or "severe," although it was suggested that the term "health" should be thought of as referring to congenital defects, degenerations or deformities and as excluding temporary or short-term effects.[184]

Given these suggestions, it has been argued that Articles 35(3) and 55 do not impose any significant limitation on combatants waging conventional warfare, and that they are:

> . . . *primarily directed at high level policy decision makers and would affect such unconventional means of warfare as the massive use of herbicides or chemical agents which could produce widespread, long-term, and severe damage to the natural environment.*[185]

As for questions (c) and (d), at the time of their formulation, Articles 35(3) and 55 were regarded as innovative. States like the United States[186] and France,[187] and many scholars,[188] continue to believe that they bind only State parties. In its 1996 Advisory Opinion on the *Legality of Nuclear Weapons,* the ICJ rather enigmatically stated that these provisions provide additional protection to the environment and "are powerful constraints for all States having subscribed to these provisions,"[189] thereby apparently suggesting that they do not reflect customary law.

The question of the relationship between existing customary international law and Articles 35(3) and 55 is essential and depends chiefly on the level of environmental damage permitted by the latter provisions. Some authors argue that because of their high threshold, they do not add much by way of protection to customary rules of the law of armed conflict.[190] However, another interpretation is possible. If the threshold set by Articles 35(3) and 55 is innovative, it may entail a more permissive rule than the customary principles of the law of armed conflict. Rather than improving on the customary protection, the 1977 additions of *jus in bello* may lead to an erosion of the customary requirements of proportionality and necessity in relation to the environment.[191]

As the above analysis has indicated, a strong case can be made that the intended threshold of Articles 35(3) and 55 is much higher than the peacetime standard of "severe." This raises the question of what standard applies in armed conflict to third States and international areas. This issue will be further addressed in the next chapter,[192] but it seems *prima facie* unacceptable that belligerents would be entitled to inflict environmental damage leading to congenital diseases in third States. Given their high threshold, the provisions of Additional Protocol I cannot lower the protection which the latter derive from general international law. Therefore, the view that these provisions should not be considered applicable to third States appears convincing.

Another question is whether the provisions would nonetheless cover third States that become party to the protocol. Would such States accept that they will have no cause for complaint unless the damage caused within their territory is of

the severity envisaged in Articles 35(3) and 55: *i.e.*, unless it lasts for decades, covers wide areas and leads to birth defects? It would be hard to believe that States would accept such a consequence voluntarily. The better view seems to be that Articles 35(3) and 55 only cover belligerent States, but not third States, regardless of whether the latter have become party to the protocol or not.

This leaves the case of international areas. It was seen earlier that under current international law, environmental damage in these areas is only actionable in case severe injury is caused to legal rights or interests of States. In addition, whilst there may be an emerging duty to protect the environment as such, international enforcement of these obligations and the requisite legal standing are problematic.[193] Consequently, a State's ability to bring a claim for environmental damage arising from military activities in international areas turns on demonstrating a legal interest in this environment and an entitlement to that effect.[194]

The international area of most importance to this study is the high seas. However, pursuant to Article 49(3), Section IV of Additional Protocol I applies primarily to land warfare; it may apply to air and sea warfare if the civilian population, individual civilians and civilian objects on land are affected. Therefore, while Article 35(3) applies theoretically unabridged, Article 55(1) and (2) will only apply to naval conflicts insofar as civilians or civilian objects are affected. The above controversy surrounding the anthropocentric nature of Article 55 is therefore superfluous for naval conflict.[195]

Article 55 may apply to the destruction of an oil tanker and, *a fortiori*, of a nuclear-powered vessel at sea provided that the civilian population on land is affected. Such consequences are conceivable when the destruction happens in the territorial seas[196] or in the Exclusive Economic Zones of States, but are less likely further away from the coasts and particularly on the high seas. By contrast, assuming that the purpose of Article 35(3) is to protect the environment *per se*, the provision may be relevant for the entire marine environment, irrespective of benefits to mankind.

However, the high triple standard needs to be satisfied for both Articles 35(3) and 55. Precisely because there are few conventional means and methods of warfare which would cause or may be expected to cause environmental damage of the severity, duration and spatial dimensions envisaged, the environmental provisions of Additional Protocol I are regarded as of little relevance for naval conflict.[197] The discussions leading up to the 1994 San Remo Manual confirm that there is a great deal of uncertainty regarding the relevance of the environmental provisions of the new *jus in bello* for naval warfare. Significantly, the provision included in the Manual does not employ any of the terminology of the Protocol (or of ENMOD), but refers to the underlying principles of the law of

armed conflict and uses a "due regard" clause borrowed from the peacetime law of the sea:

> Methods and means of warfare should be employed with due regard for the natural environment taking into account the relevant rules of international law. Damage to or destruction of the natural environment not justified by military necessity and carried out wantonly is prohibited.[198]

Similarly, in the U.S. Navy's Commander's Handbook on the Law of Naval Operations, "due regard" language has been adopted, but no reference is made to either Additional Protocol I or ENMOD.

> . . . the commander has an affirmative obligation to avoid unnecessary damage to the environment to the extent that it is practicable to do so consistent with mission accomplishment. To that end, and so far as military requirements permit, methods or means of warfare should be employed with due regard to the protection and preservation of the natural environment. Destruction of the natural environment not necessitated by mission accomplishment and carried out wantonly is prohibited. Therefore, a commander should consider the environmental damage which will result from an attack on a legitimate military objective as one of the factors during targeting analysis.[199]

Finally, a word needs to be said about the environmental provisions of the 1980 "Inhumane" Weapons Convention. The preamble of the Convention recalls that it is prohibited to employ:

> . . . methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment.

Leaving aside the unsettled status of Article 35(3) of Additional Protocol I, it is worth observing that the reminder is placed in the preamble of the 1980 Convention only. Nonetheless, France attached an express reservation pursuant to which she regards Article 35(3) as binding only on States parties to Additional Protocol I.[200]

Furthermore, Article 2(4) of the third protocol of the 1980 Convention on incendiary weapons, prohibits attacks on:

> . . . forests and other types of plant cover, unless they are used to cover, conceal or camouflage combatants or other military objectives or are themselves military objectives.

It should be noted that this protocol covers only weapons primarily designed to set fire to objects, not those where fire is incidental or consequential.[201] Moreover, the exception of military necessity in Article 2(4) seems so encompassing that it is doubtful whether the provision affords any serious protection to vegetation. The instances in which "forests and other types of plant cover" are not used during armed conflict "to cover, conceal or camouflage combatants or other military objectives or are themselves military objectives" must be rare.

For these reasons, the 1980 Convention does not contribute significantly to the protection of the environment in armed conflict.

2.2.6. Responsibility and Liability for Violations of Environmental *Jus in Bello*

Breach of *jus in bello* obligations may entail State responsibility or individual criminal responsibility, or both.[202] First, State parties are required to take measures necessary for the suppression of all violations of the laws and customs of war.[203] Secondly, State parties are required to enact effective penal legislation to punish grave breaches, to search for the perpetrators, and to either try or extradite them.[204] There are also provisions of the Hague Conventions which are expressly addressed to State parties, breach of which will engage their responsibility.[205]

Even if certain *jus in bello* provisions are not specifically addressed to States, their responsibility might still be engaged. Since armed forces are to be regarded as organs of a State, their conduct will be attributable to the latter if they act in official capacity.[206] This is simply an application of the general mechanisms of State responsibility. Case law has interpreted this principle broadly. States have been held responsible for acts which were *ultra vires*, provided that the soldiers acted at least apparently in capacity.[207]

However, the law of armed conflict may depart from the general principles of State responsibility in regard to unofficial private acts which a State was not negligent in failing to prevent. Arguably, the text and the drafting history of Article 3 of Hague Convention (IV) of 1907 and of Article 91 of Additional Protocol I imply that a State may be held liable for violations by soldiers acting outside the scope of their official duties.[208] Thus, in *Eis et al.* (1959) the U.S. Foreign Claims Settlement Commission imputed the widespread pillage and destruction of neutral property by Imperial Russian soldiers in 1915 to the Soviet government.[209]

Although there have been several occasions in which States paid compensation for damage caused by their armed forces, particularly to third (neutral) States, there is no indication that the articles in question have ever been relied on explicitly.[210] State responsibility has on the whole played a minor role in the enforcement of *jus in bello.*

As for individual criminal responsibility, whilst all violations of *jus in bello* may be characterised as war crimes in the sense of an internationally recognised wrong, only certain violations of the Geneva Conventions of 1949 qualify as grave breach. These are specified grave violations of *jus in bello* committed wilfully, or at least intentionally, and against different groups of protected people by each convention. The perpetrators of grave breaches must be tried, and any State may assert universal jurisdiction to do so. The Geneva Conventions require proceedings to be brought both against those who commit grave breaches and those who order their commission.[211]

Additional Protocol I has extended the concept of grave breaches to certain acts forming part of the conduct of hostilities,[212] and to wilful omissions,[213] although the latter aspect was probably already customary law.[214] The latter protocol introduces also a new concept— "serious violations" of the Geneva Conventions and the Protocol—for which the International Fact-Finding Commission may be competent and which should also be made punishable by belligerents.[215]

Whilst States have the obligation to prosecute or extradite perpetrators of grave breaches, States arguably have the right to assert universal jurisdiction also in respect of other, "nongrave" breaches.[216]

Applied to the environmental *jus in bello* provisions discussed above, it should be noted first that breaches of the customary principles of the laws of armed conflict as well as violations of the Hague Conventions, however serious, will not amount to grave breaches or serious violations. Only violations of the Geneva Conventions or Additional Protocol I can qualify as such.[217]

As mentioned above, the Geneva Conventions contain an identically worded provision according to which the "extensive" destruction and appropriation of property protected under the relevant conventions, not justified by military necessity and carried out unlawfully and wantonly, qualify as a grave breach.[218]

Pursuant to Article 85(3)(b) and (c) of Additional Protocol I certain wilful violations of Articles 54 and 56 qualify as grave breaches provided that, *inter alia*, death or serious injury of civilians was caused and that there was knowledge that this would be the result. By contrast, Article 85(4)(d) does not require such an anthropocentric aim for grave breaches committed against certain elements of cultural and spiritual heritage which are protected by Article 53.

Although violations of Articles 35(3) and 55 may amount to war crimes—in the sense of a violation of the laws of war[219]—they are not included in the list of grave breaches in Article 85 of the Protocol.[220] This is perceived as a lacuna in the literature,[221] and the ILC seeks to remedy this by suggesting to include into a Code of Crimes against the Peace and Security of Mankind the war crime of:

> Using methods or means of warfare not justified by military necessity with the intent to cause widespread, long-term and severe damage to the natural environment and thereby to prejudice the health and survival of the population and [when] such damage occurs.[222]

Whilst the ILC characterises its proposal as based on Articles 35 and 55 of Additional Protocol I, there are substantial differences. First, only crimes committed "in a systematic manner or on a large scale" will so qualify. Second, unlike Articles 35(3) and 55,[223] the ILC proposal covers only intentional damage. Third, while the threshold of environmental damage was taken from Articles 35(3) and 55, the ILC has couched its proposal in even more openly anthropocentric terms than Article 55(1). Fourth, the ILC proposal introduces a questionable defence of military necessity.[224] In view of the controversies surrounding the existing provisions of Additional Protocol I, one may well wonder whether the ILC proposal will not add to the confusion in this area.

2.2.7. Conclusions on *Jus in Bello*

The traditional Hague and Geneva treaty law contains provisions that may offer either indirect protection to the environment and its components through provisions aimed at civilians, or direct protection for those environmental resources that can be qualified as real or personal property. Particularly after the 1990–1991 Gulf war, the merit of these provisions for environmental protection purposes has been rediscovered. There is however, controversy on their value. Some authors point out that most of these older *jus in bello* provisions were enacted in a "pre-ecological" frame of mind, that they are very anthropocentric in scope, protecting primarily combatants and civilians or their property, that they leave too much discretion to the military commander and place excessive reliance on the good faith of the belligerent.[225] Others claim that these old provisions have been grossly underestimated with respect to their environmental value. They point out that the traditional provisions of the Hague and Geneva law have been more widely accepted than the new "environmental" *jus in bello* provisions adopted since the mid-1970s.[226]

In addition it was seen that the provisions of both ENMOD and Additional Protocol I were written with the Vietnam legacy in mind. It has been forcefully argued that they no longer correspond to modem concepts of IEL because of their narrow focus on environmental damage.[227] An even more damning judgement comes from ecologists. They argue that failing further legal directives expressed in relative terms, they find it impossible to determine whether environmental

damage was caused on the basis of the threshold provisions of Additional Protocol I. The reason is that natural scientists may be able to measure change in ecological processes, but in order to establish whether this fulfils the legal concept of "damage," baseline data are needed as well as legal directives as to what constitutes excessive change.[228] This may partly explain the disagreement as to whether any of the damage caused by the oil spills and fires in the 1990–1991 Gulf war technically crossed the threshold of Additional Protocol I.[229]

Therefore, the protective merits of the new "environmental" *jus in bello,* and particularly of the provisions which mention the natural environment by name, remain debatable. The more significant limitations on the causing of environmental damage in international armed conflict will still derive primarily from the underlying principles of the law of armed conflict and from the traditional Hague and Geneva law.

It is now unlikely that the many international efforts aimed at reevaluating the environmental *jus in bello* after the 1990–1991 Gulf Conflict will lead to the negotiation of new treaty provisions dealing with environmental protection during armed conflict. However, the many studies published since 1991 may, in time, lead to a clarification and possibly even further development of the environmental *jus in bello*. In addition, it has been forcefully demonstrated that wider adherence by States, subsequent national implementation, as well as strict observance of the existing body of *jus in bello* provisions would yield tangible benefits for the environment. An example of improved national implementation is that there has been a marked increase in the number of military manuals and other types of publications that include environmental protection provisions.[230]

2.3. *Modern* Jus ad Bellum *and Environmental Protection*

The modern *jus ad bellum* consists primarily of the provisions of the UN Charter. Under the collective security system that came into force with the UN, war and the use of force have become, in the words of Kelsen, either a delict or a sanction: a delict, if waged in violation of the law; a sanction, if carried out in its defence or enforcement.[231] As is clear from the preamble, the drafters of the UN Charter were determined "to save succeeding generations from the scourge of war." To achieve this end, Article 2(4) of the Charter replaces the much abused term "war" with the more objective threshold of "threat or use of force:"

> All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any manner inconsistent with the Purposes of the United Nations.

Moreover, exceptions to Article 2(4) are narrowly circumscribed: the right to use armed force is bestowed on States individually or collectively, but only when acting in self-defence and until the Security Council has taken the measures necessary to maintain international peace and security under Chapter VII of the Charter.[232]

The Security Council's actions under Chapter VII are conditional on the determination of the existence of three events—threat to peace, breach of peace or act of aggression—after which it can make either a recommendation or a binding decision pursuant to Article 39. The measures which the Security Council can decide upon accordingly are "measures not involving the use of force" (Article 41) and "action by air, sea, or land forces" (Article 42). Article 48 provides that Chapter VII actions shall be taken by all UN members or by some of them, as determined by the Council, whilst Articles 52 and 53 of the Charter provide that regional organisations may undertake enforcement actions with Security Council authorisation.

The fundamental nature of the change brought about by the UN Charter cannot be over-emphasised. The ILC has since long suggested that the prohibition to use armed force in international relations is peremptory *(jus cogens)*,[233] and the ICJ is widely regarded as having subscribed to this view in the 1986 *Nicaragua* case.[234] In addition, the "the outlawing of acts of aggression," was mentioned as a prime example of an obligation *erga omnes* by the ICJ in the 1970 *Barcelona Traction* case.[235] The norm expressed in Article 2(4) of the Charter is considered binding, even by the few States which are not yet members of the main UN organisation, most notably Switzerland.[236]

Furthermore, in the ILC's draft on State responsibility, the (aggressive) use of armed force in violation of the UN Charter is qualified as an international crime,[237] which, in contrast to traditional State-to-State wrongs, entails legal consequences not only for the offending and injured States, but for all States of the international community.[238]

While the ILC's proposal to distinguish between two types of international State wrongs—crimes and delicts—has attracted great controversy,[239] most sceptics acknowledge that there may be different categories of violations of primary obligations in international law, which should entail different consequences based on the seriousness of the international wrong. Furthermore, even the most passionate critics appear less reticent to label the use of force by a State in violation of Article 2(4) of the UN Charter as a theoretical or potential State crime.[240]

A third indicator of the importance of Article 2(4) of the UN Charter is the ILC's Draft Code of Crimes against the Peace and Security of Mankind; it proposes universal criminal jurisdiction for the individual who commits an act of aggression under international law.[241]

A fourth indicator is the notion of state complicity in international law. Although it has been highlighted only recently,[242] the prohibition for a State to deliver aid or assistance for the commission of an international wrong by another State is regarded as customary law.[243] The majority of acknowledged cases of State complicity relate to the violation of the prohibition to use armed force in international relations, such as States permitting the use of their territory for the commission of an act of aggression,[244] or which have political and other dealings with States that have committed violations of international law,[245] or which provide material aid in the form of money or goods to a State enabling the latter to commit aggression.[246]

2.3.1. Limitation of the Resort to Armed Force

By limiting resort to armed force in international relations, *jus ad bellum* aims at reducing the incidence of armed conflict and consequently environmental damage as well. Logically, therefore, *jus ad bellum,* insofar as it is aimed at keeping or restoring international peace and security, must be seen as an integral part of the international legal protection of the environment. Conversely however, since the UN Charter does not outlaw all instances of use of armed force in international relations, environmental destruction will in some cases be the inevitable consequence of lawful use of force under the UN Charter.

Still, the view that environmental protection is subject to *jus ad bellum* is (no longer) universally shared. In particular, before the start of Desert Storm, it was feared in some circles that armed intervention in this oil rich Gulf region would lead to apocalyptic environmental damage. This prospect was then used to urge governments to desist from using any armed force at all, even if it meant that the illegal occupation and annexation of Kuwait would not be reversed.[247] In addition, the actual environmental legacy of Desert Storm has convinced some scholars that the idea of using armed force, however just its cause, should be abandoned altogether if such widespread damage to the theatre of armed conflict cannot be avoided.[248] What these reactions imply is that States are under an obligation to protect the environment from very serious (or possibly catastrophic) damage at all cost, even if this means setting aside provisions of the UN Charter. A similar but more restricted argument was recently made before the ICJ in regard to the advisory requests on the *Legality of Nuclear Weapons.*[249]

However, it is doubtful whether this view reflects current majority thinking. Principle 24 of the 1992 Rio Declaration, agreed one and a half years after Desert Storm, declares that "Warfare is inherently destructive of sustainable development." However, it does not set a threshold of environmental damage above which use of armed force should be abandoned. Instead, States are urged to:

> . . . respect international law providing protection for the environment in times of armed conflict and co-operate in its further development, as necessary.

Furthermore, whilst the ICJ expressly endorsed Principle 24, it rejected the view that environmental obligations could override a State's right to use armed force in self-defence under international law.[250]

2.3.2. Rules on the Continuation of Armed Force

There is a strong current of opinion according to which modem *jus ad bellum* is much more than a branch of the law of peace; it is said to contain not only rules on the lawfulness of the initial use of force, but also on its continuation, thereby regulating the conduct of armed forces.[251] In this view, an initial use of armed force, even if in principle lawful, will continue to remain so only on condition that the principles of necessity, reasonableness and proportionality are complied with, in addition to any directives issued by the Security Council.[252] While not universally accepted,[253] the ICJ seemed to have endorsed this view by noting in the *Nicaragua* case that:

> . . . whether the response to the attack is lawful depends on observance of the criteria of the necessity and the proportionality of the measures taken in self-defence.[254]

The ICJ's Advisory Opinion on the *Legality of Nuclear Weapons* has been hailed as a further confirmation of this view, not only with regard to the use of armed force within the context of self-defense in general,[255] but also in a specific environmental context. Indeed, the Court held that:

> States must take environmental considerations into account when assessing what is necessary and proportionate in the pursuit of legitimate military objectives.[256]

If this interpretation is correct, the UN Charter may imply that variable limits are set on the region of war.[257] Under traditional law, the region of war comprised all areas under jurisdiction of the belligerents—land territory, territorial waters and internal waters and the superjacent air column above these—in addition to the high seas.[258] Under current international law, the region of war has not only been modified by the various jurisdictional zones introduced by the new law of the sea;[259] modern *jus ad bellum* limits participants to those parts where use of armed force is both necessary and proportionate.[260] As Professor Greenwood writes:

> The traditional assumption that the outbreak of war between two States necessarily involved hostilities between their armed forces wherever they meet, can no longer be regarded as valid.[261]

The 1994 San Remo Manual contains three provisions in which this view is adopted for armed conflict at sea, although many of these proved controversial.[262]

2.3.3. Liability for Environmental Damage as a Result of Lawful Use of Armed Force

As seen earlier,[263] one of the ongoing debates within IEL concerns the following question: whether causation of (severe) environmental damage is always an international wrong in itself or whether environmental damage should in some cases be considered an unfortunate by-product of a lawful activity for which a separate regime of liability is necessary. The ILC has taken the latter view, having since 1978 worked on a regime for the "International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law."

The ILC's model seems well-suited for armed conflict, for it is incontrovertible that under the laws of armed conflict environmental damage will be caused as a result of State activities which may be either lawful or unlawful. Thus, when a State resorts to use of armed force in self-defence, keeps its response within the requirements of Article 51 of the UN Charter, and complies with all relevant requirements of *jus in bello,* the environmental damage caused by this act will be a by-product of what is in essence a lawful activity: use of armed force in self-defence.

This is in line with the ICJ's advisory opinion on the *Legality of Nuclear Weapons,* where it was held that obligations to protect the environment could not deprive a State of its right of self-defence under international law.[264] Unfortunately, the work of the ILC on State liability for lawful activities contains an exemption based on national security, as well as for armed conflict.[265]

2.3.4. Liability for Environmental Damage Based on Breaches of *Jus ad Bellum*

Any breach of international law by a State engages its international responsibility as well as its liability, that is, the duty to make reparation.[266] Since a breach of *jus ad bellum* is a breach of international law, the responsible State's liability should be engaged for any damage caused in consequence. Although international claims on the basis of violation of *jus ad bellum* have been rare, there is no

doubt about the general principle.[267] Therefore, a State guilty of aggression or of any other violation of the rules of international law on the use of force is bound to make reparation for all losses caused by such violation, including environmental damage.[268] On the assumption that a breach of *jus ad bellum* amounts to an international crime of State, consistent with the ILC's theory of State Responsibility, it entails legal consequences that go beyond the mere duty to compensate the victim State(s).[269]

One of the most notable instances after World War II in which a State has been held responsible and liable for breaching *jus ad bellum* took place after the 1990–1991 Gulf war. Once hostilities ceased, the Security Council proceeded with the imposition of cease-fire conditions on Iraq, pursuant to the Security Council Resolution 687 (1991) of 3 April 1991. This "cease-fire resolution" comprises 43 paragraphs and subjects Iraq to a strict regime of obligations, commands, controls, and "reparations." Some have likened it to the Versailles Peace Treaty,[270] others to the trusteeship system of the UN Charter.[271]

The resolution is significant, for it establishes Iraq's liability for all direct losses caused by its breach of *jus ad bellum,* including environmental damage. In a clause reminiscent of the Versailles "War Guilt" Clause, Article 16 determines Iraq's liability under international law following its illegal invasion and occupation of Kuwait:

> Iraq . . . is liable, under international law, for any direct loss, damage, including environmental damage and the depletion of natural resources, or injury to foreign Governments, nationals and corporations, as a result of Iraq's unlawful invasion and occupation of Kuwait.

In addition, the Resolution establishes a fund to pay for the compensation claims and a UN Compensation Commission (UNCC) charged with assessing the claims and administering the fund.

Although the military tribunals of World War II already considered forms of war damage which may have environmental implications,[272] Resolution 687 is unique in that environmental damage is expressly and prominently dealt with in the context of war reparations. While some view this as innovation by customary law superseding treaty law,[273] others regard it as no more than an application of the general principles of State responsibility and liability.[274]

The claims for environmental damage will present the UNCC with many technical and juridical difficulties. However, many of these problems will not be unlike those encountered in non-war related disasters: identification of the exact source of the damage, establishment of the causal relationship between cause and

effect, assessment of the magnitude of the damage, and quantification of damages. Since "standing" to bring environmental claims has been given not only to governments but also to international organisations, it was argued that damage to international areas or to the environment, as such, might be compensated.[275] However, a UNEP working group concluded in 1996 that claims in relation to international areas were hypothetical since there were no high seas areas in the Persian Gulf and the available evidence did not disclose measurable damage to international areas.[276]

It is important to note also that since Iraq's liability has been based on breach of *jus ad bellum*, many of the distinctions and limitations inherent in the application of provisions of *jus in bello* to environmental damage will not be relevant.[277]

2.3.5. Final Observations on Environmental Implications of *Jus ad Bellum*

However impressive the above may seem, cases of State liability for illegal use of armed force in international relations remain rare, particularly if one looks at the incidence of the breaches. An obvious reason is that the UN collective security system rarely produces authoritative judgements on violations of *jus ad bellum*, which makes the identification of the guilty party controversial.

A further fundamental reason is that the imposition of damages for breaches of *jus ad bellum* following armed conflict is usually a one-sided affair. Most conspicuously, the exaction of war reparations after the first and Second World War placed the vanquished State(s) at the mercy of the victor State(s), often in disregard of violations of *jus ad bellum*.[278]

A final and no less fundamental reason is linked with one of the paradoxes of the law of armed conflict, namely the duty to discriminate between legal and illegal uses of force under *jus ad bellum*, coupled with the equality of all parties before *jus in bello*. International law has thus far failed to reconcile liability for breaches of *jus ad bellum* with liability for breaches of *jus in bello*.[279] One school of thought argues that it is counter-productive to punish a violator of *jus ad bellum* for acts done pursuant to *jus in bello*.[280] A second school holds that an aggressor State should be held liable for all damage caused as a consequence of its aggression, even if some actions were allowed by *jus in bello*, and even if some of the damage was caused by its adversaries, provided that the latter complied with *jus in bello*.[281] The third school believes that the aggressor should compensate even damage caused by unlawful acts of the victim State.[282]

The work of the UNCC thus far shows that it applies the second view, with this proviso: it has thus far not been called upon to examine whether the damage caused by Coalition military actions complied with the laws of armed conflict.

The UNCC relies heavily on the finding that Iraq has breached *jus ad bellum,* and that she has accepted liability pursuant to the terms of the cease-fire resolution.[283] In furtherance of express policy clarifications to this effect, the UNCC refuses to give Iraq credit for actions which were lawful under *jus in bello.* This is evident from decisions of principle taken by the UNCC according to which Iraq is liable for any loss suffered as a result of "military operations or threat of military action by either side."[284]

These principles were applied in the first environmental award, rendered by the UNCC on 18 December 1996.[285] The *Well Blowout Control Claim* concerned damages sought by Kuwait Oil Company for the costs incurred in planning and executing the work of extinguishing the well-head fires that were burning upon the withdrawal of Iraqi forces from Kuwait. Although the UNCC expert panel admitted that part of the damage for which compensation was sought "may be a result of the allied bombing, it held that the bulk of the damage was done by Iraq and that the latter was in any event liable for damage caused by either side in the conflict.[286]

2.4. Environmental Implications of the Law of Neutrality

2.4.1. Pre-Charter Neutrality Law

A. Neutral Duties. Under the ideal precharter model, States (about to be) involved in armed conflict were expected to issue declarations so as to create a state of war between themselves, whereas third States were to issue declarations of neutrality.[287] The advantages of the legal concept of the "state of war" was that it marked the moment at which the national and international rules applicable during peace were replaced by those applicable during war.[288]

The existence of a state of war did not have any consequences for the legal relationships among non-participating States, for these remained governed by the law of peace. It had consequences, however, for the legal relationships between neutral States and belligerent States. Although in principle governed by the law of peace, they became subject to the requirements of the law of neutrality. Neutral States were required to comply with a series of classic neutral duties:[289]

The duty of non-involvement, non-interference or abstention: Trade by neutrals with belligerents is permitted but special rules apply to the supply of war material. Over land, neutral governments need to abstain from supplying war material to belligerents; over sea, neutral governments are expected to prevent all public and private trade in war materials with belligerents;

The duty of prevention: A neutral Power is obligated to use all means at its disposal to prevent violations by belligerents of its neutrality. This encompasses a duty to prevent the violation of its territorial integrity by belligerents, to prevent the use of its territory, waters or airspace by either belligerent, and the prevention of the commission of acts of hostility within its jurisdiction. It also implies that a neutral Power has the duty to use force, as necessary, to prevent or punish such violations of neutrality;

The duty of impartiality and non-discrimination: Any conditions, restrictions or prohibitions issued by a neutral Power, for instance in regard to admission into its ports, need to be applied in a non-discriminatory manner to all belligerents.

B. Protection to Neutrals offered by Pre-Charter Law. Provided that third States complied with their neutral duties, belligerent States were to respect their choice not to become a participant. It was only in certain well-defined respects that neutral States had to tolerate certain consequences of the existence of armed conflict between belligerent States. The former had to prove that they complied with neutral duties, which meant that they had to subject themselves to constant monitoring. They might also be requested to adjust their trade relations with certain belligerents to comply with their duties in respect of war material.[290]

The advantage of this régime for neutral States was obvious. They were entitled to remain outside the conflict and to maintain economic relations with belligerents subject to adjustments and measures of control, particularly at sea.[291] Neutrality law was a means of limiting the scope of international conflicts by declaring neutral States' territory, waters and airspace, in principle, off-limits to belligerents.

What the environmental implications of the regime of neutrality might be will now be examined in more detail. The law of neutrality was a flexible regime; its implications for neutral and belligerent States depended on the particular circumstances. Only part of the customary law of neutrality has been codified in formal instruments.[292] Amongst these, the 1907 Hague Convention (V) on the Rights and Duties of Neutral Powers and Persons in Case of War on Land is regarded as reflecting customary international law. Article 1 provides that:

> "The territory of neutral Powers is inviolable."

The convention does not define the term "inviolable." The conference records indicate that the provision was added to stress that neutral States do not only have the many duties listed in the convention, but that these flow from inhibitions of a general character that apply in the first place to belligerents. Article 1 was seen as

introducing the acts from which belligerents must abstain.[293] However, its exact scope is not clear, and two interpretations are possible. The narrow one views Article 1 as the counterpart of the many duties incumbent on neutral States, which relate primarily to proving, enforcing, and defending their neutrality and impartiality. The second one is more expansive, and confers on neutral territory immunity from interference by belligerents.[294]

The 1907 Hague Convention (XIII) concerning the Rights and Duties of Neutral Powers in Naval War does not contain a provision comparable to Article 1 of Hague Convention (V), but it has two provisions on belligerent duties in the territorial waters of neutral states. Article 1 of Hague Convention (XIII) obligates belligerents:

> . . . to respect the sovereign rights of neutral Powers, and to abstain in neutral territory or neutral waters, from any act which would, if knowingly permitted by any Power, constitute a violation of neutrality.

Article 2 stipulates that:

> . . . any act of hostility, including capture and the exercise of the right of search, committed by belligerent warships in the territorial waters of a neutral Power, constitutes a violation of neutrality and is strictly forbidden.

The conference records indicate that both articles were inserted to stress the general duty of belligerents to respect the sovereignty of neutral States, indicating that the principle was the same as Article 1 of the Hague Convention (V) for land warfare.[295] Particularly enlightening are the following passages from the report to the Third Commission on the rights and duties of neutral powers in naval war:

> The starting-point of the regulations ought to be the sovereignty of the neutral State, which cannot be affected by the mere fact that a war exists in which it does not intend to participate. Its sovereignty should be respected by the belligerents, who cannot implicate it in the war or molest it with acts of hostility. At the same time neutrals cannot exercise their liberty as in time of peace; they ought not to ignore the existence of war.[296]

and:

> The principle which it is proper to affirm at the outset is the obligation incumbent upon belligerents to respect the sovereign rights of neutral States. This obligation is

> not a consequence of the war any more than the right of the State to inviolability of its territory is a consequence of its neutrality. The obligation and the right are inherent in the very existence of States. . . .[297]

When read together, the clarifications provided by the *travaux* of both Hague conventions strongly suggest that the articles in question were a reference to the general principles of State sovereignty and the duty of belligerents to respect these whilst engaged in warfare.

There is no comparable formal instrument for Aerial Warfare, although in 1923, a commission of jurists drafted the influential Hague Rules of Air Warfare.[298] Article 39 of these rules provides:

> Belligerent aircraft are bound to respect the rights of neutral powers and to abstain within the jurisdiction of a neutral state from the commission of any act which it is the duty of that state to prevent.

Article 40 stipulates that:

> The airspace of a neutral state is inviolable.

Again, these provisions embrace both elements: a duty for belligerents to respect the sovereign rights of neutral States and the narrower issue of impartiality.

There are many examples of State practice related to incidents during World War I and II, in which belligerents paid compensation for unlawful entry of neutral territory and destruction of neutral property. The 1938 *Naulilaa* case is one of the rare judicial cases to deal with unlawful acts of warfare committed by a belligerent (Germany) on neutral (Portuguese) territory.[299] Most neutral States' claims were settled only after protracted negotiations, ending either in diplomatic settlements, in formal treaties or the set-up of mixed tribunals. Thus, the USSR paid the Swedish government 40,000 Swedish kroner because of an aerial attack upon Pajala during the First Finnish War.[300] In 1949 the United States and Portugal reached an overall financial settlement for four incidents in which the former bombed the Portuguese territory of Macao.[301]

The overwhelming majority of documented cases concern Switzerland, which was a neutral in both world wars and suffered from countless incursions by belligerents, not all apparently in error.[302] The most serious of these incidents concerned a full scale raid by the U.S. Army on the Swiss territory of Shaffhausen on April 1, 1944, as a result of which 37 persons were killed and 50 gravely injured. The settlement of Swiss claims for compensation took several years.[303]

Three incidents merit special attention because of their potential environmental relevance.

In 1948 the Vatican presented the United States with claims totalling $1.5 million for damage done to property of the Vatican City, the neutrality of which the Allies had agreed to respect. The settlement of the claims took several years and was finalised in 1956. The claim related to damage done to the papal residence of Castelgandolfo, which lies outside Vatican City south of Rome. It appears that the property had been damaged by air raids on legitimate targets in close proximity thereto. This example of State practice is remarkable for two reasons: firstly, compensation was paid by a former belligerent for transfrontier collateral damage caused to neutral property; secondly, the damage was caused by lawful military activities on enemy belligerent territory bordering or surrounding neutral territory.

A comparable example are the cases known as "Fernschaden," for which Switzerland tried to obtain compensation. During World War II, there were several instances in which Swiss border towns suffered destruction through shockwaves caused by bombing campaigns on belligerent territory.[304]

A further example with obvious environmental relevance were the consequences for Switzerland of the destruction of the Kembs Waterworks on October 7, 1944, by the Royal Air Force. In the 24 hours following the busting of this German dam, the banked headwaters of the Rhine had dropped so much that riverboats in the Swiss harbour of Basle were damaged and grounded in the mud.[305]

What the above cases of State practice show is that belligerent States have in the past acknowledged liability for damage to neutral States caused by lawful acts of war executed in the territory of enemy belligerent States. Whereas cases of transborder war damage caused, *e.g.*, by Germany to Switzerland, might have been solved on the basis of the principle of good neighbourliness between States, it was clear that this principle was hardly applicable in cases of air raids by the United States and UK on German territory.

After World War I the Swiss Federal authorities examined the principles underlying their claims for war damage caused by belligerents. In a written opinion, Burckhardt confirmed that they were not based on any special privileges Switzerland would be entitled to because of her perpetually neutral status, and that they were no more than the exercise of rights to which any State is entitled.[306]

C. Introduction to Contemporary Environmental Significance. The contemporary relevance of the principle of neutrality for environmental purposes is, as will be seen further, a matter of debate.[307] The following observations seem,

nevertheless, in order. The law (or principle) of neutrality is sometimes said to offer immunity to the territory and the environment of neutral States and, by analogy, to international areas.[308] Such arguments were also advanced before the ICJ by States opposing the legality of nuclear weapons.[309]

These arguments, however, suffer from three difficulties. First, the traditional law of neutrality did not offer genuine immunity to neutral States from acts of warfare. The analysis conducted above[310] shows that the basis for the protection of neutral States in armed conflict was the duty of belligerents to respect other States' sovereignty (and territorial integrity). Respect for other States' sovereignty is a dynamic concept in international law: it may have a different content today compared with 1907. It is not so much a duty especially developed for armed conflict, but the expression of a general principle, applicable in peace and in war.

In this sense, armed conflict is but one example of a situation in which States are obligated to respect the sovereignty of third States. It may be that one is bound to find fewer peacetime cases in which State A causes damage to State B through activities executed in State C. Even so, under general (peacetime) environmental law, these cases do not present any special problems of principle: military activities conducted by State A outside its jurisdiction are to be considered as being under States A's control and are therefore covered by Principle 21.

The second difficulty relates to international areas. The protection offered to neutral States under the traditional law of neutrality did not deal with environmental damage as such caused in international areas. The obvious reason is that the high seas—the only international area of historic relevance—formed part of the legitimate region of war by reason of customary law. The interface between the modern law of the sea and the law of armed conflict will be further addressed below.[311] Yet, it seems *prima facie* questionable to apply the pre-ecological principle of neutrality, whatever its contents, by analogy to modern day international areas.

The third difficulty relates to the incompatibility of neutrality with certain obligations arising from the UN Charter, which will now be discussed.

2.4.2. Post-Charter Neutrality Law

A. Influence of the UN Charter and Decline of the State of War. Under current international law, the legal relationship between belligerent States and third States is highly unsettled. There are two interrelated factors that led to this state of affairs: the influence of the UN Charter on the law of neutrality and the decline of the legal concept of the state of war in international relations.

The law of neutrality was developed in an era when resort to armed force was not in itself illegal, *i.e.*, when war was regarded as a mere duel between States to be treated in the same chivalrous and distant manner with which the matter was once viewed by domestic law.[312] However, under the collective security systems that were developed during this century, inter-State use of armed force is no longer a "neutral" activity: it is either legal or illegal. Provided that the Charter's collective security system works, no State should be left in doubt about the lawfulness of the position of each participant to the conflict. Positions of neutrality in the face of unlawful uses of force in international relations are logically and ideologically incompatible with the Charter.[313]

However, the Charter does not contain guidelines for when the collective security machinery is not operative or when it is blocked. During the 1980–1988 Iran-Iraq War, the Security Council refrained from expressly identifying the initial aggressor and was only able to adopt a binding decision on the conflict as a whole, seven years into the war.[314] This contrasts sharply with the alacrity displayed by the Council in August 1990: a few hours after Iraq invaded Kuwait, the Council passed a resolution condemning the invasion and demanding an immediate withdrawal.[315]

Assuming that the Security Council does not perform its role of arbiter, that the General Assembly does not step in and that ICJ is not seized of the matter either, there will be no binding or authoritative decision on the rights or wrongs of the use of force. As a result, States not involved in the conflict are left to their own devices; in these circumstances, it is commonly argued that the traditional body of neutrality law resumes importance.

At the same time, the significance of the state of war in international relations has declined. The decline is due partly to the outlawing of war by the UN Charter, although examinations of pre-Charter State practice have shown that non-war hostilities were quite common.[316]

Still, it has been demonstrated that a state of war is relevant in contemporary law and State practice.[317] Many States continue to regard the creation of a legal state of war as a possibility. In addition, when a State currently decides to treat a particular conflict as "war," whether involving use of armed force or not, it implies hostile intent, or extensive war aims—the "animus belligerandi"—and may now be qualified as a threat to use force in the sense of Article 2(4) of the UN Charter. This may influence the body of non-hostile relations between belligerents and may entail consequences for relations between belligerents and third States.[318] A state of war, as will be seen in the next chapter, has further considerable implications for constitutional and municipal law and is usually taken as a firm directive to municipal courts of the countries involved in the conflict.[319]

Some writers claim that whereas a legal state of war was once required to bring the law of neutrality into operation, today, the existence of armed conflict is sufficient.[320] But this is not borne out by State practice. In the absence of general recognition that a certain conflict amounts to war, third States cannot be forced to accept positions of neutrality. This means that neutrality is invoked primarily in conflicts with a certain intensity.[321] However, State practice indicates also that overt declarations of neutrality by third States are rare and that there is much uncertainty about the validity of any appeal to or application of neutrality law by non-participating States.[322]

This may be illustrated by the attitudes of third States in the 1980–1988 Iran-Iraq and the 1990–1991 Gulf conflicts.

The first is often cited as a paradigm of a classic inter-State armed conflict during which the UN Charter system failed, as a result of which traditional neutrality law was revived. However, on closer examination, this conflict shows that third States have felt free to select a panoply of positions varying from: (a) strict traditional neutrality; (b) a position variously termed "qualified" neutrality, "benevolent" neutrality or "non-belligerency," in which third States side with one of the parties to the conflict, discriminating against the State considered to be the aggressor, but without physically participating in the hostilities; or (c) a new form of impartiality and nondiscrimination between belligerents, whereby no formal position is adopted and assistance is delivered to all sides.[323]

Most surprising of all examples is the picture of third States' attitudes during the 1990–1991 Gulf war. In spite of the clear identification of the aggressor by the Security Council, Iran and India officially proclaimed their neutrality.[324] In addition, two UN Member States (Israel and Jordan) became more or less actively involved as non-belligerents on opposite sides of the conflict,[325] whilst two permanently neutral States (Austria and Switzerland) dropped their traditional stance of neutrality.[326]

B. Current Significance of Neutrality Law. Depending on the frequency with which the UN collective security system will work in the future, the law of neutrality may or may not retain some of its earlier importance. It is beyond doubt, however, that the Hague law on neutrality is in serious need of update and that such a restatement will have to reflect the more marginal position which neutrality occupies in contemporary international law.

Neutrality still has a place under the Charter, but subject to the provisions of contemporary international law. Unlike the putative ban on aggression contained in the Covenant of the League of Nations, the ban on the use of force in international relations is no longer inseparably linked to the effectiveness of the Security

Council.[327] This follows clearly from the celebrated statement by the ICJ in its very first judgement, the *Corfu Channel* case:

> The Court can only regard the alleged right of intervention as the manifestation of a policy of force, such as has, in the past, given rise to most serious abuses and such as cannot, *whatever be the present defects in international organization*, find a place in international law. . . .[328] (italics added)

The principle that the non-use of force is not dependent on the functioning of the collective security system was confirmed by the ICJ in the *Nicaragua* case.[329]

This means that whilst a third State may assume the status of a neutral, she may be obligated to participate to varying degrees in economic and military enforcement measures based, *e.g.*, on Articles 25, 41, 42, 43, 48 and 103 of the UN Charter expressed in a binding resolution of the Security Council under Chapter VII. The latter will override many duties of traditional neutrality law. When the Security Council has identified one or more parties to a conflict as responsible for unlawful resort to force, third States are obligated to discriminate between belligerents. They are forbidden from assisting the aggressor, but may lend assistance to the victim State. When the Security Council has taken preventive and enforcement action under Chapter VII of the Charter, third States may not rely on neutrality law to justify conduct incompatible with their duties as UN Members under, *e.g.*, Articles 25 and 103 of the Charter.[330]

C. Environmental Implications. To examine the relevance of the contemporary principle or law of neutrality for the protection of the environment during armed conflict, several hypotheses need to be discussed. In the examples below, environmental damage is caused to a "third State," modelled on the Iranian position during the 1990–1991 Gulf conflict: a UN Member State desirous of remaining outside the conflict.

In case A, the damage results from lawful military operations by a victim State exercising its right to self-defence; in case B, from unlawful military operations by the initial victim State; in case C, damage is caused by an identified aggressor State; in case D, by participants in an armed conflict in which the UN fails to identify the aggressor State.

The first hypothesis may have occurred in the 1990–1991 Gulf war. As UN Members, both Iran and Jordan, were obligated to accept and execute decisions taken by the Security Council under Chapter VII, which included the authorisation given to Coalition States to use armed force against Iraq. Therefore, neither Iran nor Jordan could claim complete freedom from the effects of

Coalition military actions to the same extent as they would be entitled under the traditional law of neutrality. An Iranian complaint about Coalition intrusions and environmental damage caused by Coalition States could not succeed on the basis of the traditional law of neutrality.

Although firm legal ground is lacking, it could be argued that as UN Members, both countries could be expected to tolerate environmental damage caused on their territory by lawful actions of Coalition members. It was argued above that under present international law, environmental damage may occur as a by-product of lawful military activities, *i.e.*, use of force that remains within the ambit of both the modern *jus ad bellum and jus in bello*.[331]

Even if "third" States as Iran and Jordan could not claim compensation on the basis of traditional neutrality law, there might be other paths that could be pursued. Following the imposition of economic sanctions actions against Iraq and occupied Kuwait,[332] the Security Council established a sanctions committee. This was entrusted *inter alia* with examining, pursuant to Article 50 of the UN Charter, requests from States that claimed to experience severe economic difficulties as a result of the embargo. In a parallel move, the U.S. administration established the "Brady" Committee, which provided compensation to the most affected States.[333] Although there is under present international law no firm legal basis, one could envisage a similar show of solidarity vis-à-vis States affected by military operations authorised by the Security Council.

A second avenue is the compensation scheme which the UN currently operates for peace-keeping operations.[334] Arguably, damage caused to neighbouring countries by lawful enforcement operations sanctioned by the Security Council should merit equal attention.

A third possibility is that UN Members who engage in UN-sanctioned operations, and thereby cause environmental damage to third States, agree to compensate the latter but recover ultimately from the aggressor State(s).[335] This possibility will be examined further below.

Case B deals with environmental damage caused as a result of a violation of the laws of armed conflict—*jus ad bellum* or *jus in bello*—by the victim State and/or States that come to its rescue. Under the modem collective security system of the UN, the solution of case B is bound to be difficult, since it may involve controversy over the ultimate responsibility for enforcement actions that, although authorised by the Security Council, are legally not conducted by the UN itself. Nevertheless, a case can be made that the legality of the act causing damage should be immaterial for questions of compensation related to any UN authorised "peace" operation. Arguably, the UN compensation scheme for peace-keeping operations should be extended to include environmental damage caused to "third"

States during all UN-sanctioned peace-enforcement operations. The question of whether the UN can recover any moneys paid out from the peace-enforcing State(s) that transgressed the law, should not be of concern to the "third" State that suffered the environmental damage.

However, there is an alternative to the solution of both hypotheses A and B. Arguably, all damage caused to the territory of "third" States results from a breach of *jus ad bellum* by the aggressor State and should hence be compensated by the latter. This alternative will be dealt with together with the next hypothesis.

The third hypothesis covers damage caused to a "third" State by an aggressor State. The former is in principle entitled to compensation for all damage caused as a consequence of the *jus ad bellum* breach by the aggressor State. In this respect the legal relationship between the third State and the unlawful aggressor State resembles the principles on which compensation was payable under the traditional law of neutrality. This principle has been expressed in Article 16 of Resolution 678 (1991), discussed above.[336]

However, it was seen above that the UNCC has adopted a wide interpretation of this provision. As a consequence, Iraq is liable not only for damage caused by Iraqi military operations that violated *jus in bello*, but also for those in compliance with *jus in bello*, and in addition for damage caused as a consequence of Coalition military operations. It was seen too that according to a more extreme view, Iraq could be held liable for damage caused by Coalition actions in violation of the laws of armed conflict.[337] However, the latter view is open to challenge on two grounds: arguably, an illegal act by the Coalition would break the chain of causation between the unlawful Iraqi invasion and the subsequent damage; moreover, it would conflict with the principle of *ex injuria jus non oritur*.

In fact, the UNCC has not excluded Iranian claims despite the government's assertion of neutrality in the 1990–1991 Gulf conflict. From the point of view of Iranian citizens, this solution has to be applauded. There is no reason why any environmental damage caused to Iran as a direct result of the conflict, should not be considered by the UNCC as well.

Hypothesis D concerns cases that occur more frequently, but because of the uncertainty surrounding the legitimacy of positions of neutrality under the UN Charter, the solution is very unclear. Theoretically one could argue with, *e.g.*, Switzerland,[338] that all States of the international community are under a duty to comply with the implications of the prohibition of the use of force under the UN Charter. Each State would hence be under an independent duty to identify the aggressor State, to refuse co-operation with the latter, and to discriminate in favour of the victim State.

Such duties would be incumbent on all States of the world community because of the *jus cogens* character of *jus ad bellum*, the legal force of which does not depend on the effectiveness of the Security Council. However, the State practice discussed above shows that in the absence of firm directions from the Security Council, third States feel free to adopt a panoply of attitudes to belligerents. Space does not permit to go into detail about possible consequences which these varied attitudes may entail for environmental protection.

2.4.3. Conclusions on Neutrality Law

The present state of the law of neutrality is unsettled. Whilst there is no doubt about its continued importance, the determination of its exact contents presents many legal and conceptual difficulties. The above analysis has shown that it does not offer a universally reliable nor comprehensive legal foundation for the protection of the environment in armed conflict. Support for this contention may be found in the 1996 *Advisory Opinion on Nuclear Weapons* in which the ICJ admitted the existence of the "principle of neutrality" and called it of fundamental character. However, the Court strongly suggested that its content was controversial and that it was subject to the relevant provisions of the UN Charter.[339]

Chapter III

The Operation of General International Environmental Law during International Armed Conflict

THE MAIN PURPOSE OF THIS CHAPTER IS to examine whether International Environmental Law (IEL) continues to operate during international armed conflict, and if so, to what extent. The author will analyse the main legal principles involved and propose a methodology to determine the legal effect of multilateral environmental agreements during international armed conflict.

This chapter is divided into five sections. The first section discusses instances of recent State practice, ending with State submissions before the ICJ in connection with the advisory requests on the *Legality of Nuclear Weapons*. Section two deals with the relationship between general (peacetime) international law and the laws of armed conflict. Section three analyzes the relationship between Principle 21 of the Stockholm Declaration and armed conflict. Section four deals with the relationship between multilateral environmental agreements and armed conflict. Section five contains the conclusions to this chapter and introduces the case studies to be conducted in the second part of this study.

3.1. State Practice Regarding IEL in Armed Conflict

Since IEL is a relatively young discipline, questions related to its applicability during international armed conflict have arisen only rarely. This section will examine the principal instances of State practice in this regard.

3.1.1. The Tanker War and the Law of the Sea.

In mid-September 1980, Iraqi forces seized a disputed area from Iran, escalating a centuries-old dispute over the Shatt-al-Arab.[1] During the ensuing eight

years of war, third State shipping and, in particular, oil tankers, fell victim to attacks from both belligerents in a campaign allegedly started in earnest by Iraq in 1984.[2] In what came to be called the Tanker War, merchant ships suspected of sustaining the enemy's war effort were attacked in and outside war zones proclaimed by both parties, very often without prior warning.[3] Iran and Iraq also laid naval mines that were set adrift or came loose from their moorings, damaging third State ships.[4] It is estimated that Iran and Iraq attacked more than 400 merchant ships, 31 of which sank and 50 of which were declared total losses.

The Security Council passed four resolutions condemning the attacks on third State ships.[5] It is reasonable to assume that much environmental damage was caused as a result of these attacks, but this aspect did not receive any media attention, and there are no scientific or legal assessments available.[6]

The Tanker War took place shortly after the conclusion of the 1982 UNCLOS convention. As seen earlier, UNCLOS is one of the most comprehensive environmental treaties concluded thus far.[7] It lays down the obligation of all States "to protect and preserve the marine environment" (Article 192), confirms Principle 21 of the Stockholm Declaration (Article 194 (2)), and enacts a framework envisaging all types of pollution of the marine environment, whatever the cause: vessel-source, land-based sources, dumping, exploitation of the seabed, and air pollution (Part XII).

To what extent the environmental obligations of belligerents, as recorded and developed in 1982 UNCLOS, continued to operate during the Iran-Iraq conflict is a complex question. The first hurdle is that since the convention was not yet in force, the customary status of many of its provisions was hotly debated in the beginning of the 1980s. Iran for instance, formally stated that it regarded the rights concerning transit passage and the Exclusive Economic Zone (EEZ) as "contractual" in nature and therefore not available to non-parties such as the United States and the UK.[8]

The second problem is that during the UNCLOS negotiations, State delegates had honoured a long tradition of reticence about discussing military uses of the seas.[9] As a result, the term "military activities" appears only once in the Convention, in the provision listing the optional exceptions from the compulsory third party dispute settlement system.[10] But this does not mean that the Convention does not regulate military activities at all. On the contrary, some authors contend that what motivated major military powers throughout the negotiations was precisely their concern to preserve the freedom to conduct military activities.[11] To what extent this goal was achieved remains a matter of controversy and requires detailed assessment, article by article.

The uncertainty surrounding the regulation of military activities under the convention applies, *a fortiori*, to questions of armed conflict. It is noteworthy that

the ILC had stressed in regard to its first draft on the law of the sea—which ultimately led to the 1958 Law of the Sea Conventions—that it was only concerned with "the law of peace."[12] Many authors believe that, like its predecessor treaties, 1982 UNCLOS was drafted mainly for peacetime.[13] But this presumption does not resolve the difficulties, for the Convention contains no provisions on its continuation, modification or abrogation in time of war or armed conflict.

The tactical silence of the final treaty text on military uses of the seas in peace and war has made it a document that can be invoked to support opposing theories. One example is the clause that seems to form a *leitmotiv* of the new law of the sea: in a few well-known provisions, the Convention rules that the high seas, the EEZ and the Area—that is, the seabed and ocean floor and subsoil thereof beyond the limits of national jurisdiction—are reserved for peaceful purposes or uses.[14] These clauses gave birth to two diametrically opposed positions: one asserting an outright prohibition of military activities (at least in the Area) and the other claiming that the "peaceful purposes/uses" clause merely forbids actions in violation of Article 2(4) of the UN Charter. The latter position, which undoubtedly coincides more with the *opinio juris* and State practice, has since gained the upper hand.[15]

Third States were divided on the many legal issues that arose during the 1980–88 Iran-Iraq conflict, including on the relationships between belligerents and States not directly involved in the conflict. Significantly though, the exercise of traditional belligerent rights was tolerated to a certain extent. Thus, Iran resorted to measures of economic warfare and several States accepted that she could exercise the right to visit and search third State merchant shipping.[16]

Although paralysed by cold-war rivalry, the Security Council managed to pass several resolutions on the conflict. In some of these, the Council stressed the importance of freedom of navigation in the Gulf and the protection of oil supplies from the region. In the light of what has been said above on the uncertain relationship between the law of the sea and military uses, it is noteworthy that the Council often invoked the law of the sea and even appeared to suggest that freedom of navigation needed to prevail over belligerent activities.[17]

3.1.2. The 1983 Nowruz Oil Spill, the 1978 Kuwait Regional Convention and 1982 UNCLOS

In 1983, a major incident would draw the world's attention to another aspect of the conflict: its devastating impact on the environment. Late February or early March 1983, Iraqi bombers hit an already leaking Iranian offshore oil installation in the Nowruz field, about 60 km from the Kharg Island oil port, destroying an

unspecified number of Iranian oil tankers and oil installations as well as six other wells nearby.[18] The fire raged for weeks, and when the well blew out, 7,000 to 10,000 barrels a day leaked into the Gulf. The spill has been ranked among the three largest recorded in human history.[19] It threatened Bahraini, Qatari and Saudi desalination plants, and affected other areas beyond belligerent jurisdiction. For instance, fish imports into the UAE were stopped because of oil contamination of fishing grounds.

The Nowruz oil spill became a turning point in the history of legal thinking about "war" and the environment. Firstly, it is one of the few instances of documented State practice with respect to the effect of an ongoing inter-State armed conflict on the continued application of an international environmental treaty. The treaty at issue was the 1978 Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution (hereinafter Kuwait Regional Convention), to which both belligerents and many of the affected countries in the region were party.[20] It contains a provision, Article IX (a) on "pollution emergencies," which obligates all Parties to take individually and/or jointly:

> . . . all necessary measures . . . to deal with pollution emergencies in the Sea Area, *whatever the cause of such emergencies*, and to reduce or eliminate damage resulting therefrom. (Italics added.)

Whether this and other provisions of the Convention remained relevant during the conflict will be discussed later in more detail. For now, it suffices to mention the following points. Several attempts were made both within and outside the Convention's institutions to work out a temporary and partial cease-fire between belligerents in order to implement the Kuwait Regional Convention, stop the spillage, and remedy the ensuing environmental damage.[21] These negotiations failed. Iraq continued bombing the source of the spill and made its position clear in letters addressed to the UN Secretary General. In these, Iraq rejected not only calls for a partial cease-fire so as to allow repairs to the wells,[22] but asserted also that:

> *. . . the provisions of the Kuwait Regional Convention on Cooperation for the Protection of the Marine Environment from Pollution and the protocol annexed thereto have no effect in cases of armed conflict.* [23]

There is no record of any official State reactions to this position. The Security Council chose not to condemn Iraq explicitly, but instead issued a disappointingly vague call to:

> . . . both parties to refrain from any action that may endanger peace and security as well as marine life in the region of the Gulf.[24]

Following this incident, the EC commission asked five scholars to study the problem of the protection of the environment in times of armed conflict. Their 1985 report is—as far as is known—the first academic paper on the subject.[25]

The experts concluded that Principle 21, as confirmed by Article 192 UNCLOS, applies in armed conflict between belligerents and third States, and by analogy to international areas. They maintained that armed conflict gives belligerents no right to deviate from treaty rules protecting the territorial integrity and the environment of third States. They pointed out that violation of environmental obligations may bring into play the rules of international law on the responsibility of States regardless of where the damage arose.

As for treaty relations between belligerents, the EC experts stated, *inter alia*, that the mere occurrence of armed conflict does not put an end *ipso facto* to their treaty obligations in regard to the protection of the environment; that parties to such conventions have the obligation to ensure that the rules on the protection of the environment are respected to the greatest extent possible and that in cases of environmental emergency, all parties, including belligerents, need to co-operate in its prevention and accept offers of assistance. Finally, the experts believed that the ICRC or any other impartial humanitarian organisation can offer its services in this regard.[26]

Although intended to assist in the consideration of possible initiatives at the international level,[27] the report does not appear to have led to any such actions, either by the EC or by any of its Member States.

Despite the obvious merit of many of its conclusions, the report has several weaknesses. First, it is important to note that it glosses over the fundamental changes which the UN Charter brought about in *jus ad bellum* and neutrality law.[28] Because the study was done in 1984–1985, the experts could perhaps be forgiven for thinking that the Security Council would never intervene in the Iran-Iraq conflict under Chapter VII of the Charter.[29] However, it is submitted that the failings of the UN collective security system do not justify assessing the situation exclusively—as the report does—on the basis of neutrality law laid down before the first World War, nor using Switzerland as the only example of a "neutral" third State.[30] Even in cases of Security Council gridlock, the Charter's principles remain valid.[31] Furthermore, in the post-Charter era, it would be an oversimplification to equate third States' attitudes to inter-State armed conflict with the type of neutrality practised by Switzerland in the first half of this century.[32]

Secondly, with respect to the issues raised by the Nowruz oil spill, the EC report asserts that since the Kuwait Regional Convention was negotiated for a region where tensions were known to exist, the phrase "whatever the cause of such emergencies" (Article IX) must be taken to include instances of environmental damage caused during armed conflict.[33] This assertion as well as the rest of the conclusions of this seminal report will be evaluated later in this study.[34]

Thirdly, it was seen earlier that following Article 237 of UNCLOS, regional conventions, such as the 1978 Kuwait Convention, pre-empt UNCLOS provided that their provisions are consistent with its general rules.[35] However, since it predates the latter, the Kuwait Convention does not contain a provision comparable to Article 192 (nor to Article 194) of UNCLOS enunciating comprehensive and unqualified duties towards the marine environment.

Whilst acknowledging that the general obligation for States to protect the marine environment may only be emerging customary law, the EC experts asserted nonetheless that this principle applies to the environment of neutral States.[36] Many naval lawyers doubt, however, whether the environmental provisions of UNCLOS can be transported in unqualified form to situations of armed conflict. One of the treaty's negotiators, Professor Oxman, points out that Article 192 was the principled foundation for a much more detailed body of rules that followed it, explicating its meaning and effect. He believes that applying it to armed conflict in unqualified form amounts to taking the provisions out of context, ignoring the *lex specialis* character of the laws of armed conflict as well as the fact that UNCLOS was not intended to regulate the latter.[37] His views were confirmed by the naval specialists who drafted the 1994 San Remo Manual. As mentioned earlier, whilst they agreed that States are under a general duty to protect the marine environment, they could not agree on creating corollary legal obligations during armed conflict.[38]

3.1.3. Operation "Praying Mantis," Customary Law and the Kuwait Regional Convention

An examination of the legal effects of armed conflict on environmental treaties can only provide a partial answer to the problem of environmental protection during armed conflict. As demonstrated in the previous Chapter, a great part of the analysis will have to be devoted to the lawfulness of the use of force, both from the perspective of *jus in bello* and *jus ad bellum*. Moreover, international armed conflict often creates situations that are beyond the immediate reach of the law of treaties, for the simple reason that not all States involved in the conflict may be bound by the same treaties. This can be illustrated with Operation Praying Mantis, the U.S. code name for a military operation carried out against Iran during the 1980–1988

Iran-Iraq War, which forms part of the *Oil Platforms* case currently pending before the ICJ.[39]

It is common knowledge that the United States, whilst officially proclaiming its neutrality in that Gulf conflict, was nevertheless heavily involved in armed confrontation against Iran. In an effort to deter Iran from attacking third State merchant shipping, the United States decided in April 1988 to attack an Iranian frigate and three offshore gas/oil separation platforms belonging to Iran. It later emerged that the U.S. servicemen were instructed to avoid civilian casualties, collateral damage, and "adverse environmental damage" to every possible degree. Seen from a U.S. perspective, Operation Praying Mantis was carried out according to plan, although Iran claimed that there were several civilian casualties.[40]

It is not clear whether any significant environmental damage was caused.[41] But since the operation involved destruction of gas/oil separation platforms, there was at least a risk of serious marine pollution. If the U.S. raid had caused a serious oil spill, the ascription of legal responsibility would defy easy analysis. Whilst Iran and Iraq were undisputedly the main belligerents of the conflict, the U.S. claim to neutrality status is more tenuous, certainly as far as Operation Praying Mantis is concerned. Both Iran and Iraq are Parties to the 1978 Kuwait Regional Convention, which deals with pollution emergencies but which does not contain an explicit clause to deal with emergencies created by or during armed conflict. In addition, in the above hypothesis, the pollution emergency in question would have been created by a State which not only denied involvement in the conflict between Iran and Iraq but which is not a party to the 1978 treaty.[42]

3.1.4. The 1991 Gulf War Oil Spill and the 1990 OPRC Convention

It was seen earlier that the 1991 Gulf war oil spill was largely—though not exclusively—caused by deliberate Iraqi actions: the opening valves at Iraqi and Kuwaiti oil terminals, and the dumping of oil from five Iraqi tankers.[43] These actions were not only highly questionable from a *jus in bello* point of view,[44] Iraq was also identified early on as having unlawfully resorted to the use of armed force in the first place.[45]

Whilst the exact size of the oil slick is debated, it is generally regarded as the largest ever recorded in human history. It destroyed marine flora and fauna, including migratory species of birds, and interrupted food chains for all forms of life in the Gulf. It ruined fishing grounds for many countries in the region, and made beaches unsuitable for the tourist industry. The oil slick caused serious pollution of the Kuwaiti and Saudi Arabian coasts, and seriously threatened the latter's desalinisation plants and offshore oil operations.[46]

In sharp contrast to the hands-off approach during the 1981–1988 Iran-Iraq conflict, the 1991 Gulf war oil spill elicited a massive world-wide response. Already during the hostilities, local teams in Saudi Arabia managed to save strategic installations from impending disaster.[47] After the cessation of hostilities, an enormous environmental assessment and remediation effort got underway, involving an impressive number of local, regional, bilateral and multilateral organisations.[48]

More important for this study is the evidence that States and international organisations resorted to international institutional mechanisms agreed for "peacetime."[49] Because of its territorial competence in the region, the instruments and institutions agreed under the 1978 Kuwait Regional Convention were an obvious candidate for the provision of emergency relief. Unfortunately, its Marine Emergency Mutual Aid Centre in Bahrain was not able to participate, having been incapacitated by a prolonged lack of funding. Nonetheless, another regional mechanism, the Gulf Area Oil Companies Mutual Aid Organisation contributed successfully with equipment and services.[50]

The singular most impressive case was the IMO-led early implementation of the 1990 International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC Convention) and associated resolutions. The OPRC Convention had been signed barely two months earlier and was not yet in force. Although the Convention was apparently concluded with accidental oil-spills in mind,[51] the IMO considered the Gulf war oil spill to be of the "severity" envisaged in Article 7, justifying requests for assistance from government agencies in the countries threatened by the spill.[52] The early implementation of this convention, five years before its official entry into force, provides, together with the Nowruz Oil Spill, one of the rare instances of State practice on the legal relationship between armed conflict and environmental treaty law. An evaluation of this case will follow later in this work.[53]

3.1.5. State Submissions in the Advisory Opinions on Nuclear Weapons

In their submissions to the ICJ on the Legality of Nuclear Weapons, States were fundamentally divided on the question of the continued relevance of IEL during armed conflict.

Of the States opposing the legality of nuclear weapons, the Solomon Islands presented the most elaborate case in favour of the persistence of environmental obligations during armed conflict. To support their conclusions on the illegality of nuclear weapons, they argued that the use of these weapons was forbidden by current IEL.[54] Their detailed contentions can be summarised as follows:

First, regarding the operation of international law in general during armed conflict, they submitted that: (1) State obligations arising from customary principles and treaty law apply in peace and in war, unless expressly mentioned otherwise; (2) Hence, multilateral treaties that contain no provisions expressly excluding their application in times of war, apply in times of war; (3) Multilateral treaties are not *ipso facto* terminated by the outbreak of armed conflict; (4) Belligerent parties can only suspend or terminate treaties in their relation with other belligerents; they are not allowed to do so in relation to neutral States;

Secondly, applied to IEL, it followed according to the Solomon Islands that: (1) Principle 21 of the Stockholm Declaration, as reaffirmed by the Rio Declaration, continues to apply during armed conflict; (2) Multilateral environmental agreements continue to apply in times of armed conflict, unless expressly provided otherwise; (3) Several important environmental instruments establishing detailed régimes for various environmental sectors—*i.e.*, freshwater resources, the marine environment, biodiversity, climate system and the ozone layer—continue to apply during armed conflict, since they phrase State duties in unconditional and general terms and contain no provision to the contrary; (4) The latter agreements have become widely supported and may reflect rules of customary international law; they establish obligations of such essential importance to the safeguarding and preservation of the human environment that their violation is an international crime; (5) Environmental agreements may only be suspended between belligerents during armed conflict; (6) Environmental agreements may not be suspended by belligerents vis-à-vis third States.[55]

Third, the Solomon Islands contended that since any use of nuclear weapons would violate environmental obligations arising from international custom and treaty law, their use was forbidden by current IEL. This amounts to a claim that IEL is not only concerned with States' peacetime activities, but that it also regulates belligerent activities during armed conflict.

Neither the Court itself, nor States opposing the tenor of the advisory requests provided a full answer to all of the above principled arguments. As will be seen below in the following two sections,[56] the Court accepted the opponents' submission that the legal questions raised by the request from the UN General Assembly deserved a narrow answer, primarily limited to the worst-case scenario of the use of nuclear weapons.

3.2. The Relationship between Peacetime Law and the Law of Armed Conflict in General

Since IEL is primarily treaty-based law, a large portion of this study will be devoted to examining whether—and if so, how—multilateral environmental

agreements apply during armed conflict. However, this question cannot be answered without exploring first the place of IEL and the laws of armed conflict in the international legal order.

It was once believed that the distinction between war and peace was so sharp that as soon as war had begun, the rules valid in peacetime were replaced by those of the laws of wars.[57] Even if not all wars were formally declared, there was little discussion that the rules prevailing during war were fundamentally different from those in peacetime. The relationship between the law of war and the law of peace was one of *leges specialis*, superseding the rest of international law.[58] To complete this ideal picture, Grotius wrote "inter bellum et pacem nihil est medium": there is no intermediate state between peace and war.[59]

However, since there were often hostilities without formal recognition of war, the delimitation between war and peace in State practice was not as clear as the theory implied.[60] The traditional legal dichotomy between war and peace was challenged by authors such as Schwarzenberger, who introduced the notion of *status mixtus* in international law.[61] During a *status mixtus*, third States would be free to decide for themselves whether they wished to regulate their relations with belligerents in accordance with the law of peace or the law of war. Although much written about, the theory was controversial and has never been accepted in international law. Moreover, it did not solve the question of the delimitation between war and peace, but added a third State to be demarcated.[62]

It was seen in the previous chapter that the importance of the state of war has declined.[63] Particularly since World War II, there has been a shift away from the traditional concept of war as a phenomenon characterised by the formal commencement of hostilities. Instead, in many instances, use of armed force is limited in scale, or develops only gradually into a full-blown international conflict. Such hostilities may resemble traditional wars, but the contending parties may resist this label because of its incompatibility with the UN Charter.[64]

The disappearance of the dichotomy between war and peace raises the question of whether there is now a new dichotomy between armed conflict and "no armed conflict" and what its implications are for general international law.

Whilst military lawyers have continued to maintain that the relationship between general international law, including environmental law and the laws of armed conflict, was one of *lex generalis/lex specialis*,[65] this assumption has in recent decades come under scrutiny, both from human rights and environmental legal perspectives.

Since World War II, the impact of humanitarian law and the development of human rights law has been such that there is now a core body of fundamental norms for the protection of the human person, which demands respect from

States in peace and in war or in situations of armed conflict and of no armed conflict. This has been recognised by the ICJ in the *Corfu Channel* and in the *Nicaragua* cases, in which the Court stressed the exacting nature of certain elementary considerations of humanity, applicable in peace and war.[66]

Similarly, as seen in the first section of this study, since the 1980s it has been argued more often that States' rights and duties with respect to the environment continue to operate during armed conflict. In this view, armed conflict offers no excuse for States to deviate from important duties towards the environment arising from general international law.

These assertions have come to a head in States' written and oral submissions to the ICJ regarding the requests for an advisory opinion on the *legality of nuclear weapons*. Many States opposing the legality of nuclear weapons argued that there exists a principle of "environmental security" which outlaws the threat or use of these weapons of mass destruction. They asserted that general international law prohibits a State from carrying out or authorising activities which damage human health and the environment and that international obligations for the protection of human health, the environment and human rights apply during armed conflict.[67]

None of the proponents of the legality of nuclear weapons invoked the *lex generalis/lex specialis* argument explicitly, although this was implied by their assertions that the principal purpose of environmental treaties and norms was to protect the environment in time of peace. Thus, the United States argued that none of the environmental instruments referred to was negotiated with the intention that it would be applicable to nuclear weapons.[68] In addition, she warned that if the ICJ were to decide that the use of nuclear weapons was prohibited or restricted by international environmental agreements or principles, very serious damage could be done to international co-operation and the development of legal norms in this area.[69] The UK submitted that the real issue before the Court was whether any rules of human rights or environmental protection could be construed as prohibiting the use or threat of use of nuclear weapons when carried out by way of legitimate self-defence.[70]

In its advisory opinion on the General Assembly request, the ICJ took note of the arguments advanced by the two camps.[71] Accepting the UK submission it judged that:

> ... the issue is not whether the treaties relating to the protection of the environment are or not applicable during an armed conflict, but rather whether the obligations stemming from these treaties were intended to be obligations of total restraint during military conflict.[72]

The Court further held:

> . . . that the most directly relevant applicable law governing the question of which it was seized, is that relating to the use of force enshrined in the United Nations Charter and the law applicable in armed conflict which regulates the conduct of hostilities, together with any specific treaties on nuclear weapons that the Court might determine to be relevant.[73]

The answer given by the Court transcends the issue of the worst-case scenario of the use of nuclear weapons, for the opinion indicates that the law of armed conflict operates as *lex specialis* with respect to questions of interpretation related to human rights instruments and environmental obligations arising from general international law. This follows directly from the Court's analysis of the human right to life in armed conflict, which preceded its examination of environmental obligations. The Court observed that, in principle, the right to not be arbitrarily deprived of one's life applies also in hostilities, but that the test of what is an arbitrary deprivation of life, needs to be determined by:

> . . . the applicable lex specialis, namely, the law applicable in armed conflict which is designed to regulate the conduct of hostilities.[74]

The Court then turned to environmental law. It accepted that States are under a general obligation to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control.[75] However, it rejected the view that this would entail an obligation of total restraint in armed conflict or a ban on the use of force in self-defence.[76]

The above does not mean that the Court regards environmental law as irrelevant in armed conflict. On the contrary, as was seen earlier,[77] it has firmly laid to rest any suggestion that the duty to protect the environment would be of concern to States only in times of peace:

> States must take environmental considerations into account when assessing what is necessary and proportionate in the pursuit of legitimate military objectives. Respect for the environment is one of the elements that go to assessing whether an action is in conformity with the principles of necessity and proportionality.[78]

The Court also recalled its recent Order in the *Request for an Examination of the Situation* case, in which it concluded that it was "without prejudice to the obligations of States to respect and protect the natural environment."[79] In the advisory opinion the Court stressed that:

> Although that statement was made in the context use of nuclear testing, it naturally also applies to the actual use of nuclear weapons in armed conflict.[80]

However, the opinion remains vague about how exactly environmental concerns might inform the law of armed conflict. As seen in the previous chapter, the advisory opinion has been understood as confirming that the requirements of necessity and proportionality apply to use of armed force both from the perspective of *jus ad bellum* and *jus in bello*.[81]

The paragraphs in which the ICJ discusses the need to take environmental aspects into consideration during belligerent activities touch on both disciplines.[82] Whether the explicit reference to the principles of necessity and proportionality in this context includes both *jus ad bellum* and *jus in bello* is less clear.[83] As for *jus in bello*, the opinion suggests that the new environmental *jus in bello* provisions of Additional Protocol I do not constitute customary law and that limitations on the causing of environmental damage in armed conflict derive primarily from the abstract principles of the law of armed conflict discussed in the previous chapter.[84]

In conclusion, the inference to be drawn from this advisory opinion is that whilst certain State obligations towards the environment continue to apply during armed conflict, they cannot be used to override the law of armed conflict, and certainly not rights derived from *jus ad bellum*.

Accordingly, even "massive pollution of the atmosphere and the seas," which the ILC has termed an international crime,[85] could theoretically be justified in armed conflict provided that, *inter alia*, the customary requirements of necessity and proportionally are complied with.

The implications for the worst-case scenario of use of nuclear weapons are debated. As seen before, the majority opinion has been understood by many to imply, or at least, leave open the possibility that the use of nuclear weapons would inevitably violate *jus in bello*, but that their use would nevertheless be justified in extreme cases of self-defence.[86] In his dissenting opinion, Judge Schwebel used the 1990–1991 Gulf conflict to illustrate circumstances in which the threat of the use of nuclear weapons might have been justified. He acknowledged though, that the consequences of their use would have been "catastrophic," not only for the coalition forces and populations, but also for the principles of collective security and for the United Nations.[87]

3.3. The Relationship between Principle 21 and International Armed Conflict

3.3.1. Armed Conflict, UNCHE and UNCED

The Court's view on the relationship between general international law and the laws of armed conflict is supported by an analysis of the relationship between Principle 21 and armed conflict.

The starting point of this analysis is that Principle 21 has a general tenor, and that it can be understood as embracing all types of State "activities," including military activities. As seen above, it was recently argued before the ICJ that Principle 21 applies in peace and in war.[88] More specifically, it was asserted that:

> . . . use of the word control indicates that the obligation extends to activities carried out by States, through, for example, submarines, vessels or aircraft which might launch a nuclear weapon from an area beyond its national jurisdiction.[89]

Accordingly, Principle 21 was said to apply to the use of nuclear weapons in war or other armed conflict.[90]

It is true that normally the actions of a State's armed forces should be regarded as within its jurisdiction or control; hence, State military actions are subject to the requirement not to cause severe damage to other States or areas beyond national jurisdiction. But does this include armed conflict?

In the previous chapter it was explained in detail how, as a result of the Vietnam conflict, environmental concerns increasingly informed the development of environmental *jus in bello* and disarmament law from the 1970s onwards.[91] Principle 21 was formulated at the 1972 Stockholm Conference (UNCHE). This widely attended international environmental conference was held against the background of the Vietnam conflict, which brought allegations that the United States had engaged in a policy of deliberately targeting the environment, sometimes termed "ecocide." It may hence seem peculiar that the impact of war on the environment was kept off the agenda. The reason is that the issue was considered politically sensitive: it was feared by the organisers that broaching the problem would be interpreted as direct criticism of the ongoing U.S. military operations. This did not prevent the then Swedish Prime Minister Palme from sharply denouncing the omission in his opening statement at the Conference.[92]

Nevertheless, the environmental aspects of Vietnam were not totally ignored. Not only were they discussed at a rival parallel conference held simultaneously in Stockholm,[93] during the official UN conference, Tanzania attempted to break the silence by proposing the condemnation of :

> . . . the use of chemical and biological agents in wars of aggression the use of which degrade man and his environment.[94]

This initiative failed, and the only principle of the Stockholm Declaration to deal with armed conflict—albeit implicitly—is Principle 26. Far from

condemning environmental disruption for military purposes, it places most of the issues raised by Vietnam in the politically less sensitive context of disarmament negotiations and the use of weapons of mass destruction:

> Man and his environment must be spared the effects of nuclear weapons and all other means of mass destruction. States must strive to reach prompt agreement, in the relevant international organs, on the elimination and complete destruction of such weapons.[95]

Twenty years later at UNCED, held in Rio in June 1992, history appeared to repeat itself. It was seen in the previous chapter that in the months following the 1990–91 Gulf conflict, the adequacy of existing law with respect to protection of the environment during armed conflict became the subject of world-wide debate.[96] Most of these early debates centred on the adequacy of the environmental *jus in bello*, although questions were raised regarding the possible contribution of general IEL on the subject. In a reaction to the environmental legacy of the 1990–1991 Gulf conflict, the EC had introduced the condemnation of "ecological crimes" for inclusion in UNCED's agenda. Since the conference was tasked with reviewing and updating the Stockholm Declaration, it was offered an excellent opportunity to state that Principle 21 would be applicable during armed conflict as well. But following debates in the UN General Assembly and a preparatory committee, the main UNCED Committee side-stepped the issue. Although a paragraph was inserted into Agenda 21, it uses only exhortatory language, which adds little of substance:

> Measures in accordance with international law should be considered to address, in times of armed conflict, large-scale destruction of the environment that cannot be justified under international law. The General Assembly and its Sixth Committee are the appropriate forums to deal with the subject. The specific competence and the role of the International Committee of the Red Cross should be taken into account.[97]

More importantly, by mandating the General Assembly's Sixth Committee and particularly the ICRC to study the issue further, UNCED's handling of the matter strongly suggests that the issue was a problem for the laws of armed conflict and not for general IEL.

The only principle of the Rio Declaration to deal with armed conflict is Principle 24, which reads:

> Warfare is inherently destructive of sustainable development. States should therefore respect international law providing protection for the environment in times of armed conflict and co-operate in its further development as necessary.

The weakness of these recommendations is apparent from the fact that during the 1997 UN special session (UNGASS), the subject of military activities or armed conflict was, as far as can be judged from the available documentation, not discussed.[98]

To conclude, the *travaux préparatoires* of the Stockholm and Rio declarations show that delegates to these widely attended environmental conferences—UNCHE and UNCED—thought that the subject of protection of the environment during armed conflict needed to be addressed in specialised forums dealing with the *lex specialis*, that is, the laws of armed conflict and disarmament negotiations.

However, since historical antecedents are not necessarily decisive, the question of the relationship between Principle 21 and armed conflict merits further attention. Offensive or defensive operations in the course of armed conflict may be subject to Principle 21, if not because of the general tenor of the Principle, perhaps by analogy to peacetime activities. A proper evaluation of this hypothesis requires an examination of the nature of armed conflict and of its impact on the environment; What are the parallels, if any, with States' peacetime activities?

3.3.2. Hostile Military Activities Compared to Peacetime Military Activities

It is difficult to escape the conclusion that State activities during armed conflict differ fundamentally from State activities in peacetime.

Whilst the prohibition of transfrontier pollution has since 1972 evolved to include activities within States' control, the most common case to which Principle 21 applies in peacetime is that of activities within a State's territory or jurisdiction causing transboundary pollution to another State's territory or jurisdiction. By contrast, hostile military activity is either directed at or takes place in areas that lie per definition beyond a State's jurisdiction: either in international areas or within opponents' territory or jurisdiction.

Moreover, the nature of hostile activity seems hardly reconcilable with the first premise of Principle 21, which obligates States to take all reasonable measures to prevent, reduce, and control transboundary pollution.[99] Rather than preventing the occurrence of transfrontier damage, belligerent activities imply the deliberate infliction of harm directed at other States. This is recognised by the law of armed conflict, which acknowledges in the view of one commentator:

> ... that intentional destruction of life and property is a necessary aspect of the conduct of hostilities, and that collateral damage and injury—even to noncombatants, civilian property and the natural environment—are an inevitable (though regrettable) consequence.[100]

These negative environmental consequences set use of armed force apart from State activities in peacetime: armed conflict implies necessarily that the environment will be targeted and destroyed—often intentionally. In legal terms, therefore, armed conflict is distinct from all other human activities, even from those that are routinely regarded as "(ultra-) hazardous," such as activities relating to the nuclear energy sector. According to the ILC, (ultra-) hazardous (peacetime) activity is one with a low probability for catastrophic damage.[101] By contrast, State activities in the course of armed conflict appear to carry a high probability of all kinds of environmental damage: from the negligible to the catastrophic.

General environmental law has evolved from principles such as good neighbourliness and respect for other States' sovereignty and territorial integrity;[102] the hypothesis of damage deliberately inflicted on other States seems entirely anathema to it. Therefore, at least between belligerents, hostile military activity is a direct negation of Principle 21.[103]

There remains of course the question, already broached in the previous chapter, whether the principle remains valid for relationships between belligerents and third States, and how the principle might apply in armed conflict in international areas.

3.3.3. Neutrality and Principle 21

According to a view primarily held in environmental circles, Principle 21 remains valid in armed conflict for relationships between belligerents and neutrals and for relationships between belligerents and international areas. This was also explicitly argued in the recent requests for an advisory opinion on the legality of nuclear weapons.[104]

In the literature, several grounds are offered for these contentions. The argument seems based on a presumed legal dichotomy between belligerents and neutrals and on the *lex generalis/lex specialis* rule. Accordingly, whilst it is admitted that armed conflict changes the law applicable between belligerents, it is argued that belligerents and neutrals remain governed by the law of peace, including Principle 21, which is then applied by analogy to international areas.[105] In addition, it is argued that there is no principle under customary law according to which neutral States would have to tolerate damage to their territories caused by belligerent activity.[106]

Such abstract conclusions seem fraught with difficulties on various grounds. First, any theory that relies in one way or another on a strict division between war and peace on the one hand, and a further dichotomy between belligerent and neutral States on the other, is problematic. It was seen earlier that under the modern *jus ad bellum,* it has become much harder to distinguish between neutral and

belligerent or co-belligerent States. What is more, positions of complete neutrality are, strictly speaking, incompatible with the UN Charter's principles.[107] Therefore, a scheme based on a dichotomy between belligerent and neutral States may at the very least prove of little use in cases where the neutrality of third States, *i.e.*, of those not directly involved in the hostilities, is controversial or contested.

Secondly, it was seen earlier that whilst there is no longer a strict division between the law of peace and the law of war, the ICJ has taken the view in its 1996 Advisory Opinion on Nuclear Weapons that the *lex generalis/lex specialis* rule continues to govern questions relating to conduct of belligerent activities.[108] However, the Court was extremely reluctant to draw any firm conclusions on the implications of the use of nuclear weapons in regard to third States.

The Court held that neutrality was a principle of fundamental character applicable in armed conflict, but added that its content was debated and that its application was subject to the relevant provisions of the UN Charter.[109] The latter remark supports the view that reliance on the principle of neutrality is at least debatable in cases where the Security Council takes binding decisions obligating UN Members to discriminate between aggressor and victim States. This conclusion is further underscored by the fact that the Court stressed that it could not lose sight:

> . . . of the fundamental right of every State to survival, and thus its right to resort to self-defence, in accordance with Article 51 of the Charter, when its survival is at stake.[110]

As for the application of the principle of neutrality to the use of nuclear weapons, the ICJ noted that some States argued that their effects cannot be contained within the territories of the contending States,[111] whilst other States objected that this was not necessarily the case.[112] The Court held that it did not have sufficient elements at its disposal to determine the validity of the latter view.[113]

This part of the judgement could be construed as indicating that—had the Court found that there was sufficient evidence that the effects of nuclear weapons can never be contained within the "territories of the contending States"—it might have found their use contrary to the principle of neutrality.

However, such a conclusion is not necessarily warranted. First, by insisting on the fundamental right of every State to survival, the Court has left open the controversial possibility that resort to such weapons might be justified regardless of compatibility with the principles of *jus in bello*. Secondly, even if this interpretation of the judgement is not accepted, it is clear that the opinion does not indicate what level of environmental protection non-contending States might derive from the principle of neutrality in armed conflict. According to the Principal Deputy

Legal Adviser of the U.S. State Department, the opinion leads to the proposition that a lawful exercise of self-defence under Article 51—one which meets the requirements of necessity and proportionality—would not violate neutrality; hence there would be no absolute prohibition on attacks that would cause collateral damage in a neutral State.[114]

Thirdly, the advisory opinion does not address the issue of environmental damage in relation to international areas. It was argued earlier that the traditional law of neutrality was premised on respect for the territorial sovereignty of States, and that it cannot be construed to confer any type of "immunity" from belligerent interference to international areas.[115] In addition, it should not be overlooked that under general international law, the application of Principle 21 to international areas or to the environment *per se* is heavily qualified. Whilst the duty to protect the environment *per se* might be an emerging principle of customary international law, State practice indicates that it is primarily other States' rights and interests in these environments that are protected.[116]

In conclusion, resort to a legal dichotomy between war and peace, the *lex generalis/lex specialis* rule, the principle of neutrality or an analogy between peacetime and belligerent military activities does not offer a sufficiently firm, nor a universal legal basis for the protection of environments beyond the jurisdiction of the contending States during armed conflict.

3.4. The Relationship between Multilateral Environmental Agreements and International Armed Conflict

3.4.1. Introduction

It was seen earlier that IEL is primarily treaty-based law.[117] Although treaty law cannot be divorced entirely from customary international law, it forms to a great extent a self-contained source of international law and merits separate analysis.[118]

The purpose of this section is to examine whether multilateral environmental agreements continue to apply during armed conflict and, if so, to what extent. The resolution of this question must be sought in an analysis of the relationship between multilateral environmental agreements and armed conflict, and requires answers to the following fundamental questions: Can these agreements be said to apply at all to belligerent activities during international armed conflict? If so, do contracting parties have the legal right to terminate or suspend the operation of such agreements during the conflict?

One school of thought opposes the continued relevance of multilateral environmental agreements during armed conflict on the grounds that: (a) these

agreements are not applicable to belligerent activities or (b) that even if they may be said to apply, contracting parties have the legal right to terminate or suspend the operation of these agreements during armed conflict.[119]

Advocates of the continued relevance of multilateral environmental agreements during armed conflict would argue that: (a) these agreements apply to all State activities, even in armed conflict; and (b) that armed conflict is not a sufficient ground to terminate or suspend the operation of these agreements.[120]

Apart from these positions at opposite ends of the spectrum, there are a variety of compromise positions possible. For instance, some adherents to the first school of thought concede that these agreements may apply during armed conflict, but that armed conflict is a sufficient ground in itself for belligerents to suspend or terminate the agreements between themselves. Others assert that the question is simply not relevant since environmental treaties rarely deal with the kind of damage caused during warfare.[121] It is also argued that belligerents may suspend the operation of such agreements if incompatible with armed conflict, but only between themselves, and that in any case, the suspension of such agreements will not affect obligations which are binding on States regardless of treaty law.

It was seen earlier that there exists State practice on the legal effect of armed conflict on multilateral environmental agreements, but that it raises more questions than it answers.[122]

As for legal doctrine, it was seen that the EC Expert report written during the 1980–1988 Iran-Iraq conflict was the first legal study devoted to the subject. Following the 1990–1991 Gulf conflict, the need to study the issue of the legal effect of armed conflict on multilateral environmental treaties has been raised regularly.[123] However, the scope of most of the studies conducted thus far is severely restricted. Not only do they concentrate primarily on the environmental treaties directly affected by these conflicts, almost invariably, reliance is placed on pre-Charter law and legal doctrine.[124] The suggestions made by an ICRC Committee of Experts to study all major environmental treaties with a view to ascertaining whether they continue to apply in times of war have thus far not been followed.[125]

Unsurprisingly therefore, in their recent submissions before the ICJ, States were sharply divided on these questions. Both proponents and opponents of the legality of nuclear weapons admitted that the vast majority of environmental treaties are silent on the question of their effect during war and armed conflict,[126] but they drew opposing conclusions from this fact. The Solomon Islands argued that this silence proves that they are designed to ensure environmental protection at all times, in peace and war, unless expressly excluded.[127] It was further argued on their behalf that the outbreak of war or other armed conflict does not automatically suspend or terminate the operation of those treaties and that, in any event,

such treaties continue to apply where they are in force between one or more parties to a conflict and third States.[128]

The United States and the UK replied that the nature and the scope of these agreements, and the intention of the drafters, cannot be construed as an implied prohibition on the threat or use of nuclear weapons. [129] In addition, the Court itself held that whether such treaties were applicable or not in armed conflict, was not relevant to the legal question before it.[130]

In view of the above, it seems necessary to broaden the inquiry and examine the relationship between armed conflict and treaties in general.

3.4.2. The Relationship between International Armed Conflict and Treaties in General

The question of the continued relevance or validity of treaties during armed conflict is a subject that is regularly described as one of the problem areas in international law.[131] In the 1929 case of *Karnuth v. United States*, the U.S. Supreme Court made an observation which many scholars would still find true today:

> The effect of war upon treaties is a subject in respect of which there are widely divergent opinions. . . . The authorities, as well as the practice of nations, present a great contrariety of views. The law of the subject is still in the making, and, in attempting to formulate principles at all approaching generality, courts must proceed with a good deal of caution.[132]

In spite of various attempts at codification, which will be discussed below,[133] there are no international treaties in force which explicitly regulate this subject. In what follows, evidence of State practice and *opinio juris* will be discussed, followed by an analysis of case law and a review of the doctrine on the legal effects of armed conflict on treaties in general. This section of the chapter ends with a methodological proposal for the examination of the relationship between multilateral environmental agreements and armed conflict.

A. State Practice and *Opinio Juris*

At the Outbreak of Hostilities.

Under the traditional model, premised on a legal dichotomy between war and peace, questions regarding the continued operation of treaties between belligerents did not arise. At the outbreak of armed conflict, belligerent States issued declarations of war, according to which, all treaties with belligerents were abrogated. Thus, in 1911 Turkey declared war on Italy and proclaimed that all of her treaties with Italy were thereby at an end.[134] This was still the official French position at the

outbreak of World War II.[135] In its declaration of war against Japan, the French government announced the abrogation of all conventions with the former.[136]

At the end of the war, the fate of pre-war treaties was decided by subsequent peace treaties. Thus, Article II of the Definitive Treaty of Peace between Great Britain and France, signed at Paris in 1783, "renewed and confirmed" the treaties which had existed previous to the war.[137]

A U.S. author commented in 1958 that in "modern" wars, such proclamations are not ordinarily made.[138] However, even if modern armed conflicts are less frequently characterised by the formal commencement of hostilities, treaty relations between contending States may still be affected as a result of official government policy. It was argued before that the legal concept of a state of war remains significant despite the outlawry of war by the collective security systems of the 20th century. Moreover, many countries continue to regard the creation of a formal state of war as a possibility.[139]

A formal declaration of war has considerable consequences for domestic law. For example, in the United States and the UK, Trading with the Enemy acts come into operation. The opponent belligerent becomes an enemy, and all those living and trading in that country become enemy aliens. Most obligations and transactions involving enemy aliens will be nullified and may become criminal. The 1939 UK Trading with the Enemy Act introduces a stringent regime of prohibitions and controls, and proceedings involving enemy aliens become subject to serious constraints.[140] In the United States, war suspends the right of enemy plaintiffs to bring court proceedings.[141]

Absent a formal declaration of war, such effects do not come into operation automatically, but may be brought into operation by specific measures. Thus, in the 1982 Falklands/Malvinas conflict, the UK broke off diplomatic relations with Argentina, froze Argentinean assets, prohibited imports from the latter, and ceased export credit guarantees. A similar course was followed by the UK following the Iraqi invasion of Kuwait in 1990. In its immediate aftermath, the UK brought a series of statutory instruments into operation to give effect to UN and EC sanctions aimed at depriving Iraq of any financial and economic benefits and to induce it to change course.[142]

At the Conclusion of Peace Treaties.

From the above it follows that government opinion and State practice on the effect of hostilities on pre-war treaties may be derived not only from declarations and documents at the outbreak of hostilities but also from clauses included in subsequent peace treaties.[143] Nevertheless, there are several obstacles. The terms of some peace treaties are biased in favour of victorious States, even at the expense

of third States.[144] Furthermore, the language used by many treaties is, at best, inconclusive as to the question which concerns us here: namely the legal effect of pre-war treaties during the conflict. For instance, the Versailles Peace Treaty (and its counterparts[145]) includes elaborate provisions for the fate of multilateral and bilateral treaties. As to the former category, Articles 282 to 288 contain detailed provisions for specially named multilateral conventions. Article 282 enumerates 26 conventions of an economic and technical character that "shall be applied" as between the Allied Powers and Germany; Articles 283 to 286 deal with multilateral conventions in the area of postal communications, telegraphic conventions and intellectual property that will be applied between the victorious powers and Germany upon the fulfillment of certain conditions. The arbitrary character of these provisions is revealed in Article 287, which stipulates that one particular convention will be applied between all parties, except for France, Portugal and Romania.[146] Moreover, use of the term "apply" in respect of these multilateral conventions does not indicate what the status of these treaties was during the past war.

As to the category of bilateral treaties, the Allied and Associated Powers were given the right by Article 289 to select bilateral treaties they wished to "revive" by means of a notification addressed to the vanquished power(s). Use of the term "revive" might suggest that these bilateral treaties had not been annulled during the war, but that they had at most been suspended between belligerents for the duration of the conflict. However, such an interpretation is far from certain since the penultimate paragraph of Article 289 of the Versailles treaty stipulates that all other bilateral treaties concluded between the former belligerents "are and remain abrogated."[147] In addition, the last paragraph of Article 289 gave all Allied and Associated Powers the right to "revive" bilateral treaties with Germany, even if they had never declared war on the latter.

The peace treaties concluded after World War II differ from the Versailles model in that only bilateral treaties between victorious and vanquished powers were expressly dealt with. The absence of a regulation for multilateral treaties has subsequently been seized upon as proof that this type of treaty had not been abrogated between belligerents at the outbreak of World War II, but had been suspended, at most.[148]

With regard to the fate of bilateral treaties, World War II peace treaties follow in the footsteps of the Versailles treaty.[149] Hence, the victorious Powers were allowed to select those treaties which they wished to apply for the future.[150] This allowed Great Britain and India to take control over Thailand's post-war treaty relations.[151] Again, there is evidence of arbitrariness in the State practice following World War II. The United States used the treaty revival procedure to notify a few "new" treaties

to defeated Powers—Italy, Bulgaria, and Japan—although none of these had been in force between the United States and the defeated States prior to the conflict.[152]

Moreover, the language used in the peace treaty clauses after World War II reveals very little about the status of bilateral pre-war treaties between belligerents. Whereas World War I peace treaties used the term "revive," most of World War II peace treaties use the formula "keep in force or revive."[153] As for the status of treaties not notified, each of the peace treaties concluded after World War II resolved the question by providing that they shall be regarded as abrogated.[154] It is interesting to note that whilst the victorious States chose to revive very few prewar treaties after World War I, a far greater number of pre-war (bilateral) treaties were revived after World War II.[155]

In sum, the language used in these peace treaties shows that the drafters did not wish to be drawn on any theory regarding the effects of the past conflicts on treaties. They were primarily concerned with the settling of post-war Treaties and other relations with the defeated States for the future.

The post-war settlement of treaty relations involving Austria and Germany confirm the growing irrelevance of peace treaties for the question that concerns us here. The State Treaty of Austria, signed in 1955, did not include provisions on prewar treaties, apparently because she was not considered a vanquished State by the Allies.[156] Professor Verosta claims that Austria "applied again" all multilateral and bilateral pre-war treaties which she had concluded since 1918, but that some additional protocols were needed to meet the new circumstances.[157] As for Germany, the third Reich was dissolved at the end of World War II, and no formal peace treaty was signed. No comprehensive solution was ever devised, and many U.S. courts had to deal with cases involving pre-war treaties with Germany.[158]

A further problem is that since World War II, inter-State armed conflict is only rarely terminated through the conclusion of formal peace treaties. No such treaties were concluded after the 1980–1988 Iran-Iraq[159] and 1990–1991 Gulf conflicts.[160] In addition, the few that were concluded lack provisions on pre-war relations for a variety of reasons. The 1970 Egypt-Israel Peace Treaty ends the state of war between the Parties by express provision,[161] but it does not contain a settlement of pre-war treaty relations, since presumably, there were none. The same applies to the 1983 Agreement between Lebanon and Israel[162] and to the 1994 Israel-Jordan Peace Treaty.[163] The 1995 Dayton/Paris Peace agreements do not contain any such provisions either.[164]

Other Evidence of Government Views.

Shortly after World War II, a Swedish scholar sought the views of several governments on the effects of World War II on, *inter alia*, multilateral treaties of a technical or non-political nature, the fate of which had not been expressly

regulated by the peace treaties. The most representative replies received were as follows. The British Foreign Office replied that:

> *It is not the view of His Majesty's Government that multilateral conventions ipso facto should lapse with the outbreak of war, and this is particularly true in the case of conventions to which neutral Powers are parties... (...) Indeed, the true legal doctrine would appear to be that it is only the suspension of normal peaceful relations between belligerents which renders impossible the fulfillment of multilateral conventions in so far as concerns them, and operates as a temporary suspension as between the belligerents of such conventions.*[165]

Similarly, a former director of the French Foreign Ministry accepted that multilateral treaties may have only been suspended during the war between belligerents.[166]

The legal adviser of the U.S. Department of State replied that with regard to nonpolitical multilateral treaties, the United States took the view that these were not *ipso facto* abrogated by war, but that certain provisions may, as a practical matter, have been inoperative. He added that:

> *The view of this Government is that the effect of the war on such treaties was only to terminate or suspend their execution between opposing belligerents, and that, in the absence of special reasons for a contrary view, they remained in force between co-belligerents, between belligerents and neutral parties, and between neutral parties.*[167]

During the hearings before the U.S. Committee on Foreign Relations on the proposed Test Ban Treaty (1963), the question was raised whether it would prohibit the use of nuclear weapons in time of war. Article 1 of this treaty (hereinafter PTBT) prohibits:

> . . . any nuclear test weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control.[168]

In reply, the U.S. Department of Defense argued that it was standard practice "in treaties outlawing the use of specified weapons or actions in time of war" for the treaties to state expressly that they apply in time of war, and that since the proposed treaty did not contain such language, it must, therefore, be presumed that no such prohibition would apply.[169] Whilst the reasons given may be open to challenge, an analysis of the *travaux préparatoires* indicate that the words "or any other nuclear explosion" were inserted originally at the request of the UK for the purpose of banning "peaceful-use" explosions as well as test explosions.[170]

This view is notable for several reasons. Although the PTBT is on its face a disarmament treaty, it has obvious environmental implications. Since the purpose of the treaty is "to end the contamination of man's environment by radioactive substances,"[171] Schwelb regarded it as nearer to a "human rights, world health or safety at sea convention" than a disarmament convention. Furthermore, he considered it significant that the treaty does not prohibit underground testing nor, in his opinion, the use of nuclear weapons in time of war.[172] Moreover, the above U.S. view contradicts claims made before the ICJ by opponents of the legality of nuclear weapons. Several States argued that the PTBT applies in peace and in war, and that it should hence be interpreted as prohibiting the use of nuclear weapons.[173] Finally, it is noteworthy that the 1996 Comprehensive Nuclear Test Ban Treaty (CTBT) does not contain any provision for the outbreak of armed conflict either.[174]

B. Case Law. There is considerable case law on the effect of war on treaties. But it consists predominantly of municipal case law dealing with situations arising from World War II, and/or with narrow issues regarding a formal state of war.[175] There are, nevertheless, a few international decisions on problems related to armed conflict and treaties.

International Jurisprudence.

There are several international cases concerning the relationship between war or armed conflict and treaties. Some of these deal with the fundamental question as to whether certain treaties can continue to apply during war or armed conflict. Others discuss principles of interpretation.

The *North Atlantic Coast Fisheries* case (1909-1910) concerned disagreements between the United States and Great Britain on the effect of the War of 1812 on a treaty of 1783 which granted fishing rights to Americans in the North Atlantic. In its award, the Permanent Court of Arbitration noted in passing that:

> International law in its modern development recognises that a great number of treaty obligations are not annulled by war, but at most suspended by it.[176]

This statement should be contrasted with the award rendered in *Dalmia Cement Ltd. v. National Bank of Pakistan* (1976). Appointed as sole arbitrator, Professor Lalive needed to determine whether the hostilities of 1965 between India and Pakistan, which lasted 17 days and involved a substantial number of troops, had amounted to a state of war. He decided in the negative on two main grounds. First, he rejected the argument that a state of war cannot exist between

UN Members, holding that the Charter led to a mere presumption that its parties did not intend to create a state of war in the absence of clear indications to the contrary.[177] Second, he found it significant that neither party had broken off diplomatic relations nor regarded any of the bilateral treaties between themselves as cancelled upon the outbreak of hostilities.[178] This arbitral decision is debatable on several counts.

Apart from Pakistan's claim that she was at war with India,[179] there was considerable evidence that both parties had attempted to exercise traditional belligerent rights, including measures of economic warfare affecting third States.[180] Moreover, the arbitrator relied on the outdated theory that a state of war implies the "complete rupture of international relations" and the automatic cancellation of treaty relations between belligerents.[181]

The latter part of the award is at variance with current principles of international law reflected, *inter alia*, in the 1969 Vienna Convention on the Law of Treaties.[182] As was stressed by the panel of arbitrators in *Lafico and Burundi* (1991):

> The idea that the execution of treaties should be affected by the severance of diplomatic and consular relations is even more incongruous when it is borne in mind that the most authoritative recent doctrine, emanating from the Institute of International Law, considers that even armed conflict does not suspend the application of treaties.[183]

The ICJ has in several contemporary cases dealt either directly or incidentally with the problem of the continued relevance during modern—non-war—hostilities of bilateral treaties concluded primarily to regulate commercial relations between States.

In its 1980 decision regarding the *Hostages* case, the ICJ assumed jurisdiction, *inter alia*, on the basis of the Treaty of Amity, Economic Relations, and Consular Rights concluded in 1955 between the U.S. and Iran.[184] The Court found Iran responsible towards the United States for having committed successive and continuing breaches of the obligations laid upon it, *inter alia*, by the 1955 Treaty. The import of this decision is that the Court did not regard the treaty as abrogated, suspended, or not applicable to acts of violence committed against the U.S. Embassy and its staff, for which it held the Iranian government responsible.[185]

The same treaty lies at the basis of the claims currently pending before the Court in the *Oil Platforms* case, which includes claims concerning Operation Praying Mantis.[186] In its application, Iran contends that the attack and the

destruction of three offshore oil production complexes carried out by the U.S. Navy in 1987 and 1988 constituted a fundamental breach of various provisions of the 1955 Treaty of Amity.[187] The United States raised as preliminary objection that questions concerning the use of force fell outside the ambit of the 1955 Treaty, since it deals with commercial and consular provisions.[188]

In its decision of 12 December 1996, the Court rejected the U.S. objection. It pointed out first, that neither party contested that the Treaty of Amity was still in force and recalled that a similar view was taken in its above-mentioned decision in 1980.[189] It then noted that the treaty did not expressly exclude certain matters from the Court's jurisdiction and held that a violation of the rights of one party under the treaty by means of the use of force was as unlawful as a violation by other means.[190] The Court subsequently held that the contested military actions of the United States had the potential of affecting the freedom of commerce to which Iran was entitled according to the treaty.[191]

A similar dispute had been at issue in the decision in the *Nicaragua* case. In its memorial, Nicaragua had relied as a subsidiary means on the jurisdictional clause of the 1956 Treaty of Friendship, Commerce and Navigation with the United States.[192] Nicaragua submitted that the disputed U.S. military and paramilitary activities constituted a violation of the treaty, whilst the United States objected that the disputed activities fell outside its ambit. In its 1986 judgement, the ICJ held that the United States had acted in breach of the 1956 Treaty and had committed acts calculated to deprive the treaty of its object and purpose. The military and paramilitary activities specifically mentioned by the Court included a series of attacks directed against Nicaraguan territory and ports, the laying of mines in the internal or territorial waters of the claimant, and the declaration of a general embargo on trade.[193]

What these three decisions have in common is that the Court held that questions related to the use of force were not *per se* excluded from the scope of bilateral commercial treaties. The relevance of this case law for the present study is as follows: although these commercial treaties were premised on the existence of friendly relations between contracting parties, their object and purpose were, in the words of the Court, "not to regulate peaceful and friendly relations between the two States in a general sense."[194] In addition, none of the treaties contained specific provisions on armed conflict.

In the 1923 case of the SS *Wimbledon* before the Permanent Court of International Justice (PCIJ) and in the requests by WHO and the UN General Assembly concerning the *Legality of Nuclear Weapons*, a further principle of treaty interpretation was debated. The 1923 case concerned the interpretation of Article 380 of the Treaty of Versailles, which provided that:

> The Kiel Canal and its approaches shall be maintained free and open to the vessels of commerce and of war of all nations at peace with Germany on terms of entire equality.

In March 1921 Poland was at war with Russia, and Germany had declared herself a neutral in the conflict. In application of express prior neutrality orders, the Kiel Canal director refused entry into the canal to the SS *Wimbledon*, an English vessel chartered by a French company to carry war materials for the Polish government to the naval port of Danzig.[195] In the ensuing case before the PCIJ, Germany pleaded that Article 380 of the Versailles treaty posed no obstacle to the application of neutrality orders in the Kiel Canal.[196] Its opponents argued that Germany's obligations under the treaty were supreme and that Article 380 was a permissible infringement upon Germany's sovereignty. The majority of the Court resorted primarily to a literal interpretation of Article 380, finding that its terms were clear and gave rise to no doubt. They held that Germany was perfectly free to regulate her neutrality in the Russo-Polish war, but subject to the provisions of the article in question.[197]

In their joint dissenting opinion, Judges Anzilotti and Huber saw the legal question differently. They asked whether:

> . . . the clauses of the Treaty of Versailles relating to the Kiel Canal also apply in the event of Germany's neutrality, or do they contemplate normal circumstances, that is to say, a state of peace, without affecting the rights and duties of neutrality?[198]

They found that even in the absence of an express treaty provision allowing her to do so, international law permitted Germany to take exceptional measures affecting the treaty, if done for the purpose of preserving her position of neutrality or self-defence:

> The right of a State to adopt the course which it considers best suited to the exigencies of its security and the maintenance of its integrity, is so essential a right that, in case of doubt, treaty stipulations cannot be interpreted as limiting it, even though those stipulations do not conflict with such an interpretation.[199]

Although this proposition formed part of a joint dissenting opinion, the UK argued in 1995 in connection with the advisory requests on the *legality of nuclear weapons* that this opinion was not at variance with the PCIJ's majority judgement.[200] She further submitted that the fundamental and overriding character of self-defence in international law constituted a principle of general application to interpretation of treaty law.[201] As seen before, in its 1996 Advisory Opinion,

the ICJ accepted that environmental treaties could not be construed so as to deny a State the right to use armed force in self-defence or to entail obligations of total restraint in armed conflict.[202]

Municipal Case Law.

The municipal jurisprudence is so closely linked with constitutional municipal issues, and so diverse, that it is difficult to detect common principles and rules that could be transferred easily onto the international plane.

In his report to the Institut de droit International (Institut), Professor Broms argued that the Judiciary ought to ascertain the opinion of the Executive before trying to solve the problem of the legal effect of war on treaties.[203] This procedure is followed in one form or another by many countries.[204] For instance, it would be usual in proceedings before the English Courts for the Executive to be asked to certify whether there was a state of war, indicating the precise moment of its commencement and its termination. The Crown is asked for guidance even if the UK is a non-contending party.[205]

The dominant theory applied by U.S. courts was expressed in a letter from the Department of State to the Attorney-General in 1948 as follows:

> *. . . the determinative factor is whether or not there is an incompatibility between the treaty provision in question and the maintenance of a state of war as to make it clear that the provision should not be enforced.*[206]

This theory was already earlier applied by Judge Cardozo in the celebrated case of *Techt v. Hughes* (1920), in which a rather dim view was taken of academic attempts at rule-making:

> The effect of war upon the existing treaties of belligerents is one of the unsettled problems of the law. . . . International law today does not preserve treaties or annul them, regardless of the effects produced. It deals with such problems pragmatically, preserving or annulling as the necessities of war exact. It establishes standards, but it does not fetter itself with rules. When it attempts to do more, it finds that there is neither unanimity of opinion nor uniformity of practice.[207]

The study conducted by McIntyre after World War II shows that when the U.S. Executive considered it in its own national security interest to suspend or abrogate a treaty during war, it would do so, and that the courts often deferred to whatever policy the government of that moment adhered to, particularly on affairs such as trading with the enemy and on inheritance issues.[208] Thus, in *Clark v. Allen* (1947) the U.S. Supreme Court noted that the Department of State had

changed its earlier position, no longer favouring the view that World War II had abrogated all provisions of the 1923 Treaty of Friendship with Germany. The Court subsequently held that a clause providing inheritance of realty under the 1923 Treaty was not incompatible with national policy.[209]

Particularly in commercial cases involving interpretation of contract clauses, courts have been reluctant to apply the traditional technical meaning of the state of war as intended by the Executive. English law on the effects of undeclared wars has been strongly influenced by the case of *Kawasaki Kisen Kabushiki Kaisha of Kobe v. Bantham Steamship Co* (1939).[210] This concerned a charterparty clause allowing cancellation "if war breaks out involving Japan." In 1937 heavy fighting took place between the regular forces of Japan and China, even though war had not been declared and diplomatic relations were not broken off. A certificate obtained from the Foreign Office declared that the English government was not prepared to say whether a state of war existed, but that this might not necessarily be conclusive for the interpretation of the term "war" in particular documents or statutes.[211] The judge subsequently felt free to construe the term "war" in the sense in which "an ordinary commercial man would use it" and concluded that war existed for the purposes of the charterparty. This precedent was subsequently followed in five cases related to the 1956 Suez conflict, during which the Prime Minister had categorically denied that the UK was at war with Egypt. The courts recognised that there were hostilities between the UK and Egypt, albeit not involving war.[212] In application of this case law it has been suggested that if a British court were called upon to construe the expression "war" or similar terms in a commercial document, facts involving the Desert Storm phase of the 1990–1991 Gulf war would be held to constitute belligerency in a colloquial sense.[213]

Although general statements with respect to municipal jurisprudence are difficult to make, there are a few common trends. Municipal judges are generally reluctant to consider political treaties as unaffected by war.[214] A more liberal line is followed for extradition agreements, for perpetual rights accorded to individuals, and in commercial matters including in particular intellectual property rights. These treaties are often regarded as, at most, suspended during war between belligerents.[215] The above principles have been confirmed by courts in Austria,[216] Belgium,[217] Germany,[218] Greece,[219] Italy,[220] Luxembourg,[221] the Netherlands,[222] Norway,[223] the United States[224] and the UK.[225] The French *Cour de Cassation*, however, seems to adhere firmly to the theory that war annuls most (bilateral) treaties between belligerents.[226]

Unsurprisingly, courts in many countries conform to the legal standpoint of the Executive regarding questions as to whether a state of war exists, particularly

if the country itself is involved in the conflict.[227] It is also a matter for the Executive to decide on the formal end of a state of war.[228] Absent a formal declaration of war or a firm indication by the government, judges are reluctant to consider treaties as automatically terminated or suspended by the outbreak of armed conflict.[229]

Still, a caveat needs to be added for cases involving public policy. It has been noted that British courts will probably refuse to enforce contracts which are considered detrimental to the interests of the country, even in undeclared wars. This may affect transactions considered as assisting opponents in modern *jus ad bellum* "non-war" hostilities such as UN enforcement operations and self-defense measures.[230] Hence, municipal courts are empowered to examine whether the continuation of a particular treaty would be incompatible with express or implied government policy of national and perhaps even international security interests.

As a consequence of the above, the same hostilities may be construed differently, depending on the circumstances and purposes of the legal assessment.[231] Thus, while the Korean conflict did not amount to war in the legal sense in the UK, courts in the Australia, France, New Zealand, and the United States[232] have regarded the conflict as war for purposes such as insurance policies[233] and military discipline.[234]

However, there is little jurisprudence on the type of treaties this study is concerned with, although there is case law on treaties dealing with inland navigation: In *The Golden River v. The Wilhelmina* (1950), the District Court of Rotterdam needed to decide whether the Convention of Mannheim of 1868 concerning Navigation on the Rhine remained applicable during World War II between Holland and Germany. The court decided that this multilateral treaty was not concluded in contemplation of war and that it was suspended as between Holland and Germany from May 1940, but only insofar as, and as long as, its provisions had in fact become inapplicable. Applying this criterion of factual inapplicability to the case at hand, it furthermore held that the convention remained suspended after the unconditional surrender of Germany, during the period necessary to consolidate this surrender and to restore order in the chaos as a result of the fighting in Europe.[235]

In conclusion, its needs to be observed that the existing case law contributes little to the main questions this study is concerned with. Municipal case law does not answer the fundamental question as to whether multilateral environmental agreements can be said to apply at all during armed conflict. What it does indicate is that the views of the Executive on the effect of treaties during armed conflict are regarded as binding and that, failing a clear indication to that effect, courts will check whether the continued operation of a treaty is compatible with national policy. If the outcome of this analysis is positive, courts favour the view that most treaties survive the outbreak of war but that some provisions may be inoperative

on practical or factual grounds. However, municipal case law does not reveal any standards to determine whether, and if so on what grounds, contracting Parties may terminate or suspend the operation of such agreements during armed conflict.

C. Development of Legal Doctrine. In the period between the turn of the century and World War II, the problem of the effects of war on international treaties attracted the attention of several scholars.[236] In addition, two major academic studies were published. The first of these was a report written by Politis on the "Effects of War on International Obligations and Private Contracts,"[237] adopted by the Institut at its Christiana session in 1912.[238] The second major study was conducted by Professor Garner for the *Harvard Research in International Law* on the Law of Treaties. The proposed draft convention with comments on the law of treaties was published in 1935, and it contained an elaborate provision on the effect of war.[239]

After World War II interest in the subject all but disappeared.[240] The ILC consistently refrained from including the effects of war/armed conflict in its studies, including, in particular, treaty law. Nevertheless, many of the disciplines of international law which the ILC has tried to codify and progressively develop are relevant for the question of the continued operation of multilateral environmental treaties in armed conflict.[241]

In the mid-1970s, academic interest in the subject of the effects of armed conflict on treaty law was rekindled when the Institut agreed to review the work of Politis and appointed Professor Broms as rapporteur. It was only ten years later, and after much discussion, that the Institut finally adopted a Resolution on "The Effects of Armed Conflict on Treaties," at its 1985 Helsinki session.[242] The most recent contribution of the Institut will be discussed later in more detail.[243]

It is often said that there are two opposing doctrinal schools on the legal effect of war on international treaties.

- a first one according to which all treaties are annulled by war;[244]
- a second one according to which the outbreak of war as a rule does not affect treaties;[245]

However, the first "radical" theory, according to which the outbreak of war brings nothing but chaos to international relations and consequently annuls *ipso facto* all treaties, has never received many adherents. Politis already expressed doubt about the conception that war had an annulling effect on all treaties.[246] On the other hand, even Garner's theory that there were no reasons of public policy why

any treaty should be regarded as *ipso facto* annulled by war[247] was never fully accepted in State practice.[248]

Currently, the most universally accepted doctrinal premise is that war and other forms of armed conflict have no automatic (*ipso facto*) cut-off effect on treaties, but that some treaties are, may, or may have to be suspended.

There are multiple reasons for this change of heart by legal doctrine. Some of these are related to the changing concept of war, others to principles of treaty law. As to the first, international armed conflict is no longer regarded as causing total disruption of all legal bonds between States; belligerents need to observe some basic rules of humanity between each other, and State practice shows that contending States often continue to maintain legal relations with each other in several areas.[249] As for treaty law, there is a modern legal presumption—*favor contractus*—which favours the continued operation of treaties, even in such extreme circumstances as armed conflict.[250] This is related to the fundamental principle of *pacta sunt servanda*, laid down in Article 26 of the 1969 Vienna Convention on the Law of Treaties, the importance of which the ICJ reaffirmed in its judgement in the *Gabcíkovo-Nagymaros Project* case.[251]

Modern legal doctrine on the legal effect of armed conflict on treaties tends to adopt a pragmatic approach, taking into account the intention of the parties as well as the type of treaty concerned.[252] Although this does not amount to a consistent theory, it aims at reducing the impact of armed conflict on treaty relations whilst recognising that in some areas, the continuing effectiveness of treaties is incompatible with a state of war or armed conflict.[253] The pragmatic approach of modern doctrine combines the traditional technique of classification of treaties with the intention theory.

Under the classification theory, treaties are organised according to their nature and type, and different rules are said to apply to different classes of treaties, according to various criteria:[254]

- bilateral treaties are distinguished from multilateral treaties;
- treaty relations between contending (belligerent) States are distinguished from those involving non-contending (neutral) States;
- political treaties such as treaties of friendship and commerce, of alliance and non-aggression and peace treaties between belligerents are annulled (according to the older theories) or at least suspended (modern theories) during the conflict between belligerents;
- executed treaties such as those entailing territorial settlements and international boundaries remain unaffected, and by extrapolation, the same rule applies to treaties establishing international régimes or entailing a special status for a region;

- treaties concluded with war in mind, such as conventions of the Hague Law type, forbidding certain means and methods of warfare, remain in force;
- the operation of treaties that establish international organisations remain in effect between belligerents and neutrals, but may be suspended as between belligerents;
- non-political treaties such as those regulating commerce, navigation, and matters of private international law between citizens of belligerent countries, may be suspended between belligerents;

A recent addition to the classification theory is the category of humanitarian treaties, pursuant to a rule introduced by the 1969 Vienna Convention on the Law of Treaties. According to Article 60(5) of this Convention, the right to terminate or suspend the operation of a treaty as a consequence of its breach—the *exceptio non adimpleti contractus*—does not exist for:

> . . . provisions relating to the protection of the human person contained in treaties of a humanitarian character, in particular to provisions prohibiting any form or reprisals against persons protected by such treaties.

It is widely accepted that the phrase "provisions relating to the protection of the human person . . ." includes international humanitarian law.[255] From the *Namibia* Advisory Opinion it can be inferred that the ICJ considered Article 60 (5) an expression of a general principle of law that predated the 1969 Vienna Convention by at least half a century.[256]

The classification theory has several weaknesses. First, it is obvious that not all modern treaties can be labelled as belonging exclusively to one or the other category. Secondly, the theory fails to take the complexities of international armed conflict into account. For example, it is often asserted that executed treaties such as those involving territorial and boundary settlements remain unaffected between belligerents. Yet, history shows that this rule remains valid only as long as the treaty at issue is not a *casus belli: i.e.*, the reason why the Parties resorted to armed force in the first place. Indeed, disputes over natural resources and territorial claims are often causes of war; battles tend to take place along strategic "natural" places such as rivers.[257] The recent conflict in the former Yugoslavia is a stark reminder of the continuing fragility in international law of the purported principle of the "intangibility" of State borders.[258] State practice proves that several criteria and rules suggested by classification theorists belong to the realm of *jus de legu ferenda*.

Under the intention theory, first advocated by Hurst, the primary test as to whether or not a treaty survives the outbreak of war between parties is to be found

in the intention of the parties at the time the treaty was concluded.[259] It was this theory that inspired the *Harvard Research* proposal for a provision on the effect of war on treaties.[260]

However, it is clear that the intention theory will rarely lead to results that differ radically from the classification theory. The real contribution of the intention theory lies in its accommodation of those treaties which cannot be readily classified in any of the above-mentioned classes, provided that the parties' intention is clear or can be inferred: for example, it will accommodate all treaties with a provision on the outbreak of war/armed conflict.

A major weakness of this theory is that it rests on two debatable assumptions; first, that drafters of treaties have a particular intention with respect to the question of armed conflict, and secondly, that this intention can be uncovered. In regard to the attendant problem, the theory is therefore of little real help. When a treaty contains a clause on armed conflict, the intention of the drafters is clear, and one does not need the theory to resolve the issue. The difficult cases concern treaties that are silent on the issue of armed conflict. In some instances it might be that the problem was discussed during the *travaux préparatoires*, but the rules of treaty interpretation do not necessarily permit resort to statements that have not been formally recorded in the treaty text. The intention of the parties should be derived primarily from the wording of the treaty itself or from related instruments. Recourse may be had to supplementary means of interpretation such as the *travaux préparatoires* or the circumstances surrounding its conclusion, in case the general rules of interpretation lead to an ambiguous, obscure, manifestly absurd or unreasonable meaning of the text.[261]

Finally, it should be noted that most of the doctrine on the subject is primarily concerned with the effect of (a formal state of) war on treaties, and that comparatively little attention has been paid to the effects of armed conflict. However, there is little doubt that the tendency in international State practice, case law and doctrine, to reduce the impact of war on treaty relations will apply *a fortiori* to armed conflict.[262] Armed conflict does not involve a total disruption of treaty relations between States, and the treaty law principles of *favor contractus* and *pacta sunt servanda* should obviously apply in relation to armed conflict as well.

This is supported by the work of the Institut that, as will be seen immediately below, has equated a state of war with armed conflict for the purposes of its 1985 Helsinki Resolution.[263]

D. The Codification Efforts of the Institut de Droit International between 1974–1985. It was seen above that the Institut took more than ten years to conclude the subject. During these discussions, several members objected to the

adoption of the resolution on the grounds that the subject was too political,[264] that the suggested principles were too selective,[265] or that some principles were not supported by State practice.[266] Professor Brownlie questioned the utility of the entire endeavour. He saw it as internally contradictory insofar as it claimed to enunciate principles of positive international law whilst asserting that State practice in these matters was not uniform.[267]

These criticisms may explain some of the following peculiarities. For instance, in its preamble, the Resolution states that it shall not prejudge the application of the provisions of the Vienna Convention on the Law of Treaties. As pointed out by Professor Dinstein, this amounts to a "double negative *renvoi*," since the Vienna Convention itself contains several articles stipulating that it shall not prejudge questions related to the use of force.[268]

A second peculiarity concerns the definition of the term armed conflict for the purposes of the resolution. Article 1 defines this concept as:

> . . . a state of war or an international conflict involving armed operations which by their nature or extent are likely to affect the operation of treaties between States parties to the armed conflict or between States parties to the armed conflict and third States regardless of a formal declaration of war or other declaration by any or all of the parties to the armed conflict.[269]

From the *travaux préparatoires*, it appears that the formulation served several purposes: to take the realities of modern warfare into account, to convey a *de minimis* threshold, and to exclude the possibility that a State which is not materially engaged in hostilities would be entitled to affect treaty relations by a simple declaration of war.[270] The problem, though, is that the definition results in a *petitio principii*, for it provides a circuitous answer to the question of the effects of armed conflicts on treaties: One can argue indefinitely on what type of conflict "by their nature or extent are likely to affect the operation of treaties between States."

The Institut's modest ambitions are clear from the preamble, which describes the resolution's aim as affirming *certain* principles of international law considering the lack of uniformity in State practice. Furthermore, whilst aiming at reducing the effects of armed conflicts on treaties, the resolution was meant primarily as a residual means of interpretation.[271] However, the contradiction between the enunciation of principles of positive international law and the admitted lack of uniformity in State practice was never fully resolved.[272]

The operational part of the resolution affirms much of the modern legal doctrine discussed above. The outbreak of armed conflict does not *ipso facto* terminate

the operation of treaties in force between parties to the conflict (Article 2); it does not *ipso facto* terminate or suspend the operation of bilateral treaties between a party to an armed conflict and a third State, nor of the operation of multilateral treaties between third States or between parties to an armed conflict and third States (Article 5); and it brings into operation treaties which by reason of their nature or purpose are to be regarded as operative during an armed conflict (Article 3). Article 11 urges parties to resume suspended treaties as soon as possible at the end of an armed conflict or to agree otherwise.

The provisions that merit special attention are the following. Article 6 of the Resolution stipulates that a treaty establishing an international organisation "is not affected" by the existence of an armed conflict between any of its parties. However, most reports by international organisations on their work during both World Wars contain evidence of the considerable extent to which their activities, income and membership were affected by the ongoing hostilities. For some of these organisations the implications were severe. Thus, during World War II the International Labor Organisation was forced into changing its headquarters from Europe to the United States, whilst the Central Commission for the Navigation of the Rhine suspended work entirely during this conflict. Even organisations located in neutral countries, such as the Universal Postal Union (UPU) in Switzerland, were not spared.[273] Another obvious example is the collapse of the League of Nations Organisation. Some Member States ended their participation in compliance with the Covenants' provisions on denunciation, whereas others simply withdrew, with or without offering legal grounds. Following the establishment of the UN, the League of Nations was dissolved.

Seen against the background of the serious disruption that many international organisations went through during both World Wars, as well as many previous conflicts, the affirmative language of this provision appears, at a minimum, to amount to a proposal *de lege ferenda*. In mitigation one should add that the Institut's *travaux* clarify that Article 6 was narrowly conceived in that whilst the workings of international organisations may be affected by war, the treaty establishing the organisation itself should not be affected.[274] This interpretation is supported not only by State practice of the two World Wars: the case studies discussed in the beginning of this study demonstrate that during the 1980–1988 and 1990–1991 Gulf conflicts, regional institutions continued to function.[275]

A further provision that merits separate discussion is Article 4, which stipulates:

> The existence of an armed conflict does not entitle a party unilaterally to terminate or to suspend the operation of treaty provisions relating to the protection of the human person, unless the treaty otherwise provides.

This provision is noteworthy for several reasons. It was argued above that one of the crucial questions that needs to be answered is—assuming that multilateral environmental agreements can apply during armed conflict—whether and under what circumstances contracting parties may invoke the existence of armed conflict as a ground for suspending (or terminating) their operation.

Environmentalists would argue that current international law requires every ground for treaty suspension to be expressly agreed upon. Absent a provision authorising suspension in case of war, contracting parties would not be allowed to invoke armed conflict as an excuse. Military lawyers might object that armed conflict is *lex specialis*, and that every State has the right to suspend treaties in cases of war or armed conflict, even if such a possibility is not expressly provided for in the treaty itself.

Both sides of the argument were, as seen above, invoked in State submissions before the ICJ in connection with the requests for an advisory opinion on the legality of nuclear weapons.[276] The argument has obvious environmental significance, for few international environmental treaties deal expressly with armed conflict. Two diametrically opposed positions have been advocated in the doctrine on this issue. The EC Experts report concludes that because armed conflict contingency clauses are rare, absent such clauses, parties are not allowed to suspend the operation of treaties on the ground of armed conflict.[277] Others contend that the absence of a clause on armed conflict proves that the treaties in question cannot be applied in armed conflict, or at least that their application is uncertain.[278] Both positions will be tested in the case studies of conventions on marine pollution and maritime safety that will be conducted in the next part of this study.[279]

The Institut's opinion on this problem may not be immediately apparent, but it is noteworthy that Article 4 is the only provision (apart from Article 6) to deny contracting Parties the right to suspend certain treaties on the ground of armed conflict. The *travaux* show that the Institut was of the opinion that a blanket denial of the right to suspend or terminate any treaty as a result of armed conflict "would not be based on the facts relating to the known practice of States."[280] They further demonstrate that Article 4 was inspired by Article 60(5) of the 1969 Vienna Convention on the Law of Treaties, and that it covers provisions of both human rights treaties and humanitarian law.[281]

Article 4 of the Resolution is noteworthy in another respect. It was seen earlier that there is a school of thought according to which environmental protection should be linked with human rights.[282] This was advocated also before the ICJ in regard to the *Legality of Nuclear Weapons* advisory opinion.[283] If such a link between environmental protection and human rights is recognised, Article 60(5) of the 1969 Vienna Convention offers an excellent vehicle through which States

could be denied the right to suspend international environmental agreements in case of armed conflict.

During the 1985 Helsinki session, one of its members proposed that IEL treaties should be treated in similar fashion as humanitarian treaties on the ground that protection of the environment was in essence "a natural extension of the protection of the human person." The tenor of the amendment was to prohibit belligerent parties to *terminate* or *suspend* environmental treaties. However, its proponent failed to convince the meeting. Some members thought that the subject was brought up too late and deserved to be studied separately; others expressed serious doubt on the validity of the proposed rule. The amendment was overwhelmingly rejected. Nevertheless, the meeting agreed to place on record a statement to the effect that humanitarian treaties may "to a certain extent" comprise protection of the environment.[284]

Finally, the Helsinki Resolution is remarkable because of the importance it attaches to consequences of unlawful use of force under the UN Charter. The relevant provisions were highly controversial. The disagreement centred on whether treaty relations should be settled pursuant to the principle of equality of all belligerents following *jus in bello*,[285] or follow the modern *jus ad bellum* distinction between lawful and unlawful uses of force instead.[286]

Some members argued that the entire issue of treaty relations as a consequence of armed conflict should be resolved in accordance with the UN Charter's principles.[287] Consequently, an aggressor State should be denied all benefits under treaty law, based on the principle *ex injuria jus non oritur*.[288] Other members objected that there was no State practice to support such a distinction between aggressors and victims with respect to treaty relations.[289] A further suggestion was that the Institut should restrict itself to guidelines for treaty relations *durante bello* on the basis of the principle of equality of belligerents, but that it should leave open the possibility that *post bellum* another assessment may be needed pursuant to the principles of *jus ad bellum*.[290] This debate strongly resembles the discussions on compensation for violation of *jus in bello* and *jus ad bellum* examined earlier.[291]

Whilst the final text of the Resolution does not take a position on all of the above issues, it is noteworthy that it devotes not less than three of its eleven articles to the consequences of modern *jus ad bellum* on treaty relations in armed conflict. Article 7 allows victim States to suspend treaties in whole or in part if incompatible with the exercise of individual or collective self-defence. Article 8 obligates States to terminate or suspend treaties to comply with resolutions of the Security Council. Article 9 denies unlawful aggressor States the right to terminate or suspend treaties "if the effect would be to benefit that State."

Far from being unrealistic, it seems that these articles have been remarkably prescient in anticipating the increased impact of the Charter's collective security system following the end of the Cold War. The legal aftermath of the 1990–1991 Gulf Conflict, Res. 687 (1991) and the work of the UN Compensation Commission illustrate the possible effect of Articles 7 to 9 of the Helsinki Resolution.

Finally, Article 10 entails again a *renvoi* to unsettled matters insofar as it provides that the Resolution does not prejudge rights and duties arising from neutrality.

3.4.3. Contributions Made by the ILC Codifications

The ILC has consistently abstained from considering the effects of war or armed conflict in its work.[292] As seen before, it was excluded from its studies on the law of the sea,[293] and on State liability for acts not prohibited by international law.[294]

However, in respect of its own 1994 draft articles on watercourse law, the ILC commented that "the present articles themselves remain in effect even in time of armed conflict."[295] In their statements before the ICJ on the legality of nuclear weapons, the Solomon Islands relied on this comment and requested the Court to apply "the same presumption in favour of applicability where an instrument was silent."[296]

It should be noted firstly that the observation was not recorded in the draft articles themselves but only in the comments thereto. In any event, the ILC's observation appears far too general, since past practice shows that international watercourses have strategic value and may become the scene of armed conflict.[297] The ILC has not indicated whether its observation applies only to States not involved in the conflict or includes contending parties as well. Hence, it may amount to a rule *de lege ferenda*. As seen before, during the debates in the General Assembly on the ILC draft, delegates were anxious to stress that the only article to deal explicitly with armed conflict—Article 29—was not intended to change the status of the protection of watercourse installations under current laws of armed conflict.[298]

As for treaty law, there are several articles of the 1969 Vienna Convention on the Law of Treaties that touch on the use of force in international relations, but they expressly leave open the matter that concerns us here. Apart from Articles 63 and 74, which stipulate that the severance of diplomatic and consular relations does not in principle affect treaties between parties nor their capacity to conclude treaties, the drafters' reluctance to be drawn any further on the matter of armed conflict is apparent from Article 73:

> The provisions of the present Convention shall not prejudge any question that may arise in regard to a treaty from a succession of States or from the international responsibility of a State or from the outbreak of hostilities between States.

and Article 75:

> The provisions of the present Convention are without prejudice to any obligation in relation to a treaty which may arise for an aggressor State in consequence of measures taken in conformity with the Charter of the United Nations with reference to that State's aggression.

This trend was confirmed by the 1978 Vienna Convention on Succession of States in Respect of Treaties,[299] and by the 1986 Vienna Convention on the Law of Treaties between States and International Organisations or between International Organisations.[300]

However, the fact that the Vienna Convention on the Law of Treaties does not "prejudge" the effects and implications of armed conflict on treaties, does not mean that its provisions may not apply. Whilst the 1969 Vienna Convention by express provision does not have any retroactive effect, it is important to note that many of its provisions are nevertheless regarded as customary law. This includes the articles on suspension and termination, as emphasised by the ICJ in the 1997 *Gabcíkovo-Nagymaros Project* case.[301]

In the latter case, the ICJ also clarified the relationship between the law of treaties and State responsibility. The Court held that those two branches of international law were different in scope and expanded on their relationship as follows:

> A determination of whether a convention is or is not in force, and whether it has or has not been properly suspended or denounced, is to be made pursuant to the law of treaties. On the other hand, an evaluation of the extent to which the suspension or denunciation of a convention, seen as incompatible with the law of treaties, involves the responsibility of the State which proceeded to it, is to be made under the law of State responsibility.

Referring to its earlier case law on the issue, the Court also stressed that:

> It is, moreover, well established that when a State has committed an internationally wrongful act, its international responsibility is likely to be involved, whatever the nature of the obligation it has failed to respect.[302]

3.4.4. Methodology Suggested

In application of the foregoing, it is submitted that no sweeping generalisation can be made regarding the application or non-application of multilateral environmental agreements during international armed conflict. Given the great differences that exist amongst the conventions in the area of IEL, a cautious approach is advisable. Each treaty needs to be examined separately in order to determine whether or not it can apply to the specific environmental problem posed.

Furthermore, since the solution involves both questions related to the application of international treaties and the use of force in international relations, regard must be given also to the Law of Treaties and the Law of State Responsibility:

(1) Whether environmental problems related to the use of armed force are governed by a particular treaty needs to be determined primarily according to the terms of the treaty (the *pactum*) itself. Apart from the rules on treaty interpretation recorded in the 1969 Vienna Convention, regard must be given to the principles discussed in this chapter that relate specifically to questions of armed conflict. These include the rule that no treaty is *ipso facto* abrogated or suspended by armed conflict, and the related rule that issues related to the use of force are not, *per se*, excluded from the scope of treaties; on the other hand, it should be kept in mind that the law of armed conflict operates as *lex specialis* with respect to conduct of belligerent activities, and that no environmental treaty can be construed so as to overrule a State's inherent right to self-defence.

If the outcome of this examination is that the treaty applies in principle to questions of armed conflict or if the outcome of this examination is uncertain, several further tests need to be carried out.

(2) The treaty may contain explicit provisions on its continued operation during armed conflict, such as a clause allowing Parties to suspend the operation of the treaty. Such a clause may then be resorted to by the contracting Parties. However, there may be grounds arising under the Law of Treaties or the Law of State Responsibility which override such provisions.

Thus, as seen earlier, pursuant to Article 60(5) of the 1969 Vienna Convention on the Law of Treaties, suspension or termination does not extend to provisions relating to the protection of the human person contained in treaties with a humanitarian character. It remains an open question, though, whether and to what extent this prohibition covers environmental provisions.[303]

A treaty clause allowing suspension or termination in armed conflict may also be in conflict with a new peremptory norm of general international law (*jus cogens*), as stipulated by Article 64 of the 1969 Vienna Convention. While the

principle in question may reflect customary law, the procedure suggested by this Convention may not.[304] Furthermore, it should be noted that the Vienna Convention cannot be applied retroactively.[305]

According to Article 75, the provisions of the 1969 Vienna Convention are without prejudice to any obligation in relation to a treaty which may arise for an aggressor State in consequence of measures taken in conformity with the UN Charter with reference to that State's aggression. This is a clear reference to the possible implications of Security Council decisions under Chapter VII of the Charter for treaty relations between UN Members and identified aggressor States. This is in accordance with, *inter alia*, Article 103 of the Charter which stipulates expressly that "in the event of a conflict between the obligations of the Members of the United Nations . . . and their obligations under any other international obligation," their Charter obligations prevail.[306]

The relevance of the latter hypothesis was underlined in the *Lockerbie* case. In its order for provisional measures in 1992, the ICJ gave an extensive interpretation to the powers of the Security Council. It held that by virtue of Articles 25-103 of the UN Charter, a decision of the Council is able to prevail over treaty obligations of the parties under any international agreement.[307]

(3) Even if a particular treaty does not include an express provision on the occurrence of armed conflict, it would still need to be examined whether armed conflict can form a ground of treaty suspension or termination pursuant to the Law of Treaties. Space does not permit to discuss every hypothesis in detail, but a few remarks may nevertheless be in order.

Even if one accepts the modern view that no treaty is suspended *ipso facto* on account of the outbreak of armed conflict,[308] a belligerent can still decide to withdraw from a treaty, in full compliance with its provisions. In fact, belligerents may even decide to suspend or terminate bilateral or multilateral agreements *inter se* by mutual agreement.[309]

General principles of treaty law may be applicable to the subject matter as well. Non-contending States may conceivably invoke (material) impossibility of performance,[310] and *rebus sic stantibus* to justify unilateral suspension of a treaty.[311] However, in the *Gabcíkovo-Nagymaros Project* case, the ICJ had the occasion to stress that this type of defence to the general rule of *pacta sunt servanda* should only be exceptionally allowed to stand.[312] In addition, the State and treaty practice that will be examined in the following chapters indicate that armed conflict in itself is not sufficient a ground to invoke the plea of *rebus sic stantibus*. Moreover, there is reason to believe that the *rebus sic stantibus* theory was developed mainly to deal with peaceful change.[313]

(4) The next frame of reference is the Law of State Responsibility. As the ICJ indicated in the *Gabcíkovo-Nagymaros Project* case, the 1969 Vienna Convention confines itself to defining—in a limitative manner—the conditions in which a treaty may lawfully be denounced or suspended. The effects of a denunciation or suspension seen as not meeting those conditions are to be judged according to the Law of State Responsibility, which is expressly excluded from the scope of the Vienna Convention following Article 73.

The Law of State Responsibility was among the first topics which the ILC selected as suitable for codification in 1949. This project is still ongoing. Chapter V of Part Two of the Commission's draft is titled "Circumstances Precluding Wrongfulness"; it was prepared at the turn of the 1970s and the 1980s under the responsibility of Mr. Roberto Ago and was accepted provisionally in 1980.[314] According to the Commission, this chapter deals with exceptional circumstances which render an international obligation inoperative and preclude the attribution of wrongfulness to an act counter to that obligation—and the normally resulting responsibility.[315] These special circumstances are:

(1) Consent validly given by the State whose rights are affected (Article 29 of the draft); (2) Countermeasures in respect of an internationally wrongful act (Article 30); (3) *Force majeure* and fortuitous event (Article 31); (4) Distress (Article 32); (5) State of necessity (Article 33); (6) Self-defence (Article 34).

Many of these draft articles are regarded as reflecting customary law to varying degrees. For instance, in the 1997 *Gabcíkovo-Nagymaros Project* case, the ICJ had apparently no difficulty treating the articles on necessity and countermeasures as authoritative. However, in the 1990 *Rainbow Warrior* Arbitration, the arbitral panel relied primarily on the ILC's description of *force majeure* and distress, but treated its proposal for "state of necessity" as controversial.[316]

All of these special circumstances precluding wrongfulness may be of potential relevance to the subject at hand. Thus, Article 34 of the ILC's draft stipulates that:

> The wrongfulness of an act of State not in conformity with an international obligation of that State is precluded if the act constitutes a lawful measure of self-defence taken in conformity with the Charter of the United Nations.

As is clear from Article 7 of the Institut's Helsinki Resolution, a victim of aggression may resort to suspension of treaty relations as a self-defence measure.[317]

(5) Finally, it is submitted that there is a further possibility that needs to be examined. Article 73 of the 1969 Vienna Convention, as mentioned before, does not only reserve judgement with regard to the Law of State Responsibility but also to

questions related to the outbreak of hostilities. This is a *renvoi* to problems which have been touched on before, *i.e.*, the implications for treaty law of the rights and obligations which States derive from the outbreak of hostilities. A related issue is whether the law on belligerent reprisals may affect the continued operation of a treaty. All these questions point to the need to examine if there are customary principles related to the laws of armed conflict that may affect the operation of international environment agreements, and more generally, whether the implications for treaty law should follow the *jus in bello* principle of equality of belligerents *durante bello*, or the *jus ad bellum* principle of discrimination between aggressors and victims instead.

3.5 Conclusions and Introduction to Part Two.

3.5.1 Conclusions to Chapter III

The purpose of this chapter has been to establish legal principles and a methodology to determine the application of IEL in general during armed conflict.

The analysis has led to the following slightly contradictory observations. First, the 1996 Advisory Opinion of the ICJ indicates that rules devised for the conduct of belligerent activities operate as *lex specialis* for questions related to the interpretation of provisions of general international law, including environmental law, in armed conflict. Furthermore, whilst the Court stated that environmental concerns form part of the laws of armed conflict, it held that multilateral environmental agreements cannot be construed so as to deny a State the fundamental right to use armed force in self-defence.[318] This conclusion is supported by the records of 1972 UNCHE and 1992 UNCED.

On the other hand, there is a strong tendency in modern international State practice, case law, and legal theory towards maintaining the validity of treaties insofar as compatible with national policy and with obligations stemming from Security Council decisions under Chapter VII.[319]

In 1993, the ICRC suggested that the following guidelines be included into military manuals:

> International environmental agreements and relevant rules of customary law may continue to be applicable in times of armed conflict to the extent that they are not inconsistent with the applicable law of armed conflict.
>
> Obligations relating to the protection of the environment towards States not party to an armed conflict (*e.g.*, neighbouring States) and in relation to areas beyond the

> limits of national jurisdiction (*e.g.*, the High Seas) are not affected by the existence of the armed conflict to the extent that they are not inconsistent with the applicable law of armed conflict.[320]

Clearly, the application of the key criterion of "inconsistency with the applicable law of armed conflict" suggested by the ICRC is no simple matter. The ILC has carefully avoided studying the problem explicitly in its various codifications of international law, whilst the Institut has come up with some useful—albeit at times controversial—principles regarding the legal effects of armed conflict on treaties in general.

The State practice, case law, and legal theory examined in this chapter has failed to answer certain pertinent questions. On the assumption that certain principles of IEL in general may continue to be relevant in armed conflict, and that certain multilateral environmental agreements may continue to apply during armed conflict, to what extend are contending Parties entitled to deviate from such obligations on the ground of armed conflict? More specifically, how should the rights of contending parties be balanced against the enjoyment of entitlements by non-contending States (and perhaps by international areas as well) under IEL in general and multilateral environmental agreements in particular?

This uncertainty may not be surprising given that use of armed force, as seen in the Second Chapter of this study, raises many difficult legal questions. When the failings of the collective security system leave the legal position of States not directly involved in the hostilities unclear, the treaty relations between the latter and the belligerent States will be inevitably affected by the uncertainty.

Furthermore, one would be hard pressed to generalise rights and obligations arising from the many environmental treaties in force. It was seen earlier that there are a great number of treaties from the bilateral to the global level dealing with a vast array of environmental problems in a variety of media. Some régimes are very detailed and put in stringent terms, others are obviously more abstract or exhortatory in character.[321]

Drawing further on the two main disciplines involved, *i.e.*, the Law of Treaties and the Law of State Responsibility, it was concluded that each multilateral treaty needs to be examined separately in order to determine its application to the problem in question.

First, the *pactum* between contracting States needs to be examined, applying the relevant articles of the 1969 Vienna Convention on treaty interpretation as well as the principles of interpretation related to armed conflict examined in this

chapter. Secondly, provision needs to be made for obligations arising from *jus cogens*, humanitarian provisions and binding Security Council decisions. Thirdly, regard must be had to the grounds of suspension and termination arising from the Law of Treaties, and fourth, to the "circumstances precluding wrongfulness" arising under the Law of State Responsibility. The final possibility that needs examining is whether there are any customary rules on the fate of multilateral environmental agreements during armed conflict outside the frames of reference of the Law of Treaties or the Law of State Responsibility.

3.5.2 Introduction to Part Two

The aim of the second part of this study is to take a closer look at the problem of the relationship between international armed conflict and multilateral environmental agreements by examining one particular category of maritime agreements.

The reasons why this study concentrates on the marine environment were set out in the introduction to this study. A series of representative treaties regarding marine safety and prevention of marine pollution were selected. These cover the following themes: (1) Safety Aspects and Navigation; (2) (Civil) Liability Conventions; (3) Prevention of Oil Pollution and other forms of Marine Pollution; (4) Maritime Emergencies.

Three types of basic clauses with a possible bearing on armed conflict will be examined: (1) Clauses exempting war damage from the scope of the convention; (2) Clauses dealing with the possibility of war/armed conflict/hostilities and (3) Clauses dealing with the exemption of warships and other State craft. A chapter has been devoted to each clause and the analysis will follow the same basic plan. First, a short justification will be provided for why the selected clause may have a bearing on armed conflict. This will be followed by an analysis, treaty-by-treaty, of the negotiating history of the clause and, if possible, by an examination of State practice, *opinio juris*, and doctrine where relevant. Finally, for each clause, a conclusion will be formulated on the significance of the absence or presence of the clause for the relationship between armed conflict and the treaties in question.

Although the majority of the conventions that will be discussed were concluded under IMCO/IMO auspices, others have been concluded under UNEP, IAEA, the Council of Europe and the UN/ECE. In addition, throughout this study, references will be made to similar clauses contained in other multilateral environmental agreements. All in all, close to 60 international treaties and instruments will be discussed either directly or indirectly.

Part Two

Maritime Conventions and Naval War

Chapter IV

The Exclusion of War Damage from the Scope of Maritime Conventions

4.1. General Comments

IN MATTERS OF LIABILITY AND REPARATION, a distinction is usually made between State and civil liability. Both are legal frameworks for settling issues of reparation. State liability refers to the duty of States to make reparation for damage caused by a breach of public international law; civil liability, by contrast, is determined primarily on the basis of private—municipal or international—law. The treaties reviewed in this section are usually said to regulate matters of civil liability. However, many régimes that will be discussed involve State participation in one form or another: States may either act as supervisors or guarantors of a particular compensation scheme, contribute to a particular indemnity fund, incur complementary or residual liability, or may even be liable as principal operators.[1] Taken as whole, the liability régimes discussed here are therefore best described as mixed régimes.

As will be seen below, many—if not all—civil liability conventions exclude coverage for damage caused by war and other instances of armed conflict. From an insurance point of view, this may not be surprising, for in commercial law, damage caused by war is a risk usually excluded from normal coverage by the insurer. Many contemporary standard forms used in the commercial trade exclude losses caused not only by wars in the traditional sense (classic, declared, inter-State conflicts), but contain expressions excluding a whole range of other types of armed conflicts: formulas as "act of war" and "act of public enemies" in the Hague Rules[2] and Hague-Visby Rules; "war, civil war, revolution, rebellion, insurrection or civil strife arising therefrom, or any hostile act by or against a belligerent power" as in the marine insurance clauses of the Institute Time Clauses

(Hulls) and the Institute Cargo Clauses. The net is cast particularly wide in the Gencon Charterparty which excludes damage caused by:

> . . . any blockade or any action which is announced as a blockade by any Government or by any belligerent or by any organized body, sabotage, piracy and actual or threatened war, hostilities, warlike operations, civil war, civil commotion or revolution.[3]

The latter formula makes it absolutely clear that hostilities other than "war" in the formal legal sense are also intended. This avoids the problems that arose in *Kawasaki Kisen Kabushi Kaisha of Kobe v. Bantham Steamship Co*, where the charterparty contained a clause allowing cancellation "if war breaks out involving Japan."[4] As indicated earlier, domestic courts and arbitral tribunals tend to construe terms as "war" or "acts of war" in insurance policies broadly, holding that they apply to undeclared wars,[5] and even to actions by resistance or guerrilla forces.[6] The implications of this flexible interpretation may be illustrated with the case of *Dreyfus & Co v. Duncan (Lloyd's Underwriters) and Another* (1981), in which the Belgian Court of Appeal of Antwerp needed to construe an insurance policy which expressly excluded "riot, social disorder and malicious damage" but not war or armed conflict as such. The Court decided that this phraseology applied to the starting of fires and the bomb attacks by rebel troops in the course of the conflict in East Pakistan in 1971, which ultimately led to the creation of the State of Bangladesh.[7]

The underlying idea is that war and other instances of armed conflict are considered an abnormal risk, akin to *force majeure*, which the insurer should not be required to bear—[8] unless, of course, the client took out special war risk coverage.

4.2. Discussion

4.2.1. Nuclear Industry as Model

- **(Paris) OECD Convention on Third Party Liability in the Field of Nuclear Energy, 1960**
- **Convention on the Liability of Operators of Nuclear Ships, 1962**
- **(Vienna) Convention on Civil Liability for Nuclear Damage, 1963**
- **Protocol to Amend the 1963 Vienna Convention, 1997**
- **Convention on Supplementary Compensation for Nuclear Damage, 1997**

Since the beginning of the 1960s, a number of international conventions were concluded to regulate and channel questions of liability regarding two special

risk-creating industries: the nuclear industry and the sector of maritime carriage of oil. The impetus for a civil liability régime for the nuclear sector can be situated towards the end of the 1950s. It was linked with the fear for potential astronomical compensation claims for nuclear incidents involving land-based reactors and transportation of nuclear materials. The nuclear supply industry considered these risks too incalculable to bear or insure. Since these liability issues could jeopardise the development of a peaceful nuclear energy sector, the OECD governments decided to intervene.

The first convention in which this was done was the 1960 Paris Convention. It applies to nuclear incidents within Western European States and establishes an exclusive non-fault civil liability régime. It completely relieves the nuclear supply industry and channels all liability, subject to certain ceilings, exclusively to the operators, who need to cover their liability by compulsory insurance. The 1963 Vienna Convention provides similar solutions but on a more global scale.[9] Again in response to industry demands, two more additional liability layers to the Paris Convention were subsequently agreed upon. The 1963 Paris Supplementary Convention establishes a second tier of residual State liability as well as a third one, constituted by a private insurance pool.[10] A Joint Protocol agreed in 1988 between IAEA and the OECD/NEA linked the Vienna and Paris Conventions into one system.

In 1990, the IAEA Standing Committee on Liability for Nuclear Damage was set up to revise the Vienna Convention and prepare a supplementary compensation scheme. On 12 September 1997, a Protocol to amend the 1963 Vienna Convention and a Convention on Supplementary Compensation for Nuclear Damage were adopted. The new instruments contain, *inter alia*, a better definition of nuclear damage that also addresses the concept of environmental damage and includes compensation for preventive and remedial measures.[11] In addition, the Convention on Supplementary Compensation applies to nuclear damage suffered in or above the Exclusive Economic Zones and Continental shelves of Contracting Parties,[12] whilst the Protocol may apply to nuclear damage, "wherever suffered," including in the territory and any maritime zones established by a non-Contracting State in accordance with the international law of the sea.[13] As will be seen further below, the two new instruments not only apply to civilian installations, but may cover (military) installations used for "peaceful purposes."[14]

However, none of these nuclear liability instruments cover war damage. Pursuant to an identically worded clause, no liability shall attach to an operator for nuclear damage caused by a nuclear incident "directly due to an act of armed conflict, hostilities, civil war or insurrection."[15]

The Convention on the Liability of Operators of Nuclear Ships (hereinafter 1962 NS Convention) was adopted at a Diplomatic Conference in Brussels under the auspices of the *Comité Maritime International* and IAEA, in 1962. It deals with questions of liability in much the same way as the above mentioned conventions: absolute or strict liability of the operator, with ceilings on compensation, and compulsory insurance. Like the Paris and Vienna Conventions, the 1962 NS Convention was basically forward-looking, concluded mainly to provide a liability channelling and compensation régime for the potential incalculable claims that might follow from a nuclear incident.[16] As will be discussed below, the main interest of this Convention for this study lies in its explicit inclusion of incidents involving nuclear warships.[17] The reasons why the latter were finally incorporated—after much discussion—were essentially of a pragmatic nature: nuclear propulsion on ships was at that time still the reserved domain of the military of a few countries (*i.e.*, the United States and the USSR),[18] and it was predicted that this situation would persist in the near future.[19] However, at the Brussels conference, the inclusion of warships led to a heated debate on the corresponding liability coverage. Several countries, mainly from Eastern Europe, argued that the liability of the operators of warships—*i.e.*, of the States concerned—needed to be unlimited. Limiting a State's liability for incidents involving warships would in their view legalise the use of nuclear energy for purposes of war.[20] Despite these protestations, the conference let the States off with limited liability for warships as well (Article III).

Article VIII of the 1962 NS Convention contains a clause which resembles the exoneration clauses mentioned above, in that it excludes coverage for: "an act of war, hostilities, civil war or insurrection." True, the conventions of the Paris and Vienna group use the expression "act of armed conflict," which on its own could be wider than "act of war," used in the 1962 NS Convention. However, such an interpretation is not certain. Even if the term "act of war" in the latter treaty would have to be interpreted narrowly as referring only to a state of war in the legal-technical sense, other instances of use of armed force would still be excluded from the NS convention because of the term "hostilities."

It seems extraordinary though, that the NS Convention allows even the operators of nuclear warships, *i.e.*, State governments, to take advantage of the exemption clause for losses caused by war or other forms of hostilities. It would undoubtedly have been more prudent for the negotiators to include a "savings clause" to the effect that Article VIII is without prejudice to the rules of general international law on State responsibility. The issue will probably remain of academic interest only since the convention is unlikely ever to enter into force.[21]

4.2.2. Maritime Carriage of Oil

- **International Convention on Civil Liability for Oil Pollution Damage, 1969**
- **International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971**

Questions of liability and compensation in relation to the sector of maritime oil transport were brought to the fore at the end of the 1960s. Unlike with the nuclear industry however, it was an actual disaster that became the catalyst for the negotiation of a special liability régime. Following the 1967 *Torrey Canyon* incident, IMCO adopted a programme for measures and studies in relation to marine pollution from maritime casualties. This included for the first time legal measures (1) on intervention on the high seas and (2) on questions relating to the nature and extent of the liability of the owner/operator of the ship or cargo. Subsequently, at a Conference organised in Brussels, two conventions were adopted: one on intervention, the other one on civil liability. The 1969 Civil Liability Convention (hereinafter CLC) was soon supplemented by the 1971 IOPC Fund Convention. Together these conventions provide a liability and compensation scheme for maritime oil transport, inspired largely by the liability régimes for the nuclear industry. There are, nevertheless, some important differences. The 1969 CLC puts the burden of liability neither on the vessels' operator nor on the cargo owner, but on the shipowner. Although the latter's liability is strict, it is limited in most cases according to a formula related to the tonnage of the ship and an overall total (Article 5). The 1971 Fund Convention's stated purpose is to provide additional compensation to the victims of oil pollution. Unlike most schemes in the nuclear energy sector however, States have been reluctant to shoulder even a part of this burden. The additional layer of compensation agreed in 1971 is financed by a levy on the oil importers and oil cargo interests (Article 14).[22]

According to most commentators, the 1969 CLC already covered environmental damage occurring in the territorial sea of a Contracting Party, including the cost of preventive measures to minimise such damage.[23] Nonetheless, the relevant clauses were given divergent interpretations in practice, both by the IOPC Fund and by national legal systems. In response to appeals for an internationally agreed uniform definition, the clauses were revised by two 1984 Protocols.[24] The revised provisions not only increase the level of compensation substantially, they provide an explicit though narrow definition of environmental damage and extend the scope of the conventions to the Exclusive Economic Zone of contracting States.[25]

The CLC and the IOPC Convention contain in part an identically worded escape clause for pollution damage "resulting from an act of war, hostilities, civil war and insurrection." In both cases the burden of proof rests with the party to which the main liability has been channelled: either the shipowner or the Fund. In the case of the CLC, the clause came from an alternative proposal on strict liability of the shipowner, made by IMCO'S Legal Committee. It was obviously inspired by the liability conventions for the nuclear industry.[26] The proposal did not elicit any substantial comments[27] and was accepted almost unaltered, apart from cosmetic improvements relating to the proposed exclusion for natural disasters.[28] The exemption for natural phenomena "of an exceptional, inevitable and irresistible character" follows immediately on the exclusion for war damage. This indicates that the conference delegates regarded war and other types of armed conflict as extraneous circumstances, akin to *force majeure*, which totally escape the shipping industry's control.

The basic hypothesis underlying the draft for the 1974 IOPC Convention was that the Fund (supported by the oil industry) should be able to offer compensation in cases not fully covered by the 1969 CLC: *i.e.*, either if the shipowner is not liable, or, if he was liable, but neither he nor his insurer were able to meet their obligations, or if the damages exceeded the owner's liability.[29] Yet, no agreement could be reached on the philosophy or nature of the Fund. As pointed out by one delegation, the conference remained divided over whether the Fund should provide additional relief to oil pollution victims in all cases where the 1969 CLC offered compensation or, instead, whether the Fund should be no more than an insurance policy.[30] This ambivalence became apparent when the delegates clashed over two draft proposals by IMCO: one to exonerate the Fund from liability for oil pollution caused by war and other instances of armed conflict (as in the 1969 CLC); the other to make the Fund bear the risk of damage caused by natural disasters (unlike in the 1969 CLC).[31]

The proposal to exonerate the Fund from liability in cases where it could prove that the pollution damage resulted from an "act of war, hostilities, civil war or insurrection," was the subject of protest before the conference started.[32] It attracted the most passionate of debates during the conference. Both proponents and opponents of the provision relied on a panoply of arguments allegedly based on the "legal tradition" in this area, equity, economic principles, philosophical arguments, and even common sense.

The most fervent opponent of IMCO 's draft proposals was the U.S. delegation. They proposed the deletion of the war damage exoneration clause arguing that the fundamental question involved was "whether innocent victims of pollution damage should be denied relief under any circumstances." During the debates, the

United States and her supporters (Australia, Canada, Lebanon, Portugal, Singapore, Spain) developed this argument as follows:

- pollution victims should not be made to bear the cost of war damage; this should be spread over all those benefiting from the oil trade; otherwise the full cost of such damage would fall on the individual;
- excluding war damage from coverage is particularly unfair in case the victim is not connected with a belligerent State;
- excluding war damage will lead to much discussion and litigation and will be subject to varying interpretations;
- the Fund should fill gaps left in the compensation schemes by other conventions and by insurance companies;
- the convention should be forward-looking;[33]

The proponents (Belgium, Bulgaria, France, Greece, Ireland, Italy, Japan, Netherlands, Norway, Rumania, UK, USSR) of the exclusion of war damage invoked the following grounds:

- war acts are excluded in other conventions; including it in the Fund Convention would lead to discrepancies;
- war damage is usually not compensated; most insurance companies exclude war damage for good reasons; there is no reason why victims of oil pollution caused by war should be placed in a more favourable position; The Fund should not be a charity;
- not all victims are completely innocent;
- it is up to the States—and hence to the society at large—to pay compensation in cases of war and armed conflict;
- since the Fund is to be financed by the private industry, it should not and cannot be required to bear this burden; war risk insurance is too costly;
- in case of armed conflict, a large number of oil tankers can be destroyed simultaneously, exceeding the Fund's capacity to pay;
- dropping of the exoneration clause would require the Fund to deal with a host of minor incidents, leading to an unacceptable administrative burden;
- if the shipowners are allowed to escape liability in case of war damage, the oil cargo/importing industry should not be required to provide coverage either;
- common sense indicates that many States will be deterred from signing the Convention if war damage is covered; this will impair the financial viability of the Fund;[34]

The latter point of view carried the day. The U.S. proposal was rejected by 25 votes to 10, with 7 abstentions.[35]

Still, that was not to be the end of the discussion, for the conference remained in two minds about the ultimate purpose of the Fund. After having excluded war damage, the delegates broached the issue of natural disasters, which had been exempted previously from the 1969 CLC. The majority of the delegates now thought that natural disasters presented a different case from war altogether: it was said that the former did not have their origin in human activity, and the examples which were brought up during the discussions related to extremely rare occurrences such as "a meteorite hitting a ship." Greece thought that including natural disasters would become too onerous. During the debates, similar counter-arguments as in case of war damage were heard: the IOPC Fund Convention should not put victims of natural disasters in a more favourable position; the conference should not cause legal discrepancies with other conventions, such as those relating to the nuclear industry and particularly the 1969 CLC; if the shipowner is exonerated in case of damage by a natural disaster, it would be unjust to require the oil companies to bear the full weight of this. However, this time the proponents of the widest possible safety and compensation net won the argument. The Greek position was rejected by 19 votes to 14 with 8 abstentions.[36]

4.2.3. Maritime Carriage of Nuclear Material

- **Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material, 1971**

The Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material was adopted at an international conference co-sponsored by IMCO and the OECD.[37] The need for the convention arose as a result of an apparent conflict between nuclear law and maritime carriage law. The question had been studied since 1968 by the European Nuclear Energy Agency of the OECD, by IAEA, IMCO and the *Comité Maritime International*. A comprehensive study of the problems followed at a Symposium held in Monaco in 1968.[38]

The crux of the problem seemed to be that under maritime law, the carrier could incur liability, whereas the nuclear conventions were based on the no-fault absolute liability of the nuclear industry and its insurers. Following the limitation of the liability of the operators of nuclear installations under the Paris Convention and the Vienna Conventions, maritime carriers of nuclear material began to request indemnity to cover their possible liability. The operators themselves were unable to get insurance for this and even governments were not

normally prepared to do so. The OECD reported that as a result, the transport by sea of nuclear substances had come practically to a standstill. Unless either a warship could be made available or a government indemnity could be given, transport had instead to be done by air at a greater expense, and this was only possible because the air carriers did not consider it necessary to demand indemnities at all and were content to rely on the operator's insurance.[39]

The 1971 Convention gives primacy to the nuclear law and ensures that the operator of a nuclear installation will be exclusively liable for damage caused by a nuclear incident occurring in the course of maritime carriage of nuclear material[40] unless the damage is caused by a nuclear incident involving the nuclear fuel or radioactive products or waste produced in the ship.[41]

The 1971 Convention does not contain an express clause relating to damage caused by acts of armed conflict. But this should not to be taken as proof that exoneration for such damage would not be available. Indeed, from the text of the convention it is clear that its rules rely primarily on the liability régimes of the nuclear industry.[42] Moreover, according to Article 4, the convention supersedes any international conventions in the field of maritime transport to the extent that such conventions would be in conflict with it. Any defence available under the nuclear liability régimes will therefore apply to the maritime carriage of nuclear material as well.

4.2.4. Maritime Carriage of Hazardous and Noxious Substances

- **Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS), 1996**

The plan for a Hazardous and Noxious Substances (HNS) Convention has been with IMCO/IMO since the mid-1970s. It was at its 29th session in 1976 that the Legal Committee concluded that it would be desirable to have a new comprehensive international convention dealing with liability for maritime carriage of substances other than oil.[43] Over the years this proposal ran into many difficulties. The draft was unsuccessfully placed on the agenda of the 1984 International Conference on Liability and Compensation for Damage in connexion with the Carriage of Certain Substances by Sea.[44] Afterwards the IMO Secretary-General reported that there remained substantial differences of opinion on (1) the geographical scope of the convention; (2) the scope of application in respect of the risks and damage to be covered; (3) the party to be held liable under the convention; (4) the limits of liability to be placed on the party liable; and even on (5) the necessity itself for an international convention on liability

and compensation of HNS.[45] It is a testimony to the Legal Committee's tenacity that agreement was reached after all. The HNS Convention was adopted on 3 May 1996.[46]

The final text of the convention is based on substantially remodelled proposals discussed within the Legal Committee during the second half of the 1980s. It combines elements of both the 1969 CLC and the 1971 IOPC Fund Convention.[47] For instance, it takes inspiration from the 1969 CLC in channelling liability essentially to the shipowner, adopting a strict but mostly limited liability approach and requiring compulsory insurance; it also adopts many elements of the IOPC Convention in that it proposes, *inter alia*, the establishment of a special Hazardous and Noxious Substances Fund (HNS Fund) to provide compensation in addition to the required compulsory insurance.

The first draft articles for the Convention were prepared by an informal Working Group, which presented the Legal Committee at its 37th session in 1978 with several alternatives. Alternative I of that proposal channelled the main liability to the shipowner and followed closely the basic rules on liability and the various defences contained in the 1969 CLC. It copied the CLC's war damage exclusion clause *verbatim*.[48] The only time this article elicited comments was in 1978, when a member of the Legal Committee questioned whether the exclusion of liability in the case of a natural phenomenon was not too wide. In reply, it was recalled that this had been extensively discussed at the 1969 Brussels Conference and that it was generally agreed that the exception was much narrower than an act of God, since it required that the phenomenon be "of an exceptional, inevitable and irresistible character." Nevertheless, it was suggested that this exception might be further restricted if feasible from an insurance standpoint.[49]

During the many versions the HNS proposal went through subsequently, the war damage exclusion clause remained unchanged and unchallenged. In a similar vein, the provision to exonerate the HNS Fund for war damage in the last draft (Article 14(3)) was copied directly from the IOPC Fund Convention's Article 4(2). It did not attract a single comment. In the final version of the HNS Convention, adopted on 3 May 1996, the exoneration clauses for the shipowner and for the Fund can be found in Articles 7(2)(a) and 14(3)(a) respectively. The final HNS Convention follows the solution of the CLC and the IOPC Fund not only in spirit but also to the letter: the shipowner is allowed an escape clause not only in case of damage caused by war *etc.*, but also in case he proves that the damage was caused by a natural phenomenon of an exceptional, inevitable and irresistible character. The HNS Fund, however, needs to provide coverage in the latter event.

4.2.5. Draft Convention on Wreck Removal

Draft Convention on Wreck Removal, 1995

At its 69th session in 1993, the IMO Legal Committee considered a request for an international convention to establish uniform rules on wreck removal in international waters. According to its promoters,[50] the convention would have to be consistent with coastal States' powers under the 1982 LOSC, but would fill the gaps in the existing international law.[51] Since 1993, preliminary drafts for such a convention have been submitted by Germany, the Netherlands, and the UK. Consideration of the draft was included in the Committee's work programme for 1996–1997.[52]

According to the 1995 draft, shipowners would be held strictly liable for the costs of locating, marking and removing of hazardous wrecks.[53] However, under proposed Article VIII (1)(a), shipowners would be able to escape their liability if they could prove, *inter alia*, that the casualty resulted from an act of war, hostilities, civil war, insurrection or a natural phenomenon of an exceptional, inevitable, and irresistible character.[54] The proposed war damage exoneration clause was copied from the 1969 CLC Article III (2).

4.3. Conclusions to Chapter IV

Recent data demonstrate that the 100 States party to the 1969 CLC represent 88.55 percent of world tonnage. The 1971 Fund Convention has attracted 76 ratifications representing 62.03 percent of world tonnage, whilst the 1971 Convention concerning maritime carriage of nuclear liability is decidedly less popular: it has only 14 parties representing 23.01 percent of world tonnage.[55]

Regardless of whether the 1984 protocols to the 1969 CLC and the 1971 IOPC will enter into force one day,[56] marine pollution and related damage to the environment caused by belligerents during armed conflict, are not covered. The exoneration clauses for war damage incorporated in both these conventions and the extensive debates held on the issue during the 1971 Conference leave no doubt that victims of oil pollution damage in instances, such as the 1983 Nowruz and the 1991 Gulf War oil "spills," will have to look elsewhere for compensation.

This will be the case, moreover, irrespective of whether the conflict is international or internal, or one waged by a National Liberation Movement, whether it is small-scale or large-scale, a declared or undeclared war, and regardless of the precise military circumstances in which the marine pollution was caused. Furthermore, the exoneration clause holds good irrespective of whether the

belligerent responsible for the pollution resorted to armed force on lawful *jus ad bellum* grounds (*e.g.*, in self-defence or in execution of a UN Security Council resolution taken under Chapter VII) or not and regardless of whether the damage to the marine environment was caused as a consequence of actions permissible under the *jus in bello* or not.

The same observations apply, *mutatis mutandis*, to the nuclear liability conventions of the Paris and Vienna group. It is too early to say whether the war damage exoneration clause currently incorporated in the draft on Wreck Removal will remain unchallenged. However, it would come as a surprise if this clause were dropped or even substantially modified.

There is a firm legal tradition of excluding war damage from "civil" liability conventions dealing with various risk-creating activities. Apart from the discussed conventions on maritime transport of oil and nuclear liability conventions, one can find a war damage exoneration clause—identical to Article II (2) of 1969 CLC—in the 1977 Convention dealing with the exploration and exploitation of seabed mineral resources[57] and in the 1989 UN/ECE Convention on Civil Liability for Damage Caused During Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels (CRTD Convention).[58] This defence has even been incorporated in the 1993 Council of Europe's *Lugano* Convention, which regulates civil liability for damage resulting from all activities dangerous to the environment.[59] Since the majority of these clauses are, moreover, worded in identical terms, one can truly speak of a "standard war damage exoneration clause" in State and treaty practice. This practice was confirmed once more in the three recently adopted civil liability instruments discussed in this chapter: the 1996 HNS Convention concluded under IMO auspices and the two new instruments on civil liability concluded in 1997 under IAEA auspices.

Given this legal tradition, it is perhaps not surprising that, as noted earlier,[60] the ILC has excluded war damage from its work on State liability for acts not prohibited by international law.[61] Special Rapporteur Mr. Julio Barboza justified this proposal on the ground that such an exoneration clause is often contained in civil liability conventions. The text of the suggested provision reads in relevant part:

> (1) The operator shall not be liable: (a) If the harm was directly attributable to an act of war, hostilities, civil war, insurrection or a natural phenomenon of an exceptional, inevitable and irresistible character. . . .

Although not fully spelled out in the above conference records, there are fundamental reasons why, *e.g.*, the owners or operators of ships should not be required to bear the costs of damage resulting from armed conflict.

It was seen that the United States argued strongly in favour of war damage coverage by the IOPC Fund. She pleaded that the burden of oil pollution caused in the course of armed conflict should not be borne by innocent victims, but that it should rest instead with the private industry and with the countries profiting from maritime carriage of oil. These views were rejected by the majority, who believed that there were good reasons for the exclusion of war damage by insurers, that the IOPC Fund was not a charity, and that it was up to the State to pay compensation in case of war or armed conflict.[62]

It is submitted that there remains a fundamental distinction between damage caused in the normal course of shipping operations, and damage caused by acts of warfare. Leaving the question of *force majeure* and natural disasters aside, in the first case, the ensuing damage is caused by acts not intended to inflict damage. In such a case, there is much to be said for making the industry bear the brunt of the cost of risks associated with their profit-making activities, regardless of the precise cause of the damage.

By contrast, war damage to ships is the result of deliberate acts by belligerents who are determined to inflict damage on the adversary, either directly or indirectly. As seen before, general IEL does not cover the hypothesis of the intentional infliction of damage by States.[63] It is one thing to ask the operators or owners of ships to act as insurer for risks associated with maritime carriage of environmentally hazardous materials, such as nuclear substances and oil. It is quite another to ask the industry to act as insurer for the entire world, including for extraneous acts by belligerents during armed conflict. Environmental damage caused by acts of warfare are not meant to be addressed by civil liability or mixed State/civil liability régimes. Under current international law, they are, however, addressed by the general rules of State responsibility, which were discussed above, in Chapter Two.[64]

Chapter V

Contingency Clauses for Armed Conflict in Maritime Treaties

5.1. General Comments

IT WAS SEEN THAT TO EXAMINE THE POSSIBLE EFFECT of a particular multilateral environmental agreement in armed conflict, the exact terms of the *pactum* between parties would need to be established first. If there is an express clause permitting suspension, withdrawal, modification or termination of the treaty in case of war or other armed conflict, it should be possible to determine the drafters' intentions without difficulty. Absent such a clause, recourse must be had to the general rules of treaty interpretation in addition to the principles examined above, which relate specifically to armed conflict.[1]

There exists, as seen before, broad consensus on the fact that the majority of multilateral environmental agreements are silent on the question of their effect during war or armed conflict. However, whilst some regard this as evidence that the agreements continue to apply, others believe that this proves that they were not designed for this purpose.[2] These assertions will be critically tested in this chapter through an analysis of a series of maritime safety and pollution prevention conventions. Some of these treaties contain clauses dealing expressly with the possibility of war, armed conflict and other types of hostilities, whilst others do not.

5.2. Discussion

5.2.1. The Salvage Conventions

- **Convention for the Unification of Certain Rules of Law relating to Assistance and Salvage at Sea, 1910**

- **International Convention for the Unification of Certain Rules relating to Assistance and Salvage of Aircraft or by Aircraft at Sea, 1938**
- **International Convention on Salvage, 1989**

A. The 1910 Salvage Convention. The original Salvage Convention was signed on 23 September 1910. It entered into force on 1 March 1913, on the eve of the outbreak of World War I, for the following countries: Austria, Belgium, France, Germany, the Netherlands, Romania, Russia, the UK and the USA.[3] The provision of most interest to this chapter is Article 11, according to which every shipmaster is bound to render assistance to everybody, *even though an enemy*, found at sea in danger of being lost, to the extent that he can do so without serious risk to his ship, crew, or passengers.[4] According to an American commentator, the nature of the treaty, and particularly Article 11, demonstrated "the manifest intention that it (*the treaty*) should be operative in war as well as peace."[5] In support of this interpretation, reference was made to two municipal cases, of 1948 and 1950 respectively, in which American courts assumed that the convention remained in force after the outbreak of World War II.[6]

However, it is unlikely that the 1910 Convention was designed to apply unabridged during inter-State armed conflict. The 1910 Convention was intended to regulate matters of private maritime law, and did not apply to warships (Article 14). During both World War I and II, most merchant ships belonging to belligerent countries came under the government control.[7] Presumably therefore, the instances in which the convention was applied during those armed conflicts must have been sharply reduced. Furthermore, the two U.S. court cases dealt only with the application of the convention between friendly or co-belligerent countries. The 1950 case for instance, was about assistance rendered in 1943 by a UK to a U.S. vessel. There seems to be no case law on the application of the 1910 Salvage Convention between countries which are enemies.

After World War I, the 1910 Salvage Convention was among the multilateral treaties of "an economic and technical nature" enumerated in Article 282 of the Versailles Peace Treaty "to be applied" from the coming into force of the Treaty. But, as mentioned before, the formulation of that article does not permit to say anything definite about the status of the Salvage Convention during the war between opposing belligerents. In similar vein, after World War II, the United States notified Germany of its desire to have the convention of 1910 "placed in effect" between the United States and Germany. Significantly, this was accompanied by a statement that the notice was:

"... without prejudice to the previous status of any portion of the convention which may have remained operative or may have again become operative at any time since the outbreak of hostilities between the United States and Germany."[8]

This purposely ambiguous statement proves at a minimum that the U.S. administration was uncertain about the legal status of this pre-war convention during and immediately after World War II, at least insofar as its relations with a (former) enemy were concerned.

It may indeed have been the case that the 1910 Salvage Convention remained in force between neutral and other mutually friendly countries during both world conflicts. However, it is submitted that it is very unlikely that the Convention continued to apply between opposing belligerents, in spite of the wording of Article 11.

This is supported by the explanation given by a commentator who examined the *travaux préparatoires* of the above convention extensively. "*Wildeboer* believes that the addition of 'même ennemie' simply referred to the possibility that the contracting States might be at war with each other; that in that case the convention would no longer be applicable between the parties at war; but that since Article 11 rested on a moral obligation not dependent upon the question who is the person in danger or to which state he belongs, it was intended to make an exception."[9]

That this is a more likely interpretation is confirmed by the 1911 UK Maritime Conventions Act implementing the Salvage Convention. Article 6 of this Act obligates every shipmaster to render assistance to everybody, even though an enemy, found at sea in danger of being lost, and stresses that this holds "... even if such person be a subject of a foreign State at war with his Majesty."

Finally, a further clarification of the exact meaning and scope of Article 11 came with the 1967 Protocol to the 1910 Convention. The purpose of this protocol was to extend the application of the 1910 Convention to ships of war and other State-owned ships.[10] However, each Party to the Protocol was given the right to determine for itself whether and to what extent Article 11 of the 1910 Convention would apply State-owned ships.[11] If nothing else, the 1967 Protocol confirms that Article 11 has no bearing on the status of the 1910 Convention in times of war. Therefore, the import of "même ennemie" in the 1910 Convention seems to have been limited to the (moral) obligation to render assistance, an obligation that remained even between nationals of States at war with each other.

The above conclusions are entirely compatible with the law of naval warfare, which contains detailed regulations on the obligation to search for casualties after naval engagements. Hague Convention (X) of 1907 for the Adaptation to Maritime Warfare of the Principles of the Geneva Convention requires belligerents to

"take steps to look for the shipwrecked," after each engagement, "so far as military interests permit."[12] This obligation is addressed more stringently in Geneva Convention (II) of 1949 for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea. Article 18 of the latter no longer refers to military interests, and obligates Parties to act without delay:

> After each engagement, Parties to the conflict shall, without delay, take all possible measures to search for and collect the shipwrecked, wounded and sick, to protect them against pillage and ill-treatment, to ensure their adequate care, and to search for the dead and prevent their being despoiled.
>
> Whenever circumstances permit, the Parties to the conflict shall conclude local arrangements for the removal of the wounded and sick by sea from a besieged or encircled area and for the passage of medical and religious personnel and equipment on their way to that area.

The ICRC commentary to this provision refers explicitly to Article 11 of the 1910 Salvage Convention and emphasises that there is a general obligation under international law to search for and collect victims, whether military or civilian, of any incident occurring at sea.[13] Similarly, Additional Protocol I of 1977 enunciates a general obligation to respect and protect the shipwrecked.[14]

Given the above, the International Convention on Assistance and Salvage of Aircraft or by Aircraft at Sea of 1938, could be judged as a step back for it does not contain the addition that the obligation to render assistance holds good, even if the person in danger belongs to an enemy country.[15] However, since that convention never entered into force, it would be futile to speculate on its wartime status.

B. The 1989 Salvage Convention. The 1989 Salvage Convention was concluded under IMO auspices, mainly in response to increasing environmental concerns. The 1910 Convention incorporates the "no cure, no pay" principle, giving little incentive to a salvor to undertake an operation which has only a slight chance of success and little reward for attempts to prevent or minimise environmental damage. The 1989 Convention seeks to remedy this by providing for an enhanced salvage award, taking into account efforts to prevent or minimise damage to the environment. Article 1(d) defines environmental damage as:

> "... substantial physical damage to human health or to marine life or resources in coastal or inland waters or areas adjacent thereto, caused by pollution, contamination, fire, explosion or similar major incidents."

Whilst Article 14 introduces "special compensation" for salvors who fail to earn a reward in the normal way (*i.e.*, by salving the ship and the cargo).

There is no clause in the 1989 Convention that deals expressly with the contingency of war/armed conflict. Article 10, on the "Duty to render assistance," much like the above 1938 Convention, does not include a reference to enemy nationals. Still, there are several other articles that have military implications and that may have a bearing on armed conflict: Article 4 on State-owned vessels, Article 25 on State-owned cargoes, and Article 26 on Humanitarian cargoes. All of these will be discussed in the next chapter.[16]

5.2.2. The Load Lines Conventions

- **International Convention respecting Load Lines, 1930**
- **International Convention on Load Lines, 1966**

A. The 1930 Load Lines Convention. It has long been recognised that limitations on the draught to which ships may be loaded make a significant contribution to the safety of life and property at sea. The first International Convention on Load Lines, adopted on 1 January 1930, established uniform principles and rules on the basis of reserve buoyancy. Its successor convention, adopted on 5 April 1966 under IMCO auspices, sets limits in the form of freeboards, which constitute, besides external weathertight and watertight integrity, the main objective of the convention. Its regulations take into account the potential hazards present in different zones and different seasons. The technical annex contains several additional safety measures concerning doors, freeing ports, hatchways and other items. The main purpose of these measures is to ensure the watertight integrity of ships' hulls below the freeboard deck. All assigned load lines must be marked amidships on each side of the ship, together with the deck line.[17]

The 1930 Convention contained provisions for its modification and revision (Article 20) and provided for the possibility of denunciation after the expiration of a five-year period from its coming into force (Article 25). It did not provide for the possibility of suspension. However, the 1966 Convention contains an express clause on "suspension, in case of war or other extraordinary circumstances" (Article 31). The *travaux preparatoires* of the latter Convention show that this was done at the initiative of the United States, with the express intent of legalising unilateral measures taken in 1941 concerning the 1930 Convention.[18]

As is well known, in 1941, two years after the outbreak of World War II in Europe, the United States was still formally a neutral country,[19] in spite of being heavily engaged in supplying friendly belligerents with war materials. It was

particularly the increased demand for oil that made it desirable for the United States to increase the amount she was allowed to carry in her tankers over the limits allowed by the 1930 Load Lines Convention.[20] The United States discussed the matter with other State parties to the Convention—including the UK—but there was disagreement on the course to follow.

The UK—which was at that time involved in World War II as a belligerent—thought that the convention was essentially a peacetime agreement and that it should be regarded as inoperative during war. She proposed that the convention be modified in common agreement so as to permit deeper loading of vessels. The United States argued, however, that no modification or revision was necessary, on the ground that the convention could be regarded as suspended on the basis of the legal theory of *rebus sic stantibus* (changed circumstances).

The American standpoint was based on a legal opinion sought from Acting Attorney General Biddle.[21] The latter reasoned in substance that the Load Lines Convention was a peacetime agreement, that peacetime commerce was a basic assumption of the treaty, and that the prevailing situation with respect to shipping was wholly different: of the 36 parties to the treaty, 10 were at war, and 16 were under military occupation. Moreover, the actual destruction of merchant ships, however loaded, had become a major war strategy. His opinion concluded as follows:

> *Under these circumstances there is no doubt in my mind that the convention has ceased to be binding upon the United States. It is a well-established principle of international law, rebus sic stantibus, that a treaty ceases to be binding when the basic conditions upon which it was founded have essentially changed. Suspension of the convention in such circumstances is the unquestioned right of a state adversely affected by such essential change.*

In a direct reference to the UK's position, he further admitted that:

> *. . . it may well be that ordinarily the procedure would call for the government to inform the other parties to the treaty with respect to the matter and request agreement for termination or suspension of the treaty. The matter of procedure, however, does not affect the right of termination or suspension.*[22]

In his opinion, it was not necessary either to denounce the treaty under Article 25 or to have it otherwise abrogated. Following this advice, President Roosevelt issued a presidential proclamation on 9 August 1941, based explicitly on the *rebus sic stantibus* theory. The proclamation referred, *inter alia*, to the fact that the conditions envisaged by the Convention had been for the time being almost wholly

destroyed, that the partial and imperfect enforcement of the Convention could operate only to prejudice the "victims of aggression," and that:

> *. . . under approved principles of international law it has become, by reason of such changed conditions, the right of the United States to declare the Convention suspended and inoperative.*[23]

The reaction of other parties to the treaty can be called one of general acquiescence. No State seems ever to have protested against this unilateral suspension; the eight American States which were parties to the Convention gave their express assent thereto, and even the UK accepted the U.S. action in a diplomatic note.[24]

During the war, several States followed the U.S. example and unilaterally suspended the convention.[25] After the war, the proclamation of 9 August 1941 was revoked by presidential proclamation of 21 December 1945, effective 1 January 1946.[26]

B. The 1966 Load Lines Convention. The above event represents an important piece of State practice and *opinio juris* on the legal effect of armed conflict on multilateral treaties; not in the least since it constitutes one of the best documented episodes in which a (formally) neutral State, upon the outbreak of armed conflict between other contracting parties to a multilateral treaty, decided to suspend the operation of that treaty unilaterally. In the light of this, the discussions held in 1966 for the revision of the 1930 Convention carry particular interest. The draft suspension clause proposed by the United States was identical to Article VI of the International Convention for the Safety of Life at Sea, 1960, which, as will be seen below, had itself given rise to serious controversy.[27]

The proposed new Article 5 on suspension in case of war, read in substantial part as follows:

> *(a) In case of war or other hostilities, a contracting Government which considers that it is affected, whether as a belligerent or as a neutral may suspend the operation of the whole or any part of the Regulations annexed hereto.* The suspending Government shall immediately give notice of any suspension to the Organization; (b) Such suspension shall not deprive other Contracting Governments of any right of control under the present Convention over the ships of the suspending Government when such ships are within their ports; (c) The suspending Government may at any time terminate such suspension and shall immediately give notice of such termination to the Organisation; (d) The Organization shall notify all Contracting Governments of any suspension or termination of suspension under this Article. (Italics added.)

The reactions of other governments to the U.S. proposal can be summarised as follows. France argued that the clause should not be adopted, for three reasons: (1) The entire article appeared unnecessary, "as it is always open to a Government, in case of war, to denounce a Convention"; (2) The use of terms such as "war" and "hostilities" rendered the clause too vague; (3) By granting other governments a right of control in subparagraph b, the entire proposal was internally contradictory. [28]

The USSR, Yugoslavia, and Bulgaria also argued in favour of deletion of the American amendment, but for more legal or ideological reasons. Their delegates insisted that the draft clause was incompatible with the precepts and the spirit of the UN Charter, and in particular, that it was contrary to Article 2(4) of the Charter.[29] The United States replied that its proposal:

> *. . . would enable governments to take such immediate measures as were necessary in case of hostilities and in the interests of national security it would seem indispensable.*

This view was supported by Western States including the UK, Norway, Canada, Greece, and by Argentina, China (Taiwan) and Liberia.[30]

When the proposal for deletion of the draft provision was overwhelmingly rejected in the General Committee, the USSR and Poland tried another strategy. They introduced an amendment aimed at bringing the suspension provision more in line with what they considered to be the spirit and purpose of the Convention as well as the UN Charter. They suggested to replace the expression "*In case of war or other hostilities*" used in subparagraph (a) of the suspension clause proposed by the United States, with the following: "In case of an *armed attack* or *in extraordinary circumstances*, which affect the *vital interests* of the State of any Contracting Government. . . ."[31]

With the United States and other governments willing to compromise, this Soviet-Polish proposal became the basis of the text which was finally agreed by the 1966 Conference. The text of the final provision retained the procedural requirements of the above-mentioned U.S. proposal, but changed the substantive requirement.[32] Article 31 (1) now reads:

> In case of *hostilities or other extraordinary circumstances* which *affect the vital interests of a State* the Government of which is a Contracting Government, that Government may suspend the operation of the whole or any part of the present Convention. The suspending Government shall immediately give notice to any such suspension to the Organization. (Italics added.)

This end result represents a substantial update of the suspension clause initially proposed by the United States, in several respects:

1. It no longer uses the terms "war," "belligerent" or "neutral." While the USSR appears to have been successful in convincing other delegates that such terms would sit uncomfortably with the UN Charter, the conference nonetheless declined to adopt either the expression "armed attack" or "armed conflict." The latter would have been more in accordance, respectively, with the *jus ad bellum* terminology employed in the Charter and with the current *jus in bello* terminology.

2. The conference decided instead on the expression "hostilities or other extraordinary circumstances," which is much less precise a definition of the circumstances in which State parties may decide to suspend the convention. The licence given for auto-determination of the case for suspension of the convention is therefore wider than would have followed from use of the term "war or other hostilities." One cannot help but doubt whether this was an outcome which the USSR and Poland had intended.

3. The previous observation is only partly tempered by the additional requirement that the circumstances must affect the "vital interests" of a State. It is far from certain for instance, whether other contracting parties would be entitled to dispute a party's decision to suspend. The only course of action open to other contracting parties under the treaty seems to lie on the diplomatic level. Subparagraphs (3) and (4) of Article 31 might facilitate such diplomatic discourse, but these are provisions of a mere procedural nature which do not affect a State's substantive right of decision to suspend.[33]

4. The provision of subparagraph (2) can indeed be regarded as a moderating element. Accordingly, suspension by one State party of its obligations under the convention does not affect the right of other State parties to continue to exercise control in their ports over ships registered with the suspending State. This provision was borrowed from the Safety Conventions and will be discussed below.[34]

Although the above events took place when the United States was not yet an official belligerent in the War, it is difficult to deny that *rebus sic stantibus* was invoked in connection with international armed conflict between a third State and a belligerent. It was suggested before that historically, the rule of *rebus sic stantibus* was developed to deal with peaceful change.[35] The Load Lines episode seems to contradict this. However, it is submitted that the circumstances in which the rule was invoked here were unique, and that the ensuing suspension clause does not meet the substantive and procedural requirements that current international law attaches to the *rebus sic stantibus* plea under the law of treaties.

First, Article 62 of the 1969 Vienna Convention on the Law of Treaties, which represents largely customary international law,[36] lays down strict substantive requirements for the plea of "fundamental change of circumstances." Subparagraph (1) requires a heavy burden of proof: the circumstances must not only have been

unforeseen, the original circumstances must have constituted an essential basis of the consent of the parties to be bound by the treaty, and the effect of the change is to radically transform the extent of obligations still to be performed under the treaty.[37] Thus formulated, it seems debatable whether the circumstances which the United States invoked in 1941 meet these demands. The Presidential proclamation did attempt to demonstrate that "peacetime commerce" was a basic assumption of the 1930 Convention, and that the war had radically altered this assumption. Nevertheless, it seems that the prime purpose of the 1930 Convention was to deal with safety regulations of ships, which the United States subsequently found burdensome or inconvenient to her activities as (qualified) neutral in the conflict.

Even if the U.S. standpoint would be correct, the ICJ's judgments in the 1973 *Fisheries Jurisdiction* and 1997 *Gabcíkovo-Nagymaros Project* cases demonstrate that the party invoking a plea of changed circumstances is not the sole judge of its merits.[38] Although the 1966 Convention suspension clause does not exclude judicial review, the wording of the substantive requirement[39] and the lack of substantive say which other treaty Parties are accorded[40] do seem to imply that the suspending State is given a much larger measure of discretion than allowed by the modern plea. The latter point is confirmed by the fact that under the 1966 Convention, States are allowed to decide whether they shall suspend the convention as a whole, or only in part, whilst Article 62 of the Vienna Convention deals with reasons for withdrawing from a treaty, terminating it or suspending its operation as a whole. Furthermore, Article 31 (3) of the 1966 Convention gives States the discretion not only as to when to suspend but also as to when to terminate the suspension.[41]

Furthermore, the modern version of the *rebus sic stantibus* theory attaches specific procedural requirements to all cases of termination and suspension: notification to the other treaty Parties, the right of other Parties to formulate objections, peaceful settlement of any disputes, and the expiry of a period of not less than three months before the suspension or termination can take place in case no objections are formulated.[42] While it is not excluded that all these conditions could apply between belligerents and third Parties, the suspension clause which was included in the 1966 Convention indicates that the treaty Parties wished to grant each other as little substantive say as possible with respect to suspension based on armed conflict.

The preliminary conclusion, based on the legal history of the 1966 Load Lines Convention, is that the suspension clause which the treaty parties decided on, and which applies between belligerents and third States, does not meet the standards of the modern plea of fundamental change of circumstances.

Finally, it is submitted that modern requirements of the plea make it unlikely that it can ever be used as a ground to suspend or terminate treaties between

belligerents on the basis of the existence of armed conflict alone. It was seen earlier that reliance on this defence in the case of armed conflict is not *as such* excluded by the 1969 Vienna Convention.[43] However, the plea's specific procedural requirements—notification, period for the formulation of objections *etc.*—are unsuitable for application between belligerents. Furthermore, Article 62(2) of the 1969 Vienna Convention excludes the plea of changed circumstances in two cases that seem to bar application in armed conflict: in case (a) the treaty establishes a boundary; or (b) if the fundamental change is the result of a breach by the party invoking it either of an obligation under the treaty or of any other international obligation owed to any other party to the treaty. The first subparagraph means that the plea cannot be relied on by belligerents fighting over a boundary treaty. The second subparagraph implies that at least "illegal aggressors" would not be allowed to take advantage of this defence.

5.2.3. The Safety Conventions

- **Convention for the Safety of Life at Sea, 1914**
- **International Convention for the Safety of Life at Sea, 1929**
- **International Convention for the Safety of Life at Sea, 1948**
- **International Convention for the Safety of Life at Sea, 1960**
- **Convention for the Safety of Life at Sea (SOLAS), 1974**

The Safety Conventions in their successive forms are generally regarded as the most important of all international treaties concerning the safety of primarily merchant ships. The first version was adopted in 1914, the second in 1929, and the third in 1948. The 1960 Convention was the first major task for IMCO after its creation, and it represented a considerable step forward in modernising regulations and in keeping pace with technical developments in the shipping industry. The intention was to keep the convention up-to-date by periodic amendments, but in practice the amendments procedure proved to be too slow. A completely new convention was adopted in 1974—the Convention for the Safety of Life at Sea (SOLAS).[44]

A. The 1914 Safety Convention. The 1914 Safety Convention was concluded as a direct international response to the 1912 *Titanic* disaster, one of the worst maritime accidents in history. Its provisions included safety precautions for ice and other derelicts floating in the sea, rules on radio-telegraph installations and signalling lamps, and led to the set-up of the first international ice patrol.[45] The 1914 Convention was concluded on the eve of World War I. Although it did

provide for emergency situations such as "stress of weather" and other instances of *force majeure*, [46] it was meant to apply to merchant ships only[47] and contained no provisions on war.

The global conflict of World War I, which eventually involved 32 nations, had a major effect on the treaty. Article 69 of the treaty provided for its entry into force on 1 July 1915, but because of the 1914–1918 conflict, this never materialised.[48] Unlike the 1910 Salvage Convention, the 1914 Safety Convention was consequently not listed among the "multilateral treaties, conventions and agreements of an economic or technical character" to be "applied" between defeated Germany and the Allied and Associated Powers in accordance with Article 282 of the Versailles Peace Treaty.[49]

B. The 1929 Safety Convention. It was only 11 years after the end of World War I that a second international conference on the Safety of Life at Sea could be convened. The conference produced a revised version of the 1914 Convention and also recommended changes to the International Collision Regulations (hereinafter COLREGS).[50] The UK government was charged with obtaining the necessary international agreements to modify the latter.[51] Other than that, the 1929 Conference did not entail any major innovations in the general provisions of the 1914 Convention. More in particular, no clause was inserted to deal with the effects of war. This may not be surprising, since, after all, the 1914 Convention never entered into force, and the issue of the legal effect of war on the execution of that treaty never arose.

The 1929 Safety Convention entered into force on 1 January 1933 and was ratified by 35 governments.[52] According to some accounts, the convention continued to remain in force during World War II. Thus, McIntyre refers to various domestic implementation measures taken by the United States during the war.[53] However, from the documents that will be discussed immediately below, it is clear that if the 1929 Safety Convention was applied during World War II, it was certainly not in "unabridged" form.

C. The 1948 Safety Convention. After World War II, a third International Safety Conference was convened in London. It led to a substantially revised Safety Convention and to a renewed proposal for amendments to the COLREGS. World War II had at least one clear negative effect on the execution of the 1929 Convention: it prevented the UK government from carrying out the mandate received in the 1929 Convention regarding the revision of the COLREGS.[54] The influence of World War II was also apparent from three further questions which the conference tackled: an explicit provision on the effect of war on the treaty, an exemption for humanitarian evacuations, and a resolution extending a temporary waiver for "the situation created by the Second World War."

During the 1948 Safety Conference, the United States proposed an elaborate new provision for the contingency of war. The new article would allow contracting governments, in case of war, if they consider that they are affected, whether as belligerents or as neutrals, to suspend the convention as a whole or in part and also allow exemptions for humanitarian reasons.[55]

What is more, early on the conference delegates agreed to adopt a resolution on the "Situation created by the Second Word War."[56] In the final act, the title of the proposed resolution was changed to "Carriage of Passengers in Excess of Convention Limits." The substantive part of the Resolution (No. 1) itself was never challenged and read in its final version as follows:

> The International Conference on Safety of Life at Sea, 1948
> RECOGNISING,
> That as a consequence of the situation created by the second World War the number of passengers needing to be carried by sea at the present time is still considerately greater than the passenger accommodation available, and that a number of Governments signatory to the International Convention for the Safety of Life at Sea signed in London on May 31st, 1929, have accordingly been obliged to allow passengers to be carried in their ships in excess of the limits allowed by that Convention
> RESOLVES,
> That Governments should each bring their practice into conformity with the provisions of the said Convention as soon as practicable, and in any event not later than the 31st day of December, 1950.[57]

What motivated these two major innovations—one permanent (suspension/exemption clause) and one temporary (Resolution 1)—were the problems with execution experienced by many States during the past war. During the 1948 Conference, many governments confessed to having been unable to fully abide by the provisions of the 1929 Convention due to the necessities of war:

- The United States admitted that it had tried in vain to obtain the agreement of other contracting Parties on the suspension by the United States of certain provisions; [58]

- The UK explained that the draft resolution on the circumstances created by the second World War ". . . dealt with a situation which had been forced upon the UK government and others";[59]

- France also admitted to having suspended part of the 1929 Convention for she declared being unable to bring the proposed waivers in relation to the situation created by the past war to an end before December 31st, 1950.[60]

By insisting on the inclusion of a suspension clause, its promoters wanted the conference to acknowledge the reality of World War II and thus in a sense absolve their governments *post-factum* from any blame. Another reason why the suspension clause was considered necessary is that many delegates wished to obtain from the conference an authorisation to do the same in the future, should the necessity arise again.[61] Finally, many governments foresaw that they would need about two years before being able to return to the full implementation of the requirements of the convention. That is why Resolution 1 extends a waiver until the end of 1950.

Still, the proposal to include a provision in the Safety Convention to allow belligerent and neutral States to suspend the whole or any part of its regulations, proved extremely controversial. Opinion was divided on whether such a provision was needed at all, and to a lesser degree, on the effect of suspension on the right of (port-State) control by third Parties.[62] As to the first issue, delegates soon split into two main camps. Countries such as the United States and the UK pressed hard for the inclusion of such a provision, on the following grounds:

- It was common knowledge that many Parties to the 1929 Convention had been in breach of it;[63]
- As governments did not wish to violate the convention, some provision should be made to meet conditions such as those obtained during the late war; the proposal would assure that governments were "correct internationally";[64]
- Countries would, in time of war, suspend whatever provision they wished; the proposal would merely enable Parties to do so without violating the treaty; it would be far better to recognise the contingency of war and the likelihood of suspension of the convention;[65]
- Other conventions as the ICAO Convention and many League of Nations treaties already contained such a clause;[66]

Delegates who opposed the inclusion of the war contingency clause or who voiced doubts about the wisdom of doing so,

- expressed fear for possible abuse of the clause;[67]
- or argued mainly with the USSR, that the convention should only deal with "normal conditions"; that war was not a normal condition; that in the event of war, every country, whether belligerent or neutral, would make its own

rules to deal with the situation, and that in any case, the provisions on emergency and *force majeure* were sufficient;[68]

- or claimed that the entire issue was of military nature, and that the conference was not competent to deal with such delicate matters as obtained during war; [69]

It was only at a very late stage that the implications of the recently concluded UN Charter were brought up. Yugoslavia drew attention to the fact that because of the Charter, the Safety Convention would have to distinguish between the rights of victim and aggressor States with respect to armed conflict. However, the delegate conceded that this was a delicate and difficult matter. He therefore proposed that the Conference should decide not to deal with the issue at all, and leave it to general international law.[70] This hurdle was crossed when a clear majority of delegates appeared to be in favour of incorporating the contingency of war in express terms.[71]

The second hurdle consisted of the extent of (port-State) control other contracting Parties would be left with in case of suspension of the convention by a Party because of war. Greece [72] and the Netherlands took a hard-line approach, arguing that third States should not be allowed to continue the controls.[73] India wished to see the right of control limited to the extent it was intended to secure the safety of nationals of the country in whose port the vessels are located for the time being.[74]

This line of argumentation was rejected by the majority. They considered it unacceptable that third States would lose their right to exercise safety controls in their ports, simply because the State to which the ship belonged was at war and had decided to suspend part or whole of the convention. This, they argued, would not only be contrary to third States' sovereign authority, but it might even be taken as violation of the latter's duties of neutrality.[75] It was also pointed out that in World War II, suspending action was taken by certain Parties and that governments which so desired had exercised control.[76] The proposals to restrict or forbid the right of control by third States in case of suspension of the convention by a Contracting Party were subsequently defeated by a large majority.[77]

The other provision, which had been undoubtedly inspired by the experience of World War II, was the proposal to exempt a contracting government from complying with the convention in case it needed to evacuate private citizens whose lives were threatened.[78] True, according to its promoter, the proposed provision was of a pure humanitarian nature and not intended as a special application of the suspension clause in case of war.[79] The proposal met with little resistance during the conference.

The final text of Article VI on Suspension in case of War read in substantial part as follows:

> (a) In case of war, Contracting Governments which consider that they are affected, whether as belligerents or neutrals, may suspend the whole or any part of the Regulations annexed hereto. The suspending Government shall immediately give notice of such suspension to the Organisation; (b) Such suspension shall not deprive other Contracting Governments of any right of control under the present Convention over the ships of the suspending Government when such ships are within their ports; (c) The suspending Government may at any time terminate such suspension and shall immediately give notice of such termination to the Organisation; (d) The Organisation shall notify all Contracting Governments of any suspension or termination of suspension under this Article.

The 1948 Convention proved widely successful. It entered into force in 1950, and by the time of the 1960 Safety Conference, the Convention and its Regulations had been accepted by 52 governments.[80] The text of the provision that was finally agreed upon (Article VI) apparently grants contracting States a fairly unfettered right to auto-determine not only when but also what provisions to suspend. As discussed in relation to the 1966 Load Lines Convention,[81] the requirements of subparagraphs (c) and (d) are only of a procedural nature and do not affect the substance of the right accorded to Contracting Governments in subparagraph (a). However, the leeway given to all contracting States has been moderated in the same article by two other factors. First, the only type of armed conflict which the Conference took into consideration was that of "war." This reflects undoubtedly the type of conflict a large part of the world's nations had just gone through: a large-scale international conflict affecting many States, belligerent and neutral alike. A second limit to the right of auto-appreciation accorded in subparagraph (a) follows from the preservation of the right of port-State control by third States in subparagraph (b): a unilateral decision taken by a Government to suspend the convention will therefore not imply, *ipso facto*, that other contracting States will lose their rights (of control) under the convention.

Although the contingency clause of the 1948 Safety Convention clearly predates the formulation of the 1966 Load Lines contingency clause, the circumstances which led to the adoption of the respective clauses are fairly similar. During the *travaux préparatoires* of both conventions, many States admitted to having unilaterally suspended part or whole of the convention during World War II, and declared that they wished to put this situation right for the future. Moreover, both contingency clauses are almost identically worded.

It is submitted that not too much significance should be attached to the different legal grounds invoked. It was seen above that in the Load Lines Convention case, the United States officially relied on *rebus sic stantibus*. This theory was, however, not mentioned at all during the 1948 Conference, during which, the UK delegate seemed to invoke, instead, some doctrine of necessity.

> *There is no doubt about it, Gentlemen, that in time of war we shall be faced—if ever we have another war, which God forbid—as we were in the last war, with the necessity of failing to carry out certain other requirements of this Convention. We had to do it in the last war—not only my Government, but many other Governments had to do the same thing.* [82]

Although other delegates also referred to the "necessities of war," it is unlikely that the above excerpt can be understood as a reference to the theory of necessity under international law. As seen in Chapter Three, the theory of necessity forms part of the general law of State responsibility as a ground precluding wrongfulness under international law[83] and is technically distinct from the plea of *rebus sic stantibus* under the law of treaties.

Moreover, the apparent leeway which contracting parties are given in the 1948 Convention seems to be at odds with the substantive requirements which international law attaches to the plea of necessity. Article 33 of the ILC's current draft on State Responsibility lays down very strict substantive conditions for the invocation of the "State of necessity," which it considers "deeply rooted in general legal thinking"[84] and which the ICJ regards as reflecting customary international law. The World Court recently stressed in the 1997 *Gabcíkovo-Nagymaros Project* case how heavy the burden of proof attached to these requirements is: there needs to be evidence of the existence of a "grave and imminent peril"; the act being challenged must have been the "only means" of safeguarding that interest; the act must not have "seriously impaired an essential interest" of the State towards which the obligation existed; the State which is the author of that act must not have "contributed to the occurrence of the state of necessity"; the party invoking this plea is not the sole judge of its merits.[85] For all those reasons, what has been said above on the relationship between the modern version of the *rebus sic stantibus* rule and the 1966 Load Lines Convention contingency clause applies *mutatis mutandis* to the relationship between the theory of necessity and the 1948 Safety Convention contingency clause.

Finally, there remains the suggestion by Yugoslavia that the Safety Conference should pay heed to the new *jus ad bellum* following the UN Charter, distinguish between victim and aggressor States and therefore discriminate between legal and

illegal acts of suspension. The suggestion was not followed up. The conference was apparently more concerned with rectifying a situation that had existed before the UN Charter than with taking the new, and admittedly more complicated, *jus ad bellum* into consideration. However, the statement of the Yugoslavian delegation in 1948 was a foreboding one. As seen previously, it touches on a debate which to date remains unresolved.[86] At the same time, Yugoslavia also "pioneered" a line of argumentation that would be more frequently heard at maritime conferences from 1960 onwards: namely, that contingency clauses, which allow any State to suspend part or whole of the convention in case of war and similar circumstances, are at odds with the UN Charter.

D. The 1960 Safety Convention. The fourth international safety conference of 1960 was the first one to be organised under the auspices of IMCO. It became immediately clear that one of the major issues the conference would have to deal with was the right of suspension in case of war. Once again, the main protagonists of the debate were the USSR and the United States. While the former power proposed the deletion of the Article VI of the 1948 Convention,[87] the latter, by contrast, wished to expand the article to encompass the handling of "emergency situations occurring in international relations not culminating in war," and proposed the following new subparagraph (a):

> Action in case of war or emergency:
> (a) Nothing in the present Convention shall preclude a Contracting Government from taking any action which it considers necessary for the protection of essential security interests in time of war or other emergency in international relations. A Contracting Government that takes any such action, which may include the suspension of the whole or any part of the Regulations annexed to the Convention, shall immediately give notice of the action to the Organisation.[88]

The debate on these two diametrically opposed amendments was fought on much the same ground as during the 1948 Conference. However, the battle lines were drawn even more sharply along the ideological East-West divide, and the legal arguments which were invoked seemed to be more sharply focused than before. The United States, for one, denied that its amendment carried political significance, affirming that its purpose was simply to recognise conditions "as they had existed, do exist and might exist in the future."[89] Her views were supported by the UK, who stressed that the article was only concerned with practical considerations.[90]

The USSR, supported by other East Block countries, objected not only to the amendment proposed by the United States, but argued even against keeping the 1948 version of the clause. Their delegates insisted that the entire article was in violation of the spirit of the UN Charter and that the United States amendment, by broadening the category of circumstances in which the suspension clause could be invoked, would make the situation even worse. They therefore urged the conference, at a minimum, to stick with the 1948 version of the clause, which they saw as the lesser of two evils.[91] When the clause was discussed in the General Provisions Committee, the USSR found some support among Western States who considered the terms of the U.S. proposal as being too wide.[92] In reply to this criticism, the United States agreed to temper the language of its amendment, suggesting an alternative that was in essence a repetition of the clause agreed for the 1954 OILPOL Convention.[93]

This did not satisfy the Russian delegate who asserted that the new American proposal increased the possibility of the suspension of the convention by extending it also to "certain difficult situations in international relations." That, in his opinion, was much too broad, and open to abuse. The delegate asserted gravely that the texts would outlast the goodwill of the conference, and that he saw another serious defect in the U.S. proposal in that it retained in an international text the notion of a "state of tension." This, he argued, was contrary to the spirit of the Convention and would be a distortion of international law. He added that the Universal Postal Union and the International Telecommunications Union Conventions no longer included any provision of that nature, and concluded that if need be, he would favour, instead of deletion, retention of existing text.[94]

However, several delegates pointed out that there was now a legal tradition of this type of contingency clauses and that the right of suspension was tempered by the provision under which third States would retain their right of control pursuant to subparagraph (b). Following this exchange, the (USSR) proposal for deletion of the article on suspension in case of war was heavily defeated in the General Committee, while the latest (U.S.) version of the suspension clause found favour with many members.[95] During the subsequent plenary session, both the USSR and the United States restated their case. The U.S. proposal for a widened set of circumstances in which suspension of the convention would be allowed, *i.e.*, not only in case of war but also in case of "other hostilities" was carried with 28 votes in favour, 6 against, and 9 abstentions.[96]

One can only speculate on the type of international tension the U.S. delegation had in mind when proposing an amendment to Article VI. It is nevertheless striking that the above debate was conducted entirely in fairly abstract legal terms; no particular conflicts were mentioned to illustrate the type of "other hostilities" the

final version of the article was intended to cover. Furthermore, the *travaux préparatoires* of the 1960 conference do not contain any indication of whether the contingency clause of the 1948 Convention (or of the 1954 OILPOL article) had led to any significant State practice between 1948 and 1960.

E. The 1974 SOLAS Convention. The 1960 Conference entered into force on 26 May 1965. Since its amendments procedure proved too slow in practice, it was put up for review again in 1974. The ensuing SOLAS Convention includes not only the amendments agreed upon up until that date but also an improved amendments procedure. The main objective of the 1974 Convention is to specify minimum standards for the construction, equipment and operation of ships, compatible with their safety. Flag States are responsible for ensuring that ships under their flag comply with its requirements, and a number of certificates are prescribed in the Convention as proof that this has been done.[97]

Surprisingly, the suspension clause that had sparked many a passionate ideological and legal argument during the 1948 and 1960 conferences now hardly aroused any interest. The entire clause was unceremoniously dropped by the Committee on General Provisions. Since the summary records of this committee were never published, one can only speculate on the reasons for this deletion: its members must have judged either that the clause was outdated or that it was a matter of general international law beyond the conference's competence. The Chairman's report simply mentions that the committee decided to delete the suspension clause together with a provision on non-self-governing territories. Subsequently, the plenary accepted the deletion of both clauses without further ado.[98]

5.2.4. The Pollution Prevention Conventions

- **International Convention for the Prevention of Pollution of the Seas by Oil (OILPOL), 1954**
- **Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention), 1972**
- **International Convention for the Prevention of the Pollution by Ships (MARPOL) 73/78**

A. The 1954 OILPOL Convention and the 1962 OP Conference. The 1954 OILPOL Convention constituted the first successful attempt at international regulation of oil pollution from tankers.[99] Its original scope, however, was limited to prohibiting discharges within 50 miles off land. It contains a clause, Article XIX,

similar to the ones discussed above, according to which Parties are entitled to suspend part or whole of the convention in case of war or other hostilities:

> (1) In case of *war of or other hostilities*, a Contracting Government which considers that it is affected, whether as a *belligerent or as a neutral*, may *suspend* the operation of the whole or any part of the present Convention in respect of all or any of the territories. The suspending Government shall immediately give notice of any such suspension to the Bureau.
> (2) The suspending Government may at *any time terminate* such suspension and shall in any event terminate it as soon as it ceases to be justified under paragraph (1) of this Article. Notice of such termination shall be given immediately to the Bureau by the Government concerned.
> (3) The Bureau shall notify all the Contracting Governments of any suspension or termination of suspension under this Article. (Italics added.)

Although the clause was probably inspired by the 1948 Convention,[100] there are two differences. The latter uses the term "war," whilst the 1954 Convention contains the significant addition of "other hostilities."[101] Furthermore, whilst according to Article VI (c) of the former convention, the suspension may at any time be terminated, Article XIX (2) of the OILPOL Convention obligates governments to end the suspension "when it ceases to be justified."[102]

As far as can be gauged from the published preparatory documents, the proposal to include this contingency clause did not attract any comments. It was discussed neither at the 1954 OILPOL Conference,[103] nor at the 1962 OP Conference,[104] which amended the 1954 Convention so that it applied to smaller gross tonnage and extended the zones where dumping was prohibited.

As will be seen below, at the 1954 OILPOL Conference, most of the debate on military aspects was devoted to the issue of warships. The same occurred during the 1962 OP conference: the issue of the application of the convention to warships was heavily debated, but the armed conflict contingency clause of the 1954 Convention was left unchallenged.[105] It may be that delegates at the OILPOL/OP conferences believed that the issue of the legal effect of war and other types of hostilities on the treaty was clearly regulated by international law, and that it had been given adequate expression in the proposed suspension provisions. However, this explanation seems doubtful when one considers that the question of the status of such treaties in times of armed conflict was broached again in 1966 during the International Conference to update the Load Lines Convention.[106] A more plausible explanation for the lack of interest for the contingency clause is that the OILPOL/OP conferences took place shortly after the 1948 and 1960 Safety Conferences, during which similar

provisions had been the subject of extensive debate. Presumably, no delegation felt the need to re-open this debate so soon after that, in 1954 and 1962 respectively.

B. MARPOL 73/78. The 1954 Convention and its subsequent amendments did little to reduce the amount of oil introduced in the oceans, and their main effect was to move oil pollution outside coastal areas. The 1973 International Convention on Marine Pollution was intended to improve this situation substantially. It incorporates the requirements and standards of the 1954 OILPOL Convention, extends the regime to all ships operating on oceans (and not just tankers), and sets ambitious goals for the complete elimination of all intentional pollution of the marine environment by oil and other harmful substances and the minimalization of accidental discharge of such substances. Nevertheless, some 40 States remain bound by the 1954 Convention and its contingency clause for war and other hostilities.[107]

The 1973 International MARPOL Conference was preceded by years of preparatory work under the auspices of IMCO's Maritime Safety Committee and its technical Subcommittee.[108] The draft provisions which were submitted subsequently to governments for comments no longer contained a clause on the contingency of war or armed conflict.[109] Surprisingly, however, the deletion of this clause was not challenged at all, and this fact foreshadowed a similar development regarding the Safety Conventions discussed above. Finally, as will be seen further on, the MARPOL Conference continued the tradition of the OILPOL/OP conferences in that it was the provision related to warships that proved more controversial during the 1973 Conference.[110]

C. The 1972 London Dumping Convention. A final treaty instrument which needs to be mentioned is the Convention on the Dumping of Wastes at Sea. It was concluded at an intergovernmental conference in London, convened in November 1972 at the invitation of the UK. IMCO was made responsible for the Secretariat duties related to it. The Convention has a global character[111] and applies to all marine waters other than internal waters.[112] It entered into force in 1975 and has thus far been ratified by 72 States representing 67.64 percent of world tonnage.[113]

"Dumping" is defined in the convention as the deliberate disposal at sea of wastes or other matter from vessels, aircraft, platforms or other man-made structures as well as the deliberate disposal of these vessels or platforms themselves.[114] Article IV prohibits the dumping of certain hazardous materials and requires a prior special permit for the dumping of a number of other identified materials and a prior general permit for other wastes or matter.[115] Wastes which cannot be

dumped and others for which a special dumping permit is required are listed in the annexes. Article V(2) allows the issuing of permits for the dumping of even the most dangerous wastes into the sea in cases of emergency "posing unacceptable risk relating to human health and admitting no other feasible solution." However, this exception—which may be waived —[116] is contingent on a series of procedural requirements: other Parties need to be consulted, and the Organisation may recommend appropriate procedures.

The Convention does not contain an express clause dealing with war or armed conflict, but includes the following exception in Article V(1):

> The provisions of Art. IV shall not apply when it is necessary to secure the safety of human life or of vessels, aircraft, platforms or other man-made structures in cases of *force majeure* caused by stress of weather, or in any case which constitutes a danger to human life or a real threat to vessels, aircraft, platforms or other man-made structures at sea, if dumping appears to be the only way of averting the threat and if there is every probability that the damage consequent upon such dumping will be less than would otherwise occur. Such dumping shall be so conducted as to minimise the likelihood of damage to human or marine life and shall be reported forthwith to the Organisation.[117]

The phrase "or in any case which constitutes a danger to human life or a real threat to vessels etc." seems broad enough to justify deviation from the convention in times of armed conflict. This impression is reinforced by the fact that, unlike for emergencies (Article V(2)), no waiver is foreseen for resort to Article V (1), nor any prior consultation procedure.

This interpretation is in accordance with U.S. domestic practice. Thus, the 1988 U.S. Public Vessel Medical Waste Anti-Dumping Act prohibits the disposal of potentially infectious medical waste into ocean waters, unless this is done beyond 50 nautical miles from the nearest land. This interdiction does not apply, however, when either the health or safety of individuals on board is threatened, or "during time of war or a declared national emergency."[118]

5.3. Conclusions to Chapter V

The *travaux préparatoires* of some of the maritime conventions show that reference was made to the contingency clauses of the Convention on Air Navigation of 1919[119] and the ICAO Convention of 1944.[120] These stipulate that the treaties do not apply during war, or at least do not place limits on the freedom of action of belligerent and neutral States during war or other types of emergency. However,

the tenor of the maritime clauses agreed on subsequently was often different. Leaving aside the old 1910 Salvage and 1914 Safety Conventions, the contingency clauses discussed in this chapter indicate that the drafters intended that the conventions would, in principle, continue to apply during international armed conflict. But the contingency clauses permit Parties to deviate from the convention in whole or in part in accordance with certain substantive and/or procedural requirements.

It is noteworthy that most of the conventions discussed in this subchapter deal(t) with war or other types of armed conflict in a fairly similar manner. Whenever conference delegates were called upon to deal with the question, the majority agreed that armed conflict was a contingency that might allow a State party to suspend some or all of its obligations under the conventions. However, it is striking that none of the clauses under review entail any pre-determined automatic legal effects of the outbreak of armed conflict on the treaty. Although some delegates voiced the opinion that war "*ipso facto*" meant that the treaty would be terminated or suspended between belligerents, none of the texts which were finally adopted supports that view.

The various conference documents discussed above and the wording of the clauses that were finally adopted demonstrate that the delegates' overarching concern was to deal with the issue in as pragmatic a manner as possible. As a consequence, legal subtleties that follow from the new *jus ad bellum* under the UN Charter, or even the more established distinction between belligerent and neutral countries, were not really taken into account. Many of the provisions which were adopted after World War II reflect primarily experiences related to the large-scale international conflicts of the First and Second World Wars. The consequences of these conflicts were inevitably felt globally; they had affected world shipping and navigation and had caused impacts on the commercial operations of all States, regardless of their formal political or legal status in these conflicts.

Another sign of the purposely pragmatic way in which the conference delegates dealt with the contingency of war/armed conflict is that the resulting clauses tend to treat all types of armed conflict as *temporary emergencies*, which could affect a part or the whole of the operation of the convention. At first glance, there seems to be little real difference in the way the treaties judge instances as *force majeure*, stress of weather, humanitarian emergencies and war or armed conflict. All of these may justify temporary non-application of certain provisions. Particularly striking for instance is the substantive and procedural similarity between the clauses on "carriage of persons in emergency" and "suspension in case of war" adopted for the first time at the occasion of the 1948 Safety Conference.

There are nevertheless some differences between war/armed conflict and other types of emergency: (1) instances as *force majeure* and stress of weather do have automatic *ipso facto* effects on the execution of the treaty:[121] By definition, these are circumstances that leave a State party with little choice of action;[122] by contrast, as mentioned before, the contingency clauses for war/armed conflict assume that a State party is still left with some freedom of choice, not only as to whether to suspend or not, but also as to what provisions to suspend; therefore, an armed conflict contingency clause usually includes a number of procedural requirements regarding the duty to inform and notify other contracting Parties; (2) compared to *force majeure* and similar emergencies, war/armed conflict may affect a different type and range of provisions of the treaty.

It was seen as well that the insertion of a suspension clause in the 1930 Load Lines Convention and the 1929 Safety Convention had been justified on different legal grounds: *rebus sic stantibus* in the former,[123] the "necessities" of war in the latter.[124] It was argued above that these claims do not meet the requirements which current international law attaches to the pleas of either "fundamental change of circumstances" under the law of treaties or the "state of necessity" under the law of State responsibility.

In addition, there is reason to believe that even before World War II, international law distinguished between the suspension of treaties in case of war, and suspension/termination on the basis of *rebus sic stantibus*, or on other grounds such as duress. For instance, the 1935 *Harvard Research* draft treaty on the law of treaties[125] contains provisions with separate substantive and procedural requirements for *rebus sic stantibus*,[126] duress,[127] and effect of war.[128] Perhaps an even clearer example is given by the distinction which the Washington Naval Disarmament Treaty concluded in 1922—*i.e.*, eight years before the 1930 Load Lines Convention—makes between the procedure for revision of the treaty on the ground of *rebus sic stantibus* (Article 21):

> If during the term of the present Treaty the *requirements of national security* of any Contracting Power in respect of naval defence are, in the opinion of the Power, *materially* affected by *any change of circumstances*, the Contracting Powers will, at the request of such Power, meet in conference with a view to the reconsideration of the provisions of the Treaty and its amendment by mutual agreement. (Italics added.)

and unilateral suspension of the treaty in the case of war (Article 22):

> Whenever any Contracting Power *shall become engaged in war* which in its opinion affects the *naval defence of its national security*, such Power *may* after notice to the other

> Contracting Powers *suspend* for the period of hostilities its obligations under the present Treaty . . . provided that such Power shall notify the other Contracting Powers that the emergency is of such a character as to require such suspension. (Italics added.)

On the basis of the above, including what has been said on this issue in Chapter III,[129] a clear case can be made that the discussed maritime contingency clauses point to the existence in international law of a separate ground allowing Parties to suspend a treaty in whole or in part in the case of armed conflict.

Are such contingency clauses now outdated? The analysis has shown that, at least up to 1966, (mainly Western) States succeeded in convincing the majority of conference delegates that it was better not only to preserve this type of treaty clause: in 1960 and 1966 the set of circumstances under which a State party could decide unilaterally to suspend part or whole of the convention, was even expanded; to "other hostilities" in the 1960 Safety Convention,[130] and to "hostilities or other extraordinary circumstances" (affecting) the "vital interests" of a State, in the 1966 Load Lines Convention.[131]

Although some of these clauses are still in force today (*e.g.* the 1954 OILPOL Convention and the 1966 Load Lines Convention), it is noteworthy that none of the conventions concluded since the 1970s contain such a provision. Moreover, as was seen above, the contingency clause was deleted without much ado from the 1974 SOLAS Convention,[132] and does not appear in MARPOL 73/78 either.[133] However, without a further examination of the other clauses of these treaties, any conclusion on their status in times of armed conflict would be premature.

Chapter VI

Sovereign Immunity and the Exemption of Public Vessels from Maritime Conventions

6.1. General Comments

A GREAT NUMBER OF MARITIME CONVENTIONS DO NOT APPLY TO WARSHIPS, a fact which is sometimes seized upon in the literature as proof that these treaties would not apply in times of armed conflict.[1] It is submitted that the validity of such an inference depends on the scope of the exemption granted. The reasons for why warships are exempted are complex, give rise to confusion, and need to be explored in detail.

There are two basic interrelated principles which have led to the current situation. Historically, the ruler was equated with the State. Under the traditional law, laid down, *inter alia*, in *Tobin v. The Queen*, "The King could do no wrong," which meant that under no circumstances could a sovereign be sued in the courts, not even of his own country.[2] A similar prohibition still applies to foreign heads of State.[3] While sovereigns are no longer equated with the State, a foreign State is normally granted qualified immunity from the jurisdiction of another State, in respect of its conduct or property.[4] This is based on the concept that States are co-equal on the international plane[5] and regarded as an act of comity under customary international law.[6] Sovereign immunity may be waived, but since this constitutes an exception to the general rule, a waiver should be interpreted restrictively.[7]

The precise limits of State immunity are controversial and constitute one of the most litigated aspects of international law.[8] Under current international law, the principle is limited to acts of *ius imperii*, or governmental acts in official capacity, as opposed to acts of *ius gestionis*, or acts done in a private or commercial capacity.[9] There is also a tendency to exempt cases of non-commercial torts from the principle of immunity,[10] and in particular, cases of gross violations of human

rights by a foreign government. [11] The 1989 case of the *Hercules* demonstrates, however, that acts of warfare by foreign governments are covered by the principle of sovereign immunity and do not fall under the non-commercial tort exception. [12]

Similarly, in the case of *Koohi and Others v. United States* (1992), the U.S. Court of Appeals needed to decide whether the shooting down of an Iranian civilian aircraft by the U.S. cruiser *Vincennes*, as well as other instances of U.S. intervention in the Iran-Iraq war, were justifiable. The Court decided in the negative, deciding that these operations fell within the "combatant activities exception" to the waiver by the U.S. of sovereign immunity under the Federal Tort Claims Act. [13]

As noted by the U.S. Supreme Court in *Alfred Dunhill Inc. v. Republic of Cuba* (1976), whilst discernible rules of international law have emerged with respect to the commercial dealings of governments in the international market, there is no consensus as to the rules of international law concerning exercise of governmental *power*, including military powers.[14]

Because of the legal fiction that they form part of their flag State's territory, ships belonging to a foreign State have of old been entitled to immunity from jurisdiction of any State other than the flag State.[15] The *locus classicu* of U.S. and international law is that of *The Schooner Exchange v. McFaddon*, decided by the U.S. Supreme Court in 1812.[16] In this case, two American citizens attempted to assert title to a French military vessel harboured in Philadelphia, claiming that she had been unlawfully seized from their custody by persons acting under orders of the Emperor Napoleon. Chief Justice Marshall, in denying the claim formulated the principle that public armed vessels in the service of a foreign sovereign are generally exempt from the jurisdiction of any nation but the flag state.[17] The next case which has strongly influenced international law is the UK case of *The Parlement Belge* (1879-1880). This concerned a vessel owned by the Belgian King that had rammed an English steam tug. Although employed primarily as a mail carrier, the vessel was also engaged in carrying passengers and freight. Reversing the judgement delivered in the first instance, the Court of Appeal decided that a foreign sovereign cannot be sued *in personam* and that an action *in rem* cannot be brought against his ship if she is being used substantially for public purposes.[18]

Currently, the legal situation with respect to State-owned ships is also determined by various national laws and international treaties, which lack uniformity. Apart from provisions in maritime conventions which will be discussed below, there have been several attempts at codification of the issue of jurisdictional immunity. The 1926 International Convention for the Unification of Certain Rules relating to the Immunity of State-owned Vessels includes several exceptions to the jurisdictional immunity of warships and other State-owned ships. It modified the position taken by the English courts in *The Parlement Belge* by explicitly

denying immunity in cases of collisions and other accidents of navigation.[19] The 1934 Protocol thereto clarified that this convention did not affect the rights or obligations of belligerents and neutrals nor the jurisdiction of prize courts.[20] The 1940 Treaty on International Commercial Navigation Law adopts the same principles as the 1926 Brussels Convention regarding actions in respect of collisions involving warships and other State-owned ships.[21]

By contrast, the 1972 Council of Europe Convention on State Immunity and its Additional Protocol include many exceptions to the principle of jurisdictional immunity, but these do not apply to State-owned ships nor their cargo.[22] In its 1991 Draft of Articles on Jurisdictional Immunities of States and their Property, the ILC adopts the latter approach, specifying that warships, naval auxiliaries, and other ships owned or operated by a State and used exclusively on government noncommercial service remain covered by the sovereign immunity principle, even in respect of collisions and other accidents of navigation.[23]

There is still no generally internationally recognised definition of State-owned ships, although there is a common understanding of the basic elements and categories.[24] The most important category for this study is formed by warships and similar vessels;[25] the second comprises ships employed for public, non-commercial purposes, including for example, police, customs or other patrol vessels. The third type of State-owned ships would be those employed for commercial purposes; however, according to current international legal theory and practice, the latter category of ships is probably no longer entitled to traditional sovereign immunity.

Many of the provisions which will be discussed in this chapter deal ostensibly with "sovereign immunity" or with the exemption of vessels "entitled to sovereign immunity under international law." It is important to distinguish, however, between jurisdictional immunity on the one hand, and exemption from substantive legal provisions on the other. State jurisdiction can theoretically cover two distinct types of legal authority: prescriptive and jurisdictional. The first is synonymous with the authority of a sovereign nation to prescribe substantive rules and regulations, primarily applicable and limited to its territory and its nationals.[26] By contrast, the jurisdictional or enforcement authority of a State refers to "the exercise of the power to adjudicate, normally assumed by the judiciary or magistrate within a legal system of the territorial State," and by extension, to the exercise "of all other administrative and executive powers, by whatever measures or procedures and by whatever authorities of the territorial State in relation to a judicial proceeding."[27]

Sovereign immunity is generally assumed not to entail exemption from the jurisdiction to prescribe, and therefore not to imply exoneration from compliance with substantive rules of law.[28] It follows that when a maritime treaty contains a

classic sovereign immunity reservation, it applies fully to all ships, including warships and noncommercial ships, but that enforcement of applicable rules is reserved exclusively for the flag State.[29] If the exemption of public vessels relates to jurisdictional matters only, it is submitted that this has no bearing on the effect of the (substantive) rules of the treaty during armed conflict.

However, as will be seen below, many maritime treaties extend immunity to warships from matters of substance, often under the misleading title of "sovereign" immunity. Such an exemption bears on the effect of the treaty during armed conflict. While for most of the time navies of modern sea powers operate at least technically in a state of peace, they may engage in some type of hostile or even forcible action in the pursuit of their countries' policies. Incidents at sea may range from "bumping incidents," *i.e.*, deliberate collisions, to open conflicts.[30] When a warship or other naval vessel is exempted from the substantive rules of a maritime treaty under normal circumstances, it will, *a fortiori*, not be bound by that treaty during armed conflict. In cases where the drafters did not wish to be drawn on this issue,[31] the substantive rules laid down in the treaty may or may not be applicable to the "exempted" category, and the answer may have to be sought in general international law. If the reason for the exemption is not clear from the wording of the treaty, an examination of the *travaux préparatoires* may be necessary.

6.2. Discussion

6.2.1. Load Lines

- **International Convention respecting Load Lines, 1930**
- **International Convention on Load Lines, 1966**

Both the 1966 Load Lines Convention[32] and the predecessor treaty of 1930[33] contain a clause exempting "ships of war" from the scope of the convention. It was seen above that during the 1966 Conference, the proposal to allow suspension of the convention during armed conflict proved controversial.[34] By contrast, the proposal to retain the exemption of warships was not challenged at all. The conference records show that the list of exempted ships was moved from the Regulations to the general provisions of the convention.[35]

The wording of the exemption provision of the 1966 Convention leaves little room for doubt about the type of immunity warships are entitled to. The exemption extends to the entire treaty, exonerating warships from compliance with the substantive rules of the treaty and all its regulations. In the literature, this

exemption has been justified on the grounds of security. Professor Treves, for instance, points to the requirement of confidentiality regarding data on the construction of warships and their operational procedures.[36]

6.2.2. Safety Conventions

- **Convention for the Safety of Life, 1914**
- **International Convention for the Safety of Life at Sea, 1929**
- **International Convention for the Safety of Life at Sea, 1948**
- **International Convention for the Safety of Life at Sea, 1960**
- **International Convention for the Safety of Life at Sea (SOLAS), 1974**

The 1913 Safety Conference was held to remedy the many safety defects of passenger ships discovered as a result of the 1912 *Titanic* disaster. As is made plain by the text of Articles 2 and 5, the convention was intended to apply to merchant ships of a certain description only: "mechanically propelled, which carry more than 12 passengers and which proceed from a port of one of the said States to a port situated outside that State. . . ." As a result, warships—which were not even mentioned in the convention—were not expected to comply with the substantive (safety) provisions.

The Final Act of the 1929 Safety Conference comprises, apart from the text of the 1929 Convention itself, two appendices: Annex I, which contains the (Safety) Regulations, and Annex II, which contains a proposal for amending the International Regulations for Preventing Collisions at Sea (COLREGS). The latter are "rules of the road at sea," which have of old applied to all types of ships, including in particular, warships.[37] However, the fact that an annex on COLREGS was appended does not imply that these became part and parcel of the 1929 Safety Convention. On the contrary, the text of several articles make clear that the COLREGS were considered to be wholly separate.[38] The 1929 Conference could do no more than propose amendments to the COLREGS, which dated back from the previous century and for whose revision the agreement of parties not present at the Safety Conference was required.[39]

Finally, it transpires from Article 2(4) of the main provisions of the 1929 Convention that the status of warships under the convention was unchanged from 1914:

> The present Convention, unless expressly provided otherwise, does not apply to ships of war.

Although this cautious formulation leaves room for the possibility that some of the convention's provisions might apply to warships, no such express provision has been adopted.

The 1948 Safety Conference led to a complete overhaul of the structure of the previous convention. First, with respect to the part relating to Safety, many clauses were moved from the main body of the convention to the regulations, including the provision on exempted ships (which became Regulation 3). The conference decided to keep the main body of the convention as succinct as possible, confine it to matters as ratification, denunciation and modification, and move all other "technical provisions" to the Regulations. Second, just like in 1929, the conference proposed a series of revisions to the COLREGS, which were appended to the final act. Although attempts were made to integrate the latter with the rest of the Safety Convention, the task proved impossible for the following reasons:

- The COLREGS were observed by many more countries than were parties to the 1929 Safety Convention, and it was realised that this might continue to be the case in the future;[40]
- Over 50 countries had accepted the COLREGS, but only 30 were present at this Conference: some 20 ratifications of those not present would be needed for new COLREGS to come into force;[41]
- There were several technical obstacles to integration, which included different dates for entry into force and different procedures for amendment;[42]

During the 1948 Conference, the exoneration clause for warships became the subject of debate. However, the question at issue was not whether warships should or should not be exempted from the safety provisions, but what other types of military vessels might be allowed to benefit from the same exemption.[43] Agreement was eventually reached on exempting both "ships of war" and "troopships" (Regulation 3). It was noted for the record that it was the meeting's stated intention that the term "ships of war" should be interpreted broadly, whilst "troopships" narrowly. The (UK) chairman of the Working Party added that it was not the intention to exempt commercial ships carrying troops on a particular voyage.[44]

The verdict on the application of the Safety Convention and the Safety Regulations produced by the 1948 Safety Conference is the same as for the previous Safety Conventions. Although the exoneration clause for warships was moved in 1948 from the main body of the Convention to the Safety regulations, this was done for the technical reasons explained above. Furthermore, none of the delegates at the 1948 Conference challenged the exemption for warships; on the contrary, the entire debate related to what additional categories of ships with a

military mission might be exempted. Finally, Article II of the main provisions stipulates that the 1948 Safety Convention applies (only) to "ships registered in countries. . . ." From the records of the 1954 OILPOL conference, it is clear that the term "registered" was at that time understood as excluding warships.[45]

The 1960 Safety Conference retained the structure of the previous conference. Annex A to the Final Act contains the text of the amended Safety Convention as well as of the newly agreed Safety Regulations. Annex B to the final act contains the proposed new version of the COLREGS, which, as before, were not integrated in the Safety Convention. IMCO was requested to initiate the necessary procedure for their revision.

The major innovation brought about by the 1960 Safety Conference was the incorporation of provisions and recommendations on the safety of nuclear ships, despite the fact that many delegates thought that the matter was premature.[46]

As for warships, the 1960 Conference decided to retain the clauses of both Article II and of Regulation 3, Chapter I of the Safety Regulations of the previous convention.[47] As was the case in 1948, ships of war and troopships were hence exonerated from complying with the substance of the Safety Convention and its Regulations "unless expressly provided otherwise." However, like in 1948, the 1960 Conference does not seem to have adopted any such express provisions. On the contrary, the express exclusion of warships is repeated in two of the Safety Regulations' Chapters: in Chapter V on the Safety of Navigation, which, according to Regulation 1, applies to all ships on all voyages, *except ships of war*; and in Chapter VIII on Nuclear Ships, which, according to Regulation 1, applies to *all nuclear ships except ships of war*.

The 1974 International Convention for the Safety of Life at Sea (SOLAS) was adopted about nine years after the previous Safety Convention entered into force,[48] and about two years after the COLREGS had been revised in a separate convention.[49] None of the amendments tabled either before or during the 1974 Safety Conference pertained to the exoneration of warships and troopships. Consequently, there was no debate about their exclusion from the substance of the Convention. As a result, the relevant provisions that are still in force today are identical to the principal exemptions adopted by the 1948 Safety Conference. What has been said before in relation to the meaning and the significance of these exemptions, remains valid. According to Professor Treves, this exclusion is justified for reasons of confidentiality.[50]

6.2.3. COLREGS

- **COLREGS appended to the Final Act of the 1929 Safety Conference**

- **COLREGS appended to the Final Act of the 1948 Safety Conference**
- **COLREGS appended in Annex B of the International Convention for the Safety of Life at Sea, 1960**
- **Convention on the International Regulations for Preventing Collisions at Sea (COLREGS) 1972**

As indicated before, the international "rules of the road" at sea have of old applied to warships. The Regulations presently in force were revised by an international conference held under IMCO auspices in 1972.[51] As of 1 February 1998, 131 States representing 96.02 percent of the world's tonnage were party to this 1972 treaty.[52]

One of the most important innovations in the 1972 Regulations was the recognition given to traffic separation schemes (Rule 10). The Convention groups provisions into sections dealing with steering and sailing, lights and shapes and sound and light signals. There are also four Annexes containing technical requirements concerning lights and shapes and their positioning; sound signalling appliances; additional signals for fishing vessels when operating in close proximity, and international distress signals. Guidance is provided in determining safe speed, the risk of collision and the conduct of vessels operating in or near traffic separation schemes. Other rules concern the operation of vessels in narrow channels, the conduct of vessels in restricted visibility, vessels restricted in their ability to manoeuvre, and provisions concerning vessels constrained by their draught.[53]

Since the adoption of the first international rules of the road, the number of provisions that expressly apply to warships and other naval ships has increased steadily. Several types of warships, amongst which are minesweepers and aircraft carriers, are covered by the Rules either expressly[54] or by implication.[55]

The demands of good seamanship require that naval ships comply with these international "rules of the road." Although the total number of naval ships is small compared to merchant ships—for every naval vessel in 1988, there were about ten large merchant vessels[56]—traffic at sea would result in chaos if naval vessels would enjoy "immunity" with respect to the substance of the COLREGS.

However, the text of the COLREGS shows that the duties of State parties with respect to military vessels are formulated in less stringent terms. Most conspicuously, Rule l(e) requires that governments endeavour to achieve the "closest possible compliance" if they "have determined that vessels of a special construction or purpose cannot fully comply with the provisions of any of the Rules." The wording of Rule l(e) suggests that governments enjoy a measure of freedom to determine the extent to which naval vessels should comply with some of the substantive provisions.

There remains, nevertheless, the question of what legal effects, if any, armed conflict has on the COLREGS. As was explained before, none of the Safety Conferences at which both the international Safety Regulations and the international COLREGS were revised managed to integrate the latter with the main provisions of the Safety Convention. Because of this legal and technical disunion, the coverage of the general provisions of the texts of these Safety Conventions does not extend to the international COLREGS. As a result, Article VI of the 1960 Safety Convention on Suspension in case of War could not be taken to apply to the Annex on COLREGS. Furthermore, the 1972 conference revising the COLREGS adopted a general provision on denunciation,[57] but no clause on suspension in case of armed conflict, *force majeure*, or any other cases of emergency.

This does not mean however, that governments would not be entitled to resort to suspension of certain COLREGS when they find themselves in the circumstances mentioned, *e.g.*, in Article VI of the 1960 Safety Convention. It is submitted that even in the absence of an express provision to this effect, States may be entitled to resort to special measures in times of armed conflict by virtue of general international law. Indeed, common sense alone indicates that in times of armed conflict, States will in any case resort to amending or suspending certain COLREGS, at least as far as their naval vessels are concerned. This submission can be substantiated further with the following two elements of treaty practice.

First, Rule l(e) indicates that State parties may not be in a position to have certain vessels "of a special construction or purpose" comply with all COLREGS. The same provision urges States to endeavour to achieve the "closest possible compliance," however, "without interfering with the special function of the vessel." It is submitted that this provision would allow any State party to (auto-determine) the extent to which warships need to comply with certain COLREGS when on a special mission or when entrusted with such special functions as may be required in times of armed conflict.

Secondly, since the 1970s, a number of naval powers have entered into bilateral so-called Incidents at Sea Agreements (INCSEA), following the example of the Agreement on Prevention of Incidents at Sea, concluded between the United States and the USSR in 1972.[58] Similar bilateral agreements were subsequently concluded between the USSR and the UK, France, FRG, Italy and Canada.[59]

These agreements apply exclusively to naval vessels and are meant to defuse tensions caused by quasi-hostile encounters at sea between naval powers. They form part of the body of arms control measures and are akin to confidence-building measures.[60] Taking the first of these agreements as an example, the United States and the USSR solemnly declare in Article II that a first means for reducing the risks associated with their military competition at sea consists of observing

"strictly the letter and spirit of the of the International Regulations for Preventing Collisions at Sea. . . ." The bulk of this 1972 INCSEA consists of additional undertakings—or special regulations—designed specifically for military encounters and operations.[61] There is also an article on the exchange of information between Parties on instances of collisions or other incidents (Article VII).

Although not explicitly provided for, it is patent that this INSCEA agreement was not concluded in contemplation of hostile conflict between the Parties. This is confirmed by military lawyers who have stressed that in the event of the outbreak of armed conflict, both Parties may decide, at a minimum, to suspend at least some of the INSCEA provisions, including its references to the COLREGS.[62]

This interpretation is reinforced moreover, by the more recent Agreement on the Prevention of Dangerous Military Activities (DMAA) concluded in 1989 between the same two States.[63] The DMAA is intended to supplement the 1972 INSCEA and is no longer limited to naval incidents.[64] Significantly, the DMAA incorporates a special "savings clause," which refers in the *jus ad bellum* language of the UN Charter to the right of individual or collective self-defense in accordance with international law:

> This Agreement shall not affect the rights and obligations of the Parties under other international agreements and arrangements in force between the Parties, and the rights of individual or collective self-defense and of navigation and overflight, in accordance with international law. Consistent with the foregoing, the Parties shall implement the provisions of this Agreement, taking into account the sovereign interests of both Parties.[65]

6.2.4. Prevention of Oil Pollution

- **International Convention for the Prevention of Pollution of the Seas by Oil (OILPOL), 1954**
- **International Conference on Prevention of Pollution of the Sea by Oil, 1962 (OP Conference)**

The 1954 International Conference on Pollution of the Sea by Oil had before it the proposals made by the UK government dated April 1954. This included an exemption for warships and naval auxiliaries as in the 1948 Safety Convention.[66] No delegate objected to the principle of the exemption, but there was some disagreement about the range of excluded military vessels and the wording of the clause. In addition, the idea was aired that even if Parties could not be compelled to do so,

they should nevertheless be urged to apply the convention's provisions on a voluntary basis to categories of vessels formally excluded from application.[67]

It was finally proposed to exclude "ships for the time being used as naval auxiliaries" from the convention and to add a resolution in the annex, on "*The application of the principles of the Convention so far as is reasonable and practicable to the ships to which the Convention does not apply.*" The substantive part of this Resolution (No. 2) reads as follows:

> That the governments of countries which accept the present Convention should also, by legislation or otherwise, apply the provisions of the Convention so far as is reasonable and practicable to all classes of sea-going ships registered in their territories or belonging to them to which the provisions of the Convention do not apply, that is to say, *warships and other unregistered ships*, ships used for the time being as *naval auxiliaries.* (Italics added.)

Delegates subsequently queried why the exclusion of warships had not been expressly mentioned in the main exemption clause, Article II (1). The Chairman's explanation was that no such explicit reference had been included:

> . . . because the Convention refers only to ships registered by Contracting Governments. Warships, not being registered, were, therefore, excluded from the Convention, although they were referred to in Resolution 2. . . .[68]

Furthermore, the Italian delegate requested that it be put on the record that Resolution 2 was not binding on governments. This request was granted, and Resolution 2 was carried without further comments.[69]

Soon after its establishment, IMCO became the administrator and depositary of the 1954 OILPOL Convention. In 1962, the "OP" conference was convened to revise the 1954 OILPOL Convention and to consider, *inter alia*, a series of amendments in respect of warships and similar military vessels. A first series of proposals was aimed at refining, reformulating or updating the wording of the exclusion clauses, or at integrating the text of Resolution 2 in the main part of the Convention.[70] Other proposals questioned the wisdom of continuing the exemption for warships and/or naval auxiliaries altogether.[71] A third series of proposals aimed at strengthening the recommendations contained in Resolution 2, by using more urgent and stringent language.[72]

During the conference the differences between the various positions seemed at first irreconcilable.[73] In the end, preliminary agreement was reached on a formula for Article II that would still exonerate warships and ships "for the time being

used as naval auxiliaries" from complying with the substance of the convention, but incorporating also a new "undertaking" based on the text of the old Resolution 2.[74] The revised text of Article II, which was finally adopted by the 1962 OP conference, reads in relevant part as follows:

> (1) The present Convention shall apply to ships registered in any of the territories of a Contracting Government and to unregistered ships having the nationality of a Contracting Party, except. . .(. . .)
>
> (d) naval ships and ships for the time being used a naval auxiliaries
>
> (2) Each Contracting Government undertakes to adopt appropriate measures ensuring that requirements equivalent to those of the present Convention are, so far as is reasonable and practicable, applied to the ships referred to in subparagraph (d) of paragraph (1) of this Article.

It is questionable whether as a result of this compromise text more pressure is brought to bear on Parties to apply the convention to the excluded categories of ships. There remains of course the decision of the 1962 Conference to reformulate the recommendations contained previously in Resolution 2 of 1954 and to incorporate these into the main body of the Convention. The impact of this change could only be appreciated by comparing domestic State practice both before and after the 1962 amendments.

6.2.5. Prevention of other forms of Marine Pollution

- **(Oslo) Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft, 1972**
- **(*London*) Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972**
- **International Convention for the Prevention of the Pollution by Ships (MARPOL) 73/78**
- **Kuwait Regional Convention, 1978**
- **Montego Bay Convention on the Law of the Sea, 1982**
- **Convention for the Protection of the Marine Environment of the North-East Atlantic OSPAR Convention (OSPAR), 1992**

A. The 1972 Oslo and London Dumping Conventions. The Oslo Convention, which regulates dumping in part of the Northern Hemisphere, and the London Dumping Convention, which is universal in scope, were adopted in the same year but deal with the issue of State-owned ships differently. The London

Convention was signed at an intergovernmental conference in December 1972 and provides in Article VII (4):

> This Convention shall not apply to those vessels and aircraft entitled to sovereign immunity under international law. However, each party shall ensure by the adoption of appropriate measures that such vessels and aircraft owned or operated by it act in a manner consistent with the object and purpose of this Convention, and shall inform the Organization accordingly.

During the preparation of the London Convention, its application to public ships had been very controversial.[75] Military powers, and particularly the United States, maintained that the convention should not apply to vessels and aircraft entitled to sovereign immunity under international law. Other countries favoured a classic sovereign immunity approach whereby a reservation would be made for enforcement measures only. The latter—more restrictive—solution was adopted only months earlier by the drafters of the Oslo Dumping Convention, Article 15(6) of which provides that:

> Nothing in this Convention shall abridge sovereign immunity.[76]

The formula that was finally adopted at the London Conference was intended as a compromise between those two approaches. Nevertheless, as Dr. Timagenis writes, the overall effect of this compromise text is very close to the classic sovereign immunity approach, in that only flag State enforcement can be conceived. The real difference—at least in theory—lies in the substantive obligations which the latter State should enforce. Under the classic sovereign immunity approach of the Oslo Convention, the flag State should enforce strictly the provisions of the convention; under the London Convention, the flag State is offered more flexibility and should adopt appropriate measures to ensure that these vessels act in a manner consistent with the object and purpose of the convention.[77]

It was seen earlier that the 1972 Oslo Dumping Convention was replaced in 1992 by the OSPAR Convention.[78] The negotiators of the latter chose to retain the traditional concept of sovereign immunity. Article 10 (3) of Annex II provides that:

> Nothing in this Annex shall abridge the sovereign immunity to which certain vessels are entitled under international law.

B. MARPOL 73/78 and 1982 UNCLOS. The 1973 MARPOL conference was preceded, amongst others, by an officially convened preparatory meeting earlier that

year.[79] One of the outcomes of this meeting was the following proposal (Article 3 (2)) for a subparagraph dealing with the exclusion of warships and similar vessels from the scope of the convention:

> The present Convention shall not apply to any warship or other ship (sic) owned or operated by a State and used for the time being, only on government non-commercial service (fn. 8). However, each Contracting State shall ensure by the adoption of appropriate measures that such ships owned or operated by it act in a manner consistent with the object and purpose of the present Convention.

As the preparatory work for MARPOL foreshadowed, the immunity clause would become, once again, the focus of debate during the conference. The USSR suggested a formula that would make the wording of the exemption clause more precise without, however, enlarging the number of exempted ships.[80] Norway and Japan wanted to limit the exemptions to warships only.[81] Greece wanted to restrict the immunity to warships, "or at least to state vessels only."[82] According to Spain, the exemption should be formulated in broader terms, leaving scope for exclusion of all ships "entitled to exemption in accordance with international law,"[83] while according to Mexico, the exemption clause should only refer to the jurisdictional aspects of sovereign immunity.[84] Subsequently, the Netherlands tabled an amendment which combined elements of several of the above proposals.[85]

Unfortunately, the summary records of the committee debates have not been published. The text, which was finally adopted (Article 3(3)), reads as follows:

> The present Convention shall not apply to any warship, naval auxiliary or other ship owned or operated by a State and used, for the time being, only on government non-commercial service. However, each Party shall ensure by the adoption of appropriate measures not impairing the operations or operational capabilities of such ships owned or operated by it, that such ships act in a manner consistent, so far as is reasonable and practicable, with the present Convention.[86]

At the 10th plenary session of the conference, the text of Article 3 was adopted by 55 votes to none with two abstentions.[87]

Despite the relative parsimony of comments from the *travaux préparatoires*, it is nevertheless possible to draw conclusions on the manner in which the MARPOL conference has dealt with the issue of State immunity. The exemption clause adopted in Article 3(3) by the 1973 MARPOL conference differs from Article II (1) (d) of the 1954 OILPOL Conference, as amended into II (2) by the 1962 OP Conference, in several respects. First, the range of ships absolved from compliance with

substantive provisions has been broadened to include *all State-owned or State-operated ships* as long as they are used on government non-commercial service. Second, by accepting the 1962 amendments, State Parties *undertook* to adopt appropriate measures *to ensure* that requirements equivalent to those developed for other ships apply so far as is reasonable and practicable to the exonerated military vessels. Arguably, the rephrasing of this mitigation clause by the MARPOL conference has placed a heavier and more stringent duty on State parties, by using terminology such as "each Party *shall* ensure . . . by the adoption of *appropriate* measures . . . that such ships *act* . . ." in conformity with the convention.

The phrases "each Party shall ensure," and "by the adoption of appropriate measures" were most likely borrowed from Article VII (4) of the 1972 London Dumping Convention. Unfortunately, the MARPOL conference did not follow the latter's example in requesting that State Parties inform the Organization of the measures taken. It is submitted that the incorporation of such a reporting requirement would significantly increase the pressure brought to bear on State Parties.

Although these differences may only be questions of degree, it is the MARPOL formula which has gained wide acceptance in subsequent treaty practice, and not the formula of the 1972 London Dumping Convention. Significantly, the negotiators of the Third United Nations Law of the Sea Conference (UNCLOS III) copied the MARPOL exemption/mitigation formula almost *verbatim* for inclusion in Part XII of 1982 UNCLOS on the Protection and Preservation of the Marine Environment. The resulting "sovereign" immunity clause in Article 236 of 1982 UNCLOS stipulates that:

> The provisions of this Convention regarding the protection and preservation of the marine environment do not apply to any warship, naval auxiliary, other vessels or aircraft owned or operated by a State and used, for the time being, only on government non-commercial service. However, each State shall ensure by the adoption of appropriate measures not impairing operations or operational capabilities of such vessels or aircraft owner or operated by it, that such vessels or aircraft act in a manner inconsistent, so far as is reasonable and practicable, with this Convention.

The origins of Article 236 can be traced to proposals submitted by Australia in 1973 during UNCLOS III. These were aimed at exempting warships from the provisions on the protection of the marine environment and based explicitly on the immunity provisions of the 1954 OILPOL and 1972 London Dumping Conventions.[88] Competing proposals were lodged by Canada, the USSR and the United States. The Canadian text stated that the Convention should not apply to:

> ... those vessels and aircraft entitled to sovereign immunity under international law

and continued with a phrase reflecting the substance of the Australian proposal.[89] The text submitted by the USSR was more general and referred to the existing immunity for such vessels and aircraft under international law, but without a mitigation clause, [90] whilst the U.S. proposal was akin to the Canadian one.[91]

The proposed exemption clause was subsequently discussed in depth during informal meetings. In 1974, the United States tabled a new proposal, visibly inspired by the MARPOL formula, which contained the elements of what would become Article 236.[92] The only criticism came from Tanzania, whose delegate pointed out that:

> *(. . .) Since the issue under consideration was the prevention of pollution and not the protection of ships, the draft articles should deal with the status rather than the nature of the vessels in question.*[93]

Subsequent texts produced as a result of informal negotiations confirm that the issue under discussion was not merely immunity from jurisdiction, but a genuine exemption from the substance of the provisions of the prospective convention regarding the protection and preservation of the marine environment.[94]

One of the main principles underlying Article 236 can be traced back to several other articles of 1982 UNCLOS: principally Articles 30, 31, 32, 95 and 96. However, the major difference between these articles and the stipulations of Article 236 is that the former deal primarily with immunity from jurisdiction, whereas the latter goes much further and grants immunity from substantive provisions.

Although included in Part XII on the Protection and Preservation of the Marine Environment, Article 236 should be regarded as bearing on the entire Convention, for the provisions regarding the protection and preservation of the marine environment are scattered throughout the Convention.[95] The end result is that warships are exempt from the material applicability of the pertinent rules.[96]

Apart from the all-important 1982 UNCLOS, the MARPOL formula has been borrowed, often *verbatim*, by a multitude of other treaties and instruments. It was included, amongst others, in two important instruments concluded in the 1990s: the International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC Convention), 1990, Article 1 (3) and the Protocol on Environmental Protection to the Antarctic Treaty, 1991, Article 11 (1);

In addition, the MARPOL formula forms part of practically all regional framework maritime treaties concluded under UNEP auspices over a period of more than two decades.[97] A prominent example is the Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution, concluded in 1978 for the Persian-Arabian Gulf (Kuwait Regional Convention). It was seen earlier[98] that the applicability of this convention became contentious during the 1980–1988 Iran-Iraq war in connection with the 1983 Nowruz Oil Spill. Its exemption clause reads as follows:

> Warships or other ships owned or operated by a State, and used only on Government non-commercial service, shall be exempted from the application of the provisions of the present convention. Each Contracting State shall, as far as possible, ensure that its warships or other ships owned or operated by that State, and used only on government non-commercial service, shall comply with the present Convention in the prevention of pollution to the marine environment.[99]

The clause not only bears a strong resemblance to the MARPOL formula, both the Kuwait and MARPOL Conventions deal in principle with the same subject matter: pollution of the marine environment. There is consequently no reason to believe that the respective immunity clauses would have a substantially different meaning.

Finally, the MARPOL formula has been relied on by countries such as the United States and the UK in "interpretative statements" made in respect of various instruments, including regarding environmental sectors other than the marine environment.[100]

C. Environmental Implications in General. The exclusion of warships from the substantive provisions of 1982 UNCLOS has been justified in the literature on the following grounds: (1) Pollution regulations of a general character, including international regulations, may be inappropriate to the special configuration or mission of certain warships; (2) It was feared that coastal States, in the exercise of powers to prevent and control pollution from foreign ships, could thereby acquire leverage over warship passage in general and the passage of nuclear warships in particular; a question regarding the compliance of a warship with a particular standard might require the inspection or release of data regarding the ship, which most flag States would be reluctant to disclose; (3) Warships were not considered a substantial source of marine pollution, and because the rules of sovereign immunity would have restricted the possibilities of enforcement against the will of the flag State in any event, there was no significant opposition to Article 236; (4)

Moreover, given the political mission of naval vessels that operate far from their home shores in peacetime, it would not be unrealistic to expect a high degree of self-imposed environmental diligence by major flag States. [101]

There is no question that the configuration and the mission of naval vessels differ fundamentally from commercial vessels. Still, the single most important reason why immunity clauses for warships are adopted centres on security issues. States are extremely averse to allowing foreign nations access to their military ships.[102] In a position paper advocating adoption of 1982 UNCLOS, the U.S. Department of Defense articulated the rationale in this way:

> *[T]o support military operations around the globe, there must be assurance that military vessels and their cargoes can move freely without being subject to levy or interference by coastal states.*[103]

However, the amount of waste generated by such ships is far from trivial. Aircraft carriers may house as many as 5,000 crew members.[104] The United States owns over 2,000 vessels, including 600 Navy ships, with over 300,000 crew members. Each sailor is estimated to generate approximately three pounds of garbage per day. Processing and storing such huge quantities of waste presents a considerable challenge to navies. This problem is exacerbated by the fact that military operations often require naval vessels to remain at sea for prolonged periods of time, often conducting operations in areas which lack adequate shore disposal facilities. [105]

Because of the implications for marine pollution, the MARPOL/UNCLOS "sovereign" immunity clause has been the subject of severe criticism:

> *This serious derogation [the sovereign immunity clause] is not only irreconcilable with the rest of the Convention, it is incompatible with the usual principles of immunity which provide only for exemption from enforcement procedures, not from applicability of the law. [T]here is no reason why government ships should not be governed by marine pollution rules.*[106]

Although campaigns for the total abolition of the immunity of State-owned ships were not unknown around the turn of the century,[107] national and international public sentiment is now said to turn against such exclusions on environmental grounds.[108] Sweden spearheaded a recent effort to remove the immunity clause from the 1972 (London) Dumping Convention.[109] However, the new 1996 protocol to this convention proves that this was unsuccessful.[110] On the one hand, the protocol strengthens and updates environmental protection provisions through the introduction of principles such as "the polluter pays," and precautionary and preventive measures.[111] On the other hand, the clause on

immunity of public vessels, far from being dropped, was replaced by the following text:

> Article 10 (4): This Protocol shall not apply to those vessels and aircraft entitled to sovereign immunity under international law. However, each Contracting Party shall ensure by the adoption of appropriate measures that such vessels and aircraft owned or operated by it act in a manner consistent with the object and purpose of this Protocol and shall inform the Organisation accordingly.
>
> Article 10 (5): A State may, at the time it expresses its consent to be bound by this Protocol, or at any time thereafter, declare that it shall apply the provisions of this Protocol to its vessels and aircraft referred to in paragraph 4, recognising that only that State may enforce those provisions against such vessels and aircraft.

The fourth subparagraph of the new protocol introduces only cosmetic changes to the previous clause, but the fifth subparagraph makes it absolutely clear that even if the convention's substantive provisions are made applicable to public ships, it does not entail a waiver by the flag State of jurisdictional immunity.

In mitigation one should add that the second sentence of the MARPOL/UNCLOS formula obligates Parties to use their best efforts to prevent pollution by public vessels. Yet the widespread adoption of this sentence in many other international instruments does not reveal the extent to which State Parties comply with this undertaking. Moreover, there are several built-in obstacles preventing such an assessment. First, as noted above, unlike for the 1972 London (Dumping) Convention, there is no requirement for States Parties to report to the administrating or depositary organisation on any implementation measures taken. The IMO has virtually no organised means of monitoring compliance of military vessels and has acknowledged that:

> *Since warships are outside MARPOL 73/78, we do not receive any information on the national legislation for these ships. Even if it exists, information we do receive from time to time is more in the form of research and development work, and this again from more informal contacts rather than established procedure.*[112]

Furthermore, the MARPOL/UNCLOS formula entitles State Parties to auto-determine what the "appropriate measures not impairing the operations or operational capabilities" of excluded categories of ships are. Of course, there is much force in the argument that this consequence is an essential part of sovereign

immunity.[113] Still, the lack of international schemes for monitoring, reporting and control of compliance by public vessels has convinced some writers that the second sentence of the formula in question is of academic value.[114] Others indicate that the absence of international control will inevitably cause potentially huge differences in implementation by State parties.[115]

On a more positive note, there is nonetheless increasing evidence of the application of national and international environmental standards to the military sector, especially in industrialised States. At a meeting organized in 1995 by UN/ECE and UNEP, many countries reported that their armed forces were, as a rule, subject to national environmental standards and legislation.[116] World-wide, the military have been forced to study alternatives to ozone-depleting substances which form part of many military applications. This is the result of the scheduled phase-out of these substances following the protocols and amendments to the 1985 Vienna Convention which were discussed earlier.[117] The military response was partly motivated by a growing environmental consciousness within the sector, but also by the realisation that these chemicals would soon become either unavailable or too expensive.[118] NATO has organized two International Conferences on the Role of the Military in Protecting the Ozone Layer[119] and has also sponsored a Pilot Study on Defense Environmental Expectations to examine the impact of military activities on the environment in general.[120]

To illustrate a point of interest to this study, the U.S. Navy is required by domestic law to comply with Annex V of MARPOL 73/78, which deals with different types of garbage and specifies the distances from land and the manner in which they may be disposed of. The requirements are much stricter in a number of "special areas," but the most important feature of the Annex is the complete ban imposed on the dumping into the sea of all forms of plastic.[121] As for international developments, NATO's Special Working Group Twelve, a technology-sharing collection of nations, is striving to develop "The Environmentally Sound Ship of the Twenty-First Century." In addition, in October 1994, representatives of 14 NATO navies and of former Warsaw Pact navies met to discuss vessel-source pollution. [122]

D. Environmental Implications during Armed Conflict. The most important question in view of the present inquiry is the following: what is the fate of these environmental requirements when the country at issue is engaged in armed conflict or other types of hostile activity?

An analysis of the environmental legislation applicable to the U.S. Navy indicates that there are indeed unspecified "peacetime" limits on the Navy's Environmental Program. The Navy is subject to the National Environmental Policy Act (NEPA), which requires federal agencies to document the effects of

their actions on the environment, including the marine environment, for any activity that would he considered a major federal action significantly affecting the quality of the human environment.[123] However, NEPA provides no express war or national emergency exemption. Common sense indicates of course, that U.S. commanders:

> *. . . should not be required to prepare an environmental impact statement for amphibious assault, nor obtain a permit for whale harassment before conducting an attack on enemy shipping.*[124]

That NEPA does not apply to belligerent activities can be inferred from the text of its provisions as well. For one, the bulk of the environmental legislation applicable to the Navy—and to other components of the U.S. armed forces—is limited to military activities within U.S. jurisdiction.[125] Furthermore, the preparation of environmental documentation such as EIAs is not required for certain "categorical exclusions," including "maintaining law and order." There are also special waivers related to "classified action" and "emergency actions." The regulations provide that if emergency circumstances make it necessary to take action without observance of NEPA requirements, the agency should consult the Council on Environmental Quality.[126] It appears that during Operation Desert Storm, the U.S. Department of Defense did in fact consult with this Council regarding pursuit of various emergency military requirements in the United States without full NEPA compliance. [127]

Whilst NEPA contains only implicit peacetime limits for domestic military operations, there are express limits for U.S. military activities abroad. For the latter type of activities, the major piece of legislation is Executive Order 12144, entitled "Environmental Effects Abroad of Major Federal Actions."[128] It applies to the "global commons," defined as the geographical areas outside the jurisdiction of any nation, and to areas (land, water, and airspace) under the jurisdiction of one or more foreign governments. Its stated objective is to further foreign policy and national security interests "while at the same time taking into consideration important environmental concerns."

If a "major federal action" is determined to do significant harm to the environment of a foreign nation or to a protected global resource, the Executive Order requires as a general rule that a prior environmental study, an environmental review, or an environmental impact statement be prepared and conducted. As with operations within U.S. jurisdiction, some of these requirements may be waived, postponed or mitigated in case of "emergencies" and "classified actions." But in addition to this, the Executive Order expressly exempts a wide range of

(hostile/military) operations and activities related to the U.S. national security from its provisions: from actions related to armed conflict (encompassing officially declared wars and other types of hostilities), actions affecting the national security or the national interest, to intelligence activities, arms transfers *etc.* Additional case-by-case or class exemptions may be added to this list by the Department of Defense because of "emergencies, national security considerations, exceptional foreign policy requirements, or other special circumstances which preclude or are inconsistent with the preparation of environmental documentation and the taking of other actions prescribed" by the Order. An example of such case-by-case exemptions are "actions that must be taken to promote the national defense or security and that cannot be delayed." Therefore, the conclusion must be that there are indeed peacetime limits to the U.S. Navy Environmental Program.

These limitations to the environmental obligations incumbent on the Navy are supported by the qualifying language of the MARPOL exemption clause. Accordingly, a Party may determine for itself which measures—comparable or equivalent to the MARPOL provisions—apply by analogy to its naval vessels, "*so far as is reasonable and practicable*" and taking into consideration the "*operations or operational capabilities of such ships.*" "Operations" in relation to naval vessels is a term with a clear military connotation: it is barely coded language that may encompass military activities executed in a hostile environment, as is the case during armed conflict. Consequently, the phrase "operations or operational capabilities of such ships" is a crucial qualifying condition which defines and limits the scope of the MARPOL mitigation clause to unspecified peacetime military activities. It seems therefore correct to state that:

> *One cannot but conclude that the second sentence leaves the protection of the environment legally subordinated to operational demands in times of peace and military necessities in times of naval war.*[129]

As with the war suspension clauses that were examined in the previous chapter, the MARPOL clause does not point to any automatic—*ipso facto*—effects of the outbreak of armed conflict on the treaty. However, it does suggest that it is within a Party's own, sovereign judgement to decide which of the MARPOL (or comparable national) provisions may be affected by the outbreak of armed conflict. Given, however, that the integration of environmental concerns into military actions is still in its infancy in many States, much may depend, ultimately, on the judgement of an individual commander. A recent study made available by the U.S. military uncovered a real void in military environmental planning. The report,

which was limited to an examination of environmental policy for operations other than war (OOTW), acknowledges that a legal basis for such a policy is currently lacking in the United States. Its author concludes that most environmental laws affecting the U.S. military are primarily designed for use at the installation level and are closely linked with local civilian environmental standards. *Faute de mieux*, these peacetime environmental standards have been used in environmental annexes in the Operations Plans of U.S. "peace" military operations in Somalia, Haiti, and the former Yugoslavia. They are, nevertheless, regarded as too restrictive for use across the full spectrum of military operations. On the other hand, the report's author asserts that the laws of war do not provide an appropriate level of environmental protection during operations short of war. As a result, there is a grey area in which the application of environmental law is currently being left to the discretion of the individual commander.[130]

A final observation is that like the many war suspension clauses discussed before, the phrase "operations or operational capabilities of such ships" constitutes rather unsophisticated language from a *jus ad bellum* perspective. There is no distinction between, *e.g.*, legal actions taken in self-defence and operations conducted to pursue illegal aggression in violation of Article 2 (4) of the UN Charter.

6.2.6. (Civil) Liability Conventions

- **(Paris) OECD Convention on Third Party Liability in the Field of Nuclear Energy, 1960**
- **Convention on the Liability of Operators of Nuclear Ships, 1962**
- **(Vienna) Convention on Civil Liability for Nuclear Damage, 1963**
- **International Convention on Civil Liability for Oil Pollution Damage, 1969**
- **International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971**
- **Convention on the Early Notification of Nuclear Accidents, 1986**
- **Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, 1986**
- **Convention on Civil Liability for Damage Caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels, 1989**
- **International Convention on the Carriage of Hazardous and Noxious Substances by Sea (HNS), 1996**
- **Protocol to Amend the 1963 Vienna Convention, 1997**
- **Convention on Supplementary Compensation for Nuclear Damage, 1997**

Since the maritime "civil liability" conventions have been largely modelled on the schemes set up for the nuclear industry, it would seem appropriate to start the analysis with the latter conventions.

A. The 1960 Paris Convention and the 1963 Vienna Conventions. The 1960 Paris OECD and the 1963 Vienna IAEA Conventions apply in the first instance to land-based nuclear installations, broadly defined as encompassing reactors, reprocessing, manufacturing and storage facilities where nuclear fuel, nuclear material, and radioactive products or waste are used or produced.[131] In addition, both conventions also apply to the transport of nuclear material and to the handling of nuclear waste.[132]

Despite the lack of express exclusion provisions to that effect, it is accepted that neither convention applies to military installations.[133] This is supported by the tenor of the preamble of both conventions, which emphasises their civilian and "peaceful" rationale. Furthermore, as seen earlier,[134] both conventions exonerate operators from liability for damage directly caused by armed conflict, hostilities, civil war, and insurrection.[135]

As far as the Vienna Convention is concerned, the above conclusion is confirmed *a contrario* by the discussions held from '90 to '94 within the IAEA's Standing Committee on Liability for Nuclear Damage. One of the areas up for discussion was precisely the proposed extension of the convention to military installations.[136] The result of these discussions are contained in two new instruments concluded in 1997. According to Article IB of the new 1997 Protocol, the 1963 Vienna Convention:

> . . . shall not apply to nuclear installations used for non-peaceful purposes.

A similar term is used in Article II (2) of the new Convention on Supplementary Compensation for Nuclear Damage, the scope of which extends to:

> . . . nuclear damage for which an operator of a nuclear installation used for peaceful purposes situated in the territory of a Contracting Party is liable. . . .

What is meant by "peaceful purposes" is open to interpretation. It will be remembered that this expression is also used in 1982 UNCLOS. The majority understanding in regard to the latter is that the clause prohibits only military activities in violation of Article 2(4) of the UN Charter.[137]

However, the phrase "(non-) peaceful purposes" may have a different meaning in the above IAEA instruments. It seems that these terms were agreed early on

within the Standing Committee. Although no official interpretation is available, there are reasons to believe that the term "non-peaceful purposes" was used to refer to so-called dual-use facilities and therefore has a broader meaning than "military installations."[138] If this interpretation is correct, it would mean that instead of extending coverage to military installations as well, the new instruments will end up narrowing the field of application of the nuclear liability conventions by excluding dual-use (military/civilian) installations.

The recent interest for the application of the Vienna Convention to military installations arose as a result of the serious difficulties experienced during the negotiation of two IAEA Conventions in response to the 1986 Chernobyl nuclear disaster.[139] During the negotiation of the 1986 Convention on the Early Notification of Nuclear Accidents and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, the nuclear superpowers disagreed sharply over whether these should apply to accidents involving military facilities and military activities. Deadlock was only narrowly avoided by agreement over a text which does not expressly mention military and civilian installations or activities, but which distinguishes instead between accidents for which notification is mandatory and those for which notification is voluntary. In accordance with this compromise, Article 1(2) of the Notification Convention lists facilities and activities which are subject to the mandatory notification provisions, which are widely understood to represent civilian facilities and applications. Apart from this, in accordance with Article 3, State Parties have the opportunity to notify "*nuclear accidents other than those specified in Article I.*" This compromise reportedly met the wishes of the nuclear powers on the division of military and civil matters. In addition, some nuclear weapon States have made declarations to the effect that they are prepared to use Article 3 in order to notify releases caused by accidents involving nuclear weapons and nuclear weapons tests. Nonetheless, since most of these declarations stress the "voluntary" character of such undertakings, it is debated whether State Parties are under a positive legal duty to notify accidents related to military activities or military installations.[140] The USSR is thus far the only State to have notified two accidents involving military nuclear submarines.

B. The 1962 Nuclear Ships Convention. The text of the 1962 Nuclear Ships Convention (NS convention) was agreed as a result of negotiations conducted during the 11th session of the Diplomatic Conference on Maritime Law, held in Brussels from 17-29 April 1961. However, major disagreements over several points in the draft text prepared by the *Comité Maritime International* (hereinafter *Comité*) and the IAEA, made it necessary to reconvene the Conference on 14 May 1962 for the sole purpose of dealing with nuclear ships. The final act of the NS

Convention was eventually opened for signature on 25 May, after it had been adopted with a mere 28 votes in favour, 10 against (amongst which were the United States and the USSR), four abstentions and with eight of the fifty participants absent at the time of the final vote.[141]

The incorporation of nuclear warships into the NS Convention continues to remain a divisive issue: it is the principal reason why, more than 30 years after its negotiation, not a single licensing State has ratified the convention, thereby preventing its entry into force.[142] The arguments in favour of the inclusion of these warships into the convention were primarily of practical nature:

- It was expected that for years to come the large majority of nuclear ships would be military ships; the ratio in 1960 was 30:2 and would increase to much higher levels by the end of the decade;
- It was argued that nuclear propulsion represented a real hazard and that the public needed protection against nuclear warships as well; [143]

The contrary views were of a more legal, technical, and even ideological nature. The objectors maintained:

- that rules concerning warships are a matter of public international law since any accident involving these will engage primarily the public, international responsibility of States; that such rules have no place in a convention on private civil liability;
- that if warships would be covered, the resulting limitation of liability would encourage the use of nuclear warships;
- that coverage of warships by the Convention might presage an attempt to impose other types of regulations (safety, international inspection and licensing) on these military ships, which would be wholly unacceptable;
- that no treaty sponsored even in part by the IAEA may relate to any military use of nuclear energy;[144]

The warships question was raised relatively late during the negotiations and led to an extraordinary coalition between the two principal Cold War foes. During the preparatory stages of the Convention, the United States had pushed strongly for the inclusion of warships, but at the Conference itself, the United States delegate declared that he was no (longer) authorised to do so.[145] The United States and the USSR faced a solid block of opposition led by the UK and formed from delegations from all continents and ideologies.[146] In an attempt to appease the two major nuclear powers, the conference agreed on two concessions: one on the

maintenance of liability insurance, the other on the question of jurisdiction. First, Article III.3 provides that the States operating nuclear warships, as well as any other ships operated directly by a Contracting State or by any constituent subdivision thereof, need not maintain any insurance or other coverage.[147] The second conciliatory gesture was that, whereas according to Article X. 1, primary jurisdiction lies at the option of the claimant, either in the courts of Licensing State or of the Party in whose territory the damage was sustained. If the claim is in respect of a warship, resort must be had exclusively to the courts of the Licensing State (X.3).

Writing in the beginning of the 1970s, Professor Szasz noted that the hesitation of the United States to ratify the convention related solely to the question of warships, presumably reflecting the views of the U.S. Navy.[148] Likewise, during the negotiation of the 1969 CLC and Intervention Conventions, the Russian delegate warned against repeating the failed experiment of the NS Convention.[149]

Nevertheless, the compromise which was pioneered in the 1962 Convention—*i.e.*, incorporation of a waiver of sovereign immunity related to State vessels, combined with an exemption for liability coverage and jurisdiction—has re-emerged in other civil liability conferences. Apart from those related to the maritime sector, which will be discussed below, it also inspired the negotiations for the 1989 UN/ECE Convention on Civil Liability for Damage Caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels (hereinafter CRTD Convention).[150] Although this convention does not appear applicable to military premises or installations,[151] it expressly covers cases in which the carrier is a State Party or any constituent part of a State. In furtherance of Article 16 (1) to (4), however, contracting Parties may provide that State carriers shall be dispensed from the obligation to cover their liability by insurance or other financial security.

C. The 1969 Civil Liability Convention. The Brussels Conference, at which both the 1969 Intervention Convention and the Civil Liability Convention (hereinafter CLC) were negotiated, had before it the draft texts prepared by the IMCO Secretariat. The draft articles for the CLC contained a substantive exoneration clause for warships or other ships owned or operated by a State and used for the time being, only on government non-commercial service.[152]

This proposal elicited several comments and amendments revealing widely different views on the matter. With the support of other countries, Norway argued that the CLC should contain no such exception, asserting that the purpose of the convention—ensuring that adequate compensation would be available to persons who suffer damage caused by the escape of discharge of oil from ships—applied as much with regard to warships and State-owned ships as to merchant ships.

Nevertheless, the Norwegian government was willing to consider an exception to the provisions on compulsory insurance and jurisdiction, modelled on the compromise achieved at the 1962 NS Convention.[153] Similarly, the UK government commented that there was no justification for the exoneration proposed by IMCO, adding that these ships might need to be exempted from the provisions on jurisdiction. In any case, the UK did not think that the issue was likely to affect genuine warships, since they did not carry oil in bulk as cargo.[154]

Japan and the United States did not object to the IMCO proposal as such, but wished to add a special provision by which State parties would waive jurisdictional immunities with regard to State-owned or State-operated ships used for commercial purposes.[155]

However, during the discussions in the conference committee, most delegations warned that there had been many difficulties in the past with subjecting warships to the substantive provisions of conventions. The declaration made by Mr. Zhudro of the Soviet delegation was characteristic for this school of reluctant States. He pointed out that State-owned ships were already exempted under several conventions; that it should be borne in mind that the prospective convention would necessarily be linked with the liability provisions of the 1957 and 1924 Conventions, neither of which applied to warships; that attempts to extend the provisions on the Liability of Operators of Nuclear Ships to warships and State-owned ships had led to the failure of the 1962 NS Convention, which not a single State had ratified, and that this unfortunate experience should not be repeated.[156]

The Norwegian amendment was subsequently rejected by 19 votes to 10 with 12 abstentions.[157] By contrast, there was a much clearer majority of delegates in favour of waiving sovereign immunity in regard to State-owned or State-operated ships used for commercial purposes. An amendment to that effect was carried 28 to 6 with 7 abstentions, over strong objections by the USSR.[158] The text (Article XI), finally agreed on, reads as follows:

> (1) The provisions of this Convention shall not apply to warships or other ships owned or operated by a State and used, for the time being, only on Government noncommercial service;
> (2) With respect to ships owned by a Contracting State and used for commercial purposes, each State shall be subject to suit in the jurisdictions set forth in Article IX and shall waive all defences based on its status as sovereign State.

D. The 1971 IOPC Fund Convention. As had been the case for the 1969 CLC, the IMO Secretariat proposed excluding coverage for oil pollution damage caused by warships from the IOPC Fund Convention.[159] The proposal to exonerate the

Fund from liability for damage caused by armed conflict or natural phenomena of an exceptional character was hotly debated at the conference.[160] By contrast, the exemption provision relating to warships and other State-owned ships was accepted without discussion. The final provision (Article 4(2)) reads as follows:

> The Fund shall incur no obligation under the preceding paragraph if: a) it proves that the pollution damage resulted from an act of war, hostilities, civil war or insurrection or was caused by oil which has escaped or been discharged from a warship or other ship owned or operated by a State and used, at the time of the incident, only on Government non-commercial service.

Use of the terms "escape" and "discharge" clearly indicates that both accidental and non-accidental releases are excluded from coverage when caused by these State-owned vessels.

E. The 1971 Convention on Maritime Carriage of Nuclear Material. This 1971 Convention does not contain an express exoneration clause for warships and other State-operated or State-owned ships. Yet, apart from arguments derived from general international law, there are several legal-technical reasons implied in the treaty itself pointing to such an exemption, As explained previously, the convention was concluded to unlock serious problems that had arisen for the maritime transport of nuclear material since the conclusion of the Paris Convention and Vienna Conventions. According to an OECD report on the matter, commercial transport of such material had virtually come to a standstill because of the indemnity coverage requested by the commercial carriers. Nuclear operators had to rely on transport by air, or wait instead for a warship to be made available.[161] Seen against this background—reflected in the preamble of the 1971 Convention—it is clear that the latter was intended to deal with private, commercial transport of nuclear material and not with warships. Secondly, the wording of Article 1 demonstrates that the provisions of the 1971 Convention should be interpreted in conjunction, *inter alia*, with both the Paris and Vienna Conventions:

> Any person who by virtue of an international convention or national law applicable in the field of maritime transport might be held liable for damage caused by a nuclear incident. . . .

Therefore, any defence under the established (civil) nuclear liability régimes will by analogy be available under the 1971 Convention as well. As was explained above, it is commonly assumed that neither the Paris nor the Vienna Conventions

applied to military installations and activities. The two new instruments concluded in 1997 appear to have confirmed this and extended the exclusion to "dual-use" installations.[162]

F. The 1996 HNS Convention. Almost two decades after it was first planned, the International Convention on Liability and Compensation for damage in connection with the carriage of Hazardous and Noxious Substances (HNS) by sea, was finally adopted in 1996 under IMO auspices. It was only at a very late stage, in 1991, that the first proposals on State-owned ships surfaced within IMO's Legal Committee.[163] It would soon become clear that some delegations were of the view that sovereign immunity of State-owned ships was satisfactorily regulated by general international law and domestic law, whereas others thought that the HNS Convention could usefully contribute to achieve uniformity and consistency in this area.

The Committee's first draft was strongly inspired by the civil liability regimes for oil pollution damage, and based on the relevant provisions of the 1969 CLC and 1971 Fund Conventions.[164] These proposals were immediately criticised on several grounds. One delegation considered the provisions superfluous on the ground that it was adequately regulated by Article 96 of 1982 UNCLOS. However, another delegation pointed out that the paragraph might still be of use in the case of States not party to 1982 UNCLOS. Other delegations voiced their preference for the wording of Article 4 of the 1989 Salvage Convention,[165] claiming that this represented a more recent formulation of the sovereign immunity doctrine.[166] Mexico insisted that the exoneration provision should be amended so as to include a recommendation to States "when reasonably possible," to endeavour to ensure that such ships do not hinder the application of this convention.[167]

Discussion of the issue was resumed at the Legal Committee's 66th session in March 1992, on the basis of alternative proposals tabled by the United States and Mexico. The new texts were based on provisions borrowed from Article 4 of the 1989 Salvage Convention and Article 236 of 1982 UNCLOS. The draft was thoroughly amended and discussed during subsequent sessions at which it became clear that some delegations still held opposite views on the matter. Some regarded a detailed regulation of the matter desirable to promote uniformity and consistency on the matter of sovereign immunity in the field of maritime law, others claimed that the issue of a possible waiver of sovereign immunity was a matter of domestic law.[168]

After still more discussions,[169] agreement was eventually reached within the Legal Committee on a version combining elements of three previous conventions: 1969 CLC, 1989 Salvage Convention and 1982 UNCLOS.[170] This latest

proposal formed the basis of the provision finally accepted by the 1996 Conference. Article 4 reads in relevant part as follows:

> (4) Except as provided in paragraph 5, the provision of this Convention shall not apply to warships, naval auxiliary or other ships owned or operated by a State and used, for the time being, only on Government non-commercial service.
> (5) A State Party may decide to apply the Convention to its warships or other vessels described in paragraph 4, in which case it shall notify the Secretary-General thereof specifying the terms and conditions of such application.
> (6) With respect to ships owned by a State Party and used for commercial purposes, each State shall be subject to suit in the jurisdictions set forth in article 38 and shall waive all defences based on its status as a sovereign State.

The exemption clause for the "Fund" part of the convention was never challenged, and covers accidental and non-accidental releases. Final Article 14 (3) (a) exempts the Fund when it proves that:

> . . . the damage was caused by hazardous and noxious substances which had escaped or been discharged from a warship or other ship or owned or operated by a State and used, at the time of the incident, only on Government non-commercial service.

6.2.7. Intervention Series

- **International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Damage, 1969**
- **Protocol Relating to Intervention on the High Seas in Cases of Marine Pollution by Substances other than Oil, 1973**

A. The 1969 Intervention Convention. The 1969 Intervention Convention was adopted under IMCO auspices by the International Legal Conference on Marine Pollution Damage, 1969. This was held in the wake of the 1967 *Torrey Canyon* disaster, in which a Liberian-registered tanker, stranded outside British territorial waters near the Scilly Isles, was seriously polluting beaches in Cornwall, Devon, the Channel, and Brittany. The UK took unprecedented action to protect its interest: it employed military aircraft which used rockets and napalm to bomb and destroy the vessel and to set fire to the oil. Naval forces as well carried out extensive spraying of the oil slick with chemicals and by mechanical means.[171]

One of the main purposes of the 1969 Conference was to clarify the measures which coastal States may take in similar circumstances. Without passing direct judgement on the UK actions, the conference parties were able to reach agreement on the conditions and modalities of the right of intervention by coastal States with respect to certain maritime casualties occurring on the high seas. In the case of a maritime casualty, defined in the Convention as:

> . . . a collision of ships, stranding or incident of navigation, or other occurrence on board a ship external to it resulting in material damage or imminent threat of material damage to a ship or cargo.[172]

State Parties to the 1969 Convention:

> may take such measures on the high seas as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests from pollution or threat of pollution of the sea by oil. . . .[173]

Furthermore, the terms "related interests," which a coastal State may take into account, include conservation of living marine resources and of wildlife.[174]

However, before taking the measures deemed necessary, and unless extreme urgency requires otherwise,[175] the coastal State is obligated to notify and consult other affected States, including the flag State as well as independent experts drawn from an IMCO list.[176] Furthermore, any measures taken by the coastal State will need to be proportionate to the damage actual or threatened to it, and may not go beyond what is reasonably necessary to achieve the purpose laid down in Article I.[177] Any Party which causes damage by contravening the provisions of the Convention is liable to pay compensation.[178]

The Conference parties had before it a draft text which was the outcome of almost two years of discussions within IMCO's Legal Committee. The resulting draft included in Article I an explicit but partial waiver with respect to State-owned ships, as follows:

> However, no measures shall be taken under this Convention against any warship or other ship owned or operated by a State and used for the time being only on government non-commercial service.[179]

This draft exemption clause was objected to on several grounds:

- Since the purpose of the convention was to deal with measures in case of (oil) pollution casualties, no ship should be allowed to escape the convention by a virtue of its special status or ownership;[180]
- A blanket prohibition to take measures against the ships mentioned in the clause would only be acceptable if the coastal State had an undisputed right of recourse to the flag State (*quod non*);[181]
- In a Resolution on the subject adopted by the Institut at its session at Edinburgh on 12 September 1969, *all* oil tankers had been excluded from an otherwise identically worded warship exemption clause;[182] Ghana subsequently lodged an amendment with the IMCO conference in this sense;[183]
- Some delegations were dissatisfied with IMCO's proposal to exempt certain State-owned ships in addition to warships. The Italian delegation considered it arbitrary and tabled an alternative proposal according to which no measures would be allowed "against any warship or other ship owned by a State and used to carry oil for military purposes";[184] Other intervenors also thought that the IMCO proposal seemed to place the burden of proof unfairly on the coastal State;[185]
- Norway regarded the draft clause as ambiguous and proposed a separate article to exempt warships and other State-owned ships—used for the time being on government non-commercial service—from the scope of the convention altogether;[186]

However, after extensive debate, none of the above views carried the day. The Norwegian proposal was not put to the vote, because it was felt that it might imply that warships could not be used to prevent or eliminate pollution of the sea.[187] All other proposals were rejected by substantial majorities.[188] The views held by majority can be summarised as follows:

- The USSR and other Eastern Block countries invoked general international law, which in their view left no room for doubt: warships could not be made subject to the jurisdiction of another State; furthermore, the proposal to exempt measures against State-owned ships used on non-commercial service was similar to Article 9 of the 1958 Geneva Convention on the High Seas. The USSR added that it "would be a political error to grant immunity exclusively to warships, since the conference would give the impression of favouring warlike interests";[189]
- Sweden, Germany and Poland appealed to "realism" and pointed out that *all* conventions made exceptions for warships and State-owned ships,

and that hence many countries would oppose the deletion of the exemption;[190]

- Finally, the Chairman of IMO's Legal Committee assured delegates that the proposed exemption was the outcome of two long years of thorough discussion and research, during which, all legal aspects of the problem had been considered.[191]

The final provision (Article 1(2)) reads in relevant part as follows:

> However, no measure shall be taken under the present Convention against any warship or other ship owned or operated by a State and used, for the time being, only on government non-commercial services.

B. The 1973 Protocol. The 1973 Protocol to the 1969 Intervention Convention, as its title indicates, was concluded to establish a right of intervention by coastal States for marine casualties on the high seas involving marine pollution by substances other than oil. It was adopted by the same international conference that led to the 1973 MARPOL Convention.[192] On the question of warships and other State-owned ships, IMCO proposed that the Conference adopt the same solution as agreed in 1969 for oil pollution casualties.[193] This proposal did not encounter any opposition. The relevant article was adopted by forty votes to none, with six abstentions.[194]

C. Conclusions Regardinq the Intervention Series. From the views that prevailed during the preparation of the 1969 Conference, it is clear that the nature of the agreed exemption clause relates only to jurisdictional immunity. What the drafters of the convention wanted to prevent at all cost was establishing a right of intervention or interference on the high seas by a coastal State with regard to vessels and property owned by a foreign State. Protests that this would be unfair to coastal States, especially since there was no general right of recourse to the flag State, fell on deaf ears. Another "progressive" view that was aired but quickly dismissed during the conference was that pollution and environmental considerations should outweigh conservative misgivings based on sovereign immunity. Whether these views have undergone change in later IMO conventions will be examined below. On the other hand, it is now accepted that the right of intervention by coastal States beyond their territorial sea has become part of customary international law.[195] The 1969 Convention has been widely ratified, and similar provisions can be found in Article 221 of 1982 UNCLOS and, as will be seen below, in the 1989 Salvage and the 1990 OPRC Conventions.[196] Moreover, there have been no serious disputes in practice involving coastal States' rights of intervention.[197]

Finally, since the type of immunity agreed in the 1969 Convention and the 1973 Protocol is of a pure jurisdictional nature, it is impossible to draw conclusions on the fate of the convention and its protocol during war/armed conflict on the basis of the exemption clauses alone.

6.2.8. Salvage

- **Convention for the Unification of Certain Rules of Law relating to Assistance and Salvage at Sea, 1910**
- **1926 International Convention for the Unification of Certain Rules relating to the Immunity of State-owned Vessels, 1926**
- **International Convention for the Unification of Certain Rules relating to Assistance and Salvage of Aircraft or by Aircraft at Sea, 1938**
- **Montevideo Treaty on International Commercial Navigation Law, 1940**
- **Protocol to Amend the Convention for the Unification of Certain Rules of Law relating to Assistance and Salvage at Sea, 1967**
- **International Convention on Salvage, 1989**

A. The 1910 Salvage Convention. On September 23, 1910, two conventions were signed in Brussels at a Conference convened under the auspices of the *Comité*: one establishing uniform provisions on rules relating to collisions, the other relating to salvage. The initiative for a convention on salvage rules dated back from 1885 and was discussed at three international conferences before the final text could be agreed on.[198]

Pursuant to Article 14, the Convention does not apply to ships of war and government ships appropriated exclusively to a public service. While there is little trace of any substantive discussion in the conference records, the exemption became the subject of divergent interpretations after the conclusion of the treaty. Although Article 14 does not distinguish between salvage services rendered *by* or *to* the exempted categories of ships, it was suggested that the article would not exclude application of the convention to services rendered by warships.[199]

Such views were firmly rejected by Dutch commentator Wildeboer, on the following two grounds: 1) At the time the 1910 Convention was negotiated, the question of whether warships were entitled to salvage remuneration at all, was heavily debated amongst scholars; 2) Article 14 reflects a simple truth: the convention was intended to regulate matters of private maritime law and not matters of public international law. In particular, Article 14 does not state that no salvage awards can be obtained for services rendered *to a ship* belonging to the excluded categories, but neither does it state that such ships *would not be entitled to a salvage*

reward for salvage services rendered.[200] Wildeboer maintained that all that can be derived from Article 14 is that no salvage award could be claimed for services rendered to or by the excluded categories of ships on the *basis of the convention*. It was up to the domestic law of the contracting Parties to regulate instances involving public vessels. This account concurs with the comments made by a French writer.[201]

B. The 1967 Protocol. On May 27, 1967, a protocol amending the 1910 Convention was adopted at a Diplomatic Conference convened in Brussels at the initiative of the *Comité*. Its sole purpose was to introduce a new provision[202] completely reversing Article 14. In furtherance of the first paragraph of Article 1 of the protocol, the 1910 Convention also applies to assistance or salvage services rendered *to* or *by* ships of war and other State-owned or State-operated ships. The second paragraph stipulates that claims for salvage awards rendered to such ships shall only be brought in the courts of the State concerned, whereas according to the third paragraph, State parties have the right to determine to what extent the duty to render assistance laid down in Article 11 of the main convention applies to the State-owned ships in question

The reason for this striking reversal is that Article 14 of the 1910 Convention had reportedly become outdated; by the 1960s, salvage rewards could be obtained in most countries for services rendered to the previously excluded categories of ships.[203] This change was reflected in various international instruments concluded since the beginning of the century. In accordance with these, State parties agreed to waive their jurisdictional immunity in part, in regard to claims involving assistance and salvage services rendered to public ships.[204]

It is noteworthy that the 1967 Brussels Protocol differs from these instruments in that it also deals with the question of salvage services rendered *by* warships and other State-owned ships. This issue was addressed at the *Comité*'s Rijeka Conference in 1959, at which proposals for modification of Article 14 were discussed.[205] Subsequently, the conference passed a resolution on the matter which stipulates, *inter alia*:

> When a ship of war or any other ship owned or operated by a State or a Public Authority has rendered assistance or salvage services, such State or Public Authority has liberty to claim remuneration but only pursuant to the provisions of the Convention.

If such is the meaning underlying Article 14, as amended by the 1967 protocol, it involves a significant change in the scope of the rules on sovereign immunity

for State parties to the 1967 protocol. Indeed, in addition to a (partial) waiver of their jurisdictional immunities in regard to salvage services rendered to State-owned ships, parties to the Protocol would thus undertake to subject their ships to the *substantive rules* of the treaty regarding salvage services and remuneration by such ships.

The last paragraph of Article 1 of the 1967 protocol modifying Article 14 of the 1910 Convention confirms the view expressed above;[206] namely, that Article 11 on the duty of shipmasters to render assistance to all persons in danger at sea, even if they are enemies, does not allow for any conclusions on the application of the 1910 Convention between opposing belligerents in time of war. Indeed, the meaning of the last paragraph of Article 1 can be traced to a sentence in the above mentioned Rijeka resolution which reads:

> The High Contracting Parties reserve themselves the right of fixing the conditions in which Article 11 will apply to Masters of ships of war.

This phrase demonstrates that what Article 11 was meant to address was the universal moral duty incumbent on any master of a "civilian ship" to render assistance to persons in need, a duty which held good in times of war. Finally, it should be noted that the 1967 protocol has received only a moderate following. It took ten years to receive the required five instruments of ratification or accession necessary for its entry into force[207] and has at present barely 10 State parties.[208]

C. The 1989 Salvage Convention. Following the 1978 *Amoco Cadiz* disaster, the subject of the shortcomings of the international law on salvage was placed on IMCO's agenda at the insistence of France.[209] In March 1979 the *Comité* offered to assist IMCO in the preparation of a new draft convention. The offer was accepted and the *Comité* adopted a draft at its 32nd Conference held in Montreal in 1981. The proposal was then submitted for consideration by IMCO's Legal Committee at its 46th session held the same year.[210]

The 1989 Convention differs from the 1910 Convention in many respects. One of these differences was already highlighted, namely the explicit incorporation of financial incentives to minimise or reduce environmental pollution into the salvage award.[211] Furthermore, the 1910 Convention regulates matters generally considered as belonging to the sphere of private maritime law and is concerned only with the contractual relationships between the salvor, the master of the ship, and the owner of the property. In contrast, the 1989 Convention is not only concerned with these relationships but adds to the international law of salvage a substantial body of rights and duties that belong to the sphere of public

international law. The most conspicuous innovations, apart from the above-mentioned financial incentives, are the explicit duty of the salvor, master and the owner to exercise due care to prevent or minimise damage to the environment[212] and the explicit recognition of the rights of coastal States "to take measures in accordance with generally recognised principles of international law to protect its coastline or related interests from pollution," including the right to give instructions to the salvor.[213]

The conference records of the 1989 Convention are of particular interest for the evolution of the concept of immunity and its application to maritime conventions. During the preparatory work in IMO's Legal Committee, the provisions touching on sovereign immunity were extensively debated by government delegates. The ensuing declarations and the provisions of the treaty itself constitute in many respects among the most recent evidence of treaty practice and *opinio juris* on the subject.

The 1981 draft by the *Comité*, which served as a basis for discussion by IMCO/IMO, followed the 1910 Convention in exempting from the scope of the convention:

> . . . warships or other vessels owned or operated by a State and being used at the time of the salvage operations exclusively on governmental non-commercial services.[214]

In its commentary to this provision, the *Comité* noted that whilst such State-owned ships had been excluded from the 1910 Convention, the situation was reversed by the 1967 Brussels Protocol. However, the *Comité* felt that in view of the rather limited acceptance of the latter instrument, the new Convention should not deal with these issues, which should instead be left for separate regulation.[215]

The question of the status of warships and other State-owned vessels led to divergent views from the very moment that IMO's Legal Committee commenced the in-depth study of the *Comité*'s draft. During its 52nd session in 1984, and subsequent sessions up to the 56th, several delegates argued that they saw no reason why these ships should not be subject to the ordinary rules on salvage, while others wanted to allow an option for States to apply the provisions of the draft if they saw fit. Still other delegates wanted to broaden the exemption to include government-owned non-commercial cargo as well. The *Comité*'s draft was also criticised for failing to distinguish between instances where State-owned ships rendered salvage services and those where salvage services were rendered to such ships, and for not dealing with the question of State-owned cargoes transported on commercial ships. Finally, some delegates thought that the matter should be left out from the convention altogether, claiming that the question of immunity should either

be dealt with by a special convention on the subject or by the laws of the individual States. Others drew attention to the fact that the matter of sovereign immunity was being studied by the ILC.[216]

The first genuine alternatives to the *Comité*'s draft were proposed in 1986 during the 56th session of IMO's Legal Committee, during which three alternatives were proposed. According to the first one, a State party may stipulate in its national legislation that the convention *shall not apply* to warships and other State-owned ships either for services rendered to such ships or for services rendered by such ships. The State would be required to notify the depositary of such an exemption. According to the second alternative, a State party *wishing to apply* the convention to public ships would be required to *so notify* the depositary. In furtherance of a third alternative, the convention would contain a provision extending the scope of its application *expressis verbis* to salvage services rendered to warships and other enumerated State-owned ships, whilst States would have to notify the depositary should they wish to apply the convention to State-owned ships beyond that.[217]

Shortly thereafter, a further proposal was submitted to the Legal Committee's 57th session, according to which the convention would not apply to "property owned, possessed, shipped or controlled by a State and not in use or intended for use for commercial purposes."[218] The United States in particular warned that failure to specifically exclude governmental non-commercial cargo would have a significant impact upon traditional principles of sovereign immunity. She accepted that the application of the convention to government-owned commercial cargo was entirely appropriate, but argued that application to non-commercial cargo interfered with vital government functions and would be inconsistent with current international and U.S. national law.[219]

The report on the Legal Committee's 57th session shows that most delegates were concerned that extending the scope of the convention automatically to warships and State-owned ships might encroach on the principle of sovereign immunity by subjecting these ships to all of the treaty's provisions. There was a clear majority for the proposal to exempt warships and other State-owned or State-operated ships in principle from the convention and to add a paragraph to the effect that States that elect to waive this exemption shall so notify the depositary. On the other hand, the U.S. proposal to exonerate in addition State-owned non-commercial cargo ran into opposition on practical grounds. Many delegates argued that it would be very difficult for a salvor rendering assistance to a vessel to determine which of the cargoes on board fell within the scope of the exemption.[220]

During the Legal Committee's 58th session, the above views were firmed up. Agreement was reached on the text of a new article (code-named "Y") for

inclusion among the final clauses of the convention.[221] At the same session, delegates engaged also in an in-depth discussion of a revised U.S. submission to exempt from the scope of the convention:

> ... property owned or shipped by a State for governmental and non-commercial purposes whether on board a vessel described in subparagraph (c) or a commercial vessel.

However, the various misgivings among the Committee's members on this issue could not be ironed out. Objections were voiced on practical grounds—the impossibility for a salvor to identify the cargo benefiting from immunity—and on legal-technical grounds: the term "property" was considered as being too wide and deviating from the concept of State-owned cargo in the 1926 Brussels Convention; on the whole, the number of exemptions from the salvage treaty would become too numerous.[222]

The International Conference on Salvage was convened in London, in April 1989. Two countries made further special submissions for consideration by the Conference. Germany (FRG) claimed that the above mentioned article "Y" confused two elements of generally accepted principles of public international law. She argued that extending the Convention's provisions to warships should either be entirely up to the national legislator without any obligation to notify this act, or that there should be a reservation clause combined with a duty of notification. However, the delegate indicated that Germany would be prepared to accept a provision like Article 1 of the 1967 Brussels protocol amending the 1910 Convention.[223]

The United States submitted proposals for two new articles to the conference. The first related to the status of State-owned property/cargo on commercial vessels. In the text accompanying this submission, the United States explained at length that it was not concerned with the substantive issue, for it recognised that government owners were obligated to pay for salvage services rendered in respect of such cargo, but that it wanted to ensure that the Convention would not be used "as a basis for abridging sovereign immunity principles." The following new provision was proposed:

> Unless the State owner consents, no provision of this Convention shall be used as a basis for the seizure, arrest or detention of cargoes owned by a State and entitled to sovereign immunity under accepted principles of international law, nor shall articles 4, 2, 17, 18, 19, 21 and 22 apply to such cargoes.

In the eyes of its promoter, the text had two main advantages: it would reconcile the Salvage Convention with what it regarded as the "evolving nature" of

sovereign immunity and would also take the specific treaty obligations of State Parties to the 1926 Brussels Convention on the Immunity of State-owned Ships into account.[224]

The second proposal related to a new subject, the status of humanitarian cargoes donated by the State to private charities and shipped world-wide. There are cases in which the donating State does not hold title to such cargoes as a consequence of which they would not be covered by the sovereign immunity exemption. The United States suggested that in cases where the donor State voluntarily undertakes to pay for salvage services in respect of such cargoes, a way should be found to avoid subjecting such cargoes to unnecessary delay. Its delegation therefore proposed an additional provision to this effect.[225]

During the conference, the sovereign immunity issue raised much less controversy than was presaged by the preparatory work. First, the proposed article "Y" on State-owned vessels was accepted after provision was made for salvage operations controlled by public authorities.[226] The U.S. proposal in relation to humanitarian cargoes was well received, whilst the proposal on State-owned cargoes was debated by an informal working group.[227]

The text of the final provision relating to State-owned vessels (Article 4), reads as follows:

> (1) Without prejudice to article 5, this Convention shall not apply to warships or to other non-commercial vessels owned or operated by a State and entitled, at the time of the salvage operations, to sovereign immunity under generally recognised principles of international law unless that State decides otherwise.
> (2) Where a State Party decides to apply the Convention to its warships or other vessels described in paragraph 1, it shall notify the Secretary-General thereof specifying the terms and conditions of such application. [228]

D. Evaluation.

(1) The 1989 Convention entered into force on 14 July 1996. It has thus far attracted 25 States representing 27.67 percent of world tonnage.[229] Although it does not contain an express clause to that effect, there can be little doubt that it is meant to replace the whole of the 1910 Brussels Convention. This follows from the rules of general treaty law on successive conventions on the same subject[230] but can also be substantiated with observations made during the *Comité*'s preparatory work.[231] This is confirmed by the title page of the Report and Commentary prepared by *Comité*.[232]

The above issue is important because conflicts between the rights and duties of States that are parties to two or more of the discussed international instruments

on salvage cannot be excluded.[233] Precisely the provisions on immunity of public vessels might conceivably be a source for conflicts, for they were treated differently in each of the instruments discussed.

(2) A second question is that of the nature of the exemptions related to immunity that were incorporated into the 1989 Convention. This has taken on added importance because of the convention's environmental protection provisions. Thus far not a single State has taken advantage of the offer contained in Article 4(2) and notified IMO of its desire to apply the provisions of the convention to its warships and other state-owned ships. Presumably therefore, the convention does not apply to the majority of the current Parties' public vessels. But does this mean that masters of such ships, in case they are involved in salvage operations, are also exempted from the duty "to exercise due care to prevent or minimise damage to the environment"?[234]

It is submitted that the answer to this question cannot be derived from the treaty itself but should be sought in general public international law and the domestic laws of States for the following reasons:

- It was submitted that the better interpretation of the warships provision in the 1910 Convention was that the latter regulated provisions of private maritime law and was not intended to deal with matters of public international law at all. Although the 1989 Convention covers matters of public international law in addition to contractual ones, the discussions held within the *Comité*, within IMO's Legal Committee and during the 1989 Conference do not permit to conclude that the tenor and scope of the exemption relating to State-owned vessels would have changed. Obviously, this consideration leaves aside the reversal of the exemption by the 1967 Protocol, for that solution seems to have fallen out of international favour. Thus, the 1981 draft by the *Comité* and the commentary in relation to the proposed exemption relied entirely on the 1910 Convention and advised against adopting the solution of the 1967 protocol. It is noteworthy too that the draft articles on Jurisdictional immunities of States and their Property, which were presented by the ILC to the UN General Assembly in 1991, confirm the general direction taken by the 1989 Salvage Convention: draft provisions Article 16 (1) and Article 16 (5) explicitly exempt warships and other State-owned vessels used for non-commercial purposes, in addition to ditto State-owned cargoes, from the proposed rules on proceedings in respect of salvage and other instances of marine emergency.
- The 1989 Convention deals in Article 5 with "salvage operations controlled by public authorities." This Article was proposed by the *Comité* and has

been adopted without change by IMO. In its commentary to the Article the *Comité* explained the tenor of this article as follows:

> *The draft convention does not deal directly with questions related to salvage operations by or under the control of public authorities, nor does it deal with the rights of salvors to payment in such cases from the authority concerned.*[235]

Since such salvage operations may involve State-owned vessels, although admittedly not always, the *Comité*'s commentary is indicative of the fact that much like in 1905-1910, the drafters of the revised convention preferred to adopt a hands-off approach for issues related to public authority.

- Whenever the question of immunity came up during the context of the preparatory work of the 1989 Convention, only jurisdictional aspects of immunity were addressed. This limitation of the scope of the discussed exemptions is also apparent from the subject matter of the other international instruments to which reference was made during the discussions—*e.g.*, the 1926 Brussels Convention and the work of the ILC.
- The text of the provisions on State-owned cargoes and humanitarian cargoes itself leaves no doubt about the limitation of the breadth of the exemptions: Articles 25 and 26 only mention jurisdictional or procedural issues.
- It was seen above that the problem of "Humanitarian cargoes" was presented as an issue related to the sovereign immunity of State vessels and State-owned cargoes. Although the protection afforded by Article 26 resembles jurisdictional immunity, it should not be considered an addition to theory and practice of "sovereign immunity." This is so because the State which donates the cargoes—as explained by the promoter of the article—does not always retain title to the property; furthermore, the prohibition contained in Article 26 is far from unconditional: the cargoes cannot be seized "if such State has agreed to pay for salvage services rendered in respect of such humanitarian cargoes." In other words, the article does not exclude litigation involving such cargoes.

(3) The next question that arises is how the above reflects on the status of the convention during armed conflict. Clearly, the 1989 Salvage Convention is an example of a treaty the drafters of which did not wish to be drawn on the issue of the application of the substantive provisions of the convention to public vessels.

Consequently, the exemption of warships in Article 4(1) cannot be taken to imply that these vessels would not be under a duty to take due care to protect the environment when engaged in salvage operations. The extent of the environmental duties incumbent on such vessels would depend (1) on the domestic law of the State concerned; (2) on whether this State has made a notification in accordance with Article 4(2) to the effect that it shall apply the provisions of the convention to its vessels; (3) on general international law. With respect to the latter it should be remembered that the incorporation of environmental provisions into the international law of salvage is of recent vintage, and that the convention itself entered into force for State parties by mid-1996 only. Therefore, it is rather unlikely that its environmental provisions would have reached customary law status.

It is nonetheless possible to draw some conclusions on the effect of the 1989 Salvage Convention during naval war. This will be done in the next chapter.

6.2.9. The 1990 OPRC Convention

- **International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC Convention), 1990**

As suggested earlier, the 1990 OPRC Convention occupies a special place in the context of this enquiry.[236] It was resorted to by IMO to deal with the aftermath of (an) oil spill(s) caused in the course of the 1990–1991 Gulf war. Some of its provisions were implemented on a provisional basis in 1991, well before it formally entered into force in 1995. Furthermore, as will be seen immediately below, part of the preparatory work for the convention was held during the Gulf war itself. Iraq invaded Kuwait on August 2, 1990; the diplomatic conference leading to the OPRC Convention was held in November 1990 when the Desert Shield operation took place, during which troops were deployed in preparation for the Desert Storm phase of the Gulf war. The latter phase started on January 16-17, active combat was stopped on February 27, and the terms of a cease-fire were set by Security Council Resolution 686 of March 2, 1991. The reason why this time frame is important is that several of the principal "belligerents" participated in the preparatory work for the Convention: *e.g.*, the United States, the UK, Saudi Arabia, and Kuwait.

The catalyst for the 1990 OPRC Convention was, once again, a genuine maritime incident. Following the March 1989 *Exxon Valdez* disaster in Prince William Sound in Alaska,[237] the IMO Assembly requested the Marine Environment Protection Committee (hereinafter MEPC) to:

> . . . develop, for consideration at a conference, a draft international convention on oil pollution preparedness and response which would provide a framework for international co-operation for combating major oil pollution incidents taking into account the experience gained within existing regional arrangements on combating marine pollution. . . .[238]

Subsequently, the MEPC established a Working Group which was instructed to prepare a draft for a convention.[239] This was based on a proposal made earlier by the United States, developed in informal consultations with experts from several IMO Member States, the EEC and the IMO Secretariat.[240]

The next stage was the convening of a Preparatory Meeting for the Conference on International Co-operation on Oil Pollution Preparedness and Response, which was held at IMO headquarters from 14-18 May 1990.[241] This Preparatory Meeting reviewed the text of the draft convention as well as the report prepared by the MEPC Working Group.[242] The outcome of this meeting was a new draft for an "International Convention on Oil Pollution Preparedness and Response" as well as seven draft resolutions dealing, *inter alia*, with an appeal for the early implementation of the Convention and with the expansion of the scope of the Convention to Hazardous and Noxious Substances.[243] During none of these preparatory stages did questions related to warships and other State-owned ships arise.

The Conference on International Co-operation on Oil Pollution Preparedness and Response was convened in London from 19 to 30 November 1990. It is worth observing that it was attended by Kuwait, Saudi Arabia, the UK, the United States and many other countries that would form part of the Gulf War Coalition, in addition to Iran (but not Iraq).[244] Only at this fairly advanced stage was the status of warships and other State-owned ships under the prospective convention brought up. As has been the case with so many other treaties, the initiative came again from the U.S. delegation. She explained that her proposal was borrowed from MARPOL 73/78, giving the following justification:

> *The draft Convention calls upon Parties to impose certain requirements upon ships flying their respective flags. Such regulatory requirements are appropriately applied, pursuant to international agreements, to ships engaged in commercial service. However, it would be inconsistent with long-standing international practice for an international convention to require the application of such requirements to warships, naval auxiliaries, or other ships owned or operated by a State and used, for the time being, only on government non-commercial service.*[245]

Apart from "long-standing international practice," it might be that the impetus for the U.S. proposal was inspired by the then on-going military buildup in

the Persian/Arabian Gulf. But this is only an assumption, since there is no written evidence that the Persian Gulf situation was discussed during the November conference. In any event, the U.S. proposal for the insertion of an immunity clause modelled on MARPOL 73/78, was adopted without much discussion.[246] The final text can be found in Article 1(3) of the Convention.

As for the scope of the immunity clause of the OPRC Convention, it is manifest that the State-owned ships in question are formally exempted from the substantive provisions of the Convention; this follows not only from the fact that the clause was borrowed in its entirety from MARPOL 73/78, but also from the commentary provided by its initiator, the U.S. delegation. Consequently, what has been said above on the environmental implications of the MARPOL formula in general, and during armed conflict in particular,[247] applies *mutatis mutandis* to the OPRC Convention as well.

6.2.10. Wreck Removal

- **Draft Convention on Wreck Removal 1995**

In the view of its advocates, the proposed international convention on wreck removal would enhance and complement the international law relating to maritime casualties by clarifying the duties of shipowners and States with respect to hazardous wrecks. Shipowners would not only be responsible for making a full report on casualties involving their ships in accordance with IMO guidelines, but would also be financially liable for locating, marking, and removing the hazardous wrecks.[248] The States whose interests are the most directly threatened by the wreck would be responsible for determining whether a hazard exists. Furthermore, the prospective convention would provide guidance for this determination through a non-exhaustive list of criteria encompassing considerations relating to the marine environment, public health and the economic interests of the coastal States.[249]

The 1995 draft submitted to IMO's Legal Committee contains a proposal for an exoneration clause, identical to Article 4(1) and (2) of the 1989 Salvage Convention.[250] Its promoters have justified this provision citing grounds of general international law:

> In accordance with customary international law (as reflected in Articles 32, 95 and 96 of UNCLOS) the Convention would not apply to warships and other ships owned or operated by a State and used for non-Commercial purposes.[251]

One may conclude therefore that in accordance with this comment, Article 4 of the 1989 Convention and proposed Article III of the draft Convention on Wreck

Removal constitute either a reflection or a special application of the general rule of international law on the substantive aspects of immunity of public vessels.

6.3. Conclusions to Chapter VI

1. The above examination has borne out that there exists a great diversity of exemption clauses for State property in maritime and other treaties. The differences relate not only to the wording of the clauses, but also to their meaning and scope, and in particular to the question of whether they offer only jurisdictional immunity or, in addition, immunity from the material provisions of the instruments. It would be impossible to formulate general conclusions, in particular regarding the relationship between armed conflict and these treaties. Nonetheless, the following trends can be discerned

2. During the preparatory work for many maritime conventions, it was often argued that exempting warships and other State-owned ships was a sensible solution, in view of the principle of sovereign immunity. There can be little doubt that sovereign (jurisdictional) immunity of public vessels forms part of customary international law. However, whether this should be broadened to cover exemption from substantive provisions of maritime conventions is the subject of continuous debate. In addition, the above analysis has shown that international law on jurisdictional immunity itself is not immutable. Some of the treaty clauses discussed here have made a substantial contribution to general public international law by either confirming the accepted wisdom, or by producing a refined version of the pre-existing rules.

3. The above examination has also demonstrated that especially in the 1960s, many countries started to question the traditional wisdom that warships should be exempted automatically from compliance with maritime conventions. Most conspicuous in this regard were the discussions held during the following conferences: the 1962 "OP" Conference to amend the 1954 OILPOL Convention, the Brussels Conference leading to the 1962 NS Convention, the 1967 Brussels Conference of the *Comité* leading to the 1967 Protocol to the 1910 Salvage Convention, and the 1969 Brussels IMCO Conference leading to the 1969 Intervention Convention and the 1969 CLC.

4. Although the principle of the exemption of warships was not seriously challenged as such, the 1973 MARPOL Conference constitutes in a sense a watershed. It was seen that the compromise formula which was agreed during that conference has been widely copied by an impressive range of treaties and other international instruments, both within and outside IMCO/IMO context, and is used even in interpretative statements in regard to treaties dealing with media other than the marine environment. Crucially, the MARPOL formula was included in 1982

UNCLOS. As a result, one may conclude that it is now a rule of general public international law that States should apply appropriate rules and standards for the protection and preservation of the marine environment to public vessels "insofar as reasonable and practicable," and "without impairing their operations or operational capabilities." It was seen too that the entire military sector is increasingly required to comply with domestic environmental legislation, at least in peacetime.

5. When the groundwork was laid for the 1989 Salvage Convention, the issue of immunity of warships, of other State-owned ships and ditto cargo was again subjected to a thorough review by delegations of various countries. The outcome of this was, at a minimum, the addition of a nuance to and a change of tone of the classic exemption clause. Whereas under the MARPOL formula, Parties undertake to apply equivalent standards to State-owned ships, they are not required to report such measures to the depositary or other State parties. Under the formula of the 1989 Salvage Convention, States are explicitly offered the opportunity to apply the Convention to ships which are normally exempted. In addition, States that wish to take this course need to inform the depositary of this fact. Since the new Salvage Convention entered into force in 1996, it is too early to tell whether the new formula represents not only a development of the doctrine, but whether it will be widely accepted as a new (treaty) norm. Already, the record seems mixed. It is true that the 1989 "Salvage formula" has been used in the texts of two other IMO conventions: in the HNS Convention, adopted in 1996 and in the recently tabled draft convention on Wreck Removal. On the other hand, none of the States that have thus far ratified the 1989 Salvage Convention have made use of the offer to apply its provisions to the State-owned ships in question. Furthermore, the immunity clause incorporated into the 1990 OPRC Convention follows the MARPOL Convention and not the Salvage Convention. The 1992 OSPAR Convention, replacing the 1972 Oslo Regional Dumping Convention, includes a reference to mere jurisdictional immunity. Finally, it was seen above that in response to criticism on the exemption of public vessels, the most recent protocol to the London (Dumping) Convention, concluded in 1996, clarifies that States may in derogation of the general principle elect to apply the substantive provisions of the protocol to public vessels without, however, waiving their right to jurisdictional immunity in this regard. Although not entirely identical, this resembles the solution chosen in the 1989 Salvage Convention.

6. The effect of the exoneration clauses on the status of the treaty during war/armed conflict and other types of hostilities was discussed above for each of the conventions under consideration The first general rule that can be distilled is that an exoneration clause—*e.g.*, the 1989 Salvage Convention or the 1992 OSPAR

Convention—which deals only with jurisdictional immunities, is not in itself a good indicator of the status of the convention during war, armed conflict or other types of hostilities. On the other hand, there are exoneration clauses that genuinely affect the substantive obligations under the convention. If the wording of the exoneration clause exempts warships and similar vessels or objects from the substantive provisions of the treaty altogether—*e.g.*, the 1969 CLC—the logical conclusion is that this exemption remains valid in the event of the outbreak of war, armed conflict, or other types of hostilities. However, if the exoneration clause is tempered in the treaty itself by a mitigation clause, the conclusion might be different. The upshot of the relevant provisions of MARPOL 73/78 is that State parties would not be justified in exempting warships *ipso facto* from complying with the substance of the provisions of the convention or of comparable domestic provisions; this is, *a fortiori*, the case with the international COLREGS, which States are required to apply to the maximum extent possible, to warships and other public vessels. The above analysis has shown that while the vessels at issue are normally subject to the substance of the provisions of these conventions, State parties may decide to suspend some of these in the event of war, armed conflict, or other types of hostilities. Still, as was the case with the contingency clauses that were discussed in the previous chapter, the drafters of these immunity clauses intended to provide pragmatic solutions and were evidently unconcerned by the intricacies of the new *jus ad bellum* under the Charter.

Chapter VII

Conclusions on the Relationship between Maritime Treaties and Naval War

THE AIM OF THIS CHAPTER IS TO MAKE A FINAL ASSESSMENT of the relationship between armed conflict and the treaties reviewed in this study. To this end, the conclusions reached in the previous chapters will be collated and evaluated together with other relevant information. The conventions that will be examined in this chapter have been grouped around the following themes: 1) Conventions dealing with Safety Aspects and Navigation; 2) (Civil) Liability Conventions; 3) Conventions on Prevention of Oil Pollution and other forms of Marine Pollution; 4) Conventions Dealing with Maritime Emergencies.

7.1. Conventions Dealing with Safety Aspects and Navigation

7.1.1. The 1966 Load Lines Convention

The 1966 International Convention on Load Lines has proven of special interest to this study. It was in response to past State practice that its drafters agreed on an express provision (Article 31) dealing with armed conflict. Pursuant to this clause, any contracting Party, irrespective of its position in the armed conflict may unilaterally decide to suspend the operation of the whole of the convention or a part of it. As discussed earlier, armed conflict has been broadly defined by the convention as "hostilities" or other "extraordinary circumstances" affecting the "vital interests" of the State party contemplating suspension.[1] In addition, the means of recourse or protest of other Parties under the convention are limited: apart from a mere procedural right to be informed of the suspension and its termination, third Parties cannot be deprived of their right of control granted by the convention to port States. Any disagreement on the application of Article 31 will

need to be solved via diplomatic channels, although one can never exclude judicial review.

Furthermore, following Article 5(l), warships are exempted from complying with the substantive rules established by the treaty; but unlike the exoneration clause of MARPOL 73/78, the 1966 Load Lines Convention does not require State parties to apply equivalent domestic provisions to their public vessels. Evidently, this exemption of warships in peacetime will stand should the emergency conditions defined in Article 31 materialise.

7.1.2. The 1972 International Collision Regulations

The International Collision Regulations (COLREGS) were singled out in the previous chapter because of their explicit incorporation of provisions applicable to State ships, including warships and minesweepers. However, the wording of Rule l(e) of the 1972 Convention, as well as the complementary treaty practice of the Incidents at Sea (INSCEA) agreements, demonstrate that the application of COLREGS to State ships may be less straightforward in conditions other than times of peace. It was argued on the basis of the two elements just mentioned that States are entitled to suspend part of the COLREGS applicable to warships, in case of armed conflict, at least insofar as relations with opposing belligerents are concerned.

One may venture to suggest that since the COLREGS are an expression of the rules of good seamanship, belligerent States would not be justified in ignoring these "rules of the road" in their relations with States not involved in the conflict. Ignoring such widely accepted standards would be a self-defeating attitude: it would raise questions of State responsibility and might possibly lead to a broadening of the geographical scope of the hostilities.

In similar vein, there would normally be no reason why genuine merchant vessels would not continue to be bound by the COLREGS in the event of the outbreak of armed conflict. Usually, merchant vessels steer well clear of war zones at sea, and furthermore, the 1972 COLREGS Convention provides for special circumstances at sea: Rule 2 (a) on Responsibility refers to the requirements of "the ordinary practice of seamen," and of the "special circumstances of the case." This wording is flexible enough to include emergencies such as war, armed conflict, or other type of hostilities.

7.1.3. The 1974 Safety of Life at Sea Convention (SOLAS)

In Chapter Five, much attention has been paid to the Safety Conferences of 1948 and 1960, during which, contingency clauses on armed conflict were

accepted after thorough debates among State delegates.[2] First, there is unequivocal evidence that several Parties had unilaterally suspended (parts of) the 1929 Safety Convention during the second World War. This was acknowledged by the 1948 Conference in two ways. According to a special contingency clause—Article VI—any Party would, in case of war, irrespective of its position in the conflict, be allowed to suspend part or whole of the Safety Regulations. As with the 1966 Load Lines Convention, the right of recourse or protest of other Parties under the convention was limited to a procedural right to be informed of the suspension and its termination and to the preservation of their rights of control under the convention. The second element pointing to the effect of war on the Safety Convention and its Regulations came with the adoption of Resolution 1, according to which, State parties were granted a temporary waiver to deal with "the situation created by the second World War."

After much debate, the 1960 Safety Conference accepted a proposal not only to retain the suspension clause in the main part of the Convention but to broaden the circumstances in which suspension might be justified from "war" to "war or other hostilities."

In view of this legacy, the move to drop the contingency clause from the 1974 SOLAS Convention comes as a surprise, the more so since the deletion aroused apparently very little official comment. It was submitted that the deletion of the special suspension clause should not be equated with an abrogation of the right for State parties to resort to suspension. As demonstrated by the *travaux préparatoires* of many of the conventions discussed in Chapter Five, there is evidence of State practice and *opinio juris* pointing to the existence of such a right under general international law: *i.e.*, States may, under certain emergency conditions, at the outbreak of war, armed conflict, or other types of hostilities, suspend part or whole of the operation of maritime conventions by virtue of general international law, irrespective of whether this has been explicitly recorded in the convention or not. The incorporation of the contingency clauses into the 1948 and 1960 Safety Conventions had been preceded each time by extensive and often passionate debates. Hence, if it had been the intention of the 1974 SOLAS Conference to abolish the right to resort to suspension in such circumstances, one would expect that this would have been reported in a much more explicit way.

Finally, according to Regulation 3 of the General Provisions, the 1974 SOLAS Regulations do not apply to ships of war nor to troopships, "unless expressly provided otherwise." No such explicit provision has been adopted. Since this clause affects the substance of the Regulations, there can be no doubt that warships and troopships are, *a fortiori*, exempted from the 1974 SOLAS Convention in case of war, armed conflict, or other type of hostilities.

7.2. Maritime (Civil) Liability Conventions

- **The 1962 Nuclear Ships Convention (NS Convention)**
- **The 1969 Civil Liability Convention (CLC)**
- **The 1971 Fund Convention**
- **The 1971 Convention on Maritime Carriage of Nuclear Material**
- **The 1996 Hazardous and Noxious Substances Convention (HNS Convention)**

It was seen in Chapter IV that exclusion of war damage has become a standard clause in all civil liability conventions[3] and that it is implied in the 1971 Convention on Maritime Carriage of Nuclear Material. The wording of each of the reviewed war damage clauses unambiguously excludes coverage of marine pollution caused by practically all types of armed conflicts: acts of war, hostilities, civil war, insurrection. This is barely mitigated by the fact that the burden of proof of such circumstances lies with the person, the company, or the fund to which the main liability has been channelled.

All of the reviewed civil liability conventions contain, in addition, an express provision excluding application of the substantive rules to warships or other naval vessels. The only exception is the 1962 NS Convention, but it was seen that it is precisely because of the explicit inclusion of warships that this treaty is not yet in force. In addition, the discussions held during the preparation of the 1969 CLC, for example, clarify that it was the drafters' intention to exclude claims for war damage regardless of the status of the victim (belligerent or neutral).

The inevitable conclusion is that the reviewed liability conventions do not apply to circumstance of war, armed conflict, or other types of hostilities, such as civil war and insurrection.

7.3. Prevention of Oil Pollution and other Forms of Marine Pollution

- **The 1954 OILPOL Convention**
- **The 1972 Oslo Dumping Convention**
- **The 1972 London Dumping Convention**
- **The MARPOL 73/78 Convention**

The 1954 Convention for the Prevention of Pollution of the Seas by Oil, as amended by the 1962 OP Conference, contains an explicit provision (Article XIX) that allows any State party, regardless of its status in relation to the conflict, to suspend any part or even the whole of the treaty, if it "considers that it is affected" by "war or other hostilities." As was the case under the 1948 and 1960 Safety Conventions, and still is the case under the 1966 Load Lines Convention,

the suspending government is under a procedural duty to notify the depositary of the Convention of its actions under Article XIX. Unlike the other conventions just mentioned, the wording of the 1954 OILPOL suspension clause does not include a reference to any rights retained by other Contracting Parties in case suspension is resorted to under these circumstances.

As discussed earlier,[4] while this suspension clause was not challenged at all during the 1962 OP conference, it has not been incorporated into MARPOL 73/78, which was intended to supersede the 1954 OILPOL Convention. What has been said above in relation to the deletion of the suspension clause by the 1974 SOLAS Convention applies *mutatis mutandis* in this case. It was submitted that the non-incorporation of the suspension clause in MARPOL 73/78 cannot be interpreted as an abolition of the right to suspend part or whole of the operation of its provisions in circumstances of war, armed conflict, or other types of hostilities. There is no indication that the 1973 MARPOL Conference intended to restrict or abolish the customary right of States parties to resort to suspension of some or all of the provisions in case of armed conflict.

Finally, warships and other State ships are, in principle, exempted from complying with the substantive provisions of both the OILPOL and the MARPOL Conventions, although State parties are, to varying degrees, expected to apply equivalent measures "insofar as reasonable and practicable," to the exempted categories. In the case of MARPOL 73/78, however, this application should not impair "the operations or operational capabilities" of such ships. Apart from the limitations inherent in this qualifying terminology itself, an analysis of the implementing legislation for the U.S. military sector confirms that the application of the mitigating factors is subject to conditions of peace.

It was shown earlier that whilst the Oslo and London Dumping Conventions contain different immunity clauses, the MARPOL formula for the exoneration of State ships has been widely copied not only in other maritime conventions but also in conventions dealing with other media.[5] The latter can therefore be considered reflective of customary international law. In addition, some commentators believe that there are strong grounds for treating MARPOL 73/78 as a customary standard to be complied with by the vessels of all states, whether or not they have chosen to ratify.[6]

7.4. Conventions Dealing with Maritime Emergencies

7.4.1. The 1969 Intervention Convention and the 1989 Salvage Convention

It was submitted in the previous chapter that it proves impossible to determine the legal effect of either treaty during armed conflict.[7] One reason is that the only

treaty clauses with a bearing on armed conflict deal with classic sovereign immunity and hence concern only jurisdictional aspects: Article 1(2) of the 1969 Convention and Articles 4, 25 and 26 of the 1989 Salvage Convention. Another reason is that there is no trace in the *travaux préparatoires* of any discussion of the effect of armed conflict on the treaties in question.

Despite the foregoing, one may venture to suggest the following regarding the status of the 1989 Salvage Convention in times of armed conflict. It will be remembered that there is case law indicating that the 1910 Salvage Convention was applied or at least considered to be applicable between mutually friendly countries during the Second World War.[8] It was also seen that Article 14 of the 1910 Convention refers explicitly to a duty incumbent on the shipmaster to render assistance to persons in need, even to enemy nationals. It was submitted that this article indicates that the Convention as a whole, apart from the preceding moral duty, was not applicable between opposing belligerent States. Building on the foregoing, one could make the following—admittedly obvious and "soft" law— deductions with respect to the effect of armed conflict on the execution of the 1989 Convention:

(1) Presumably, between opposing belligerents that are at the same time party to the 1989 treaty, the latter may become inoperative or irrelevant for the duration of the armed conflict;
(2) However, nothing prevents the treaty from being applied between State parties not involved in the armed conflict;
(3) The treaty may even be applicable between a State party to a conflict and a Party not involved in the conflict;
(4) The incorporation of a provision on Humanitarian cargoes in Article 26 of the Salvage Convention demonstrates at the very least that the drafters of the treaty did not assume that the outbreak of armed conflict would engender any automatic "cut-off" effects on the execution of the treaty. [9]

As for the 1969 Intervention Convention, it will be remembered that the main pre-occupation of the drafters of the immunity clause was to avoid at all cost acknowledging a right of interference by coastal States on the high seas vis-à-vis warships and other vessels owned or operated by a foreign State. [10]

While circumstances of both international and internal armed conflict were discussed at length in the context of the 1969 CLC's "war damage exclusion clause,"[11] the matter was not touched on at all in relation to the draft articles on Intervention. Still, it could be argued that the fact that both conventions were adopted by the same conference indicates that if circumstances of armed conflict were excluded from the scope of the CLC, the same should hold true for the

Intervention Convention. However, such an inference is open to challenge on several grounds. A major objection is that the 1969 CLC and the 1969 Intervention Convention deal with two entirely distinct matters. During the 1969 Brussels Convention, the draft for the civil liability convention was thought of as dealing with the question of (private) civil liability of shipowners, whereas the draft Convention on Intervention was meant to deal with matters of public international law. A second problem is that any contemporaneous interpretation based on observations made during the *travaux préparatoires* is of doubtful value in view of the plain meaning of the texts: the fact remains that war damage is explicitly excluded from the 1969 CLC, but that circumstances of war or armed conflict are not mentioned at all in the 1969 Intervention Convention.

Building on the foregoing, it cannot be ruled out that the definition of maritime casualty, defined in Article II (1) of the latter convention as:

> ... a collision of ships, stranding or incident of navigation, or other occurrence on board a ship or external to it resulting in material damage or imminent threat of material damage to a ship or cargo

could encompass incidents caused by belligerents in the course of armed conflict. Indeed, the purpose of this convention is to establish and regulate the right of coastal States to intervene on the high seas in order (Article I (1)):

> ... to prevent, mitigate or eliminate grave and imminent dangers to their coastline or related interests

caused by maritime casualties. From the point of view of the threatened coastal State, the exact circumstances in which such casualties occur make little difference. Yet, in spite of its common-sense appeal, the validity of this deduction remains uncertain. The negotiating history of many maritime conventions shows that advocates of common-sense arguments favouring the interests of the victims invariably lost out to proponents of conservative views on issues such as armed conflict and the immunity of warships. For instance, it will be recalled that during the 1969 Brussels Conference, a proposal to exclude all oil tankers from the exemption provisions, irrespective of their status or ownership, was rejected on grounds of "sovereign" immunity.[12]

On the whole, the effect of armed conflict on the 1969 Intervention Convention remains uncertain. If one considers the 1969 Intervention Convention on its own, one might conclude that the taking of measures by a coastal State against a

foreign nation's warships under the convention remains forbidden, regardless of whether the nations involved are at peace or whether one or more is involved in armed conflict. On the other hand, there is no recorded evidence pointing either to the application or the non-application of the convention with respect to civilian ships between State parties during the course of an armed conflict. Any conclusions to that effect remain purely speculative.

7.4.2. The 1990 OPRC Convention

At first sight, the 1990 OPRC Convention poses the same dilemma as the 1969 Intervention and 1989 Salvage Conventions: the only clause that might have an apparent bearing on armed conflict is Article 1(3), under which, warships and other State-owned ships are exempt from the scope of the Convention. Yet, the 1990 OPRC Convention presents a different case altogether. First, the exoneration clause of Article 1(3) deals with the substance of the provisions of the Convention and goes beyond preserving mere jurisdictional immunities. This means, for instance, that warships are not under as strict an obligation as civilian ships to carry the shipboard oil pollution emergency plans described in Article 3 of the Convention. Furthermore, warships are not under the same firm obligation to comply with the oil pollution reporting procedures dealt within Article 4 of the Convention.

As was mentioned earlier, the immunity clause of Article 1(3) was inserted at the request of the U.S. delegation, who borrowed the text from MARPOL 73/78.[13] Hence, the conclusions that were reached for the MARPOL formula apply *mutatis mutandis* to the OPRC Convention: *i.e.,* during armed conflict, the obligation of States to apply equivalent provisions to the exempted categories of ships is probably non-existent.

Secondly, a more striking difference between the other conventions on maritime casualties and the OPRC Convention is that the latter was applied even prior to its entry into force in connection with the oil spill(s) that occurred during the 1990–1991 Gulf conflict. The genesis of the Gulf War oil spill(s)[14] and the negotiating history of the OPRC Convention[15] were described earlier. An indication was also given of the chronology of the events of the 1990–1991 Gulf conflict, putting the salient steps in the preparation of the OPRC Convention in historic relief. It was noted that the final diplomatic conference was held in November 1990 during the Desert Shield phase of the conflict, and that many of the Governments represented were either already involved in the conflict or would shortly form part of the Desert Storm coalition.[16] Yet, there is no recorded evidence in the conference records that circumstances such as war and armed conflict were taken into consideration by the drafters.

Considered in isolation, the definition of "oil pollution incident" adopted by the OPRC Conference could technically cover both accidental—non-war related—disasters as well as spills deliberately caused during armed conflict:

> Art. 2(2): "Oil pollution incident" means an occurrence or series of occurrences having the same origin, which results or may result in a discharge of oil, and which poses or may pose a threat to the marine environment, or to the coastline or related interests of one or more States, and which requires emergency action or other immediate response.

Yet, there are plenty of indications that during the preparatory stages of the OPRC Convention only peaceful and not deliberate wartime spills were thought of:

- The impetus and catalyst for drafting of the convention was the 1989 *Exxon Valdez* disaster that occurred entirely in peacetime;
- During the preparatory stages of the OPRC Convention, reference was often made to the 1969 CLC and the 1971 IOPC Fund Convention. The possibility of pre-financing or coverage by the latter fund of the cost of actions dealing with pollution or threat of pollution was thoroughly examined,[17] and it was decided eventually to include references to both conventions in the preamble to the OPRC Convention. The point here is that the 1969 CLC and the 1971 IOPC Fund Conventions explicitly exclude coverage for damage caused during armed conflicts;
- Similarly, the question whether only "oil pollution" incidents should be covered or whether the prospective convention should also deal with "hazardous and noxious substances" (hereinafter HNS) was contentious during the preparatory stages of the OPRC Convention.[18] Eventually, a compromise was reached under which HNS substances would be left out from the convention, whilst a special resolution would be adopted on the subject (Resolution 10) urging IMO and State parties to expand the scope of the convention to HNS.[19] It is noteworthy that the 1996 HNS Convention excludes war damage;[20]
- What is more, the resolution adopted by the OPRC conference on the HNS question mentions only *accidental* discharges. Its third preambular paragraph reads:

> Recognising that pollution of the sea by *accidental* discharge of hazardous and noxious substances into the waters may threaten the marine environment and the interests of coastal States. . . . (Italics added.)

The latter point needs to be addressed in more detail. The HNS resolution was proposed early on by a Working Group. In the accompanying commentary, it was noted that some delegations were of the view that the Convention should apply to HNS substances and that the proposed resolution was a compromise intended to form "a package with the Convention," to be considered "by the Conference in conjunction therewith."[21]

In view of the foregoing, one can only conclude that the OPRC Convention was intended for non-accidental oil spills such as the 1991 Gulf war oil spill. This was confirmed later by the Secretary-General of IMO:

> *Delegates to the November Conference had been thinking of an accidental disaster, such as spillage from a tanker. . . .*[22]

Because of this negotiating history, the resort to its mechanisms in connection with the 1990–1991 Gulf war appears all the more remarkable. Nonetheless, it would be wrong to conclude on the basis of this single precedent that the OPRC Convention could be applied unreservedly during armed conflict in the future. A close scrutiny reveals that there are serious constraints on the application of the convention machinery during armed conflict.

- It is noteworthy that the early implementation of the OPRC machinery was already envisaged before the oil spill became known. Indeed, the November Conference adopted a resolution (No. 2) calling for the early implementation of the Convention pending its entry into force,[23] and another resolution (No. 3) on the early implementation of Article 12 of the Convention.[24] The latter article deals with institutional arrangements and outlines the tasks and responsibilities given to IMO, whilst Resolution 3 calls upon the Secretary-General of IMO to initiate the early implementation of the article in question.
- Unlike in the 1983 *Nowruz* oil spill, the 1991 oil slick had affected regions largely outside the zones of active combat. Even if the opposing belligerent (Iraq) would have wished to, she would probably have been unable to prevent the initial relief and remediation efforts undertaken by other states.
- Nevertheless, it is important to note that most of the international relief effort could only take place after the cessation of hostilities, and that the activities of IMO under the OPRC Convention were no exception to this. Operation Desert Storm commenced on 16-17 January 1991 with large-scale air and missile attacks, and the Coalition ground offensive was started on 24 February 1991. Kuwait was liberated and all fighting was ceased on 27

February 1991. The first reports of the Gulf War oil spill reached the outside world by the end of January 1991, and shortly thereafter, IMO began receiving offers of assistance to the country that was seemingly worst affected, Saudi Arabia.[25] As mentioned earlier, the impacts of the oil spill(s) on the coastal and marine environments were most severe along the Saudi Arabian coast, with lesser effects for the Kuwaiti, Iraqi, and Iranian coasts.[26] During the hostilities, local teams in Saudi Arabia managed to save strategic installations from impending disaster. The IMO dispatched its first civilian co-ordinator to Saudi Arabia some 10 days after the cease-fire, and IMO Secretary-General O'Neill called for the establishment of a special trust fund and the setting up of an international co-ordination centre in the month of March 1991.[27] The first money from the fund was disbursed in early April 1991.

- A further observation is that IMO concentrated its relief efforts on Saudi Arabia, the country that was most severely affected by the oil slick. However, it should be noted that this was in response to an explicit request for assistance by this victim State, and that IMO depended for its operations not only on the co-operation but also on the initiative of the latter. Although it was the IMO Secretary-General himself who concluded at an early stage that the oil spill was of the "severity" envisaged by Article 7 of the OPRC Convention, the text of this provision places the right of initiative for co-operation and assistance squarely with State parties. In view of the *Nowruz* experience—which will be further discussed below—it is unlikely that the OPRC Convention could be relied on when State parties disagree or when a belligerent has the power to block relief efforts.
- Finally, now that the OPRC Convention has entered into force, State parties are obliged to give effect to Articles 4 and 5 of the Convention. These deal with oil pollution reporting procedures and actions subsequent to receiving an oil pollution report. While the 1991 Gulf War oil spill was publicised world-wide soon after its occurrence, it should be recalled that pursuant to the exemption clause of Article 1(3) of the OPRC Convention, warships, naval auxiliaries or other ships owned or operated by State parties for non-commercial purposes are under no duty to report oil spills encountered during armed conflict.

7.4.3. The 1978 Kuwait Regional Convention

The 1990–1991 Gulf war precedent stands in sharp contrast to the situation surrounding the 1983 *Nowruz* oil spill. As mentioned earlier, although the origin

of this spill was probably accidental, Iraq soon aggravated it by regularly bombing the oil field.[28] During the entire incident, co-operation between the belligerent States was lacking, and the various meetings held under the auspices of the Regional Organisation established under the Convention (Ropme), failed even to lead to a partial cease-fire in order to allow capping of the burning wells. [29] As a consequence, international as well as unilateral relief efforts were effectively ruled out since it would have required entering an active war zone.[30] In addition, most of the unilateral remediation efforts planned or undertaken by Iran proved futile, since Iraq resumed bombing of the fields feeding the spill.[31]

On the basis of the conclusions reached above regarding, *inter alia*, the MARPOL and the OPRC Conventions, the various claims made during the Iran-Iraq war regarding the 1978 Kuwait Regional Convention can now be evaluated.

It will be remembered that this Convention contains no express clause on armed conflict. It does, however, contain a provision (Article IX (a)) on "pollution emergencies," which obligates all Parties to take individually and/or jointly:

> . . . all necessary measures . . . to deal with pollution emergencies in the Sea Area, *whatever the cause of such emergencies*, and to reduce or eliminate damage resulting therefrom. (Italics added.)

Furthermore, it contains an exemption clause, Article XIV, providing that:

> Warships or other ships owned or operated by a State, and used only on Government non-commercial service, shall be exempted from the application of the provisions of the present convention. Each Contracting State shall, as far as possible, ensure that its warships or other ships owned or operated by that State, and used only on government non-commercial service, shall comply with the present Convention in the prevention of pollution to the marine environment.

It was seen that Iraq justified its behaviour during the *Nowruz* incident by asserting in a letter to the UN Secretary-General that:

> *. . . the provisions of the Kuwait Regional convention on Cooperation for the Protection of the Marine Environment from Pollution and the protocol annexed thereto have no effect in cases of armed conflict.*[32]

Whilst there is no record of any official reaction from other States, the Iraqi position was rejected explicitly by five experts convened by the EC Commission. They argued that since the Kuwait Regional Convention was negotiated for a

region where tensions were known to exist, the terms "whatever the cause of such emergencies" in Article IX (a) must be taken to include instances such as the *Nowruz* oil spill. They further suggested that since the convention contained no express provision to that effect, State parties would not be entitled to suspend the operation of the convention, or at least not in their relations with neutral States.[33]

To assess these claims, two main questions have to be distinguished. Can the Kuwait Regional Convention be said to apply at all during armed conflict? If so, would Iraq be entitled to suspend a part or the whole of the operation of the treaty on the ground of armed conflict?

First, there is incontrovertible evidence that the multilateral institution established by the Kuwait Regional Convention,[34] although no doubt "affected" by the 1980–1988 Iran-Iraq conflict, and despite the fact that it failed to reach any meaningful result, continued to function. The sources consulted for this work indicate that both belligerents continued to participate in the meetings of the Regional Organisation established under the 1978 Convention. Therefore, and despite Iraq's statement to the UN, the Kuwait Convention continued to operate, at least in part, during the Iran-Iraq conflict.

It is an entirely different issue, however, whether the 1978 Convention could be construed so as to deny Iraq the right to attack the *Nowruz* oil field. As discussed in Chapter II, under current *jus in bello*, oil fields and oil installations are not, as such, immune from attacks by belligerents.[35] Could a belligerent such as Iraq nevertheless be denied the right to attack the *Nowruz* oil field on the basis of its adherence to a maritime treaty which obligates Parties to prevent incidents of marine pollution and to co-operate in their resolution? Insofar as the relationships between contending States are concerned, it is submitted that this question has to be answered in the negative, for two principal reasons.

In its advisory opinion on the *Legality of the Threat or Use of Nuclear Weapons,* the ICJ indicated that for questions related to the conduct of belligerent activities, the law of armed conflict operates as *lex specialis* with respect to multilateral environmental treaties.[36] Insofar as the attacks by Iraq on the *Nowruz* oil field conformed to the requirements of the law of armed conflict, any rights derived by Iran from the Kuwait Regional Convention were overridden by the law of armed conflict.

This conclusion is supported by a close examination of the convention itself. As argued in the previous chapter,[37] the exemption clause of Article XIV of the Kuwait Regional Convention means that Iraqi warships are not required to comply with the substance of the treaty nor with any possible equivalent domestic provisions in time of armed conflict. This suggests that the Convention was not intended to regulate questions of armed conflict.

Moreover, contrary to what was claimed by the EC experts, there is reason to believe that the Kuwait Convention was concluded only with accidental, non-war related emergencies in mind. This is supported by a protocol concluded on the same day as the main framework convention and which forms an integral part of the Convention.[38] The Protocol Concerning Regional Co-Operation in Combating Oil and Other Harmful Substances in Cases of Emergency defines "marine emergency" as:

> . . . any casualty, incident, occurrence or situation, however caused, resulting in substantial pollution or imminent threat of substantial pollution to the marine environment by oil or other harmful substances. . . .[39]

However broad and all-encompassing this phrase may seem, the provision cites only non-intentional and non-war related accidents:

> . . . *inter alia*, . . . collisions, strandings and other incidents involving ships, including tankers, blow-outs arising from petroleum drilling and production activities, and the presence of oil or other harmful substances arising from the failure of industrial installations. . . .

Whether the above analysis is equally valid for the relationships between Iraq and third States that were affected by the *Nowruz* oil spill is more difficult to answer. First, in case the affected third State was not a party to the Kuwait Regional Convention, the latter could derive no rights vis-à-vis Iraq on the basis of the latter agreement.

Secondly, if the affected State was a party to the Convention, several further variables complicate the analysis. The first question to be asked is whether the affected State was truly neutral in the conflict or instead a co-belligerent siding with one of the parties involved. If the latter, it is submitted that the affected State's claim to immunity from the effects of the conflict would be in any event tenuous, regardless of whether this claim is based on the law of armed conflict or on any purported rights arising from the Kuwait Convention. If the affected State was genuinely neutral in the conflict, current international law, as seen in Chapters II and III, offers no clear answer to the question of whether such a State may invoke the right to be immune from the effects of armed conflict between other States, and if so, to what extent.[40]

However, even if the law of armed conflict and the law of neutrality offer no clear guidelines, the analysis of the Kuwait Regional Convention does seem to indicate that, on balance, it did not outlaw the Iraqi belligerent conduct in question,

even if this affected third States. The reason for this suggestion is twofold. First, Article XIV, as seen above, exempts Iraqi warships from the duty to comply with the substance of the convention and leaves the protection of the environment legally subordinated to operational demands in times of peace and military necessities in times of naval war. Secondly, Iraq would in any event be entitled to suspend the operation of the entire convention because of the ongoing conflict.

The view that suspension of the convention could not be allowed failing an express provision to that effect, however attractive from an environmental point of view, could only be accepted if the Kuwait Convention were to be considered in isolation. The latter premise is, however, open to challenge. The examination conducted in the previous chapters indicates that the Kuwait Convention is but one treaty in a long list of treaties on the marine environment that point to the existence of rules of customary international law on the subject of the legal effect of this type of multilateral treaty during international armed conflict. It was argued in Chapter Five that the rule according to which State Parties—regardless of their status in the conflict—are allowed to suspend maritime treaty provisions in armed conflict is still current international law, despite the fact that most treaties concluded since the 1970s no longer contain such an express contingency clause.

Finally, it should be noted that these conclusions are advanced as a matter of principle. They neither approve of the Iraqi conduct in general nor of the continued bombing of the oil field in particular. Procedural questions have been left aside in this assessment, whilst perhaps more importantly, the implications of the prohibition to use armed force in international relations were not considered. The main import of the above analysis is twofold. First, it was not the intention of the drafters of the Kuwait Regional Convention to regulate activities and consequences related to armed conflict. Secondly, *in abstracto*, Iraq would be justified in claiming that she could not be denied the right to bomb the *Nowruz* oil field on the ground of any contractual obligations under the Kuwait Regional Convention.

Chapter VIII

General Conclusions on the Legal Effect of Multilateral Environmental Agreements during International Armed Conflict

- It was seen in the first chapter that the most clearly established principle of general IEL is that no State may conduct activities or permit the conduct of activities on its territory or in international areas that cause harm to the territory of another State if that harm is of serious consequence and is established by clear and convincing evidence. It was demonstrated also that modern IEL is predominantly treaty-based and that it encompasses detailed régimes for various environmental sectors such as the marine environment, freshwater resources, biodiversity, and the atmosphere.
- It is now well accepted that States need to take environmental considerations into account in the pursuit of military activities, including during armed conflict. The analysis of the *lex specialis* of the laws of armed conflict in Chapter II has demonstrated not only the environment-protective potential but also the limitations of current *jus in bello*, *jus ad bellum*, and neutrality law. It was seen too that the generally accepted principles of environmental protection during military operations remain at a very high level of abstraction. The main purpose of this study, as set out in the introduction, was to examine the extent to which international law has developed more detailed rules to protect the environment in armed conflict.
- In Chapter III, the author has examined the main legal principles involved and suggested a methodology to determine the legal effect of general IEL during armed conflict.

Following, *inter alia*, the 1996 Advisory Opinion of the ICJ on the *Legality of the Threat or Use of Nuclear Weapons* and the records of the 1972 UNCHE and the 1992

UNCED conferences, it was submitted that the laws of armed conflict operate as *lex specialis* for questions related to the conduct of armed conflict. This means that whilst certain State obligations towards the environment continue to apply during armed conflict, IEL cannot be construed as overriding a State's right to use armed force in self-defence.

To determine the legal effect of multilateral environmental agreements in general during armed conflict, two doctrinal questions were distinguished. First, can these agreements be said to apply at all to belligerent activities during international armed conflict? If so, do contracting Parties have the legal right to terminate or suspend the operation of such agreements during the conflict?

It was noted that modern international State practice, case law, and legal theory led to two main principles of interpretation. First, as mentioned before, the laws of armed conflict operate as *lex specialis* vis-à-vis IEL. Second, there is a strong tendency towards maintaining the validity of treaties insofar as compatible with national policy and with obligations stemming from Security Council decisions under Chapter VII.

Drawing further on the two main disciplines involved, the Law of Treaties and the Law of State Responsibility, it was suggested that each multilateral treaty needs to be examined separately in order to determine its application to the problem in question. First, the *pactum* between contracting States needs to be examined, applying the relevant articles of the 1969 Vienna Convention on treaty interpretation as well as those principles related to armed conflict. Second, provision needs to be made for obligations arising from *jus cogens*, humanitarian provisions, and binding Security Council decisions. Third, regard must be had to the grounds of suspension and termination arising from the Law of Treaties, and fourth to the "circumstances precluding wrongfulness" arising under the Law of State Responsibility. The final possibility which needs examining is whether there are any customary rules on the fate of multilateral environmental agreements during armed conflict, outside the frames of reference of the Law of Treaties or the Law of State Responsibility.

- For the reasons explained in the introduction, the second part of this study focused on the marine environment, examining the legal relationship between naval warfare and a series of representative treaties dealing with maritime safety and marine pollution.

The analysis conducted in Part Two confirms that each treaty needs to be examined separately to determine its possible effect during armed conflict. For instance, there is sufficient evidence to support the conclusion that none of the

reviewed civil liability conventions apply to questions of armed conflict. By contrast, the analysis of the *pactum* agreed in MARPOL 73/78 and the 1972 COLREGS Convention indicates that these agreements could, in principle, apply in their entirety during armed conflict. As for the 1989 Salvage Convention, it was submitted that it does not apply between contending States, but that it may continue to be relevant for relationships involving non-contending States.

Nevertheless, it is difficult to escape the conclusion that a great number of the reviewed maritime treaties are unlikely to apply during armed conflict, either because war damage is expressly excluded or because the treaties do not apply to warships.

It was seen that the drafters of the majority of the reviewed treaties tended to adopt a categorical "hands-off" approach to the subject of international armed conflict. The overriding concern of the negotiators of the maritime treaties reviewed in this study was to provide pragmatic solutions to certain problems encountered at sea, not to solve questions related to armed conflict. Whenever pressed to take an official stand on the issue, drafters opted either for excluding the matter from the convention altogether (*e.g.*, through war damage exoneration clauses and warship exemption clauses), or for leaving it up to the discretion of the State parties (*e.g.*, through armed conflict contingency clauses and warship exemption clauses). However unsatisfactory from an environmental and *jus ad bellum* point of view, it is difficult not to conclude that the majority of the reviewed treaties were not intended to deal with belligerent activities nor with the consequences of armed conflict.

- As for the treaties that are in principle applicable during armed conflict, the analysis shows that, under international law, all contracting Parties, regardless of their status, have the legal right to suspend those treaties, either wholly or partially. This conclusion has wider implications, since it supports the existence of a customary rule of law according to which all contracting Parties have the legal right to suspend (certain) multilateral treaties in whole or in part during circumstances of war, armed conflict, and other types of hostilities. Because of the discretion which the discussed contingency clauses accord to State parties, it was argued that this constitutes a separate ground on which treaties may be suspended, which differs, *inter alia*, from the *rebus sic stantibus* ground arising under the 1969 Vienna Convention on the Law of Treaties and the "state of necessity" defence under the general Law of State Responsibility.
- There is no support in the treaty practice examined in Part Two of this study for any mechanical consequences linked to the "outbreak" of armed conflict: none of the reviewed treaties become automatically "inoperative."

Moreover, contracting Parties would only be allowed to suspend part or whole of the operation of a treaty on the ground of international armed conflict, but would not be entitled to withdraw permanently from a treaty.

- This study confirms also that it would be difficult to formulate an all-purpose single rule on the legal effect of the reviewed treaties during international armed conflict. One may even venture to suggest that there is little prospect of any such rule developing in the future. There is probably no single rule capable of satisfying the many divergent interests of States in regard to multilateral treaties during armed conflict. Resort to armed force in international relations is per definition a breakdown of international diplomacy. In these circumstances, States involved or affected by the conflict naturally wish to recapture their freedom as much as possible in respect of treaties they have entered into previously.
- This study also reveals that there have been many instances in which attempts to adapt the old contingency rules to the new *jus ad bellum* failed. As a result, most of the current armed conflict contingency clauses may be regarded as defective or even out of date. No distinction is made between aggressors and victims, and all contracting Parties, regardless of their status in the conflict, enjoy broad discretion not only as to when to suspend the operation of a treaty in whole or in part, but in addition, as to when to terminate the suspension.

Because the prohibition to use armed force in international relations is *jus cogens*, and because of the primacy of the UN Charter law, it was submitted in Chapter III that measures taken pursuant to Chapter VII of the UN Charter may override certain treaty rights and obligations. Therefore, the rights or wrongs of hostile military activity under UN Charter law may affect the operation of the contingency clauses of maritime treaties.

Nevertheless, it was seen in Chapter II that under the current UN collective security system, authoritative judgements on the legality or illegality of belligerent activity are rare and that the status of non-contending States is unsettled and complicated, to say the least.

- The question that arises, then, is whether one should expect every *jus ad bellum* contingency to be provided for in treaties on technical matters such as maritime safety and prevention of marine pollution. The treaty practice and the *travaux préparatoires* discussed in this study suggest that this would not be realistic. Failing widespread agreement internationally on the legality of particular instances of use of armed force, it would be too much to

ask—if not futile to expect—that Parties to a treaty such as MARPOL 73/78 agree on which belligerent is waging a *bellum illegale* and should henceforth not be allowed to resort to the suspension of the convention or its equivalent domestic provisions. If, on the other hand, there is consensus within the international community as to the identity of the illegal aggressor(s), the ensuing international sanctions may include binding decisions on matters of treaty law, as illustrated by Res. 687 (1991) on the cease-fire conditions imposed against Iraq, and particularly by the ongoing work of the UN Compensation Commission.

- It may nevertheless be useful to provide expressly for the contingency of armed conflict in multilateral environmental treaties. This would counter the customary presumption that where an instrument is silent, any Party may decide to suspend the treaty or some of its provisions during armed conflict.

A first requirement would be that the possibility of the occurrence of armed conflict be discussed at the negotiating stage of a treaty. To reduce the negative effects of auto-determination by any Party, the contingency clause should be restrictive and leave the treaty rights of other Parties unaffected to the maximum extent possible. To bring future international environmental treaties at least formally in line with the current *jus ad bellum* precepts, the right to suspend a treaty should be reserved strictly for non-aggressor States. Finally, the resort to suspension should be subject to continuous review by the other Parties to the treaty—provided of course that they are also non-victim States.

- There seems little justification for the unqualified substantive exemptions which many maritime treaties continue to grant to warships and other State-owned craft. This study has indicated that military forces are by virtue of the domestic laws of several States already under the obligation to comply with the environmental duties imposed on other sectors of society, at least in times of peace. In this day and age, when military roles are changing, one may require that the latter comply with current environmental standards to the maximum extent possible. Therefore, a case can be made that exemption clauses in maritime treaties need to be adapted so as to better reflect these national practices.
- Finally, this study has signalled that there is major work to be done regarding the incorporation of environmental standards in the full spectrum of contemporary military operations. Military commanders need to be given appropriate guidance on environmental standards for all types of military

operations, including for the so-called operations other than war (OOTW), which have taken on added significance since the end of the Cold War. This is required to implement the admonition of the ICJ in its advisory opinion on the *Legality of the Threat or Use of Nuclear Weapons*:

> ... States must take environmental considerations into account when assessing what is necessary and proportionate in the pursuit of legitimate military objectives. Respect for the environment is one of the elements that go to assessing whether an action is in conformity with the principles of necessity and proportionality.[1]

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13. *Ibid.*, 87–9; Hohmann, *op. cit.*, 166–80, 180–189, 190–209.
14. UNEP was established as a special fund by the UN General Assembly (Res. 2997 (XXVII) 1972) upon a recommendation by UNCHE: Caldwell, *op. cit.*, 71; Sands, *op. cit.*, 71–2; Timoshenko, in Al-Nauimi & Meese, *International Legal Issues Arising Under the United Nations Decade of International Law* (1995), 154.
15. Kiss & Shelton, *op. cit.*, 45, 59*ff.*; Plant, in Churchill & Freestone, *International Law and Global Climate Change* (1991), 167–8; Birnie & Boyle, *op. cit.*, 41–52; Sands, *op. cit.*, 38; Palmer, G., 86 *AJIL* (1992), 266, fn. 11.
16. UNGA Res. 37/7, adopted on 28 October 1982, adopted by a vote of 111 in favour, 18 abstentions and one vote against (U.S.), 23 *ILM* (1983), 455.
17. Sands, *op. cit.*, 42–44; Birnie & Boyle, *op. cit.*, 431–2; Hohmann, *op. cit.*, 81–89.
18. Sands, *op. cit.*, 48*ff.*; Barber & Dickson, in Cooper & Palmer, *Just Environments* (1995), 124.

19. UN Framework Convention on Climate Change; Convention on Biological Diversity; a set of "Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests": See Sands *et al.*, *Documents in International Environmental Law* (1994), vol. II A, 246, 845, 874; Adede, in Kiss & Burhenne-Guilmin, *A Law for the Environment* (1994), 16.

20. See chapter 1, Preamble to Agenda 21, para 1.3 in the Report on UNCED, UN Doc. A/151/26 (vol. I).

21. Sands, *op. cit.*, 52*ff.*

22. Sands, 4 *EJIL* (1993), 386–7.

23. Report of the UNGA 19th Special Session (UNGASS), 23–28 June 1997: UN Doc. A/S-19–29, 27 June 1997.

24. 5 *Earth Negotiations Bulletin*, No. 88 (30 June 1997).

25. See *infra* 1.2.2. C for the concept of sustainable development.

26. Cited by Birnie & Boyle, *op. cit.*, 3.

27. *ICJ Rep.* (1996), 241–2, para 29; see too *Gabcíkovo-Nagymaros Project*, judgment of 25 September 1997, ICJ General List No. 92, para 112.

28. But see definitions by Meyer and Tolbert in Plant, *Environmental Protection and the Law of War* (1992), 255–6 & 257–61.

29. *Op. cit.*, 22.

30. Caldwell, *op. cit.*, 27; Kiss & Shelton, *op. cit.*, 9.

31. Lehnes, *Probleme der eindeutigen Emittlung der Ausdehnung, der Dauer und der Schwere einer Umweltschadigung*, (1993), 22–23, paras 9.1, 9.2 (on file with author).

32. Palmer, J., in Cooper & Palmer, *op. cit.*, 27–8.

33. Moroni *et al.*, in Bourdeau *et al.*, *Environmental Ethics* (1990), 141–54; Robinson, *ibid.*, 263; Palmer, J., *op. cit.*, 28.

34. Report of the Working Group of *Experts on Liability and Compensation for Environmental Damage Arising from Military Activities* (hereinafter: Working Group on Environmental Damage), UNEP/Env. Law/3/Inf. 1, 15 October 1996, 10, para 42.

35. Stone, 45 *SCLR* (1972), 456.

36. Stone, in Westing, *Cultural Norms, War and the Environment* (1988), 77–9.

37. Lynch, in Bourdeau *et al.*, *op. cit.*, 160.

38. Stone, 59 *SCLR* (1985), 4–5.

39. Glennon, 84 *AJIL* (1990), 1–2.

40. D'Amato & Chopra, 85 *AJIL* (1991), 23.

41. Cooper, in Cooper & Palmer, *Just Environments*, 144.

42. Lynch, in Bourdeau *et al.*, *op. cit.*, 161.

43. Moroni *et al.*, *op. cit.*, 15; Cooper, *op. cit.*, 146.

44. Preambular paragraphs; Sohn, 14 *Harv. ILJ* (1973), 436.

45. UNGA Res. 37/7 on a World Charter for Nature, 28 October 1982, 37 UNGAOR, (Supp. No. 51), 17; II A *Documents in International Environmental Law*, 31.

46. Glennon, 84 *AJIL* (1990), 5–10.

47. See *infra*, 1.2. 2. C.

48. Stone, in Westing, *Cultural Norms, War and the Environment* (1988), 76–77; D'Amato & Chopra, 85 *AJIL* (1991), 23.

49. The Preambular paragraphs recognise both the intrinsic value of biological diversity and its value for humankind.

50. See *infra*, 1.2.1. C.

51. Birnie & Boyle, *op. cit.*, 423–4.

52. See *Stone*'s example about what people would prefer if asked to choose between an additional 1,000 million persons on earth, or an additional 1,000 million trees, in Westing, *Cultural Norms*, 78.

53. Stone, 45 *SCLR* (1972), 489.

54. For concept of "Reflexwirkung" see Spieker, *Gewohnheitsrechtlicher Schutz der natürlichen Umwelt im internationalen bewaffneten Konflikt* (1992), 184.

55. Stone, 45 *SCLR* (1972), 462*ff*.

56. *Infra*, 2.2.

57. Boelaert-Suominen & Cullinan, *Legal and Institutional Aspects of Integrated Coastal Area Management in National Legislation* (1994), 1–7; Kiss & Shelton, *op. cit.*, 307.

58. Between 1980 and 1995, the UNEP multilateral treaty register increased from 102 to 164: Bodansky, 3 *Ind. J. Global Legal Stud.* (1995), 106, fn. 1; There could be more than a 1,000 treaties dealing with environmental protection: O'Connell, M., 35 GYIL (1992), 295; Sands counts more than 2,000 bilateral environmental treaties since the mid-18th century: *op. cit.*, 106.

59. A first attempt was the 1982 World Charter for Nature, mentioned *supra*, 1.1.1; A second, the "Legal Principles for Environmental Protection and Sustainable Development," annexed to the 1987 Report of the World Commission on Environment and Development: *Our Common Future* (1987); A further failed attempt was the suggested "Earth Charter" at the 1992 UNCED Conference: Sands, 4 *EJIL* (1993), 381–2; A fourth example is the IUCN-proposed "International Covenant on Environment and Development," launched at the UN Congress on Public International Law, New York, 13–17 March 1995 (on file with author).

60. O'Connell, M., 3 *Ind. J. Global Legal Stud.* (1995), 53.

61. Pisillo-Mazzeschi, in Francioni & Scovazzi, *International Responsibility for Environmental Harm* (1991), 17, 34.

62. Spieker, *op. cit.*, 186; Birnie & Boyle, *op. cit.*, 3, 102;

63. Birnie & Boyle, *ibid.*, 11.

64. O'Connell, M., 35 *GYIL* (1992), 303.

65. Brownlie uses the terms "general" and "customary" international law interchangeably: 13 *Natural Resources Journal* (1973), 179.

66. Bodansky, 3 *Ind. J. Global Legal Stud.* (1995), 106

67. Kiss & Shelton, *op. cit.*, 161.

68. *Ibid.*, 162; Dupuy & Rémond-Gouilloud, *op. cit.*, 1169.

69. Signed by 31 States; Dupuy & Rémond-Gouilloud, *op. cit.*, 1169.

70. Arts. 24, 25.

71. Art. 5.

72. Dupuy & Rémond-Gouilloud, *op. cit.*, 1155–57.

73. It declares that all States shall take all possible steps to prevent pollution of the seas by substances that are liable to create hazards to human health, harm living resources and marine life, damage amenities or interfere with other legitimate uses of the sea.

74. Recommendations 86–94 on marine pollution: Kiss & Shelton, *op. cit.*, 164.

75. Annex VI containing Regulations for the Prevention of Air Pollution from Ships was adopted on 26 September 1997 by the International Conference on Air Pollution Prevention, 15–26 September 1997; IMO Fax 17/97 of 26 September 1997.

76. See IMO/Lloyd's data of 1/2/98: MARPOL 73/78 (Annex I/II) has been ratified by 104 States representing 93.49 percent of world tonnage.

77. Sands, *op. cit.*, 327; Status on 31/10/97: between 83 and 100 States, covering 82.02 to 93.47 percent of world tonnage.

78. Schachte, 23 *ODIL* (1992), 60–1.

79. Birnie & Boyle, *op. cit.*, 252–3.

80. Art. 45

81. Art. 220

82. Press Release UN Office of Legal Affairs, SEA/1396/Rev. 1 of 19 November 1993.

83. Agreement Relating to the Implementation of Part XI of the Convention, GA Res. 48/263 of 29 July 1994, adopted by a vote of 121 in favour, none against and seven abstentions, into force since 28 July 1996; Platzöder, 4 *EJIL* (1993), 390–402; Stevenson & Oxman, 88 *AJIL* (1994), 488; Anderson, 44 *ICLQ* (1995), 314*ff.*; Freestone & Mangone, *The Law of the Sea Convention: Unfinished Agenda and Future Challenges*, 10 *IJMCL* 1995, Special Issue, Number 2.

84. Malanczuk, *Akehurst's Modern Introduction to International Law* (1997), 174.

85. Source: UN Division for Ocean Affairs and the Law of the Sea

86. Even the U.S. administration seemed to embrace Part XII during the 1980s: Schachte, 23 *ODIL* (1992), 56; Stevenson & Oxman, 88 *AJIL* (1994), 490; Larson, 25 *ODIL* (1994), 81.

87. Birnie & Boyle, *op. cit.*, 253, 255; Kiss & Shelton, *op. cit.*, 165; Dupuy & Rémond-Gouilloud, *op. cit.*, 1187–8.

88. Dupuy & Rémond-Gouilloud, *ibid.*, 1193; Schachte, 23 *ODIL* (1992), 61.

89. Anderson, 44 *ICLQ* (1995), 313, 320–1.

90. Agenda 21, paras 17.1, 17.22.

91. Birnie & Boyle, *op. cit.*, 260.

92. Sands, *op. cit.*, 303–5.

93. Birnie & Boyle, *op. cit.*, 261; Sands, *op. cit.*, 303.

94. Birnie & Boyle, *op. cit.*, 261.

95. Sands, *op. cit.*, 297.

96. *Ibid.*, 301.

97. Birnie & Boyle, *op. cit.*, 262; Sands, *op. cit.*, 301.

98. Heintschel von Heinegg & Donner, 37 *GYIL* (1994), 311; Walker, in Grunawalt *et al.*, *Protection of the Environment During Armed Conflict* (1996), 189.

99. *E.g.*, Art. 3, 1976 Convention for the Protection of the Mediterranean Sea Against Pollution; Art. 3, 1985 Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region; Art. 4, 1986 Convention for the Protection of the Natural Resources and Environment of the South Pacific Region.

100. Arts. 208, 210, 211.

101. See literature cited by Birnie & Boyle, *op. cit.*, 256, fn. 16.

102. Anderson, 44 *ICLQ* (1995), 321; Birnie & Boyle, *op. cit.*, 54.

103. Birnie & Boyle, *op. cit.*, 266; Dupuy & Rémond-Gouilloud, *op. cit.*, 1183; Walker, *op. cit.*, 207, fn. 33; Heintschel von Heinegg & Donner, 37 *GYIL* (1994), 310; Schachte, 23 *ODIL* (1992), 62–3.

104. For a definition of "watercourse" see, *e.g.*, Art. 2 (a) and (b) of the 1997 International Watercourse Convention mentioned below and ILC Report (1994), UN Doc. A/49/10, 200.

105. Kiss & Shelton, *op. cit.*, 208.

106. UN Doc. A/51/869, 11 April 1997, 51st session, Report of the 6th Committee.

107. ILC Report (1994), UN Doc. A/49/10, 210.

108. Arts. 5–10.

109. Arts. 11–19.

110. Art. 20.
111. Art. 21.
112. Art. 23.
113. Arts. 27–28.
114. Art. 29.
115. Birnie & Boyle, *op. cit.*, 219–222; Kiss & Shelton, *op. cit.*, 208; see too ILC Report by McCaffrey, *Yearbook ILC* (1986), vol. II, pt. 1, 103–5, 110*ff.*; Schwebel, *ibid.*, (1982), pt. I, 75*ff.*; For States' views, see ILC Report (1987), UN Doc. A/42/10, 70 & and ILC Report (1994), UN Doc. A/49/10, 222–30.
116. Judgment of 25 September 1997, ICJ General List No. 92, para 97, citing Art. 5 para 2 of the 1997 International Watercourse Convention in full.
117. Birnie & Boyle, *op. cit.*, 219–242.
118. *River Oder Case*, PCIJ (1929), Ser. A, No. 23; *Diversion of Water from the Meuse Case*, PCIJ, (1937) Ser. A/B, No. 70; *Lac Lanoux* arbitration, 24 *ILR* (1957), 101; *Gut Dam Arbitration*, 8 *ILM* (1968), 118; *Gabcíkovo-Nagymaros Project*, Judgment of 25 September 1997, ICJ General List No. 92.
119. Birnie & Boyle, *op. cit.*, 225; Kiss & Shelton, *op. cit.*, 208; Lammers, *Pollution of International Watercourses* (1984), 124–7; but see Sands, *op. cit.*, 347 who suggests that this may be changing.
120. On the controversy surrounding this article, see McCaffrey & Sinjela, 92 *AJIL* (1998), 100–102.
121. ILC Report (1994), UN Doc. A/49/10, 236.
122. *Ibid.*, 291.
123. McCaffrey & Sinjela, 92 *AJIL* (1998), 101.
124. The requirement of significant harm is only included in Art. 22; the threshold of harm of Arts. 20 and 23 may be lower: ILC Report (1994), UN Doc. A/49/10, 293.
125. ILC Report (1994), UN Doc. A/49/10, 282, 298, 299.
126. *Ibid.*, 283–9; see too, Kiss & Shelton, *op. cit.*, 20.
127. McCaffrey & Sinjela, 92 *AJIL* (1998), 103–4.
128. Brownlie, *Principles of Public International Law* (1990), 233–4; Kiss & Shelton, *op. cit.*, 203.
129. For a definition of these terms see 1992 Biodiversity Convention, Art. 2.
130. Birnie & Boyle, *op. cit.*, 418.
131. Sands, *op. cit.*, 433–37.
132. *Ibid.*, 422–432; Van Dyke, in Freestone & Mangone, *op. cit.*, 219–227.
133. Birnie & Boyle, *op. cit.*, 418–9.
134. *Ibid.*, 419–445.
135. For a definition see Ramsar Convention, Art. 1.
136. Art. 2. (2), (3), (4).
137. Art. 2(6).
138. Art. 4 (2).
139. Art. 3 (1), (2), Art. 4 (1), (2), (4).
140. Birnie & Boyle, *op. cit.*, 465.
141. Source: The Ramsar Convention Bureau.
142. More than 150 to date, source: UNESCO World Heritage Centre, 1 February 1998.
143. Defined in Art. 2.
144. Art. 3.
145. Birnie & Boyle, *op. cit.*, 469.

146. Art. 11 (1); By December 1997 the World Heritage List included 418 cultural sites, 114 natural sites and 20 mixed properties in 112 States; Source: UNESCO World Heritage Centre, 1 February 1998.

147. Art. 11 (4).

148. Source: UNESCO World Heritage Centre, 1 February 1998.

149. Arts. 4, 5.

150. Art. 6 (1), (2).

151. Art. 6 (3).

152. Parts III, IV and V.

153. Source: Biodiversity Convention Secretariat.

154. Art. 4.

155. Art. 6.

156. Art. 7.

157. Arts. 8 & 9.

158. Art. 10.

159. Art. 11.

160. Art. 12.

161. Art. 13.

162. Art. 14.

163. Art. 5.

164. U.S. Declaration, 22 May 1992, 21 ILM (1992), 848; but the U.S. has signed since: Malanczuk, *op. cit.*, 249.

165. Sands, *op. cit.*, 386–7.

166. The provision was controversial during the preparatory stages and attracted various interpretative statements as soon as it was adopted: Chandler, 4 *Colo. JIEL & P* (1993), 148–50.

167. Written Pleading, HC-M, para 4.23.

168. Oral Pleading for Hungary (Mr. Sands), CR 97/12, 67, para 10.

169. The Court noted neither party claimed that new peremptory norms of environmental law had emerged since 1977: *Gabcíkovo-Nagymaros Project*, judgment of 25 September 1997, ICJ General List No. 92, para 112.

170. The underlying motive was the concern that the Biodiversity Convention might be used to upset the delicate balance achieved by the customary law of the sea regarding marine resources: Chandler, 4 *Colo. JIEL & P* (1993), 151–3.

171. Sands, *op. cit.*, 449–452.

172. Birnie & Boyle, *op. cit.*, 487–9.

173. *Ibid.*, 516–538; Sands, *op. cit.*, 422.

174. Birnie & Boyle, *op. cit.*, 538.

175. Second Assessment, Report of the Intergovernmental Panel on Climate Change of December 1995, summarised in *UN Climate Change Bulletin*, Issue 10, 2nd quarter 1996.

176. Boyle, in Churchill & Freestone, *op. cit.*, 7*ff.* & 13; for the view that State duties towards prevention of climate change, acid rain and depletion of the ozone layer are *erga omnes and jus cogens*: Hohmann, *op. cit.*, 214–16.

177. Birnie & Boyle, *op. cit.*, 390–1.

178. *Ibid.*, 399; Sands, *op. cit.*, 249;

179. Art. 2.

180. Arts. 3 & 4.

181. Art. 5.
182. Art. 8(b).
183. Sands, *op. cit.*, 248–255.
184. Birnie & Boyle, *op. cit.*, 402.
185. Art. 2 (1)
186. Art. 2 (1), (2).
187. Birnie & Boyle, *op. cit.*, 405.
188. Preamble.
189. Art. 1 (2).
190. Preamble.
191. Preamble.
192. Art. 5; Sands, *op. cit.*, 268–9.
193. Art. 4; Birnie & Boyle, *op. cit.*, 408–9.
194. Birnie & Boyle, 409–10.
195. Source: Ozone Secretariat at UNEP.
196. Source: UNFCCC Secretariat.
197. Art. 2.
198. Arts. 4, 12.
199. Sands, *op. cit.*, 276–8; Malanczuk, *op. cit.*, 248.
200. Art. 4(2).
201. Press Release UNFCCC Secretariat, 16 March 1998.
202. Sands, 4 *EJIL*(1993), 380; Birnie & Boyle, *op. cit.*, 93, chapters 11 & 12.
203. On these issues, see Birnie & Boyle, *op. cit.*, chapters 8, 9, 10; Sands, *op. cit.*, chapters 11, 12, 13.
204. *E.g.*, UNGA Res. 1803 (XVII) on Permanent Sovereignty over Natural Resources, 14 December 1962, 17 UN GAOR (Supp. No. 17), 15, para 1; see Sohn, 14 *Harv. ILJ* (1973). 485–7; Kiss & Shelton, *op. cit.*, 129; In the 1985 *Case Concerning East Timor*, the ICJ acknowledged the *erga omnes* character of the right to self-determination: *ICJ Rep.* (1995), 102. para 29.
205. Sohn, 14 *Harv. ILJ* (1973), 485–93; O'Connell, M., 35 *GYIL* (1992), 305; Birnie & Boyle, *op. cit.*, 90–1; Sands, *op. cit.* 191.
206. 2 *RIAA*, 829, 839.
207. Kiss & Shelton, *op. cit.*, 120–1.
208. Shearer, in Grunawalt *et al.*, *op. cit.*, 549.
209. 3 *RIAA*, 1965.
210. Merits, *ICJ Rep.* (1949), 22.
211. 24 *ILR*, 129 para 13; The tribunal clarified that pollution of waters, changed chemical composition, a change in water temperature, or inability to make restitution of waters resulting from the use by one State of international waters within its borders could violate the rights of the affected State: *ibid.*, 123–4, para 6.
212. Discussed in ILC, 47th session, Geneva, 2 May-21 July 1995, *Survey of Liability Regimes Relevant to the Topic of International Liability for Injurious Consequences arising out of acts not prohibited by International Law* [hereinafter 1995 ILC Survey], UN Doc. A/CN.4/471 of 23 June 1995, paras 181–2; Sands, op. cit, 360–61; Handl, & 2 *EPIL* (1981), 126.
213. 1995 ILC Survey, para 184.
214. *Ibid.*, para 192.
215. *E.g.*, 1979 LRATP Convention, preamble; 1982 UNCLOS, Art. 194 (2); 1992 Biodiversity Convention, Art. 3; 1992 Framework Convention on Climate Change, preamble.

216. *E.g.*, UN Charter of Economic Rights and Duties of States, 12 December 1974, UNGA Res. 3281; 1982 World Charter for Nature; Rio Declaration, Principle 2, see further *infra*, 1.2.3. C.

217. O'Connell, M., 35 *GYIL* (1992), 303–9; Sohn, 14 *Harv. ILJ* (1973), 485–93; Palmer, G., 86 *AJIL* (1992), 267–8; Kiss & Shelton, *op cit.*, 106–7, 129*ff.*; Sands, *op. cit.*, 191–4; Charney, in Francioni & Scovazzi, *op. cit.*, 162–3; see too the assessment made by the ILC of Principle 21 in its work on International Liability, ILC Report (1994), UN Doc. A/49/10, 389–90.

218. Written Statements by U.S., WHO Request (June 1994), 15–6; UNGA Request (June 1995), 38–9; UK (June 1995), 69, para. 3.109; France (June 1995), 39, para. 26.

219. Written Statements by Nauru (I), WHO Request (September 1994), 44; by Solomon Islands, WHO Request (June 1994), 83, paras 4.17–.19; Solomon Islands (June 1995), 64–5, paras 4.83–.87; Solomon Islands, UNGA Request (June 1995), 84–6, paras 4.17–.19; Egypt, UNGA Request (June 1995), 17, (September 1995), 30, 32, paras 70, 75; Oral Statements (WHO and UNGA requests), Solomon Islands (Mr. Sands), CR 95/32, 72, para 21; Iran, CR 95/26, 42–3, para 64.

220. *ICJ Rep.* (1996), 241–2, para 29.

221. 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 Case (New Zealand v. France) [hereinafter Request for an Examination of the Situation], Order, 22 September 1995, *ICJ Rep.* (1995), 306, para 64.

222. ICJ, *Gabcíkovo-Nagymaros Project*, judgment of 25 September 1997, General List No. 92, para 53.

223. Birnie & Boyle, *op. cit.*, 89, 91, 100.

224. Sands, *op. cit.*, 194–197.

225. While Birnie & Boyle argued in 1992 that the duty of harm prevention was "beyond serious argument" (*op. cit.*, 89), O'Connell, M., wrote in the same year that this was an emerging principle: 35 *GYIL* (1992), 293, 303.

226. Plant, *Environmental Protection*, 19.

227. Birnie & Boyle, *op. cit.*, 102–9.

228. Sands, *op. cit.*, 197–8.

229. Kiss & Shelton. *op. cit.*, 131–41.

230. Sands, *op. cit.*, 198.

231. Birnie & Boyle, *op. cit.*, 102–3, 234–242; Arts. 12–19 of the 1997 International Watercourse Convention; see too Hungarian submissions, *Gabcíkovo-Nagymaros Project* case, HM, 203–4, paras 6. 70–.71, 211–13, paras 7.06–.16, 223–27, paras 7.57–.65.

232. Birnie & Boyle, *op. cit.*, 102–109; Harlow & McGregor, in Grunawalt *et al.*, *op. cit.*, 317; Smith, *op. cit.*, 80–82; For the view that the procedural principles of co-operation inherent in Principle 21 are *jus cogens:* Hohmann, *op. cit.*, 255.

233. *ICJ Rep.* (1995), 290–1, paras 5–8.

234. *Ibid.*, 304–6, paras 56–66.

235. *Ibid.*, 344.

236. *Ibid.*, 410, para 87.

237. Oral Pleadings (Prof. McCaffery), CR 97/9, 38–9.

238. Written Pleadings, HC-M, 195, para 4.24; Oral Pleadings (Reply, Mr. Sands) CR 97/12, 68–9.

239. Judgment, para 140; see too Sep. Op. Weeramantry who argues that this wording implies that an EIA must be conducted.

240. The theme of (sustainable) development or "environment and development" permeates the entire Rio Declaration, for it is mentioned in many of its Principles.

241. Sands, *op. cit.*, 50; Sands, 4 *EJIL* (1993), 382.

242. Biodiversity Convention, Art. 3; Forest Principles, 2 (a).

243. Preamble and Principles 8 & 11: Sohn, 14 *Harv. ILJ* (1973), 464–66, 469; Kiss & Shelton, *op. cit.*, 48; Sands, 4 *EJIL* (1993), 382.

244. Established by UNGA Res. 38/161 of 19 December 1983 with a mandate to critically examine environment and development issues and to formulate realistic proposals for their solution; The WCED report was submitted to the UNGA in 1987 (UN Doc. A/42/427) through the Governing Council of UNEP, and published later under the title *Our Common Future* (1987).

245. *Our Common Future*, Chapter 2, 43; On the origin of this notion see Birnie & Boyle, *op. cit.*, 4; Sands, *op. cit.*, 199; Hohmann, *op. cit.*, 20.

246. Written Pleadings, HC-M, 196–7, para 4.25; HR, 21, para 1.39; 24–5, paras 1.45–.48.

247. Written Pleadings SC-M, 257–65, paras 9.53–.66.

248. Oral Pleadings (Prof. McCaffrey) CR 97/9, 29.

249. Judgment, para 140; see too Sep. Op. Weeramantry who argues at length that the concept of sustainable development has normative value and forms part of modern international law.

250. Principle 3.

251. Principle 10.

252. Principle 15.

253. Principle 16.

254. Principle 7.

255. For a background and critical discussion of all these principles see *Agora*: "What Obligation Does Our Generation Owe to the Next—An Approach to Global Environmental Responsibility," 84 *AJIL* (1990), 190–212 with contributions by D'Amato, 190–98; Brown Weiss, 198–207, Gündling, 207–212; see also Freestone, in Churchill & Freestone, *op. cit.*, 21–39; Rehbinder in Kiss & Burhenne-Guilmin, *op. cit.*, 93–111; Smets, 97 *RGDIP* (1993), 339–363; Bodansky, in 85 *ASIL Proceedings* (1991), 413–417; Boyle, in Francioni & Scovazzi, *op. cit.*, 368–70, 474*ff.*; Hohmann, *op. cit.*, 192*ff.*; Birnie & Boyle, *op. cit.*, 95–98, 109–111 & 211–212; Sands, *op. cit.*, 208–216.

256. Cameron & Abouchar, in Freestone & Hey, *The Precautionary Principle and International Law* (1996), 30*ff.*

257. Freestone & Hey, *ibid.*, 14; Tinker, *ibid.*, 53–71.

258. Birnie & Boyle, *op. cit.*, 97; Cameron & Abouchar, *op. cit.*, 30.

259. Kiss, in Freestone & Hey, *op. cit.*, 27; Birnie & Boyle, *op. cit.*, 95–6; Sands, *op. cit.*, 212.

260. Freestone & Hey, *op. cit.*, 13; Birnie & Boyle, *op. cit.*, 95–6.

261. Birnie & Boyle, *Ibid.*, 97–8.

262. *ICJ Rep.* (1995), 290, 298–9, paras 5, 34, 35.

263. Weeramantry, *ibid.*, 342; Palmer, *ibid.*, 412, para 91.

264. Written Pleadings HM, 200–3, paras 6.63–.69; ICJ judgment, 25 September 1997, General List No. 92, para 97.

265. Oral Pleadings (Reply, Mr. Sands) CR 97/12,78–9.

266. Written Pleadings SC-M, 271–77, paras 9.80–.94; Oral Pleadings (Prof. McCaffery) CR 97/9, 34–7.

267. At para 112.

268. At para. 54.

269. Sands, *op. cit.*, 184.

270. UN Doc. E/CN.17/1997/8, 10 February 1997, Commission on Sustainable Development, 5th Sess., 7-25 April 1997.

271. *Supra*, 1.1.2.

272. There are of course other indicators, such as voluntary compliance, national implementation, and dispute settlement.

273. This rule forms the cornerstone of the ILC's work on State Responsibility: Draft Articles on State Responsibility, General Principles, Art. 1, adopted in 1973 at its 25th session, *Yearbook ILC*, (1979), vol. II, pt. 2, Report on 31st session, 91.

274. PCIJ (1928), Ser. A., No. 17, p. 29; see also *SS Wimbledon* Case, PCIJ (1923), Ser. A, No. 1, p. 3.

275. Most international environmental agreements are said to deal either with unusual or unimportant problems or issues for which a technological solution is at hand: McManus, in 87 *ASIL Proceedings* (1993), 388.

276. O'Connell, M., 3 *Ind. J Global Legal Stud.* (1995), 54.

277. *Gabcíkovo-Nagymaros Project* case, ICJ Judgment of 25 September 1997, ICJ General List No. 92, para 47, citing earlier case law; see too *Rainbow Warrior* Arbitration (1990), 82 *ILR*, 499 at 550–1, para 75.

278. Conforti, in Francioni & Scovazzi, *op. cit.*, 179–80; Spinedi, *ibid.*, 77*ff.*

279. But this situation is not unique to IEL: Boisson de Chazournes, 99 *RGDIP* (1995), 41*ff.*

280. Palmer. J., *op. cit.*, 28–30; Sands, *op. cit.*, pp. 642–4.

281. Gehring & Jachtenfuchs, 4 *EJIL* (1993), 97–101; *See infra*, 4.2.1., 4.2.2.

282. Source: Council of Europe.

283. Art. II.

284. Gehring & Jachtenfuchs, 4 *EJIL* (1993), 102–3.

285. See *infra*, 4.2.2.

286. Rosas, in Bring & Mahmoudi, *Current International Law Issues: Nordic Perspectives* (1994), 161–82.

287. See *infra*, 4.2.1.

288. Rosas, *ibid.*, 165; Birnie & Boyle, *op. cit.*, 192–3.

289. Leigh, 14 *AYIL* (1992), 135; Sands, 30 *Harv. ILJ* (1989), 404*ff.*; Boisson de Chazournes, 99 *RGDIP* (1995), 46–47, 50–51.

290. Principle 13 of the 1992 Rio Declaration expresses clear frustration at the lack of progress in this area since UNCHE; see too Art. 14 (2) of the 1992 Convention on Biological Diversity which calls for further studies on the issues of liability and redress: Chandler, 4 Colo. *JIEL & P* (1993), 160.

291. As to the validity of this distinction see: Leigh, 14 *AYIL* (1992), 140, fn. 69; O'Connell, M., 35 *GYIL* (1992), 308–9; Boyle, 30 *ICLQ* (1990), 1; Akehurst 16 *NYIL* (1985), p. 3; Combacau & Alland, 16 *NYIL* (1985), 81.

292. Sands, *op. cit.*, 637.

293. Pisillo-Mazzeschi, *op. cit.*, 35; Tomuschat, *op. cit.*, 48–49; Boyle, 60 *BYIL* (1990), 257*ff.*

294. UNEP/Env. Law/3/Inf. 1, 15 October 1996, 5–6, para 21.

295. *Green Paper on Remedying Environmental Damage* (Com (93) 47 Final), 14 May 1993; Sands, *op. cit.*, 635.

296. See the standards mentioned *supra*, 1.2.1.

297. See the test of "*more than merely nominal harm or damage*" suggested by Australia in the Nuclear Tests case, *ICJ Rep.* (1974), 525–6; discussed by Sands, *op. cit.*, 245–6; the same test reappeared in State submissions regarding the *Legality of Nuclear Weapons*:, Written Statements by Solomon Islands, WHO Request (June 1994), 80–2, paras 4.12.15; UNGA Request (June 1995), 82–3, paras 4.12–15; and in the *Gabcíkovo-Nagymaros* Project case: Written Pleadings for Hungary, HR, 26, paras 1.52–.54; oral Pleadings for Slovakia (Prof. Crawford), CR 97/9, 30–1.

298. Birnie & Boyle, *op. cit.*, 98; Sands, *op. cit.*, 635–6; According to the 1994 ILC Report on international watercourses (ILC Report (1994), UN Doc. A/49/10, 211–12), "significant" means that it can

be established by objective evidence, that it must not be trivial, but does not mean that it rises to the level "substantial"; this interpretation has been noted by the UNGA 6th Committee: UN Doc. A/51/869, 11 April 1997.

299. Sands, *op. cit.*, 636.

300. Schermers, in Delissen & Tanja, *Humanitarian Law of Armed Conflict-Challenges Ahead* (1991), 584.

301. Hohmann, *op. cit.*, 239–46.

302. Cassese, *International Law in a Divided World* (1986), 9–32.

303. For a concurring view in relation to the marine environment: Smith. *op. cit.*, 67–8.

304. *Supra*, 1.2.1. B, D & E.

305. *Our Common Future* (1987), Chapter 10, 261; Birnie & Boyle, *op. cit.*, 154; Leigh, 14 *AYIL* (1992), 135; Johnson, in Bourdeau *et al.*, *op. cit.*, 174.

306. Slinn, in Churchill & Freestone, *op. cit.*, 83.

307. Charney, in Francioni & Scovazzi, *op. cit.*, 161.

308. Caldwell, *op. cit.*, 257*ff.*

309. Hannikainen, *Peremptory Norms (Jus Cogens) in International Law* (1988), 521–2; Lefeber, 21 *NYIL* (1990), 89.

310. Dupuy, *Droit International Public* (1993), 511.

311. Brownlie, *Principles*, 151, 178, 265, 252.

312. *Ibid.*, 178.

313. Note that several States lay claim on this region, but that these were "frozen" by the 1959 Antarctic Treaty; Lefeber, 21 *NYIL* (1990), 88*ff.*; Joyner, in Freestone & Mangone, *op. cit.*, 309.

314. Sohn, 14 *Harv. ILJ* (1973), 493; ILC Report (1982), UN Doc. A/37/10, 180.

315. See *infra*, this subheading, on the issue of protection of the environment "as such."

316. Tomuschat, *op. cit.*, 40, 44*ff.*; *Smith, op. cit.*, 80.

317. Hohmann, *op. cit.*, 88; Birnie & Boyle, *op. cit.*, 91–92; Charney, in Francioni & Scovazzi *op. cit.*, 149.

318. Charney, *ibid.*, 155; Smith, *op. cit.*, 7–8; Higgins, *Problems and Process* (1994), 163.

319. Handl, 69 *AJIL* (1975), 58*ff.*; Sands, *op. cit.*, 150.

320. *Nuclear Tests Case (Australia v. France)*, Interim Protection, Order of 22 June 1973, *ICJ Rep.* (1973), 103, paras 22 & 27.

321. *Nuclear Tests Case (New Zealand v. France)*, Interim Protection, Order of 22 June 1973, *ICJ Rep.* (1973), 139; For a discussion of the differences between the New Zealand and the Australian applications, see *Request for an Examination of the Situation*, Order of 22 September 1995, *ICJ Rep.* (1995), Diss. Op. Palmer, 384–5, para 10.

322. Handl, 69 *AJIL* (1975), 50–76; Birnie & Boyle, *op. cit.*, 100.

323. But see the *Pacific Fur Seal Arbitration* award of 1893 (UK v. U.S.) and the *Patmos* case, discussed by Sands, *op. cit.*, 415–9, 663–4.

324. Settlement of Japanese Claims for Personal and Property Damages Resulting from Nuclear Tests in the Marshall Islands in 1954, done January 4, 1955; Whiteman, 4 *Digest of International Law*, 565–7, 569–57 1; Leigh, 14 *AYIL* (1992), 136; Van Dyke, 24 *ODIL* (1993), 413; du Pontavice, in OECD, *Legal Aspects of Transfrontier Pollution* (1977), 430.

325. ILC, *Survey of State Practice relevant to international liability for injurious consequences arising out of acts not prohibited by international law*, prepared by the Secretariat, A/CN.4/384, Documents of the 37th session, *Yearbook ILC* (1985), vol. II, pt. 2, 108, paras 522–24; Szulc, The Bombs of Palomares (1967), 117*ff.*, 165, 197; du Pontavice, *op. cit.*, 435; Rousseau, 74 *RGDIP* (1970), 1062.

326. States are absolutely liable for damage caused by their space objects on the surface of the earth or to aircraft in flight (Art. II), whereas for damage caused "elsewhere than on the surface of the earth" to a space object or to persons or property on board, liability is fault-based (III).

327. See definition of damage in Art. I (a).

328. The total cost of the operation to Canada was approximately $14 million: Van Dyke, 24 *ODIL* (1993), 414.

329. Canada, Claim against the USSR for Damage Caused by Soviet Cosmos 954, 23 January 1979, 18 *ILM* (1979), 899–908; *Protocol between the Government of Canada and the Government of the Union of the Soviet Republics*, done 2 April 1981, 20 *ILM* (1981), 689; Sands, *op. cit.*, 647–8; Leigh, 14 *AYIL* (1992), 136.

330. *Yearbook ILC* (1991), vol. II. part 2, 108 at 117–18; ILC Report (1994), UN Doc. A/49/10, 391, 398–9.

331. *E.g.*, 1968 African Convention on the Conservation of Nature and Natural Resources, Art. 2; 1982 World Charter for Nature, first principle; 1982 UNCLOS, Art. 192; 1985 Vienna Convention for the Protection of the Ozone Layer, Art. 2(1); 1992 Convention on Biological Diversity, Art. 6 (a); 1997 Convention on the Law of Non-Navigational Uses of International Watercourses, Arts. 20, 23.

332. Almond, in Cooper & Palmer, *op. cit.*, 3; Stone, 45 SCLR (1972), 499–500 and 59 *SCLR* (1985), 1–154.

333. Handl, 69 *AJIL* (1975), 53.

334. Second Phase, *ICJ Rep.* (1966), 47.

335. Second Application, *ICJ Rep.* (1970), 32.

336. Interim Protection (Australia v. France), *ICJ Rep.* (1973), p. 99 at para 22; (New Zealand v. France), *ibid.*, p. 135 at para 23.

337. (Australia v. France) *ibid.*, p. 99 at para 22; (New Zealand v. France) *ibid.*, p. 135 at para 23.

338. The Court found that France unilaterally undertook to stop the tests and that Applicants had therefore reached their objective: (Australia v. France), Jurisdiction, *ICJ Rep.* (1974), p. 253 at para 52.

339. (Australia v. France), Jurisdiction, Joint Diss. Op. Onyeama, Dillard, Jiménez de Aréchaga & Waldock, *ICJ. Rep.* (1974), p. 312 at para 117; identical Joint Diss. Op. (New Zealand v. France), *ibid.*, p. 457 at para 52.

340. *ICJ Rep.* (1995), 291, para 6.

341. Diss. Op. Weeramantry, Koroma & Palmer: *ibid.*, 317*ff.*, 363*ff.*, 381 *ff.*

342. *Ibid.*, 306, para 63.

343. Smith, *op. cit.*, 97–99.

344. Even Australia acknowledged the *erga omnes* character of the right of self-determination: Rejoinder, para 78, cited in Diss. Op.Weeramantry, *ICJ Rep.* (1995), 172.

345. *ICJ Rep.* (1995), 102, para 28.

346. *Ibid.*, para 29.

347. *Ibid.*, para 28.

348. *Ibid.*, 101, para 26.

349. *Ibid.*, 102 para 29; Burchill, 2 *Journal of Armed Conflict Law* (1997), 1–22.

350. Diss. Op. Weeramantry, ICJ Rep. (1995), p. 139 at 172.

351. Sep. Op. Ranjeva, *Ibid.*, 131–132.

352. Sep. Op., ICJ Judgment of 25 September 1997, ICJ General List No. 92.

353. ILC Report (1976), UN Doc. A/31/10, 266; Draft Articles on State Responsibility so far adopted by the International Law Commission, Art. 19. 1 (d), *Yearbook ILC* (1980), vol. II, pt. 1, 30. In

1998 the Commission decided to put draft Article 19 "to one side" and to study the matter of the criminal liability of States further: ILC Report (1998) UN Doc. A/53/10, 147 para 331.

354. ILC Report (1994), UN Doc. A/49/10, 330–39 & 358. In 1998 the Commission decided to put Draft Article 19 "to one side" and to study the matter of the criminal liability of States further: ILC Report (1998) UN Doc. A/53/10, 147, para. 331.

355. Hannikainen, *op. cit.*, 287–88; Hohmann, *op. cit.*, 152; Birnie & Boyle, *op. cit.*, 209–210; Higgins, *op. cit.*, 165–8; Malanczuk, *op. cit.*, 60; see too: *Institut* Discussions on transboundary air pollution: Henkin, 60 *Ann. IDI* (1984), T. I., 236*ff.*, 237 & 246 and of Lachs, Rudolf, Seidl-Hohenveldem, 62 *Ann. IDI* (1986), T. I., 270*ff.*, 273, 281 & 288; ILC Report (1994), UN Doc., A/49/10, 338.

356. Art. 26, Draft Code on Crimes against the Peace and Security of Mankind, *Yearbook ILC*, (1991), vol. II, pt. 2, 97; see too Art. 22 (d), *ibid.*

357. Following a report by a special working group, it was finally decided to retain only the proposal to include wilful and severe damage to the environment in the list of war crimes: see Art. 20 (g), Final Draft of the Code Report of the ILC on its 48th session (1996), vol. II, pt. 2, chapter II, A (Introduction), paragraphs 41 to 44; B (Articles with commentary), paragraph 15.

358. In the *Gabcíkovo-Nagymaros Project* case, see *supra*, 1.2.1. C.

359. This provision prohibits Parties from concluding *inter se* agreements derogating from "the basic principles" of the convention; Hannikainen, *op. cit.*, 524.

360. Hohmann, *op. cit.*, 214–16, 255.

361. ILC Report (1976), UN Doc. A/31/10, 260–1, 287; Hannikainen, *op. cit.*, 288–9, 693.

362. But see Hannikainen, *op. cit.*, 248–265.

363. Birnie & Boyle, *op. cit.*, 122; but see Kiss & Shelton, *op. cit.*, 144*ff.*

364. ILC Report (1982), UN Doc. A/37/10, 186; see too ILC Report (1994), UN Doc. A/49/10, 391, 388–9.

365. But see Sands, *op. cit.*, 194.

366. Smith, *op. cit.*, 103.

367. IUCN Draft Covenant on Environment and Development of March 1995 (on file with author), Article 11 (1) (a).

368. Sohn, 14 *Harv. ILJ* (1973), 423, 429, 434, 436, 439, 451–2 & 455.

369. Handl, 69 *AJIL* (1975), 54, fn. 28; Smith, *op. cit.*, 101; Caldwell, *op. cit.*, 65; Kiss & Shelton, *op. cit.*, 21–23, 25–27, 29; Hohmann, *op. cit.*, 61, 253–4; Birnie & Boyle, *op. cit.*, 191–93; Ksentini, Special Rapporteur to ECOSOC on *Human Rights and the Environment*, Final Report, 46th session, E/CN.4/Sub. 2/1994/9, para. 31, pp. 10–11, (6 July 1994); Gormley, *Human Rights and Environment* (1976), 1.

370. Kiss, 2 *Revue Universelle des Droits de L 'Homme* (1990), 446; Desgagné, 89 *AJIL* (1995), 263–294; Sands, *op. cit.*, 220–230; Hohmann, *op. cit.*, 61, 142; Sands, *op. cit.*, 50.

371. *E.g.*, The 1981 African Charter on Human Rights and People's Rights, of June 27, 1981, OAU Doc. CAB/LEG/67/3/Rev. 5 (1981), 28 ILM(1982), 58, Art. 24; San Salvador Additional Protocol of November 14, 1988 to the American Convention on Human Rights, 28 ILM (1989), 156; Art. 11.

372. Kiss & Shelton, *op. cit.*, 22–23; Sands, *op. cit.*, 224; Ksentini, Final Report, *op. cit.*, 59–60, para 240, Annex III on "Developments in National Legislation and Practices," 81–90, and on municipal case law, 92–93.

373. Written Statements by Costa Rica, WHO Request (July 1994), 7–9; (I) Nauru, WHO Request (September 1994), 48–51; Malaysia, WHO Request (September 1994), 10–11; Samoa, WHO Request (September 1994), 3; Solomon Islands, WHO Request (June 1994), 86–7, para 4.24; by Solomon Islands UNGA Request (June 1995), 91–2, paras 4.32–.35.

374. *ICJ Rep.* (1996), 241–2, para 29; see too *Gabcíkovo-Nagymaros Project*, judgment of 25 September 1997, ICJ General List No. 92, para 112.

375. Desgagné, 89 *AJIL* (1995), 293–4.

376. Shearer, in Grunawalt *et al.*, *op. cit.,* 549; The terms added by this author are "or in international areas."

Chapter II

1. Best, in Delissen & Tanja, *op. cit.*, 6 and in Westing, *Cultural Norms*, 18–29.

2. On the origin of these terms see Kolb, *ICRC Review* (1997), No. 320, 553–562.

3. Oppenheim, *International Law. A Treatise.* vol. II. *Disputes, War and Neutrality* (1952), 217–18; Brownlie, *International Law and the Use of Force by States* (1963), 406–7.

4. Kalshoven, 9 *NYIL* (1978), 130; see too Bothe *et al.*, *New Rules for Victims of Armed Conflicts* (1982), 346.

5. Lumsden, in *War and Environment* (1981), 38–57 (1981); Westing, *ibid.*, 58–73 and in *Environmental Hazards of War* (1990), 1–10.

6. Keegan, *A History of Warfare* (1993), 6–9, 106–115, 265–266; Best, in Westing, *Cultural Norms*, 24–5; McCoubrey, in *Pilot Study on Defence Environmental Expectations* (1995), 236–7; Momtaz, 37 *AFDI* (1991), 204, 206; Witteler, *Die Regelungen der Neuen Verträge des humanitären Völkerrechts und des Rechts de Rüstungsbegrenzungmit direkem Umweltbezug*, (1993), 49–54.

7. Best, in Westing, *Cultural Norms*, 18; Roberts, in Grunawalt *et al.*, *op. cit.*, 225; Spieker, *op. cit.*, 189–199; Witteler, *op. cit.*, 151–156.

8. Plant, *Environmental Protection*, 17; Roberts, in Grunawalt *et al.*, *op. cit.*, 225.

9. Sandoz, *ICRC Review* (1997), No. 316, 6–8; Bugnion, *ICRC Review* (1995), No. 305, 217–8.

10. See State submissions in relation to the Advisory Opinion on Nuclear Weapons (UNGA Request): USSR, Written Statement, 18; U.S., Written Statement, 21; UK, Written Statement, 21; and see Opinion, *ICJ Rep.* (1996), 266, para 105 2 D; Cassese, *International Law*, 265.

11. Menon, 30 *RDMDG* (1991), 253–301; Best, *War and Law Since 1945* (1994), 204.

12. Meyrowitz, 13 *AFDI* (1967), 189–190; Witteler, *op. cit.*, 62–72; Robinson, in *War and Environment*, 79*ff.*; Moore, in Falk, *The Viemam War and International Law* (1976), vol. IV, 181*ff.*

13. Witteler, *op. cit.*, 61–82; Westing, in *War and Environment*, 66–68.

14. McCoubrey, in *Pilot Study*, 236.

15. *Infra,* 2.2.4.

16. Westing, in *War and Environment,* 66–8 and in Falk, *The Vietnam War*, 284–6; Falk, *ibid.*, 286–303; Blix, in *War and Environment*, 123–33; SIPRI, *Ecological Consequences of the Second Indochina War* (1976), 55–56, references fn. 4; Spieker, *op. cit.*, 276–84; Witteler, *op. cit.*, 72–78.

17. *Infra*, 3.3.1.

18. The Convention has four attached protocols on specific weapons and methods of warfare; The first three protocols were agreed together with the main Convention: Protocol (I) on Non-detectable Fragments; Protocol (II) on Prohibitions or Restrictions on the Use of Mines, Booby-Traps, and other Devices; Protocol (III) on Prohibitions or Restrictions on the Use of Incendiary Weapons; the fourth one, Protocol (IV), on Blinding Laser Weapons was agreed on 13 October 1995 at the first Review Conference of the 1980 Convention; see Doswald-Beck, *ICRC Review* (1996), No. 312, 272–299.

19. Art. II (2) defines toxic chemicals as "Any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals," David, *Principes de Droit Des Conflits Armés* (1994), 285*ff.*; Krutzch & Trapp, *A Commentary on the Chemical Weapons Convention* (1994), 543*ff.*; McCoubrey, in Fox & Meyer, *Effecting Compliance* (1993), 127.

20. Russo, in Dekker & Post, *The Gulf War of 1980–1988* (1988), 187–193; Wallach, 41 *ICLQ* (1992), 287–310.

21. Roberts, in Grunawalt *et al.*, *op. cit.*, 225; Interestingly, some of these oil installations belonged to a subsidiary of a U.S. company: Hyde, *International Law* (1947), 957.

22. Hinsley, *British Intelligence in the Second World War* (1994), chapter 36 on the Allied oil offensive.

23. Kalshoven, in Dekker & Post, *op. cit.*, 106–7; Momtaz, 37 *AFDI* (1991), 216; Sandoz *et al.*, *Commentary on the Additional Protocols* (1987), 668–9.

24. *Infra*, 3.1.1.

25. Walker, in Grunawalt *et al.*, *op. cit.*, 185.

26. *Infra*, 3.1.2.

27. Bothe *et al.*, *Protection of the Environment in Times of Armed Conflict*, SJ/110/85 (on file with author) [hereinafter EC Experts Report]; *Infra*, 3.1.2.

28. According to the Kuwait Oil Co., out of a total of 914 operational wells in Kuwait, 798 well-heads had been detonated by the Iraqi forces, of which 603 were on fire, 45 were gushing oil but not on fire, and a further 150 were damaged; The capping took 8 months: UNCC, *Well Blowout Control Claim* (1996), 36 *ILM* (1997), 1289 at paras 36–7.

29. Estimates of the size of the spill vary between 30 to 16 million barrels, i.e., between 30 to 40 times larger than the heavily publicised 1989 *Exxon Valdez* oil spill in Alaska; Price & Robinson, *The 1991 Gulf War: Coastal and Marine Environmental Consequences, 27 Marine Pollution Bulletin* (special issue), (1993), viii; Gerges, *ibid.*, 308; Tawfiq & Olsen, *ibid.*, 335; Literathy, *ibid.*, 356; Walker, *op. cit.*, 186; IMO, *Final Report of the Persian Gulf Oil Pollution Disaster Fund*, (1993), [hereinafter IMO Report], 1.

30. Roberts, in Grunawalt *et al.*, 248; Walker, *ibid.*, 186; Arkin *et al.*, *On Impact* (1991), 62–66; Feliciano, 14 *Houston JIL* (1992), 487.

31. See January and February 1991 issues of XIV *Oil Spill Intelligence Report* [hereinafter OSIR]; Price & Robinson, *op. cit.*; UNEP Governing Council, 17th session, Nairobi, 10–21 May 1992, UNEP/GC. 17/Inf.9, 2 February 1993, item 7 on the UN Interagency Plan of Action adopted in March 1991 in Geneva and UNEP's findings in regard to the causes of pollution.

32. Iran, Iraq, Afghanistan, Pakistan, Turkey, Bulgaria, Romania, and the northern shores of the Black sea; Arkin *et al.*, *op. cit.*, 67–70; Feliciano, 14 *Houston JIL* (1992), 493–4.

33. McCoubrey, in *Pilot Study*, 238; Momtaz, 37 AFDI (1991), 211; Walker, *op. cit.*, 187; Low & Hodgkinson, 35 *VJIL* (1995), 408–12.

34. Note though that in the 1996 *Well Blowout Control Claim* before the UNCC, Iraq denied (in vain) responsibility for the oil-well fires: 36 *ILM*(1997), 1289 at paras 42–45; *infra*, 2.4.2.C.

35. Plant, 7 *IJECL* (1992), 217–231; Zedalis, 24 *VJTL* (1991), 711–55 and 23 *RBDI* (1992), 323–49; Arkin *et al.*, *op. cit.*, 139–142; Roberts, in Grunawalt *et al.*, *op. cit.*, 261–2; McCoubrey, in *Pilot Study*, 238; Schmitt, 36 RDMDG (1997), 15–6; Lijnzaad & Tanja, 40 *NILR* (1993), 196.

36. UNEP Governing Council, 17th session, *op. cit.*, 6; U.S. (Secretary of the Army), *Report on Iraqi War Crimes (Desert Shield/Desert Storm)*, 8 January 1992, circulated as UN Doc. S/25441, 19 March 1993, 13, 15–18, 46; Feliciano, 14 *Houston JIL* (1992), 485, 490; Arkin, in Grunawalt *et al.*, *op. cit.*, 116–121; see too UNCC, *Well Blowout Control Claim* (1996), 36 *ILM* (1997), 1289 at para 85.

37. Szasz, in 85 *ASIL Proceedings* (1991), 219; Momtaz, 37 *AFDI* (1991), 204–5; Roberts, in Grunawalt, *op. cit.*, 249; Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 291–2; For a thorough review of positions by States and international organisations, see Spieker, *op. cit.*, 424–59.

38. Plant, *Environmental Protection*, 37; Witteler, *op. cit.*, 480–501; Simonds, 29 *SJIL* (1992), 10–215; Lavieille, 4 *Revue Juridique de l'Environnement* (1992), 434–37.

39. Bouvier, *ICRC Review* (1992), No. 285, 554–56; Tarasofsky, 24 *NYIL* (1993), 18, fn. 1; Gasser, 89 *AJLL* (1995), 637–641; Schmitt, 36 *RDMDG* (1997), 16–18; see too the summary of official views in Plant, *Environmental Protection*, 13–37.

40. *Infra*, 3.3.1.

41. GA Res. 47/37 (Nov. 25, 1992), adopted without a vote; Lijnzaad & Tanja, 40 *NILR* (1993), 190–2.

42. UN Docs. A/47/328, 31 July 1992 and A/48/269, 29 July 1993, entitled *Protection of the Environment in Times of Armed Conflict*, which includes a set of basic rules for the military; see too ICRC statement at UNGA, 19th Special Session, 23–27 June 1997, "Five Years after Rio," (on file with author).

43. For a historical overview see: Greenwood, in Fleck, *The Handbook of Humanitarian Law in Armed Conflicts* (1995), 12–23; For treaty texts see, *inter alia*, Schindler & Toman, *The Laws of Armed Conflict* (1988); Roberts & Guelff, *Documents on the Laws of War* (1982); On the definition of International Humanitarian Law, including the traditional but now outdated distinction between Hague and Geneva Law: Greenwood, in Fleck, *op. cit.*, 9–10; McCoubrey, in Meyer, *Armed Conflict and the New Law: Aspects of the 1977 Geneva Protocols and the 1981 Weapons Convention* (1989), 45–6; Doswald-Beck, *ICRC Review* (1997), No. 317, 35*ff.*; *On the distinction between (International) humanitarian law and human rights law see Partsch, 4 EPIL* (1982), 216–7; Hannikainen *et al.*, *Implementing Humanitarian Law Applicable in Armed Conflicts* (1992), 1–3; Hampson, in Meyer, *op. cit.*, 55–80 and 1 *Int.L. & Armed Conflict Comm.*, Pt. 1 (1994), 32*ff.*; Müllerson, 2 *JACL* (1997), 109 at 113–125.

44. Hannikainen, *op. cit.*, 291; David, *Principes*, 8692; Levrat, in Kalshoven & Sandoz, *Implementation of International Humanitarian Law* (1989), 266; Condorelli & Boisson de Chazournes, in Swinarski, *Studies and Essays on International Humanitarian Law and Red Cross Principles in Honour of Jean Pictet* (1984), 17–20; Kwakwa, *The International Law of Armed Conflict* (1992), 150.

45. *ICJ Rep.* (1996), 257–8, paras 79, 82 & 83.

46. *Ibid.*, para 79 *in fine*.

47. McCoubrey, 2 *Int.L. & Armed Conflict Comm.*, Pt. 1, (1995), 23; Greenwood, in Fleck, *op. cit.*, 11.

48. Van Hegelsom, in Heintschel v. Heinegg, *Methods and Means of Combat in Naval Warfare* (1992), 5–6.

49. Oxford, 9 August 1913, 26 *Ann. IDI* (1913), 641–672; Verri, in Ronzitti, *The Law of Naval Warfare* (1988), 329–41.

50. *San Remo Manual on International Law Applicable to Armed Conflicts at Sea*, published in book form (1995); Doswald-Beck, *ICRC Review* (1995), No. 309, 583–594.

51. Most recently in Additional Protocol I, Art. 35 (1).

52. Falk, in Plant, *Environmental Protection*, 84–5.

53. For naval warfare see: San Remo Manual, 15–16, Part III, Section I, Basic Rules and Section II, Precautions in Attack; Heintschel v. Heinegg, in Fleck, *op. cit.*, 418; Shearer, in Grunawalt *et al.*, *op. cit.*, 547–8.

54. The ICJ considered the principle of distinction and of unnecessary suffering as cardinal principles of IHL, and in subsidiary order, the principle that States do not have unlimited freedom of choice of means in the weapons they use; the Court also cited the Martens Clause and the principle of neutrality: *ICJ Rep.* (1996), 256–61, paras 77–89.

55. Guideline II (4); see too Gasser, 89 *AJIL* (1995), 637–8.

56. Falk, in Plant, *Environmental Protection*, 16.

57. Zemmali, *La Protection de l'Environnement en Période de Conflit Armé dans les Normes Humanitaires et L'Action du CICR*, (undated paper by ICRC legal officer, on file with author), 5–8.

58. Declaration (f) in relation to Art. 52, made upon signature, 12 December 1977, 1125 *UNTS* 432–433; Bothe, 34 *GYIL* (1991), 55, fn. 4; Schindler & Toman, *op. cit.*, 717; Statement (j) in relation to Art. 52, made upon ratification, Letter of 28 January 1998 sent to Swiss Government; Source: ICRC.

59. Declaration of 27 February 1986, upon ratification; Source: ICRC; Schindler & Toman, *op. cit.*, 713.

60. Declaration (6) of 26 June 1987 upon ratification; Source: ICRC; Schindler & Toman, *op. cit.*, 714.

61. Declaration (4) of 8 February 1988 upon ratification; Source: ICRC.

62. Bothe *et al.*, *New Rules*, 308.

63. Arkin *et al.*, *op. cit.*, 122, citing NWP 9, Supplement 8.2–8.3.

64. Gardam, 87 *AJIL* (1993), 394–403.

65. Bothe, 34 *GYIL* (1991), 55–6; Abijola, in Al-Nauimi & Meese, *op. cit.*, 87–8.

66. Authors cited by Plant, *Environmental Protection*, 17.

67. Schmitt, 36 *RDMDG* (1997), 25–6.

68. *E.g.*, Lieber Code, Art. 16; Hague Regulations, Art. 23 (g); The Nuremberg Charter, Art. 6 (b); For the grave breach provisions of the Geneva Conventions see immediately below.

69. Low & Hodgkinson, 35 *VJIL* (1995), 437–441; Lijnzaad & Tanja, 40 NILR (1993), 176.

70. Art. 50 of the GC I, Art. 51 of GC II and Art. 147 of GC IV.

71. *Infra*, 2.2.6.

72. Hannikainen, *op. cit.*, 713.

73. Low & Hodgkinson, 35 VJIL (1995), 437–441.

74. *E.g.*, Ottawa Conference, conclusion 5; Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 292.

75. GA Res. 47/73 (November 25, 1992), Preamble.

76. Guidelines III (8) and (9).

77. *ICJ Rep.* (1996), 242, para 32.

78. Art. 20 (g), Final Draft of the Code, *ILC Report* (1996), UN Doc. A/51/10, vol. II, pt. 2, chapter II, A (Introduction), paragraphs 41 to 44; B (Articles with commentary), para 15.

79. *Infra*, 2.2.5.B, 2.2.6.

80. See World War I State practice discussed by Zedalis, 24 VJTL (1991), 735–37.

81. *The Trial of German Major War Criminals*, Nuremberg Military Tribunal (1950), Part 22, 517; Roberts in Grunawalt *et al.*, *op. cit.*, 236.

82. 11 *Trials of War Criminals Before the Nuremberg Military Tribunals Under Control Council Law No. 18 795* (1950), 2; Zedalis, 24 *VJTL* (1991), 736; Roberts, in Grunawalt *et al.*, *op. cit.*, 236–7; Feliciano, 14 *Houston JIL* (1992), 514–6.

83. 11 *Trials of War Criminals Before the Nuremberg Military Tribunals Under Control Council Law No. 18 795* (1950), 1295–97: Zedalis, 24 *VJTL* (1991), 736; Roberts, in Grunawalt *et al.*, *op. cit.*, 236–7.

84. Best, *War and Law*, 328–30.

85. DeSaussure, 37 *Air Force LR* (1994), 41 at 64–5 on the attacks on the "Baby milk factory" and the Amariya complex.

86. Roberts, in Grunawalt *et al.*, *op. cit.*, 228.

87. Roberts, *ibid.*, 237–241.

88. 1949 GC (I), Art. 63; 1949 GC (II), Art. 62; 1949 GC (III), Art. 142; 1949 GC (IV), Art. 158; 1977 API, Art. 1(2), 1977 AP2, preamble; 1980 Inhumane Weapons Convention, preamble; Pustogarov, *ICRC Review* (1996), No. 312, 300–314; Tycehurst, *ICRC Review*, (1997), No. 317, 125*ff.*

89. Sandoz *et al.*, *op. cit.*, 38–9; San Remo Manual, General Provision 2, Commentary, 74.

90. Doswald-Beck, *ICRC Review* (1997), No. 317, 35*ff.*; Tycehurst, *ibid.*, 125*ff.*

91. Written Statement, UNGA Request (June 1995), 11–14.

92. Written Statement, WHO Request (September 1994), 84.

93. Written Statements by Solomon Islands, WHO Request (June 1995), 61–2, 4.77–.80; Nauru, WHO Request (June 1995), first part, 6–7, second part, 32–34.

94. *ICJ Rep.* (1996), 259–60, paras 84, 87; In their dissenting opinions, Judges Shahabuddeen (*ibid.*, 405–11) and Koroma (*ibid.*, 564*ff.*) argued extensively that the Martens Clause has separate normative status leading to a ban on the use of Nuclear Weapons.

95. Ottawa Conference of Experts, cited by Lijnzaad & Tanja, 40 *NILR* (1993), 184; Plant, *Environmental Protection*, 17.

96. Lijnzaad & Tanja, 40 *NILR* (1993), 184–5.

97. See too, *ICJ Rep.* (1996), 241–2, paras 28, 30; Kritsiotis, 1 *JACL* (1996), 111

98. Following Roberts, in Grunawalt *et al.*, *op. cit.*, 229.

99. Recognised by the International Military Tribunal at Nüremberg, judgement 30 September–1 October 1946, *Off. Doc.*, vol. 1, 267; Schindler, in Ronzitti, *op. cit.*, 215, 211; confirmed by the ICJ, Advisory Opinion, *Legality of the Threat or Use of Nuclear Weapons, ICJ Rep*, (1996), 258, para 81.

100. Status as of 22 January 1998: Number of Parties to the 1949 GCs: 188; Number U N Members: 185. (Source: ICRC); Opinion is divided on their customary law status: see *e.g.*, David, *Principes*, 176; Meron, 81 *AJIL* (1987), 348–370; Pellet, 96 RGDIP (1992), 34–5; Doswald-Beck, *ICRC Review* (1997), No. 317, 35–6; see too ICJ, Advisory Opinion, *Legality of the Threat or Use of Nuclear Weapons, ICJ Rep* (1996), 258, para 81, in which the Court cites an opinion according to which the GCs reflect customary law.

101. *Supra*, 1.2.1.C.

102. Greenspan, *The Modem Law of Land Warfare* (1958), 288.

103. United Nations War Crimes Commission decision discussed by Plant, *Environmental Protection*, 21; Roberts, in Grunawalt *et al.*, *op. cit.* 236.

104. Zedalis, 24 *VJTL* (1991), 718–23.

105. Zedalis, *ibid.*, 724–33.

106. Low & Hodgkinson, 35 *VJIL* (1995), 437–441.

107. Boylan, *Review of the Convention for the Protection of Cultural Property in the Event of Armed Conflict* (1993), UNESCO, CLT-93/WS/12; Clément, in Al-Nauimi & Meese, *op. cit.*, 143.

108. Sandoz *et al.*, *op. cit.*, 647.

109. Witteler, *op. cit.*, 321–322.

110. Art. 48 ter, CDDH/III/GT/35, p. 5.

111. On more recent proposals to create demilitarised nature reserves: David, *Principes*, 257.

112. Schwarzkopf, *It Doesn't Take A Hero* (1993), 529.

113. Schneider-Jacoby, in Proceedings of "*Effects of War on the Environment*," 43 *Kemija u Industrija* (1994), 151–59.

114. For examples of coastal, marine and estuarine protected areas, see Boelaert-Suominen & Cullinan, *op. cit.*, 93–96.

115. San Remo Manual, Rule 11.

116. *Ibid.*, 82–3.

117. Plant, in Fox & Meyer, *Effecting Compliance* (1993), 161.

118. This treaty provides for a partial demilitarisation of the seabed, limited to weapons of mass destruction: Ronzitti, *op. cit.*, 595, and Commentary by Migliorino, who writes that the treaty applies in peace and in war, *ibid*, 620–1; confirmed by Heintschel v. Heinegg, in Fleck, *op. cit.*, 445.

119. Art. 1 of which refers, *inter alia*, to "mines laid to interdict beaches"; But this Convention applies only to land warfare: Heintschel v. Heinegg, *ibid.*, 445–6.

120. Levie in Ronzitti, *op. cit*, 140.

121. Levie, *ibid.*, 140.

122. *Ibid.*, 140; Heintschel v. Heinegg, in Fleck, *op. cit.*, 444.

123. Heintschel v. Heinegg, in Fleck, *op. cit.*, 444; San Remo Manual, 169.

124. San Remo Manual, Rules 80–92, Commentary, 169–76.

125. Rule 81, Commentary, 171.

126. Rule 84, Commentary, 172.

127. Rule 90, Commentary, 174.

128. *Supra*, 2.1.

129. Schmitt, 36 *RDMDG* (1997), 36.

130. Witteler, *op. cit.*, 194–199; Lijnzaad & Tanja, 40 *NILR* (1993), 186.

131. UN Doc. A/31/39, 10 December 1976; Witteler, *op. cit.*, 199–203.

132. UN Doc. CCD/520, 3 September 1976, Annex A.

133. Tarasofsky, 24 *NYIL* (1993), 46; Witteler, *op. cit.*, 230–4; but see Roberts, in Grunawalt *et al.*, *op. cit.*, 232.

134. Sandoz *et al.*, *op. cit*, 4 15.

135. McCoubrey, in *Pilot Study*, 241; Witteler, *op. cit.*, 80–81.

136. Verwey, in Grunawalt *et al.*, *op. cit.*, 565; Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 283; Witteler: *op. cit.*, 94–127, 148–9.

137. Especially weather manipulation: Witteler, *op. cit.*, 112–4; Abijola, *op. cit.*, 81; see too "The Rainmaker," broadcast 5th March 1998 by BBC Horizon.

138. Art. III.

139. Goldblat, 22 *Bulletin of Peace Proposals* (1991), 401–2; Szasz, in 85 *ASIL Proceedings* (1991), 216; Witteler, *op. cit.*, 239.

140. If the opening of valves and the setting alight of oil wells is too low-tech, use of herbicides should be too: Tarasofsky, 24 *NYIL* (1993), 45, fn 130; Low & Hodgkinson, 35 *VJIL* (1995), 432–3.

141. Third para of Article II, Final Declaration, Second Review Conference of the ENMOD Parties, 17 *Disarmament Yearbook 1992*, 242*ff*.

142. During the ENMOD Ratification Hearings before the U.S. Senate Committee on Foreign Relations: Goldblat, 13 *Bulletin of Peace Proposals* (1982), 129.

143. 17 *Disarmament Yearbook* 1992, 223*ff*.

144. See literature cited by Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 283.

145. Witteler, *op. cit.*, 287; Schmitt, 36 *RDMDG* (1997), 36; Verwey, in Grunawalt *et al.*, *op. cit.*, 564; Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 285.

146. UN Doc. CCD/530, 3 September 1976, Annex A.

147. *E.g.*, Nauru 20 km^2, Bermuda 53 km^2, San Marino 62 km^2, Maldives 298 km^2.

148. Witteler, *op. cit.*, 254–5.

149. Goldblat, 22 *Bulletin of Peace Proposals* (1991), 401–2; Plant, in Fox & Meyer, *op. cit.*, 168; Lijnzaad & Tanja, 40 *NILR* (1993), 195–6; Low & Hodgkinson, 35 *VJIL* (1995), 434.

150. Although Iraq was a signatory; Roberts, in Grunawalt *et al.*, *op. cit.*, 240–241.

151. Feliciano, 14 *Houston JIL* (1992), 501; Lijnzaad & Tanja regard it as a typical superpower disarmament treaty which does not bind developing countries: 40 *NILR* (1993), 189.

152. Verwey, in Grunawalt *et al.*, *op. cit.*, 564.

153. Heintschel v. Heinegg & Donner, 27 *GYIL* (1994), 294–5.

154. An action must be brought by the complaining State (Art. V(3)); the Convention's Consultative Committee of Experts (Art. V(2), and Annex) is considered powerless; Art. V leaves enforcement to the Security Council, which is partly composed of non-parties; Simonds, 29 *SJIL* (1992), 187; Sanchez Rodriguez, in Ronzitti, *op. cit.*, 666–68.

155. *Infra*, 2.2.5. B.

156. Source: ICRC.

157. Matheson, 2 *Am. U.J. Intl L & Policy* (1987), 419–431; Sofaer, *ibid.*, 462–471; Roberts, in Grunawalt *et al.*, *op. cit.*, 237–239.

158. *E.g.*, Plant, *Environmental Protection*; Spieker, *op. cit.*; Witteler, *op. cit.*

159. Heintschel v. Heinegg & Dormer, 37 *GYIL* (1994), 284–5.

160. *Supra*, 1.3.3.

161. In addition, Art. 54 as a whole broke new ground in 1977; Sandoz *et al.*, *op. cit.*, 652.

162. *Supra*, 2.1.

163. Art. 56 (4).

164. Roberts, in Grunawalt *et al.*, *op. cit.*, 235; Greenwood in Delissen & Tanja, *op. cit.*, 102–3, 105, 108 & 110, and in Rowe, *op. cit.*, 63–88; see too extensive reservation made by the UK upon ratification: Letter of 28 January 1998 sent to Swiss Government; Source: ICRC.

165. Final treaty text, adopted on 21 May 1997 by the GA; UN Doc. A/51/869, 11 April 1997, Report of the 6th Committee.

166. UN Doc. A/51/869, 11 April 1997, Agenda item 144.

167. These were made mainly by East-European States: Witteler, *op. cit.*, 306–8.

168. Herczegh in Swinarski, *op. cit.*, 726–727; Sandoz *et al*, *op. cit.*, 412.

169. Bothe *et al.*, *New Rules*, 345.

170. For a discussion see: Witteler, *op. cit.*, 304–27; Herczegh, in Swinarski, op. cit., 725*ff.*; Kiss, *ibid.*, 181*ff.*

171. The 1974–77 GDC took, undoubtedly, inspiration from the ENMOD formula: Herczegh, in Swinarski *et al.*, *op. cit.*, 730.

172. Sandoz *et al.*, *op. cit.*, 662.

173. Proposal for Art. 49 bis (1), 19 March 1974, CDDH/III/60, discussed by Witteler, *op. cit.*, 313, 315.

174. David, *Principes*, 254.

175. Feliciano, 14 *Houston JIL* (1992), 508; Kiss in Swinarski *et al.*, *op. cit.*, 186 & 190; Witteler, *op. cit.*, 372, 437.

176. Heintschel v. Heinegg, 37 *GYIL* (1994), 284–5; Herczegh, in Swinarski *et al.*, *op. cit.*, 729; Kritsiotis, 1 *JACL* (1996), 110; Lavieille, 4 *Revue Juridique de l'Environnement* (1992), 424; Lijnzaad & Tanja, 40 *NILR* (1993), 180–181; Sandoz *et al.*, *op. cit.*, 663; Simonds, 29 *SJIL* (1992), 172; Tarasofsky, 24 *NYIL* (1993), 50.

177. In Heintschel v. Heinegg, *The Military Objective and the Principle of Distinction in the Law of Naval Warfare* (1991), 99.

178. In Heintschel v. Heinegg, *Methods and Means of Combat in Naval Warfare* (1992), 115–116.

179. Witteler, *op. cit.*, 336–7, 345.

180. *Infra*, 2.4.

181. *Supra*, 1.2.2, 1.3.

182. For an exhaustive comparison of the thresholds of ENMOD and API, see Witteler, *op. cit.*, 250–264, 376–407.

183. *Ibid.*, 394–5.

184. Sandoz *et al.*, 663–4.

185. Bothe *et al.*, *New Rules*, 22; see too Tarasofsky, 24 *NYIL*, 51–2; Lijnzaad & Tanja, 40 *NILR* (1993), 180; Lavieille, 4 *Revue Juridique de l'Environnement* (1992), 423.

186. DOD, *Report to Congress on the Conduct of the Persian Gulf War* — Appendix on the Role of the Law of War, 31 *ILM* (1992), 626–7 (reversing a position taken earlier in the interim report, July 1991, 12–6); see too Department of the Navy, *Commander's Handbook on the Law of Naval Operations* (NWP 1–14 M), para 8.1.3 (1996), cited in the introduction and further below in this subheading; Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 290, fn. 30.

187. See *infra* for Declaration made upon signing the 1980 UN Weapons Convention on 10 April 1980; Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 290, fn. 30.

188. See *in extenso*: Spieker, *op. cit.*, 462pp; Oeter, in Fleck, *op. cit.*, 118; Greenwood, in Rowe, *The Gulf War 1990–91 in International and English Law* (1993), 86–87; Roberts, *ibid.*, 126; contra: Daems & Paye, in *Entre les Lignes* (1991), 129; David, 20 *RBDI* (1987), 165–169; David, *Principes*, 358; Harlow & McGregor, in Grunawalt *et. al., op. cit.*, 318.

189. *ICJ Rep.* (1996), 242, para 31.

190. Bothe, 34 *GYIL* (1994), 56; Doswald-Beck, *ICRC Review* (1997), No. 316, 35*ff.*

191. Lijnzaad & Tanja, 40 *NILR* (1993), 180–182.

192. *Infra*, 3.3.3.

193. *Supra*, 1.3.2.

194. As recognised by the UNEP Working Group on Environmental Damage, UNEP/Env. Law/3/Inf. 1, 15 October 1996, 8, paras 32–3; see further *infra*, 3.3.3.

195. Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 285.

196. Bothe, 34 *GYIL* (1991), 58.

197. Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 288–9.

198. Rule 44, Commentary, 119–120.

199. NWP 1–14M, para 8.1.3 on Environmental Considerations.

200. Upon signing the convention on 10 April 1980; Source: ICRC and Multilateral Treaties deposited with the Secretary-General. 1992.

201. Green, *The Contemporary Law of Armed Conflict* (1993), 49–50.

202. McCoubrey, 1 *JACL* (1996), 125; Meron, 89 *AJIL* (1995), 562.

203. Meron, *ibid.*, 569; Hampson, in Rowe, *op. cit.*, 242–3.

204. GC I, Art. 49; GC II, Art. 50, GC III, Art. 129, GC IV, Art. 146.

205. *E.g.*, HR Arts. 3 & 4.

206. Kalshoven, 40 *ICLQ* (1991), 827; Greenwood, in Grunawalt *et al., op. cit.*, 399.

207. Greenwood, *ibid.*, 401.

208. Greenwood, *ibid.*, 400–3; Kalshoven, 40 *ICLQ* (1991), 837–8.

209. 30 *ILR*, 116.

210. Kalshoven, 40 *ICLQ* (1991), 836–7; Greenwood, in Grunawalt *et al., op. cit.*, 403; David, *Principes*, 525–8.

211. Hampson, in Rowe, *op. cit.*, 242–3.

212. Art. 11 (4) and Art. 85.

213. Arts. 86–7.

214. Hampson, in Rowe, *op. cit.*, 246.

215. Art. 90 (2) (c) (I); Hampson, in Rowe, *op. cit.*, 243–4, 256; and in Fox & Meyer, *op. cit.*, 74–81.

216. Meron, 89 *AJIL* (1995), 570, 571–70, fn. 93.

217. Decision in *Prosecutor v. Dusko Tadic*, 2 October 1995, ICTY No. IT-94-I-AR72, 35 *ILM* (1996) 32, at paras 71, 80; Müllerson, 2 *JACL* (1997), 109–133.

218. GC (I), Art. 50; GC (II), Art. 52; GC (IV), Art. 147.

219. Green, in Grunawalt *et al., op. cit.*, 428; but see McCoubrey, 1 *JACL* (1996), 131.

220. The matter was raised during the GDC, but a proposal to this effect was not retained; CDDH/III/GT/35, p. 5, proposed Art. 48 bis; Lijnzaad & Tanja, 40 *NILR* (1993), 181; Witteler, *op. cit.*, 315, 318.

221. Szasz, in Grunawalt et al., op. cit., 283; Bothe, 34 GYIL (1991), 58; Simonds, 29 SJIL (1992), 200–201.

222. Art. 20 (g), Final Draft of the Code, ILC Report (1996), UN Doc. A/51/10, vol. II, pt. 2, chapter II, A (Introduction), paragraphs 41 to 44; B (Articles with commentary), paragraph 15.

223. Which include the phrase "which may be expected."

224. Allain & Jones, 8 *EJIL* (1997), 100–117.

225. Lijnzaad & Tanja, 40 *NILR* (1993), 176; Verwey, in Grunawalt *et al., op. cit.*, 566.

226. Roberts, *ibid.*, 237, 242; McCoubrey, in *Pilot Study*, 243.

227. Bothe, 34 *GYIL* (1991), 58.

228. Lehnes, *op. cit.*, 32pp. (on file with author).

229. Momtaz, 37 *AFDI* (1991), 209–1 1; Feliciano, 14 *Houston JIL* (1992), 505; Lijnzaad & Tanja, 40 *NILR* (1993), 195; David, *Principes*, 256; Low & Hodgkinson, 35 *VJIL* (1995), 430, fn. 176.

230. See, for example, ICRC Guidelines, mentioned *supra*, 1.2; 1994 San Remo Manual, paras 11, 13 (c), 34 and 44; German Manual on Humanitarian Law in Armed Conflicts, August 1992, paras 401, 403, 479, 1020; U.S. Navy, NWP 1–14M, para 8.1.3; Schmitt, 36 *RDMDG* (1997), 19*ff.*

231. Kelsen cited by Rumpf, 27 *GYIL*, (1984) 441.

232. Arts. 53 (1) and 107 of the Charter regarding the former enemy States (now all UN members), are generally regarded as "extinguished": Greenspan, *op. cit.*, 28; The legality of use of armed force in other cases than those mentioned in the text, such as humanitarian intervention, rescue of nationals abroad, and anticipatory self-defence, remains controversial: Brownlie, in Cassese, *The Current Legal Regulation of the Use of Force* (1986), 497*ff.*; Hannikainen, *op. cit.*, 335–40; Gardam, 87 *AJIL* (1993), 391, fn. 2; Greenwood, 9 *Rev. Int. Stud.* (1983), 222.

233. The ILC has linked the prohibition of aggressive war with *jus cogens* on three occasions, in its work on the law of treaties and on State Responsibility: Hannikainen, *op. cit.*, 163, 185, 188–9, 284–7.

234. *ICJ Rep.* (1986), 100, 190; Czaplinski, 38 *ICLQ* (1989), 162; Birnie & Boyle, *op. cit.*, 129.

235. *ICJ Rep.* (1970), 32; The observations made earlier by the ICJ in the *Barcelona Traction* case in regard to *erga omnes* obligations are usually regarded as examples of *jus cogens*.

236. Czaplinski, 38 *ICLQ* (1989), 156*ff.*

237. Art. 19, (2) and (3)(a); *Yearbook ILC* (1979), vol. II, pt 2, 92; ILC Report (1980), UN Doc. A/35/10, 90–93. But see recent decision to study Draft Article 19 further: ILC Report (1998), UN Doc. A/53/10, 147, para. 331.

238. Christenson, in Lillich, *The United Nations Compensation Commission* (1995), 311, 312.

239. Brownlie, *System of the Law of Nations: State Responsibility* (1983), vol. I, 32–33; Dekker, in Dekker & Post, *op. cit.*, 252–3; David, *ibid.*, 269–271; de Hoogh, 42 *AJPIL* (1991), 189*ff.*; Higgins, *op. cit.*, 165–168 and literature cited therein; Annacker, 46 *AJPIL* (1994), 135ff.; Hannikainen, *op. cit.*, 182; But see recent decision to study Draft Article 19 further: ILC Report (1998), UN Doc. A/53/10, 118–147, paras. 241–331.

240. Hannikainen, *op. cit.*, 326; Dekker, in Dekker & Post, *op. cit.*, 253–261 and in particular, 254–255; Comments by David, *ibid.*, 271; Brownlie, *International Law*, 150–4, and specifically, 153; Gilbert, 39 *ICLQ*, (1990), 363; see too Dupuy, P., *Droit International Public* (1993), 349.

241. Art. 16, ILC Report (1996), UN Doc. A/51/10, para 46; see too Arts. 25, 26 and 27 of the Draft Statute for an International Criminal Court, adopted by the ILC at its 46th session in 1994: Press Release, L/2684 of 25 July 1994.

242. *Yearbook ILC* (1978), vol. II, pt. 2, 103; *Yearbook ILC* (1979), vol. II, pt. 2, 93.

243. Quigley, 57 *BYIL* (1987), 77–131, and specifically 95–104; Lauterpacht, 7 *ICLQ* (1958), 551; Brownlie, *State Responsibility*, vol. I, 191; Graefrath & Oeser, 29 *Staat and Recht* (1980), 446–8.

244. Art. 3(f) of the 1974 UN GA Definition of Aggression qualifies the situation in which a State permits another to use its territory to commit an act of aggression against another State as an act of aggression in itself: Quigley, 57 *BYIL* (1987), 83–86.

245. Brownlie, *International Law*, 418–9, 324; This type of "political" complicity was referred to by the ICJ in its Advisory Opinion on *Namibia*, *ICJ Rep.* (1971), 5–58, which refers to Art. 25 of the UN Charter and to "general international law."

246. Quigley, 57 *BYIL* (1987), 87–95; Vagts, 91 *AJIL* (1997), 473.

247. Roberts, in Grunawalt *et al. op. cit.*, 243–4.

248. Graefrath & Mohr, 43 *AJPIL* (1992), 132.

249. Written Statement, Solomon Islands, WHO Request, (June 1995), 69, para 4.96.

250. *ICJ Rep.* (1996), 241–242, paras 29–30; *Infra*, 3.2.

251. Gardam, 87 *AJIL* (1993), 391–413; Greenwood, 9 *Rev. Int. Stud.* (1983), 221–5; Kwakwa, *op. cit.*, 1–5.

252. These requirements can be traced back to the *Caroline* incident, which dealt with a situation of self-defence, but is now regarded as relevant for all cases of armed force under the Charter, including actions under Chapter VII and VIII; Brownlie, *International Law*, 42–43.

253. *E.g.* views expressed during the preparation of the San Remo Manual, Rules 3–6, Commentary, 75–8.

254. *ICJ Rep.* (1986), 103, para 194.

255. Doswald-Beck, *ICRC Review* (1997), No. 316, 35–55; Greenwood, *ibid.*, 65–75.

256. *ICJ Rep.* (1996), 242, para 30.

257. Note that while State practice shows a tendency to confine naval operations to areas close to the belligerent coasts, it is difficult to say whether this is dictated by legal conviction or by practical limitations: Ronzitti, *op. cit.*, 5.

258. The "region of war" is a term of art, introduced by Oppenheim, and refers to "that part of the surface of the earth in which the belligerents may prepare and execute hostilities against each other"; "Theatre" or "area" of warfare are concepts used to indicate the sites where warfare actually takes place: Oppenheim, *op. cit.*, 236–47.

259. Heintschel v. Heinegg, in Fleck, *op. cit.*, 409–415; Oxman, 24 *VJIL* (1984), 811; San Remo Manual, Rules 14–37, Commentary, 93–111.

260. Langdon, in Heintschel v. Heinegg, *The Military Objective*, 86–88; Gardam, 87 *AJIL* (1993), 391–413.

261. Greenwood, 9 *Rev. Int. Stud.* (1983), 223–224.

262. Section II, Rules 3–6, Commentary, 75–78.

263. *Supra*, 1.2.2.D, *in fine*.

264. *ICJ Rep.* (1996), 242, para 30.

265. *ILC Report* (1994), UN Doc. A/49/10, Chapter V, 381–2, proposed Art. J (exceptions) & p. 386, draft article 17 (national security and industrial secrets); see generally: Tomuschat, *op. cit.*, 37*ff*; see too Szasz, in Grunawalt *et al., op. cit.*, 286. fn. 31.

266. *Supra*, 1.2.2.D

267. Brownlie, *International Law*, 147; Greenwood, in Grunawalt *et al., op. cit.*, 403–4.

268. Crook, 87 *AJIL* (1993), 144, 146.

269. Christenson, in Lillich, *op. cit.*, 312–4.

270. Schachter, 85 *AJIL* (1991), 452, 456; Bederman, in Lillich, *op. cit.*, 257, 261–4.

271. Eitel, 35 *GYIL* (1992), 188.

272. Scorched Earth and Polish Forests cases, *supra*, 2.2.1. & 2.2.3A.

273. In regard to the Advisory Opinion on *Nuclear Weapons*, Solomon Islands, Oral Submissions (Mr. Sands), CR 95/32, 71, para 19.

274. Crook, 87 *AJIL* (1993), 147

275. Plant, 7 *IJECL* (1992), 221; Low & Hodgkinson, 35 VJIL (1995), 455.

276. UNEP Working Group on Environmental Damage, UNEP/Env.Law/3/Inf. 1, 15 October 1996, 8, para 33.

277. *Ibid.*, 4, para 16; Greenwood, in Grunawalt *et al., op. cit.*, 407

278. Bishop, *International Law* (1971), 795.

279. Fox, in Rowe, op. cit., 281–5; Boelaert-Suominen, 50 ZöR (1996), 298–310.

280. Hampson, in Rowe, *op. cit.*, 250–1.

281. Greenwood, in Grunawalt *et al., op. cit.*, 409; Fox, in Rowe, *op. cit.*, 284; Domb, 23 *IYHR* (1993), 107; Cottereau, 37 *AFDI* (1991), 107.

282. David, 20 *RBDI* (1987), 100; *Principes*, 71–2.

283. Boelaert-Suominen, 50 ZöR (1996), 225–316.

284. Decision 7, para 6 (a) and 21 (a) of the Governing Council, S/AC.26/1991/7/Rev. 1, 31 *ILM* (1992), 1045; see too Decision 9 of the Governing Council, 6 March 1992, S/AC26/1992/9, para 12.

285. 36 *ILM* (1997), 1289.

286. *Ibid.*, paras 85–6.

287. For a concise historical overview see Bothe, in Fleck, *op. cit.*, 487; but see *The Wirpi* (1941), *Ann. Dig.* (1943–45), 300–302; Cobbett, *Leading Cases on International Law with Notes* (1924), vol. II, 407–8.

288. Cobbett, *op. cit.*, 11–14, 400–402; McNair & Watts, *The Legal Effects of War* (1966), 2–6; Greenwood, 36 *ICLQ* (1987), 284; Post, 25 *NYIL* (1994), 87–88.

289. For a review of the traditional neutrality law see: Castrén, *The Present Law of War and Neutrality* (1954), 421–58 on neutrality in general, 458–92 on neutrality in land war, 492–587 on neutrality in maritime warfare, 587–601 on neutrality in air warfare; Schindler, in Ronzitti, *op. cit*, 215–22, in Delissen & Tanja, *op. cit.*, 367–86; Gioia, & Ronzitti, in Dekker & Post, *op. cit.*, 221–242; Bring, in Bring & Mahmoudi, *op. cit.*, 28–9; Bothe, in Fleck, *op. cit.*, 485–515; Vagts, 91 *AJIL* (1997), 466–475.

290. Ogley, *The Theory and Practice of Neutrality in the Twentieth Century* (1970), 147–149 (Switzerland), 156–157 (Sweden).

291. Zeeman, van Panhuys *et al., International Law in the Netherlands* (1980), vol. III, 352.

292. Bothe, in Fleck, *op. cit.*, 485–7.

293. Second Commission, Third Meeting: Scott, *The Proceedings of the Hague Peace Conferences. The Conference of 1907* (1921), vol. III, 48–49.

294. EC Experts Report, mentioned *supra*, 2.1, para 4.4.1.

295. Third Commission, Eight Meeting, Annex, in Scott, *op. cit.*, 492.

296. *Ibid.*, 491.

297. *Ibid.*, 492.

298. Greenwood in Fleck, *op. cit.*, 21.

299. 2 *RIAA* (1949), 1011–1033; 1035–1077.

300. Whiteman, 11 *Digest of International Law*, 207.

301. *Ibid.*, 209.

302. Bonjour, *La Neutralité Suisse* (1979), 128–129, 173; Vagts, 91 *AJIL* (1997), 468.

303. Vagts, *ibid.*, 468; Whiteman, *op. cit.*, 208;

304. Jaccard 87 *Zeitschrift des Bernischen Juristen Vereins* (1951), 231–232; Note that some claims were considered too remote for compensation: EC Experts Report, mentioned *supra* 2.1, para 4.4.5.

305. Jaccard, 87 *Zeitschrift des Bernischen Juristen Vereins* (1951), 231 fn. 1; Brickhill, *The Dambusters* (1983), 237–8.

306. Guggenheim, *Répertoire Suisse de Droit International Public* (1975), vol. IV. 2291–2292.

307. *Infra*, 3.3.3.

308. EC Experts Report, mentioned *supra*, 2.1, para 6.1.1.

309. Written Submissions by Nauru, WHO Request, pt. 2 (June 1995), 26–27, para 5.6; UNGA Request (September 1995), 16–7, para 3.4; Egypt, UNGA Request (September 1995), 31–33.

310. *Supra*, 2.4.1. B.

311. *Infra*, 3.1.1.

312. Wright, 47 *AJIL* (1953), 369.

313. Lauterpacht, 23 *BYIL* 1946, 39*ff.*; Castrén, *op. cit.* 433–5; Comments by Henkin, 19 *ODIL* (1988), 309*ff.* & 321; Green, *The Contemporary Law*, 321.

314. UN SC Res. 598 (1987); Weller, in Dekker & Post, *op. cit.*, 71–90.

315. UN SC Res. 660 (1990).

316. Greenwood, 36 ICLQ (1987), 284*ff.*; Post, 25 *NYIL* (1994), 88–89; Brownlie, *International Law*, 384–391.

317. McNair & Watts, *op. cit.*, 5–6; Greenwood, 36 *ICLQ* (1987), 283*ff.*; Voelckel, 37 *AFDI* (1991), 7–24.

318. McNair & Watts, *op. cit.*, 34–54; Greenwood, 36 *ICLQ* (1987), 294; Hudson, in Rowe, *op. cit.*, 333–47.

319. *Infra*, 3.4.2. B.

320. Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 296.

321. Greenwood, 36 ICLQ (1987), 297–301; Schindler, in Ronzitti, *op. cit.*, 212; David, Principes, 95; Oeter, *Neutralität und Waffenhandel* (1992); 256; Bothe, in Fleck, *op. cit.*, 490–491.

322. Greenwood, 36 *ICLQ* (1987), 297*ff.*; Chinkin, *Third Parties in International Law* (1993), 311; Norton, *17 Harv. ILJ* (1976), 309–11; Brownlie, *International Law*, 401–3.

323. Ronzitti, *op. cit.*, 7–10; Mehr, 20 *Ocean Development and International Law*, 105, (1989); De Guttry & Ronzitti, *The Iran-Iraq War (1980–1988) and the Law of Naval Warfare* (1993); Politakis, 35 *GYIL* (1992), 466*ff.* and 25 *ODIL* (1994), 5*ff.*

324. Robert, in Entre les Lignes (1991), 91–9; Torrelli, 96 RGDIP (1992), 27–28, fn. 54.

325. DOD Interim Report to Congress, *Conduct of the Persian Gulf War*, July 1991, section 12–7/8, and DOD Final Report to Congress, *Conduct of the Persian Gulf War*, April 1992, Appendix on the Role of the Law of War, 31 *ILM* (1992) 638–640.

326. For Austria, see: Loibl & Brandstetter, 43 *AJPIL* (1992), 73–79; Landau, 46 *Studia Diplomatica* (1993), 70; Bring, in Bring & Mahmoudi, *op. cit.*, 38; For Switzerland see: Schindler, 44 *AJPIL*, (1992), 110; Bring, *op. cit.*, 37–8; Thürer, 30 *Archiv des Völkerrechts* (1992), 63–85.

327. White, 1 *Int. L. & Armed Conflict Comm.* (1994), Pt. 1, 16.

328. *ICJ Rep.* (1949), 35.

329. Merits, *ICJ Rep.* (1986), 121, para 235.

330. San Remo Manual, Section III, Rules 7–8, Commentary, 79–80.

331. *Supra,* 2.3.3.

332. SC Res. 661 (1990), 2 December 1990;

333. Dupuy, P., 95 *RGDIP* (1991), 633.

334. Burger, in Grunawalt *et al., op. cit.*, 340–1; Bourloyannis-Vrailas, 44 *ICLQ* (1995), 586, fn. 132

335. Szasz, *ibid.*, 310.

336. *Supra,* 2.3.4.

337. *Supra,* 2.3.5.

338. See reasons given by the Swiss Federal Department of Foreign Affairs for its co-operation with the UN embargo against Iraq and Kuwait: Torrelli, 96 *RGDIP* (1992), 25 fn. 50.

339. *ICJ Rep.* (1996). 260–1, paras 88–90.

Chapter III

1. Amin, 6 *Marine Policy* (1982), 193–94.

2. Saifi, in Malek, *International Mediation and the Gulf War* (1991), 38*ff.*; Gioia, in De Guttry & Ronzitti, *op. cit.*, 58*ff.*

3. Gioia, *op. cit.*, 72*ff.*; Momtaz, *ibid.*, 20*ff.*; Leckow, 37 *ICLQ* (1988), 629–44; Bothe, in Dekker & Post, *op. cit.*, 210, and Comments by Bos, *ibid.*, 218.

4. Nordquist & Wachenfeld, 31 *GYIL* (1988), 151.

5. 540 (1983); 552 (1984); 582 (1986) and 598 (1987); see Ronzitti, in *The Law of Naval Warfare* (1988), 8 and further below in this subheading.

6. Walker, *op. cit.*, 186–7.

7. *Supra,* 1.2.1. A.

8. Lowe, 10 *Marine Policy* (1986), 181; Nordquist & Wachenfeld, 31 *GYIL* (1988), 153–9; Politakis, 25 *ODIL* (1994) 34; Leckow, 37 *ICLQ* (1988), 638; Charney, 35 *VJIL* (1995), 385; On 6 October 1994, the 1982 Convention and the 1994 Agreement amending Part XI were forwarded to the U.S. Senate for ratification: Charney, *ibid.*, 380.

9. De Muralt, 32 *NILR* (1985), 79–81.

10. Art. 298, (1) (b).

11. Oxman, 24 *VJIL* (1984), 810, 861–3; Schachte, 23 *ODIL* (1992), 55–69.

12. ILC, 8th session, *Yearbook ILC*, (1956), vol. II, pt. 2, pp. 253, 256; UN Doc. A/CN.4/SER.A/1956/Add. 1; Baxter, *The Law of International Waterways* (1964), 204.

13. Oxman, 24 *VJIL* (1984), 811; Halkiopoulos, in Dupuy & Vignes, *op. cit.*, vol. II, Chapter 24; Lowe, 12 *Marine Policy* (1988), 289.

14. Arts. 58 (2), 88, 301.

15. UN Department for Disarmament Affairs, *The Naval Arms Race* (1986), UN Doc. A/40/535, 47–8, para 188; Rauch, 28 *GYIL* (1985), 229–67; Tsarev, 12 *Marine Policy* (1988), 153–59; Vukas, in Dupuy & Vignes, *op. cit.*, vol. II, Chapter 23, 1235–38; Van Dyke, 15 *Marine Policy* (1991), 160–1; Heintschel von Heinegg & Donner, 37 *GYIL* (1994), 305; Heintschel von Heinegg, in Fleck, *op. cit.*, 414.

16. Lowe, 10 *Marine Policy* (1986), 183; Boczek, 20 *ODIL* (1990), 239–71; Heintschel von Heinegg, 30 *CYIL* (1992), 102–5; For official positions see: Menefee, in De Guttry & Ronzitti, *op. cit.*, 99–132 (U.S.); Lowe, *ibid.*, 241–253 (UK); Venturini, *ibid.*, 523–529 (Security Council).

17. SC Res. 540 (1983), UN Doc. S/Res/540, paras 3 & 5; Res. 552 (1984), UN Doc. S/Res/552, 5th, 6th and 7th preambular paras, and operational paras 2 & 5; see Venturini, in De Guttry & Ronzitti, *op. cit.*, 524–6; Ronzitti, in *The Law of Naval Warfare* (1988), 8.

18. The initial leak was caused by a well blow-out on 4 February 1983; Iraq would soon aggravate the spill by bombing the Nowruz oil field regularly: VI *OSIR*, No. 9 (11 March 1983), 1; No. 10 (18 March 1983), 1; No. 11 (25 March 1983), 4–5.

19. VII *OSIR*, No. 6 (10 February 1984), 1; Estimates of the total amount spilled vary from 1/2 to 6 million barrels: Price, in Price & Robinson, *op. cit.*, 18; Literathy, *ibid.*, 356.

20. ROPME was established by Arts. XV *ff.* of the Kuwait Regional Convention For Co-operation on the Protection of the Marine Environment From Pollution, done at Kuwait on 24 April 1978, concluded between Bahrain, Iran, Iraq, Kuwait, Oman, Qatar the UAE and Saudi Arabia: Kiss, *Selected Multilateral Treaties in the Field of the Environment* (hereinafter UNEP Compendium), vol. I, (1983), 486.

21. Mann-Borgese, in Dupuy, R., *The Future of the International Law of the Environment* (1985), 106; VI *OSIR*, No. 10 (18 March 1983), 1; No. 14 (15 April 1983), 1; No. 16 (29 April 1983), 1; No. 21, 3 June 1983, 1.

22. Letter of 5 May 1983 (UN Doc. S/15752), in which Iraq explained firstly, that part of the spill was due to a collision between a tanker and Nowruz 3 well, in which Iraq had no part and for which Iran failed to contact ROPME, and secondly, that Iran is to blame for rejecting all Iraqi peace proposals, and that as long as the war lasts, these types of damage are likely to continue to occur.

23. Letter of 23 December 1983, UN Doc. S/16238: De Guttry & Ronzitti, *op. cit.*, 89–90.

24. Para 5 of SC Res. 540 (1983), *supra*.

25. Bothe *et al.*, *Protection of the Environment in Times of Armed Conflict*, SJ/110/85 (on file with author) [hereinafter EC Experts Report]; as yet unpublished, but it has passed into the public domain judging from the frequent references made to it: *e.g.*, David, 20 *RBDI* (1987), 165; Plant, *Environmental Protection*, 5, fn. 6; Spieker, *op. cit.*, 415; Gioia, *op. cit.*, 77–78; Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 291, fn. 33.

26. EC Experts Report, Conclusions.

27. *Ibid.*, Introduction, *in fine*.

28. The report simply observes that the Security Council has rarely exercised its powers with respect to breach of the peace: EC Experts Report, para 4.1.

29. The Security Council only took binding measures under Chapter VII in 1987: UN Doc. S/RES/598 (1987) of 2 July 1987.

30. EC Experts Report, paras 4.4.1., 4.4.2, 4.3, 4.4.5.

31. *Supra*, 2.4.2.B.

32. *Supra*, 2.4.2.A.

33. Para 3.

34. *Infra*, 3.3.3., 3.4.1., 7.4.3.

35. *Supra*, 1.2.1.A.; Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 311; Walker, *op. cit.*, 189.

36. EC Experts Report, paras 1.2 & 5.3.1, conclusion 4; see too Feliciano, 14 *Houston JIL* (1992), 494–98.

37. In Grunawalt *et al.*, *op. cit.*, 577–8.

38. *Supra*, 2.2.3.B.

39. *Case concerning Oil Platforms*, ICJ General List No. 90.

40. Politakis, 25 *ODIL* (1994), 35–37.

41. Walker, *op. cit.*, 186; Iran has thus far not presented detailed reparations claims to the ICJ: Preliminary Objection, judgement, 12 December 1996, para 9; It is as yet unclear whether she will introduce claims regarding environmental damage.

42. The United States contends, though, that there was a separate conflict between the United States and Iran: ICJ General List No. 90, Preliminary Objection, judgement, 12 December 1996, para 18; Counter-Claim Order, 10 March 1998, paras 4, 25.

43. *Supra*, 2.1.

44. *Supra*, 2.2.1, 2.2.4., 2.2.5.B.

45. *Supra*, 2.3.4., 2.3.5, 2.4.2.C.

46. Roberts, in Grunawalt *et al., op. cit.*, 248; Walker, *ibid.*, 186.

47. Roberts, *ibid.*, 254; Tawfiq & Olsen, *op. cit.*, 337 on Saudi Aramco; but see Arkin *et al., op. cit.*, 70, who criticise the delay in the Saudi response.

48. Gerges, in Price & Robinson, *op. cit.*, 307; Krupp, & Jones, *ibid.*, 315–23; Alam, *ibid.*, 359.

49. Note that most of the international relief effort took place after cessation; *Infra*, 7.4.2.

50. Tawfiq & Olsen, *op. cit.*, 343; XIV *OSIR*, No. 6 (7 February 1991), 3.

51. *Infra*, 7.4.2.

52. IMO Report, mentioned *supra*, 2.1.

53. *Infra*, 7.4.2.

54. Solomon Islands, Written Observations WHO Request (June 1994), 82–95; UNGA request (September 1995), 10–11; Oral Pleadings (Mr. Sands), CR/95, 14 November 1995, 71–3, paras 20–1.

55. See in more detail, *infra*, 3.4.1, 3.4.3.

56. *Infra*, 3.2. *in fine* and 3.4.1.

57. Post, 25 *NYIL* (1994), 90; Lalive (Arbitrator) in *Dalmia Cement Ltd. v. National Bank of Pakistan* (1976), 67 *ILR*, 611 at 62, para 57 citing English law.

58. Post, 25 *NYIL* (1994), 90.

59. For a UK application see *Janson v. Driefontein Consolidated Gold Mines* (1902), AC 484.

60. Greenwood, 36 *ICLQ* (1987), 284–7.

61. Schwarzenberger & Brown, *A Manual of International Law* (1976), 151–2; McNair & Watts, *op. cit.*, 2–3; Post, 25 *NYIL* (1994), 92–93.

62. Post, *ibid.*, 93.

63. *Supra*, 2.4.2.A.

64. Delbrück, 4 *EPIL* (1982), 313; McNair & Watts, *op. cit.*, 18–19.

65. Green, 29 *CYIL* (1991), 226; Shearer, in Grunawalt et. al., *op. cit.*, 550.

66. *Corfu Channel* Case, *ICJ Rep.* (1949), 22; *Military and Paramilitary Activities in and Against Nicaragua* (merits), *ICJ Rep.* (1986), 112, para 215.

67. See Written Statements by Mexico, WHO Request (June 1994), 9–11; Samoa, WHO Request (September 1994), 3; Malaysia, WHO Request (September 1994), 10–11; (June 1995), 27–29; India, WHO Request (June 1995), 12–3; Nauru, (Memorial I), WHO Request (September 1994), 36–45; (part II), WHO Request, (June 1995), 27–28; Solomon Islands, UNGA Request (June 1995), 77–97, paras 4.1–.4.9; (September 1995), 10, para 3.112; Egypt, UNGA Request (June 1995), 17–8; Egypt, UNGA Request, (September 1995), 29–31; Nauru, (September 1995), 26–27.

68. Written Statements by U.S., WHO Request (June 1995), 10–14; UNGA Request (June 1995), 34–42.

69. Written Statements by U.S., WHO Request (June 1995), 18–9; UNGA Request (June 1995), 42.

70. Written Statement, UNGA Request (June 1995), 64, para 3.89.

71. *ICJ Rep.* (1996), 241–2, paras 27–8.

72. *Ibid.*, 242, para 30.

73. *Ibid.*, 243, para 34.

74. *Ibid.*, 240, para 25.

75. *Ibid.*, 241–2, para 29.

76. *Ibid.*, 242, para 30.

77. *Supra*, 1.2.2.A, 2.2.1., 2.2.5.B, 2.3.2.
78. *Ibid.*, 242, para 30, *in fine*.
79. Order of 22 September 1995, *ICJ. Rep.* (1995), 306, para. 64; Supra, 1.2.2. A.
80. *ICJ Rep.* (1996), 243, para 32.
81. *Supra*, 2.3.2.
82. *ICJ Rep.* (1996), 242, paras 30–31.
83. Doswald-Beck, *ICRC Review* (1997), No. 316, 35–55.
84. Greenwood, *ibid.*, 35–55; *Supra*, 221, 225.
85. ILC Report (1976), UN Doc. A/31/10, 266; Draft Articles on State Responsibility so far adopted by the International Law Commission, Part I, Art. 19. 1 (d), Yearbook ILC (1980), vol. II, 30; *Supra*, 1.3.2.
86. The dispositif 2 E, *ICJ Rep.* (1996), 266, as interpreted by several Judges: Sep. Op. Fleischhaer, *ibid.*, 308; Diss. Ops., by Shahbuddeen, *ibid.*, 377–8, 426; by Koroma, *ibid*, 560; by Higgins, *ibid.*, 590, para 29.
87. Diss. Op. Schwebel, *ICJ Rep.* (1996), 328.
88. Solomon Islands, Written Statement, WHO Request (June 1994), para 4.17; Oral Pleading (Mr. Sands), CR/95, 14 November 1995, 71–2, para 20.
89. Solomon Islands, Written Statement, WHO Request (June 1994), 83, para 4.17.
90. *Ibid.*, 84–5, para 4.20.
91. *Supra*, 2.1.
92. Cited by Blix, in *War and Environment*, 122.
93. Falk, in Plant, *Environmental Protection*, 86.
94. Sohn, *14 Harv. ILJ* (1973), 509.
95. Sohn, *ibid.*, 508–11; Blix, *op. cit.*, 122–23.
96. *Supra*, 2.1.
97. Paragraph 39.6 of Agenda 21; Sands, 4 *EJIL* (1993), 384.
98. *Supra*, 1.1.1; but see ICRC statement at UNGASS, 23–27 June 1997, mentioned *supra*, 1.2.
99. *Supra*, 1.2.2.A.
100. Matheson, 91 *AJIL* (1997), 423.
101. ILC Report (1994), UN Doc. A/49/10, Chapter V, 400.
102. *Supra*, 1.2.2.A.
103. Shearer, in Grunawalt *et al.*, *op. cit.*, 550.
104. Solomon Islands, Written Statement, WHO Request, (June 1994), 95, para 4.45.
105. EC Experts Report, conclusions 2 & 4; Plant, in Fox & Meyer, *op. cit.*, 164; Tarasofsky, 24 *NYIL* (1993), 69.
106. Bothe, 34 *GYIL* (1991), 59; Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 297–8.
107. *Supra*, 2.4.2.A., 2.4.2.B.
108. *Supra*, 3.2.
109. *ICJ Rep.* (1996), 261, para 89.
110. *Ibid.*, 263, para 96.
111. *Ibid.*, 262, para 93.
112. UK, Written Statement, WHO Request (September 1994), 92, para 44; UNGA Request (June 1995), 58, para 3.78; Advisory Opinion, *ICJ Rep.* (1996), 262, para 94.
113. *Ibid.*, 262–3, paras 94, 97.
114. Matheson, 91 *AJIL* (1997), 427–8.
115. *Supra*, 2.4.1.C.

116. *Supra*, 1.3.2.

117. *Supra*, 1.2.1.

118. Note that the Solomon Islands argued that most global and regional environmental treaties had become part of general (customary) international law: Advisory Opinion on the Legality of Nuclear Weapons, Written Statement, WHO Request (June 1994), para 4.21–4.32, and specifically para 4.22.

119. *E.g.*, State submissions, *supra*, 3.2.

120. *E.g.*, State submissions, *supra*, 3.1.5.

121. *Heintschel v. Heinegg & Donner*, 37 *GYIL* (1994), 311.

122. *Supra*, 3.1.1–3.1.4.

123. *E.g.*, ICRC Report UN Doc. A/48/269, para 110 and by countless authors, *inter alia*, Szasz in Grunawalt *et al.*, *op. cit.*, 281; Verwey, *ibid.*, 568–9; Meron, *ibid.*, 355–6.

124. Feliciano, 14 *Houston JIL* (1992), 494–98; Low & Hodgkinson, 35 *VJIL* (1995), 442–47; Prescott, 7 *EILR* (1993), 197–231; Simonds, 29 *SJIL* (1992), 188–198; Sharp, 137 *Mil. LR* (1992), summer issue, 22–28.

125. Meron, in Grunawalt *et al.*, *op. cit.*, 355.

126. Written Statements by Solomon Islands, WHO Request (June 1994), 92, para 4.35; UNGA Request (June 1995), 94, para 4.38; U.S., WHO Request (June 1995), 11; UNGA Request (June 1995), 34; UK, UNGA Request (June 1995), 68, para 3.110.

127. Solomon Islands, Written Statements, WHO Request (June 1994), 93, para 4.37; UNGA Request (20 June 1995), 95, 4.40.

128. Solomon Islands, Written Statements, WHO Request (June 1994), 94–5, paras 4.41–4.44; UNGA Request (June 1995), 96–7, paras 4.44–.47.

129. Written Statements by U.S., WHO Request (June 1995), 10–14; UNGA Request (June 1995), 34–42; UK, UNGA Request (June 1995), 69–70, para 3.111–.112.

130. *ICJ Rep.* (1996), para 30.

131. Brownlie, *Principles*, 616–7; Post, 25 *NYIL* (1994), 103; Broms, 59 *Ann. IDI* (1981), T. I., 241; Verwey in Grunawalt *et al.*, *op. cit.*, 568.

132. 279 U.S. 231; Gamer, in *Harvard Research in International Law, Part III, Law of Treaties*, Supplement to 29 *AJIL*, (1935), 1183*ff.* [hereinafter Harvard Research].

133. *Infra*, 3.4.2. C & D.

134. McIntyre, *Legal Effect of World War II on Treaties of the United States* (1958), 37.

135. Rank, 38 *Cornell LQ* (1953), 321.

136. *Journal Officiel*, October 14, 1945.

137. Cited in "La Bretagne" (1986), 82 *ILR*, 590 at 603–4, para 7.

138. McIntyre, *op. cit.*, 38.

139. *Supra*, 2.4.2 A.

140. Hudson, in Rowe, *op. cit.*, 333.

141. *Industrial Commission of Ohio v. Rotar* (1931), *Ann. Dig.* (1931–32), 437–8; *Peters et al. v. McKay* (1951), 18 ILR, 1, 474–93; *Kunstsammlungen zu Weimar v. Elicofon* (1981), 94 *ILR*, 172–173, 198.

142. Hudson, in Rowe, *op. cit.*, 333, 338.

143. Broms, 59 *Ann. IDI* (1981), T.I, 231; On the effect of various ways of terminating a state of war (treaty of peace, armistice, *etc.*) and their effects on treaties see McNair & Watts, *op. cit.*, 11–15.

144. Van Eysinga, *Grotius-Annuaire International* (1919–1920), 9.

145. The treaties of Neuilly and Saint-Germain contained similar provisions.

146. This concerned the 1905 Hague Convention on Civil Procedure.

147. Case law is divided on the exact meaning of this article for the continuation of pre-war treaties during armed conflict: *Ottoman Debt Arbitration* (1925), *Ann. Dig.* (1925–6), 78–9; *State Ex. Rel. Miner, County Attorney v. Reardon et al.* (1926), *Ann. Dig.* (1919–42), 238 at 241–2; *Societa Walter Kiada v. Societa Deutsche Werft* (1929), *Ann. Dig.* (1929–30), 479–30.

148. See 59 *Ann. IDI* (1981), T. I, 233, fn. 18; McIntyre, *op. cit.*, 322, fn. 4; *Masinnport v. Scottisch Mechanical Light Industries Ltd.* (1976), 74 *ILR*, 559, 564.

149. For a comparison between the peace treaties of World War I & II: Fitzmaurice, 73 *Hague Recueil*, (1948), vol. II, 259–367.

150. See for example, The 1922 Italian-Czechoslovak Convention for the Legal Protection of the Subjects of both States, at issue in *Koh-I-Noor Tuskarna L. & Hardtmuth National Enterprise v. Fabrique de Crayons Hardtmuth L & C., S.P.R.L.* (1960), 40 *ILR*, 17*ff*.

151. McIntyre, *op. cit.*, 320.

152. *Ibid.*, 330.

153. *E.g.*, Art. 12 of the Peace Treaty with Finland: 59 *Ann. IDI* (1981), T. I., 232–3.

154. *Whiteman*, 14 *Digest of International Law*, 491.

155. Broms claims that all pre-war bilateral treaties were revived after World War II: 59, *Ann. IDI* (1981), T.I., 1981, 236.

156. Ränk, 38 *Cornell LQ* (1953), 344; see on the international legal position of Austria: *In re Veit* (1946), *Ann. Dig.* (1946), 330–1.

157. Broms, 59 *Ann. IDI* (1981), T. I., 210–211 and Verosta, *ibid.*, 255–256.

158. Ränk, 38 *Cornell LQ* (1953), 344, 349–55; Whiteman, *op. cit.*, 492–95; see *infra*, 3.4.2. B, municipal case law.

159. See the exchange of letters in Lauterpacht *et al.*, *The Kuwait Crisis: Basic Documents* (1991), vol. I, 63–69.

160. SC Res. 687 (1991) established only a cease-fire.

161. 18 *ILM* (1979), 362, Art. 1(1).

162. 22 *ILM* (1983), 708, Art. 1(2).

163. 34 *ILM* (1995), 43.

164. 35 *ILM* (1996), 89.

165. Ränk, 38 *Cornell LQ* (1953), 346.

166. *Ibid.*, 347.

167. *Ibid.*, 343–5; Whiteman, *op. cit.*, vol. 14, 508–9.

168. Art. 1.

169. Whiteman, *op. cit.*, vol. 14, 510.

170. Schwelb, 58 *AJIL* (1964), 645–5.

171. Preamble.

172. Schwelb, 58 *AJIL* (1964), 666.

173. *E.g.*, Written Statements by Nauru (Memorial I), WHO Request, 37; Solomon Islands, WHO Request (June 1994), 83*ff*, para 4.13*ff*.; UNGA Request (June 1995), 82–3, para 4.13*ff*.

174. Concluded September 10, 1996.

175. Broms 59 *Ann. IDI* (1981), T. I, 211.

176. 11 *RIAA*, 181.

177. 67 *ILR*, 619–620.

178. 67 *ILR*, 624–625; Schindler, 59 *Ann. IDI* (1981), T. I, 268–9.

179. *Inter alia*, in a radio broadcast: 67 *ILR*, 615–6.

180. Contraband lists were issued by both parties (Award, 67 *ILR*, 615, 616); Both belligerents interfered seriously with third State rights and applied prize law: Heintschel v. Heinegg, 30 *CYIL* (1992), 94–96.

181. 67 *ILR*, 624, para 51.

182. 1969 Vienna Convention, Arts. 63 & 74; see too *SA des Ed. Feldman et Autin v. Rigaud* (1944) *Ann. Dig.* (1944), 275: "of itself, the severance of diplomatic relations is not of such a nature as to imply the lapse of treaties."

183. 96 *ILR*, 303–6.

184. Case Concerning *US Diplomatic and Consular Staff in Teheran* (merits), *ICJ Rep.* (1980), 28, paras 45–55, and particularly para 54.

185. *Ibid.*, paras 90–92.

186. *Supra*, 3.1.3.

187. Case *Concerning Oil Platforms*, General List No. 90, Preliminary Objection, 12 December 1996, paras 1, 9, 12.

188. *Ibid.*, paras 14, 17, 18.

189. *Ibid.*, para 15.

190. *Ibid.*, paras, 20–21.

191. *Ibid.*, paras 38–51.

192. *ICJ Rep.* (1984), Jurisdiction and Admissibility, paras 77–83.

193. Merits, *ICJ Rep.* (1986), 14 at paras 77–83, *Dispositif* 7, 10, 11.

194. Case *Concerning Oil Platforms*, General List No. 90, Preliminary Objection, 12 December 1996, para 28; *Nicaragua* Case (merits), *ICJ Rep.* (1986), 137, para. 273.

195. Case of SS *Wimbledon*, Judgment, Merits, 17 August 1923, *PCIJ Rep.* Series A, No. 1, 15*ff.*

196. *Ibid.*, 18.

197. *Ibid.*, 21–28.

198. *Ibid.*, 35, para 1.

199. *Ibid.*, 37, para 3.

200. This is open to challenge since the PCIJ dismissed the argument pursuant to which Art. 380 of the Versailles Treaty could not deprive Germany "of a personal and imprescriptible right, which forms an essential part of her sovereignty and which she neither could nor intended to renounce by anticipation": *ibid.*, 25*ff.*

201. UK, Written Statement, UNGA Request (June 1995), 64, paras 3.96–.98.

202. *Supra*, 3.2 *in fine*.

203. See on the work of the *Institut, infra*, 3.4.2. D.

204. Rånk, 38 *Cornell LQ* (1953), 342–3.

205. McNair & Watts, *op. cit.*, 37, 43–5.

206. Whiteman, *op. cit.*, vol. 14, 502–4.

207. *Techt v. Hughes* (20), *Ann. Dig.* (1910–22), 387 at 388, discussed in *Harvard Research*, 1183–84.

208. McIntyre, *op. cit.*, chapter V on "economic treaties in force with enemy states at the outbreak of World War II," 158–299.

209. *Ann. Dig.* (1947), 171, 174–176; 14 Whiteman, *op. cit.*, 495–99.

210. 2 K.B. 544, 556; Confirmed by the Court of Appeal; McNair & Watts, *op. cit.*, 35–36, 47.

211. *Ibid.*, 36, fn. 2.

212. *Ibid.*, 48.

213. Hudson, in Rowe, *op. cit.*, 336.

214. *Hughes v. Techt; Techt v. Hughes*, (1919–20), *Ann. Dig.* (1910–22), 387 at 388; *Loewengard v. Procureur of the Republic and Bonvier (Sequestrator)* (1921), *Ann. Dig.* (1910–22), 389–10.

215. Broms, 59 *Ann. IDI* (1981), T. I, 237, 241.

216. *Ibid.*, 211.

217. Masquelin, *Le Droit des Traités dans l'Ordre juridique et dans la Pratique belge* (1980), 604–6.

218. *International Registration of Trademark (Germany) Case* (1959), 28 *ILR*, 82, 86; *Trademark Registration Case* (1967), 59 *ILR*, 489, 490–91; Prescott, 7 *EILR* (1993), 217–8.

219. *Guardianship* case (1919), *Ann. Dig.* (1910–22), 389–10.

220. *Societa Fornaci di Stazzano v. Rancillo*, (1957), 24 *ILR*, 890–2; *Lanificio Branditex v. Societa Azais e Vidal* (1971), 71 *ILR*, 595–6.

221. *Silverio v. Delli Zotti* (1952), 19 *ILR*, 558–9.

222. *Hecht* case (1941), *Ann. Dig.* (1919–42) 242–3; *Gehrmann and Maatje van der Have v. Registrar*, (1947). *Ann. Dig.*, (1947), 176–77; In *re Holzwarth Gasturbinen AG* (1950), 17 *ILR*, 356–7; *Gevato v. Deutsche Bank* (1952), 19 *ILR*, 1952, 29–31; *Nederlands Rijnvaartvereeniging v. Damco Scheepvaart Maatschappij* (1954), 21 *ILR* 276–7; *In re Swane* (1958), 26 *ILR* 557.

223. *Fabrique des Crayons Koh-I-Noor, L. & C. Hardtmuth, SARL v. Koh-I-Noor Turkama L. & C. Hardtmuth, Narodni Podnik* (1959), 30 *ILR*, 33, 45.

224. *State Ex. Rel. Miner, County Attorney v. Reardon et al.* (1926), *Ann. Dig.*, (1919–42), 238–242; *The Sophie Rickmers* (1930), *Ann. Dig.*, (1929–30), 477–8; *In re Meyer's Estate* (1951), 18 *ILR*, 499–06; *Brownell v. City and County of San Francisco* (1954), 21 *ILR*, 432; *Argento v. Horn et al.* (1955), 24 *ILR*, 883; *Gallina v. Fraser, US States Marshal*, (1959–60), 31 *ILR*, 356*ff.*; *In re Extradition of D'Amico* (1959), 28 *ILR*, 602; but see *Karnuth v. US* (1928), *Ann. Dig.* (1927–28), 536–38; and *In re Ronkendorf's Estate* (1958), 26 *ILR*, 675.

225. *Masininport v. Scottisch Mechanical Light Industries Ltd* (1976), 74 *ILR*, 559, 564: Prescott, 7 *EILR* (1993), 215–19; McNair & Watts, *op. cit.*, 37–40.

226. *Lovera v. Rinaldi* (1949), 77 *Journal de Droit International* (1950), 125; apparently reversing its prior decision in *Bussi v. Menetti* (1943), *Ann. Dig.* (1943–45); But *Lovera v. Rinaldi* is not always followed by other Courts: see *e.g.*, *Rosso v. Marro* (1945), *Ann. Dig.* (1943–45), 307–8; *Stramazi v. Dellazoppa* (1952), 19 *ILR*, 556–558; Broms, 59 *Ann. IDI* (1981), T. I., 238–9; Prescott, 7 *EILR* (1993), 216–7.

227. *The Fjleld*, (1950), 17 *ILR*, 345–9; *Japanese Government v. Commercial Casualty Insurance Co* (1951), 18 *ILR*, 493–9; *Atlee and Others v. Laird and Others* (1972–3), 94 *ILR*, 97*ff*, 121*ff.*; *Harrington and Others v. Schlesinger and Others* (1974–5), 94 *ILR*, 122*ff.*; *Crockett v. Reagan* (1982–3), 87 *ILR*, 658*ff.*, 670*ff.*; *Lowry and Others v. Reagan* (1987), 87 *ILR*, 671; but see: *End Conscription Campaign and Another v. Minister of Defense and Another* (1988), 87 *ILR*, 257.

228. *Industrial Commission of Ohio v. Rotar* (1931), *Ann. Dig.* (1931–32), 437–8; *Mutia v. The King* (1946), *Ann. Dig.* (1946), 329; *Rex v. Bottril, Ex Parte Kuechenmeister* (1946), *Ann. Dig.* (1946), 312–321; *Stinson v. New York Life Assurance Co.* (1947) *Ann. Dig.* (1947), 210–224; *Greenville Enterprise Inc. v. Jennings* (1947), *Ann. Dig.* (1947), 225–227; *National Savings and Trust Co. et al. v. Brownell* (1955), 22 *ILR*, 932–5; *Ladue & Co, v. Brownell* (1955), 22 *ILR*, 935–9; *In re Grotrian, Cox v. Grotrian and Others* (1955), 22 *ILR*, 940–3.

229. *E.g.*, *R. v. Meroni* (1973), 91 *ILR*, 386, 390–1; *Rijn-Schelde Verolme NV v. State Secretary of Justice* (1976), 74 *ILR*, 118.

230. Hudson, in Rowe, *op. cit.*, 344–6; McNair & Watts, *op. cit.*, 49.

231. Lalive (Arbitrator), *Dalmia Cement Ltd. v. National Bank of Pakistan* (1976), 67 *ILR*, 625.

232. McNair & Watts, *op. cit.*, 51.

233. *Langlas et al. v. Iowa Life Insurance Co.* (1954), 21 *ILR*, 416; *Thomas v. Metropolitan Life Insurance Co* (1957), 26 *ILR*, 626.

234. *US v. Ayers* (1954), 21 *ILR*, 423, and cases mentioned in fn., *ibid.*, 430.

235. 17 *ILR* 354, 355.

236. Jacomet, *La Guerre et les Traités* (1909); Phillipson, *Termination of War and Treaties of Peace* (1916); Hurst, 2 *BYIL* (1921–1922), 37–47; Tobin, *The Termination Of Multipartite Treaties* (1933).

237. "Effets de la Guerre sur les Obligations Internationales et les Contrats prives."

238. 24 *Ann. IDI* (1910–12), 24, 201–202 and 207–208.

239. *Harvard Research*, 653*ff.*, and specifically 1183*ff.*

240. But see the studies done on World War II by Ränk, 38 *Cornell LQ* (1953), 321–355 and McIntyre, *op. cit.* (1958); McNair & Watts, *op. cit.* (1966).

241. *Infra*, 3.4.3.

242. See work and reports on this subject by the *Institut*'s Fifth Commission from 1976 to 1985: *Dyon* Session, 59 *Ann. IDI* (1981), T.I, 201–84, T. II, 175–244; *Helsinki* Session, 61 *Ann. IDI* (1985), T.I., 1–27, 201–84, and T. II, 199–283.

243. *Infra*, 3.4.2.D.

244. In application of the old Roman adagio "Inter arma silent leges"; Greenwood, 36 *ICLQ* (1987), 296–7.

245. This was the position adopted by the *Institut* in 1912.

246. 24 *Ann. IDI* (1910–12), 201–2, 207, 208.

247. *Harvard Research*, 1185.

248. Delbrück, 4 *EPIL*, (1982), 311.

249. *Ibid.*, 311.

250. See observations by Zourek, 59 *Ann. IDI* (1981), T. I, 213.

251. Judgment, 25 September 1997, ICJ General List No. 92, paras 114, 142.

252. Broms, 59 *Ann. IDI* (1981), T. I, 228–9; see too *Harvard Research*, draft Art. 35 (b) and commentary thereto.

253. Delbrück, 4 *EPIL* (1982), 311–12; Broms, 59 *Ann. IDI* (1981), T.I, 212; see too Art. 1 of the Helsinki Resolution, 61 *Ann. IDI* (1985), T. II, 278.

254. Broms, 59 *Ann. IDI* (1981), T.I, 241–45; Delbrück, 4 *EPIL* (1982), 312–13; Verwey, in Grunawalt *et al.*, *op. cit.*, 569.

255. David, *Principes*, 90–1.

256. The treaty at issue was a Mandate agreement under the League of Nations: *ICJ Rep.* (1971), 47.

257. Costa, in Zacklin *et al.*, *The Legal Régime of International Rivers and Lakes* (1981), 203–45, 407; Baxter, *op. cit.*, 187–244.

258. Arts. 62 (2) (a) of the 1969 Vienna Convention and Art. 62 (2) of 1986 Vienna Convention on the Law of Treaties; Art. 11 of the 1978 Vienna Convention on Succession of States in Respect of Treaties; Hannikainen, *op. cit.*, 350–56.

259. Hurst, 2 *BYIL* (1921–1922), 40.

260. *Harvard Research*, draft Art. 35.

261. 1969 Vienna Convention, Arts. 31–32.

262. Greenwood, 36 *ICLQ* (1987), 296–7; Delbruck, 4 *EPIL*, (1982), 314.

263. Broms, 59 *Ann. IDI* (1981), T. I., 205.

264. Briggs, 61 *Ann. IDI* (1985), T. I., 7–8.

265. Schindler, 59 *Ann. IDI* (1981), T. I., 282–3; Salmon, 61 *Ann. IDI* (1985), T. I., 16–7; Schindler, *ibid.*, 17; Salmon, *ibid.*, T. II., 219–221.

266. Skubizewski, 59 *Ann. IDI* (1981), T. II, 191; by Lachs, *ibid.*, 184; Bindschedler, *ibid.*, 217; Dinstein, 61 *Ann. IDI*, (1985), T. II, 214–5.

267. 59 *Ann. IDI* (1981), T. II, 202.

268. 61 *Ann. IDI*, (1985), T. II, 216.

269. Art. I of the resolution adopted at the Helsinki Session, 61 *Ann. IDI* (1985), T II, 278.

270. Broms, 59 *Ann. IDI* (1981), T. I, 203–4, 211; 61 *Ann. IDI* (1985), T. II, 205–8, 211–13.

271. Broms, 59 *Ann. IDI* (1981), T. I., 213, 217–8, Draft resolution Art. 5, 276.

272. Broms, 59 *Ann. IDI* (1981), T. II, 231; Marek, 61 *Ann. IDI* (1985), T. I., 11, para 6.

273. Commission Centrale pour la Navigation du Rhin, *Rapport Annuel* (1945), 1–11; *Rapport Annuel* (1949), 2–3; *Rapport Annuel* (1950), 2–5; *La Commission Européenne du Danube et son Oeuvre de 1856 á 1931* (1931), 36–53; Hobson, *The International Institute of Agriculture*, (1931); IIA, *The Work of the International Institute of Agriculture during the War (1940–1945)* (1945); For accounts of the effect of armed conflict on, *e.g.*, the Universal Postal Union and ILO, see McIntyre, *op. cit.*, 275–83, 124–134.

274. Remarks by Zourek, 59 *Ann. IDI* (1981), T.I., 259; revised draft resolution 7 (c), 265; remarks by Heintschel v. Heinegg, *ibid.*, T. II, 236.

275. ROPME and MEMAC; *supra*, 3.1.2 and *infra*, 7.4.3.

276. *Supra*, 3.4.1.

277. EC Experts Report, para 3.

278. Verwey, in Grunawalt *et al.*, *op. cit.*, 569; see too U.S. government opinion regarding the PTBT, *supra*, 3.4.2.A.

279. *Infra*, Chapter 5.

280. Broms, 59 *Ann. IDI* (1981), T. I, 217; Briggs, *ibid.*, 279; 61 *Ann. IDI* (1985), T. I, 8–9 and T. II, 231.

281. Salmon, 61 *Ann. IDI* (1985), T. I, 15; Tenekides, *ibid.*, 23; discussion, *ibid.*, T .II, 220–21.

282. *Supra*, 1.3.3.

283. *E.g.*, Written Statement Nauru (Memorial I), WHO Request, 48–50; Malaysia, WHO Request, September 1994, 10–11.

284. Amendment proposed by *Salmon*, rejected by 27 votes to 9 with 6 abstentions: 61 *Ann. IDI* (1985), T. II, 221–223; Professor Salmon was one of the co-authors of the 1985 EC Experts Report mentioned above (*supra*, 3.1.2.), and it can be assumed that his proposal to IDI in 1985 was at least inspired by its conclusions.

285. Munch, 59 *Ann. IDI* (1981), T. II, 187–8; Briggs, 61 *Ann. IDI* (1985), T.I, 7–8; McDougal, *ibid*, T. II, 233.

286. Tunkin, 59 *Ann. IDI* (1981), T. II, 223.

287. Broms, *ibid.*, T.I, 214; Verosta, *ibid.*, 256; Zourek, *ibid.*, 257.

288. Tunkin, *ibid.*, T. II, 185–7; Seyersted, *ibid.*, 192.

289. Schindler, *ibid.*, T.I, 268–9; Skubizewski, *ibid.*, T. II, 191; Schindler, 61 *Ann. IDI* (1985), T.I, 17; Briggs, *ibid.*, 8–9.

290. Marek, *ibid.*, 10–11.

291. *Supra*, 2.3.4., 2.3.5, 2.4.2. C.

292. For possible reasons see: Lauterpacht, 29 *BYIL* 1952 (1953), 160, fn. 2.

293. *Supra*, 3.1.1.

294. *Supra*, 2.3.3.

295. ILC Report (1994), UN Doc. A/49/10, 316, para 3.

296. Solomon Islands, Written Observations, WHO Request (June 1994), para 4.13*ff.*, 91–92; Oral Pleadings, (Mr. Sands), CR/95, 14 November 1995, 74–5, para 26.

297. Costa, in Zacklin *et al.*, *op. cit.*, 203–45, 407; Baxter, *op. cit.*, 187–244.

298. UNGA, 51st session, Agenda item 144, UN Doc. A/51/869 of 11 April 1997; *Supra*, 2.2.5.A.

299. Arts. 39–40.

300. Arts. 63, 74 (1), 75, 76.

301. Judgment, 25 September 1997, ICJ General List No. 92, para 46, which includes references to earlier case law.

302. *Ibid.*, Para 47; See too *Rainbow Warrior* Arbitration (1990), 82 *ILR*, 499 at 550–1, para 75.

303. *Supra*, 3.4.2.D.

304. Art. 71 (2); Note that the 1969 Vienna Convention also regulates the procedure to be followed should the treaty conflict with a pre-existing norm of *jus cogens*: Art. 53.

305. Art. 4.

306. Gowlland-Debbas, 43 *ICLQ* (1994), 55, 87–90.

307. *Questions of Interpretation and Application of the 1971 Montreal Convention arising from the Aerial Incident at Lockerbie*, Order of 14 April 1992, *ICJ Rep.* (1992), (Libya v. UK), 3 at para 39; (Libya v. US), 133 at para 42; See too Judgment on Preliminary Objections, 27 February 1998, in which the ICJ decided, *inter alia*, that the issue of the effects of Security Council Resolutions and the Montreal Convention was a defence on the merits: General List No. 88, (Libya v. UK), para 50; (Libya v. US), para 49.

308. Helsinki Resolution, 61 *Ann. IDI* (1985), T. II, 280, Art. 2.

309. 1969 Vienna Convention on the Law of Treaties, Arts. 54–59.

310. 1969 Vienna convention, Art. 61, which the ICJ regards as customary law: *Gabcikovo-Nagymaros Project* case (merits), judgment of 25 September 1997, ICJ General List No. 92, para 99.

311. Brownlie, *Principles*, 616–17.

312. ICJ General List No. 92, paras 102–3.

313. See Bederman, 82 *AJIL*, (1988), 1*ff.*, and particularly 8, 30*ff.*; Toth, 19 *Juridical Review*, (1974), 269*ff.*; The *Harvard Research* clearly distinguishes *rebus sic stantibus* (Art. 28) from the effect of war on treaties (Art. 35).

314. ILC Report (1996), UN Doc. A/51/10, paras 51–64.

315. ILC Report (1979), UN Doc. A/34/10, 284 and 290–91.

316. 82 *ILR* 1990, 552–555, paras 77–79.

317. *Supra*, 3.4.2.D.

318. *Supra*, 3.2.

319. *Supra*, 3.4.

320. General Principles of International Law (5), Annex to UN A/48/269, 29 July 1993, *supra*, 2.1.

321. *Supra*, 1.2.1.

Chapter IV

1. Rosas, *op. cit.*, 163.

2. On the development of the Hague Rules, generally, see O'Connell, D., *The International Law of the Sea*, vol. II, (1984), 782–86.

3. Hudson, in Rowe, *op. cit.*, 336ff.

4. *Supra*, 3.4.2. B.

5. See regarding the Korean conflict: *Langlas et al. v. Iowa Life Insurance Co.* (1954), 21 *ILR* 1954, 416; *Thomas v. Metropolitan Life Insurance Co.* (1957), 26 *ILR* 1955–II, 626; regarding the Suez Conflict: *Navios Corporation v. The Ulysses II et al.* (1958), 26 *ILR* 1958–II 638; but see diversity of opinion as to the legal effect of the Japanese Attack on Pearl Harbour: *New York Life Insurance Co. v. Bennion* (1946), *Ann. Dig.* (1946), 224–7; *Savage v. Sun Life Assurance Co. of Canada* (1944), *Ann. Dig.* (1943–45),

283–4; *West v. Palmetto State Life Insurance Co.* (1943), *Ann. Dig.* (1943–45), 289–92; *Rosenau et al. v. Idaho Mutual Benefit Association* (1944), *Ann. Dig.* (1943–45), 293–300.

6. *Smulders & Piccinati v. Societe Anonyme 'La Royale Belge'* (1943), *Ann. Dig.* (1943–45), 303–4; *Cie d'Assur. La Nationale v. Vve Cabanel* (1946), *Ann. Dig.*, (1946), 228; *Van Hoeve De Feyter v. Fire Insurance Co. of 1859 Ltd.* (1947), *Ann. Dig.* (1947), 169–171; *Amstel Insurance Co. Ltd. v. Van Der Wal* (1950), 17 *ILR* 343–4; *Marissal v. Mutuelle Générale Francaise Accidents* (1950), 17 *ILR*, 349–50; *Beccarini v. Societa La Securita* (1950), 17 *ILR* 1950, 352–353.

7. 82 *ILR*, 107, 109.

8. Steimel, 4 *EPIL* (1982), 307.

9. Birnie & Boyle, *op. cit.*, 371*ff.*

10. Gehring & Jachtenfuchs, 4 *EJIL* (1993), 100–101.

11. Protocol, Art. 2(2) & (4); Convention Art. 1 (f) (iv) to (vi), (g), (h); Press Release IAEA, 12 September 1997, PR 97/21.

12. 1997 Convention Art. V (1).

13. 1997 Protocol, Art. 3(1) & (2).

14. 1997 Protocol, Art. 3 (IB); 1997 Convention Art. II (2); *Infra*, 6.2.6. A.

15. Vienna Convention Art. IV 3 (a); Paris Convention Art. 9; Annex to the 1997 Supplementary Convention, Art. 3(5); 1997 Protocol, Art. 6(1).

16. Szasz, 2 *JMLC* (1971), No. 3, 541–2.

17. *Infra*, 6.2.6. B.

18. Between 1959 and 1962 the USSR icebreaker *Lenin* and the U.S. N.S. *Savannah* were making their initial voyages; Szasz, 2 *JMLC* (1971), No. 3, 547.

19. Szasz, *ibid.*, 552–3; Konz, 57 *AJIL* (1963), 102;

20. Konz, *ibid.*, 102, fn. 14 & 109.

21. *Infra*, 6.2.6. B.

22. Birnie & Boyle, *op. cit.*, 294–5; Jachtenfuchs & Gehring, 4 *EJIL* (1993), 97–99.

23. See "pollution damage" as defined in Art. I (6), and complemented by Art. II.

24. IMO Docs LEG./Conf.6/66 and LEG./Conf.6/67, 25 May 1984, not yet in force.

25. Revised text of Art. 1(6) of the CLC, and of Art. 3 of the IOPC Fund Convention.

26. Draft Art. II, Alternative B (2), IMCO Doc LEG/CONF/4 and IMCO Doc LEG/CONF/4/Corr. 1, September 1969, IMCO, *Official Records of the International Legal Conference on Marine Pollution Damage Conference, 1969* (1973), 460 [hereinafter *Marine Pollution Damage Conference 1969*].

27. Unlike for the proposed exclusion regarding warships: *Infra*, 6.2.6.C.

28. LEG/CONF/C.2/SR. 18, 25 November 1969, *Marine Pollution Damage Conference 1969*, 739–742.

29. LEG/Conf.2/C.1/SR.4, 1 December 1971, IMCO, *Official Records of the Conference on the Establishment of an International Compensation Fund for Oil Pollution Damage, 1971* (1978), 331 [hereinafter IOPC Conference 1971].

30. LEG/Conf.2/C.1/SR.6, 2 December 1971, *IOPC Conference 1971*, 349.

31. LEG/CONF.2/3, *ibid.*, draft Art. 4 (2) (a) and footnotes 4 (i) & (ii).

32. *Ibid.*, 49–62; the United States opposed the exoneration whilst Japan, Sweden and Australia supported the exoneration; Australia later changed its mind and supported the U.S. position: LEG/Conf.2/C.1/SR.6, 2 December 1971, *IOPC Conference 1971*, 344.

33. *Ibid.*, 62–63.

34. LEG/Conf.2/C.1/SR.5, 2 December 1971, *ibid.*, 334–5, 334–3; LEG/Conf.2/C.1/SR.6, 2 December 1971, *ibid.*, 343–47.

35. LEG/Conf.2/C.1/SR6, 2 December 1971, *ibid.*, 347.

36. Greece's objections can be found in LEG/CONF.2/3, *ibid.*, 52–3; Japan (*ibid.*, 54), Sweden (*ibid.*, 57) and the UK (*ibid.*, 61) concurred; the United States advocated the inclusion of damage caused by natural disasters on the same grounds as for war damage (*ibid.*, 63); for the discussions and final decisions of the Committee of the Whole on the issue of natural disasters see LEG/Conf.2/C.1/SR.6, of 2 December 1971, *IOPC Conference 1971*, 347–50.

37. IMO Doc LEG/CONF.3, *International Legal Conference on Maritime Carriage of Nuclear Materials, Brussels*, 1971; LEG/CONF.3/3, 15 October 1971; The Final Act was signed on 17 December 1971.

38. IMO Doc LEG/CONF.3/3, 15 October 1971, 3, para 4.

39. LEG/CONF/.3/3, 15 October 1971, Annex II, 2 with extracts from a document prepared for the IMCO Legal Committee by the Secretariat of the European NEA of the OECD.

40. Arts. 1 & 2.

41. Art. 3.

42. See reference to the Paris and Vienna Conventions in the preamble and in Art. 1.

43. IMO LEG, 34th session, 1978, LEG XXXIV/3, 7 December 1977, agenda item 3 (1).

44. IMO Council, 52nd session, 1984, C 52 /11/Add.1, 31 May 1984, Note by the Secretary-General, 2–3, paras 9–10.

45. LEG 55/5, 1 August 1985, Note by Secretary-General, 4, para 14.

46. LEG 72/4, 20 January 1995; for text of new draft: Annex 1 to that document; LEG/CONF.10, 15 April 1996; LEG 73/3 of 20 July 1995; final text see 35 *ILM* (1996), 1406.

47. *Supra*, 4.2.2.

48. LEG XXXVIL/3, 9 October 1978, Report of the Informal Working Group, 3, para 14 (LEG XXXVII/3), and ANNEX III, Art. 3(2) (a).

49. LEG XXXII/7, 5 December 1978, Report, 14–22, paras 52–89, discussion of alternative I, 22, para 85, on subparagraph (a).

50. Belgium, Germany, Greece, the Netherlands, and the UK.

51. LEG 69/10/1.

52. LEG 73/WP. 1 of 12 October 1995, Agenda item 14.

53. LEG 73/11 of 8 August 1995, Commentary with Annex on "Draft Convention on Wreck Removal."

54. *Ibid.*, Art. VIII(1) (a), Commentary, 3, para 16.

55. Source: IMO/Lloyd's data as at 1 February 1998.

56. According to Birnie & Boyle, *op. cit.*, 293, the protocols are unlikely to enter into force because the solutions which they propose seem unsatisfactory and are now out of date.

57. Art. 3(3).

58. Art. 5(4).

59. Art.8.

60. *Supra*, 2.3.3

61. ILC Report (1994), UN Doc., A/49/10, Chapter V, 381–2, proposed Art. J (exceptions) & 386, see too draft Art. 17 (national security and industrial secrets); Tomuschat, *op. cit.*, 37ff; see too Szasz, in Grunawalt *et al.*, *op. cit.*, 286, fn. 31.

62. *Supra*, 4.2.2.

63. *Supra*, 3.3.2.

64. *Supra*, 2.4.2. C.

Chapter V

1. *Supra*, 3.4.4.

2. *Supra*, 3.4.1.

3. Parry, *The Consolidated Treaty Series* (1980), vol. 212, 198–201.

4. "Tout capitaine est tenu, autant qu'il peut le faire sans danger sérieux pour son navire, son équipage, ses passagers, de prêter assistance à toute personne, même ennemie, trouvée en mer en danger de se perdre...."

5. McIntyre, *op. cit.*, 251.

6. *Publicover v. Alcoa S.S. Co.* (1948), 168 *F. 2d*, 672, 277 in which the convention was mentioned in passing; and *US v. James L. Richards* (1950), 179 *F. 2d*, 530: McIntyre, *op. cit.*, 250.

7. *Ibid.*, 250.

8. *Ibid.*, 251.

9. Wildeboer, *The Brussels Salvage Convention* (1965), 268; confirmed by Rodiére, *Traité Général de Droit Maritime. Evénements de Mer* (1972), 164.

10. *Infra*, 6.2.8 B.

11. Art. 1, *in fine*.

12. Art. 16 (1).

13. Pictet, *Commentary, II Geneva Convention* (1960), 132–3.

14. Art. 10 (1) & (2).

15. See Art. 2.

16. *Infra*, 6.2.8 C.

17. IMO Information Sheet.

18. IMCO Docs., International Conference on Load Lines, 1966, LL/CONF/1, 67, proposal for a new Art. 5.

19. The United States formally declared war on Japan on December 8, 1941; on Germany on December 11, 1941; McIntyre, *op. cit*, 3, fn. 1.

20. *Ibid.*, 25.

21. Hackworth, V *Digest of International Law* (1943), 353–55.

22. *Ibid.*, 355.

23. *Ibid.*, 356.

24. Toth, 19 *Juridical Review* (1974), 152, fn. 8; McIntyre, *op. cit.*, 26.

25. McIntyre, *op. cit.*, 26.

26. *Ibid.*, 26.

27. *Infra*, 5.2.3.D.

28. IMO Doc. LL/CONF/1, 7 and General Committee, LL/CONF/C.1/SR.10, 10 March 1966, 9.

29. General Committee, *ibid.*, 9.

30. *Ibid.*, 9.

31. General Committee, LL/CONF/C.1/WP.26, 26 March 1996.

32. Art. 31 (2) to (4).

33. Obviously one can never exclude judicial review; The ICJ might find itself competent to decide whether the circumstances invoked affect the vital interests of a State; The ICJ has, *e.g.*, acknowledged that concerns expressed by Hungary for its natural environment in the region affected by the Gabcíkovo-Nagymaros Project related to an "essential interest" of that State, within the meaning given to that expression in Art. 33 of the Draft of the ILC's current draft on State Responsibility: judgment of 25 September 1997, ICJ General List No. 92, para 53.

34. *Infra*, 5.2.3. C.

35. *Supra*, 3.4.4.

36. As acknowledged by the ICJ in the *Fisheries Jurisdiction* case, *ICJ Rep.* (1973), 63, para. 36.

37. Art. 62 (1)(a) & (b).

38. Respectively, *ICJ Rep.* (1973), 63, para. 36 and ICJ judgment of 25 September 1997, General List No. 92, para 102–3 *ff.*

39. Art. 31 (1).

40. Art. 31 (2) to (4).

41. This is similar to Art. VI (c) of the 1948 Safety Convention, but different from Art. XIX (1) of the 1954 OILPOL Convention: *infra*, 5.2.3. D & 5.2.4. A.

42. 1969 Vienna Convention, Art. 65; Toth, 19 *Juridical Review* (1974), 276–281.

43. *Supra*, 3.4.3.

44. IMO Information Sheet.

45. IMCO press release, 6 May 1960.

46. Arts 2 & 4.

47. Art. 2.

48. International Conference on Safety of Life at Sea, 1948, Heads of Delegations Conference, Minutes, 2nd meeting May 24th, 1948, Comments by the Netherlands, 4.

49. On Art. 282: *supra*, 3.4.2.A.

50. COLREGS can best be described as the "rules of the road" for the sea. Historically, technically and legally they are separate from the Safety Conventions. Yet at the 1929 Safety Conference, revisions to the COLREGS were proposed and from there grew the tradition, followed by all other Safety Conferences up to the 1960s, of appending recommend changes to the COLREGS in a separate annex to the final act of the Safety conferences. It was only in 1972 that the COLREGS were again separated from the Safety Conferences and revised at a separate Conference: *Infra*, 6.2.3.

51. Art. 40.

52. IMCO press release, 6 May 1960.

53. *Op. cit.*, 139.

54. International Conference on Safety of Life at Sea, London, 1948, SAFCON 9, Note on UK proposals, 4.

55. Final Report of the General Provisions Committee, SAFCON 50, May 28th, 1948, Annex A, Art. 3.

56. *Ibid.*, Annex D, Draft Resolutions.

57. Adopted in the Final Act as Resolution 1.

58. General Provisions Committee, Draft Minutes, 9th meeting, May 20th, 1948, 6.

59. *Ibid.*, 4.

60. *Ibid.*, 4.

61. UK declaration at Heads of Delegations Conference, Minutes, 2nd meeting, May 24th, 1948, 11.

62. See in particular UK statement, International Conference on Safety of Life at Sea, Heads of Delegations Conference, Minutes, 2nd Meeting, May 24th, 1948, 1.

63. U.S. statement, General Provisions Committee, Minutes, 2nd Meeting, May 3rd, 1948, 2; UK declaration, Heads of Delegations Conference, Minutes, 2nd Meeting, May 24th, 1948, 11.

64. U.S. statement, General Provisions Committee, Minutes, 2nd Meeting, May 3rd, 1948, 2; UK declaration, Heads of Delegations Conference, Minutes, 2nd Meeting, May 24th, 1948, 11.

65. Second Plenary Session, June 2nd, 1948, Summary by the Chairman, 7.

66. UK declaration, Heads of Delegations Conference, Minutes, 2nd Meeting, May 24th, 1948, 11.

67. General Provisions Committee, Draft Minutes, 3rd meeting, May 5th, 1948, 2.

68. Statements by the USSR and Poland, General Provisions Committee, Draft Minutes, 9th Meeting, May 20th, 1948, 6; and at Heads of Delegations Conference, Minutes, 2nd Meeting, May 24th, 1948, 11–13.

69. Statement by Greece, Annex to General Provisions Committee, Minutes, 4th Meeting, May 7th, 1948, *in fine*.

70. Heads of Delegations Conference, Minutes, 4th meeting, May 24th, 1948, 12–3.

71. The final decision carried in the General Provisions Committee by a vote of 8–5–7: General Provisions Committee, Draft Minutes, 9th meeting, May 20th, 1948, p. 6; and in the Heads of Delegations Conference by a vote of 17–3: Heads of Delegations Conference, Minutes, 2nd Meeting, May 24th, 1948, 13 *in fine*.

72. Statement by Greece *in fine*, Annex to General Provisions Committee, Minutes, 4th meeting, May 7th, 1948.

73. General Provisions Committee, Draft Minutes, 9th meeting, May 20th, 1948, 10.

74. Heads of Delegations Conference, Minutes, 2nd Meeting May 24th, 1948, 13; Second Plenary Session, June 2nd, 1948, 5–7; and SAFCON 59, Note by the Indian Delegation, June 1st, 1948.

75. UK statement, General Provisions Committee, Draft Minutes, 3rd meeting, 5th May 1948, 2; U.S. statement, General Provisions Committee, Draft Minutes, 9th meeting, May 20th, 1948, 6.

76. U.S. statement, *ibid.*, 6.

77. The proposal to remove the text on the issue of control was supported in the General Provisions Committee by a mere two delegations, and in the Heads of Delegations Conference by a mere 4 votes: Minutes, 2nd meeting, May 24th, 1948, 1 & 13 *in fine*.

78. See final Art. V on Carriage of Persons in Emergency based on a proposal (Art. 3(b)) by the U.S.

79. U.S. statement, General Provisions Committee, Minutes, 3rd meeting, May 3rd, 1948, 2.

80. IMCO press release, 6 May 1960.

81. *Supra*, 5.2.2. B.

82. International Conference on Safety of Life at Sea, Heads of Delegations Conference, May 24th, 1948, Minutes, 2nd meeting, Report on the work of the General Provisions Committee, 1.

83. *Supra*, 3.4.4.

84. *Yearbook ILC* (1980), vol. II, pt. 2, 49, para 31.

85. Judgment of 25 September 1997, ICJ General List No. 92, paras 50–58.

86. *Supra*, 3.4.2.D.

87. IMCO/SAFCON/1, 2.

88. *Ibid.*, 2.

89. IMCO/SAFCON/Plenary S.R. 3, June 10th 1960, 5.

90. *Ibid.*

91. GEN/SR/1, 18 May 1960, and GEN/SR.1/Cor. 1, 20 May 1960, 3; IMCO/SAFCON/Plenary S.R 3, 10 June 1960, 5–6.

92. GEN/SR/1, 18 May 1960, as corrected by GEN/SR.1/Cor.1, 20 May 1960, 3.

93. GEN/21 of 27 May 1960; on the 1954 Convention see *infra*, 5.2.4. A.

94. GEN/SR/16 of 31 May 1960, including corrections in GEN/SR.16/Cor.1, 8 June 1960, 2.

95. *Ibid.*, 3: (a) Vote of 5–23–1 on deletion of Art. VI; (b) Vote of 20–8–2 on U.S. proposal in regard to Art. VI (a).

96. IMCO/SAFCON/Plenary S.R. 3, 10 June 1960 and IMCO/SAFCON/Plenary SR. 3, 6.

97. IMO Information Sheet.

98. International Conference on the Safety of Life at Sea, 1974, Committee I, SOLAS/CONF/C.1/4 , 25 October 1974, 3 and SOLAS/CONF/SR.5, 29 January 1975, 4–6.

99. Birnie & Boyle, *op. cit.*, 266.

100. *Supra*, 5.2.3. C.

101. The published *travaux préparatoires* do not contain any explanation for this addition.

102. A similar obligation to limit the suspension for the duration of the hostilities follows from Art. 22 of the Washington Naval Disarmament Treaty (Five Power Naval Treaty), concluded in 1922; see *infra*, 5.3.

103. International Conference on Pollution of the Sea by Oil, 1954.

104. International Conference on Pollution of the Sea by Oil, 1962.

105. *Infra*, 6.2.4.

106. *Supra*, 5.2.2. B.

107. Birnie & Boyle, *op. cit.*, 266.

108. International Conference on Marine Pollution, held in London, 1973, IMO Docs MP/CONF/1 *ff.*

109. None of the published *travaux préparatoires* (labelled "PCMP," and distributed at the Conference as "MP/CONF/...") contains a suspension clause related to war.

110. *Infra*, 6.2.5.B.

111. *Supra*, 1.2.1. A.

112. Art. III (3).

113. Source: IMO/Lloyd's data as at 1 February 1998.

114. Art. III (1) & (2).

115. Art. IV.

116. Art. V (3).

117. Art. V (1).

118. Title III of Pub L. 100–688, 102 Stat. 4152, 33 USC 2501 *et seq.*, para 3104; *Cumulative Digest of US Practice in International Law*, 1981–88, vol. 2, 2093.

119. Art. 38.

120. Art. 89.

121. See 1948 Convention, Art. IV on cases of *Force Majeure*.

122. Art. 31 of the ILC's current draft on State Responsibility describes grounds of *Force majeure* and fortuitous events as follows: (1) The wrongfulness of an act of a State not in conformity with an international obligation of that State is precluded if the act was due to an irresistible force or to an unforeseen external event beyond its control which made it materially impossible for the State to act in conformity with that obligation or to know that its conduct was not in conformity with that obligation; (2) Paragraph 1 shall not apply if the State in question has contributed to the occurrence of the situation of material impossibility; see in this sense also: *Rainbow Warrior Arbitration* (1990), 82 *ILR*, 499, 553–4, para 78.

123. *Supra*, 5.2.2. A & B.

124. *Supra*, 5.2.3. C.

125. *Supra*, 3.4.2. C.

126. Art. 28.

127. Art. 32.

128. Art. 35.

129. *Supra*, 3.4.4.

130. *Supra*, 5.2.3. D.

131. *Supra*, 5.2.2. B.
132. *Supra*, 5.2.3. E.
133. *Supra*, 5.2.4. B.

Chapter VI

1. Simonds, 29 *Stanford JIL* (1992), 194; Sands, *op. cit.*, 232.

2. 16, CBNS, 310; Matsunami, *Immunity of State Ships as a Contribution towards Unification of the Laws on the Subject* (1924), 37–9.

3. Malanczuk, *op. cit.*, 119.

4. Steinberger, 10 *EPIL* (1987), 432*ff.*

5. O'Connell, M., 3 *Ind. J. Global Legal Stud.* (1995), 59.

6. *Universal Consolidated Inc. v. Bank of China* (1994), 107 *ILR*, 353, 355*ff.*, where a distinction is made between domestic sovereign immunity, based on constitutional law and foreign sovereign immunity, based on customary international law.

7. Steinberger, 10 *EPIL* (1987), 435.

8. See the three volumes of the International Law Reports (63, 64, 65) devoted exclusively to questions of State Immunity; On the evolution of the State immunity theory in U.S. law, see: *Stena Rederi v. Petroleos Mexicanos* (1991) 103 *ILR*, 433, 437*ff.*; *US v. Moats* (1992), 103 *ILR*, 480, 487*ff.*

9. *E.g., Libyan Arab Socialist People's Jamahiriya v. Actimon SA* (1985), 82 *ILR*, 30; *Janini v. Kuwait University* (1995), 107 *ILR*, 367–70; *Gates et al. v. Victor Fine Foods et al.* (1995), 107 *ILR*, 371–81; Malanczuk, *op. cit.*, 119–21.

10. *Joseph v. Consulate General of Nigeria et al.* (1987), 101 *ILR*, 485, 493; *Saltany and Others v. Reagan et al.* (1989), 87 *ILR 680; Jaffe v. Miller and Others (1990), 87 ILR,* 197; O'Connell, M., 3 *Ind. J. Global Legal Stud.* (1995), 59.

11. *Letelier v. Republic of Chile* (1980), 63 *ILR* 378; Malanczuk, *op. cit.*, 120–21.

12. *Argentine Republic v. Amerada Hess* (1989), 81 *ILR*, 659; *Cumulative Digest of US Practice in International Law*, 1981–88, vol. 2, 1619–31; see too *Princz v. FRG* (1992–4), 103 *ILR*, 594*ff.*, 604*ff.*, in which the plaintiff argued in vain that a violation of the Hague Rules on Land Warfare was a violation of *jus cogens* for which no sovereign immunity existed.

13. 99 *ILR*, 80; writ for *certiorari* denied.

14. 66 *ILR* 212 at 225.

15. Shearer, 11 *EPIL* (1989), 321; Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 298.

16. 7 *Cransch* (1812), 145–46; UN, *Materials on Jurisdictional Immunities of States and their Property* (1982), UN Doc. ST/LEG/SER.B/20, 100.

17. For a discussion of subsequent U.S. and international case law, see *Rex. v. Compania De Vapores, SA*, (1981), 72 *ILR*, 93.

18. *The Parlement Belge* (1879) 4 P.D. and on appeal (1880) 5 P. D. 197; for more recent applications of the principles enunciated in the latter case see: *Flota Maritima Browning de Cuba SA v. The Steamship Canadian Conqueror et al. and the Republic of Cuba* (1962), 42 *ILR*, 125–34; *Swiss Israel Trade Bank v. Government of Salta and Banco Provincial de Salta* (1972), 55 *ILR* 411; *The Philippine Admiral* (1975), 64 *ILR*, 90; *I Congreso del Partido* (1979) 64 *ILR*, 227; *US v. Ruiz* (1985), 102 *ILR*, 122, 124–7; *Holy See v. Starbright Sales* (1994), 102 *ILR* 163–73; *Kuwait Airways Corporation v. Iraqi Airways Company*, 103 *ILR*, 340 at 398; *KPMG v. Davison* (1996), 104 *ILR*, 526*ff.*

19. Done at Brussels, April 19th, 1962; ILC Report (1991), UN Doc. A/46/10, Chapter II, *Jurisdictional immunities of States and their Property* [hereinafter *Jurisdictional Immunities*], 173, Art. 3, para 1.

20. Signed at Brussels, 24 May, 1934, *Jurisdictional Immunities*, 175, Art. IV.

21. Signed at Montevideo, 19 March 1940, *Jurisdictional Immunities*, 177, Arts. 35 & 36 (1).

22. Art. 30 of Convention, *ibid.*, 156 at 165.

23. Art. 16 (1), (2), (3).

24. Shearer, 11 *EPIL* (1989), 320.

25. For a judicial interpretation of the term warship, see: *Naval and Military Works or Materials, US and Germany: Mixed Claims Commission, Ann. Dig.* (1923–24), Case No. 221, 405; For the U.S. understanding of "warships" and "auxiliaries," see: *Cumulative Digest of US Practice in International Law*, 1981–88, vol. 2, 1382–86.

26. Smith, *op. cit.*, 123–41.

27. *Jurisdictional Immunities*, Commentary on Art. 1, 11–12.

28. Shearer, 11 *EPIL* (1989), 322; Treves, in Dupuy & Vignes, *op. cit.*, vol. I, 902.

29. Timagenis, *International Control of Marine Pollution* (1980), vol. I, 61.

30. Rolph, 135 *Military LR* (1992), Winter Issue, 137–65; Nagle, 1 *VJIL* (1990), 131–2.

31. *E.g.*, the ILC repeatedly stressed that it would not deal with "the question of either State-owned or State-operated aircraft engaged in commercial service," neither with "the question of space objects": *Jurisdictional Immunities*, 10 & 127.

32. Art. 5.

33. Art. 2(1)(a).

34. *Supra*, 5.2.2. B.

35. IMO Doc. LL/CONF/1, U.S. proposal, 24; observations by the Netherlands and France, *ibid.*, 24–5; LL/CONF/C.1/WP.21, 16 March 1966; LL/Conf/SR.3 of 12 October 1966; LL/CONF/C. 1/SR. 19, 20 October 1966.

36. Treves, *op. cit.*, 903.

37. The Rules of the Road at Sea were originally customary rules of seamanship, ascertained by the English Admiralty Court. They were published in 1840 in code form by Trinity House: O'Connell, D., *op. cit.*, 770 & 831.

38. Arts. 2 (1), 40, 65.

39. Art. 40 on UK mandate.

40. General Provisions Committee, Minutes, 1st meeting, April 28th, 1948, 3, item 9.

41. General Provisions Committee, Draft Minutes, 9th meeting, May 20th, 1948, 4.

42. *Ibid.*

43. U.S. proposal: Section 3 (a) of Chapter I of SAFCON 4; French comments: General Provisions Committee, Draft Minutes, 7th meeting, May 13th, 1948, 2.

44. General Provisions Committee, Draft Minutes, 8th meeting, May 19th, 1948, 2.

45. *Infra*, 6.2.4.

46. At that time the Soviet Icebreaker *Lenin* and the USS *Savannah* were the only civilian nuclear-powered vessels in operation: Discussions of the Plenary, International Conference on Safety of Life at Sea, 1960, IMCO/SAFCON/Plenary/SR 4, 13 June 1960, 6–7, item 4.

47. A proposal by Germany to extend the exemption to military auxiliary ships was withdrawn: IMCO/SAFCON/1, 10; GEN/SR.4, 19 May 1960 as corrected by GEN/SR.1/Cor. 1, 20 May 1960, 2.

48. The 1960 Convention entered into force on 26 May 1965.

49. *Infra*, 6.2.3.

50. Treves, *op. cit.*, 903.

51. Conference on Revision of the International Regulations for Preventing Collisions at Sea 1972, held at IMO headquarters, 4–20 October 1972.

52. Source: IMO/Lloyd's data as at 31 December 1994.

53. IMO information sheet.

54. Rule 1 (c), Rule 3 (g), (iv), (v), Rule 27 (b), (f).

55. As in Rule 1 (e) on vessels of "special construction or purpose"; Warships and other military ships are furthermore subject to all provisions which by their wording apply to "all vessels" without exception, to "power-driven" vessels, to vessels "restricted in their ability to manoeuvre," or to "vessels not under command."

56. In 1988, it was estimated that there were about 7,020 naval ships afloat on the world's oceans, against an estimated 75,680 merchant vessels of 100 gross tons or larger: *Lloyd's Register of Shipping Statistical Tables 1988* (London: 1988); Morgan, in Van Dyke *et al.*, *Freedom for the Seas in the 21st Century* (1993), 439.

57. Art.VII.

58. 11 *ILM* (1972), 778.

59. Agreement between the Government of the UK and the Government of the USSR concerning the Prevention of Incidents at Sea Beyond the Territorial Sea, done 15 July 1986, 37 *ICLQ* (1988), 420; The other agreements were concluded in 1988 and 1989: Nagle, 1 *VJIL* (1990), 143.

60. *Ibid.*, 126.

61. *E.g.*, Arts. II (3), (6).

62. See Nagle, 1 *VJIL* (1990), at 131, fn. 33, quoting the American naval authority Ashley Roach and the late Australian military commander and lawyer Daniel O'Connell.

63. Done at Moscow, 12 June 1989, 28 *ILM* (1989), 877.

64. Art. II, which lists four types of "dangerous military activities."

65. Art. VIII (1).

66. At page 2, para 6 of the proposals by the government of the UK, dated April 1954, to be found in compilation of texts on the 1954 OILPOL Conference, held by IMO, London.

67 General Committee, Minutes, 8th Meeting, May 10th, 1954, 12; Minutes, 9th Meeting, May 11th, 1954, 1–2.

68 *Ibid.*, 14.

69 Third and Final (Plenary) Session, May 12th, 1954, Report by the Chairman of the General Committee, 10.

70 IMCO, International Conference on Prevention of Pollution of the Sea by Oil. Held in London, 26 March-13 April 1962, OP/CONF/3,7 with UK and U.S. proposals.

71. *Ibid.*, 1–2 (France), 5 (Germany), 6 (India); see too OP/CONF/3/Add. 1, 8 January 1962, Norwegian proposals, 2 & 7.

72. OP/CONF/3, 46–47, proposals by Greece and the UK.

73. *E.g.*, the debates reproduced in OP/CONF/C.1/SR.1, 13 April 1962, Summary Record, 1st meeting, 27 March 1962, 6–7.

74. CONF/C.1/SR.5, 13 April 1962, Agenda item 7.

75. Timagenis, *op. cit.*, 171*ff.*

76. *Ibid.*, 61, 161–2.

77. *Ibid.*, 176–9.

78. *Supra,* 1.2.1. A.

79. Preparatory Meeting for the International Conference on Marine Pollution, 1973.

80. MP/CONF/8/8, 4 July 1973, 3.

81. MP/CONF/8/11, 10 July 1973, 2–3 (Norway); MP/CONF/8/17, 2 August 1973, 2 (Japan).

82. MP/CONF/8/10/Add.1, 5 October 1973, 5.

83. MP/CONF/8/13, 18 July 1973, 2.

84. MP/CONF/C.1/WP. 13, 12 October 1973, Committee I, Agenda item 3, amendment to Art. 3(2).

85. MP/CONF/C.1/WP. 13, 12 October 1973, Committee I, Agenda item 3, Proposed amendment to Art. 3 (2).

86. MP/CONF/WP. 17, 30 October 1973, 2.

87. MP/CONF/SR. 10, 4 March 1974, agenda item 7.

88. A/AC.138/SC.III/L.27 (1973, mimeo.), principle (g) (Australia): Nordquist *et al., United Nations Convention on the Law of the Sea 1982*, vol. IV, (1991), 418.

89. A/AC.138/SC.III/L.28 (1973, mimeo.), Art. XII (Canada): *ibid.*, 418.

90. A/AC.138/SC.III/L.32 (1973, mimeo.), Art. 7, para 2 (USSR): *ibid.*, 418.

91. A/AC.138/SC.III/L.40 (1973, mimeo.), Art. XXIII (US): *ibid.*, 418.

92. US (1974, mimeo.), Art. XIII: *ibid.*, 418.

93. UNCLOS III, Official Records, vol. IV, (1975), Summary Record, 19th Meeting, Third Committee, Third Session, 26 March 1975, 85, para 32.

94. See *e.g.*, proposals for Chapter IX entitled "Sovereign Immunity," which included Art. 42; Document A/CONF.62/WP. 8/Part III, UNCLOS III, Official Records, vol. IV, Documents of the Conference, 171–6.

95. Nordquist *et al., op. cit.*, 421; Oxman, 24 *VJIL* (1984), 821, fn. 34; Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 298.

96. Heintschel v. Heinegg & Donner, *ibid.*, 298.

97. 1974 Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention), Art. 4 (4); 1976 Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft, Art. 11 (1); 1982 Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment, Art. XIV; 1986 Protocol for the Prevention of Pollution of the South Pacific Region by Dumping, Art. 12 (4); 1990 Protocol Concerning Specially Protected Areas and Wildlife in the Wider Caribbean Region (SPAW Protocol), Art. 2 (3); 1992 Convention on the Protection of the Black Sea Against Pollution, Art. IV; 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention), Art. 4 (3).

98. *Supra*, 3.1.2.

99. Art. XIV.

100. 1983 Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region: Interpretative Statement by the United States and the UK attached to the Final Act; 22 *ILM* (1983), 226, 57 *BYIL* 1986 (1987), 553; *Cumulative Digest of US Practice in International Law*, 1981–88, vol. 2, 2096; 1986 Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (SPREP), U.S. Understanding Sen. Treaty Doc., 101–21, p. 53: *Cumulative Digest of US Practice in International Law*, 1981–88, vol. 2, 2099; 1989 Basle Convention on the Control of Transboundary Movement of Hazardous Wastes and Their Disposal, U.S. Understanding; Sen. Treaty Doc., 102–5, Sen. Exec. Rep. 102–36:(2), See too Declaration made by Ecuador; 1992 Convention on Biological Diversity, proposed U.S. understanding: Sen. Treaty Doc., 103–20, p. XVII.

101. Oxman, 24 *VJIL* (1984), 820–1; Morgan, *op. cit.*, 439–40.

102. Timagenis, *op. cit.*, 276, fn. 352.

103. 140 CONG. REC. S14, 467–04, 14, 472 (Oct. 6, 1994).

104. 133 CONG. REC. 511, 896 (1987) (statement of Sen. Lautenberg).

105. Dehner, *Vessel-Source Pollution and Public Vessels* (1995), IV (A), p. 8 (on file with author).

106. Kiss & Shelton, *op. cit.*, 173–74.

107. Matsunami, *op. cit.*, 97*ff*.

108. Dehner, *op. cit.*, IV (B), p. 8.

109. 1993 Draft Amendment, IMO Doc. LC/AM 1/9, 30.

110. 1996 Protocol, concluded 8 November 1996, 36 *ILM* (1997), 1.

111. Art. 3.

112. Statement of 11 November 1994 by B. Okamura, Deputy Director, Marine Environment Division, cited by Dehner, *op. cit.*, V (A) (2) (a), p. 12.

113. Oxman, 24 *VJIL* (1984), 820–21.

114. Treves, *op. cit.*, 902.

115. Morgan, *op. cit.*, 441.

116. UNEP/IUCC, *Meeting on Military Activities and the Environment*, Linkoping, 27–30 June 1995, UNEP/MIL/3, 7 July 1995.

117. *Supra*, 1.2.1. D.

118. *Second International NATO/CCMS Conference, The Role of the Military in Protecting the Ozone Layer*, January 24–25, 1994, Brussels, Belgium, vol. 1, 27.

119. Viega da Cunha, *ibid.*, 47.

120. *Proceedings of the International Symposium on The Environment and Defence*, 13–15 September 1995, Pilot Study on Defence Environmental Expectations, CCMS Report No. 211, NATO (1995).

121. Schachte, 23 *ODIL* (1992), 61*ff*.

122. Dehner, *op. cit.*, IV B., p. 8.

123. De Marco & Quinn, in Grunawalt *et al.*, *op. cit.*, 88–9; Quinn, comments, *ibid.*, 156.

124. De Marco & Quinn, *ibid.*, 91.

125. U.S. Navy, Opnavinst 5090.1B, 1 November 1994, Procedures For Implementing NEPA.

126. 40 CFR para 1506.11.

127. De Marco & Quinn, *op. cit.*, 91, fn. 14.

128. Dated January 4, 1979.

129. Heintschel v. Heinegg & Donner, 37 *GYIL* (1994), 299 in relation to Art. 236 UNCLOS.

130. Colonel David L. Carr, *Considerations for the Development of a DOD Environmental Policy for Operations Other Than War*, May 1997 (on file with author).

131. In Art. 1 (a) (i) and I (1) (j) respectively.

132. Art. 4 and II respectively.

133. Birnie & Boyle, *op. cit.*, 375.

134. *Supra*, 4.2.1.

135. Arts. 9 and IV 3 (a) respectively.

136. See Statement made by IAEA representative during 71st session of the IMO Legal Committee, 10–14 October 1994, LEG 71/13, 17 October 1994, Report, 4, para 15.

137. *Supra*, 3.1.1.

138. Explanation given to the author by a member of IAEA's legal service.

139. *Supra*, 1.2.2. D.

140. Adede, *The IAEA Notification and Assistance Conventions in Case of a Nuclear Accident* (1987), 126–9; Birnie & Boyle, *op. cit.*, 129, 365; Cameron, in Cameron *et al.*, *Nuclear Energy Law after Chernobyl* (1988), 23–24; Politi, in Francioni, & Scovazzi, *op. cit.*, 479–80.

141. Szasz, 2 *JMLC* (1971), No. 3, 549–550.

142. Pursuant to Art. XIV.1.

143. Most of the research in maritime nuclear propulsion was done with military applications in mind: Könz, 57 *AJIL* (1963), 109; Szasz, 2 *JMLC* (1971), No. 3, 553.

144. Könz, 57 *AJIL* (1963), 108–9; Szasz, 2 *JMLC* (1971), No. 3, 553.

145. Konz, 57 *AJIL* (1963), 108 fn. 40, 109.

146. *Ibid.*, 108–9.

147. Since the residual liability of the licensing State is maintained, the actual effect of this exception is more symbolic than real: Szasz. 2 *JMLC* (1971), No. 3, 557.

148. *Ibid.*, 563, fn. 118.

149. See *infra*, 6.2.6. C, intervention by Mr. Zhudro at the International Legal Conference on Marine Pollution Damage, 1969.

150. Done at Geneva on 10 October 1989, ECE/TRANS/79, UN/ECE, Inland Transport Committee.

151. Art. 4 (a) excludes places to which the public has no access.

152. LEG/CONF/C.2/1, 12 November 1969, *Marine Pollution Damage Conference 1969*, 499, Draft Art. XI.

153. *Ibid.*, 499, and LEG/CONF/C.2/SR.13, 20 November 1969, *ibid.*, 696.

154. LEG/CONF/C.2/1, 12 November 1969, *ibid.*, 500.

155. *Ibid.*, 438 & 500 respectively.

156. LEG/CONF/C.2/SR.13, 20 November 1969, *ibid.*, 696.

157. *Ibid.*, 697.

158. *Ibid.*, 700–1.

159. LEG/CONF. 2/, draft Art. 4 (2) (a), *IMCO-Official Records IOPC Conference 1971*, 51.

160. *Supra*, 4.2.2.

161. Supra, 4.2.3.

162. *Supra*, 6.2.6. A.

163. The first draft text can be found in LEG 64/4, 25 January 1991, agenda item 4.

164. The first exoneration provision was taken from the CLC Art. XI (1) and (2), the second from the IOPC Fund Convention Art. 4(2): see LEG 64/4, 25 January 1991.

165. *Infra*, 6.2.8. C.

166. LEG 64/10, 27 March 1991, Report of the Legal Committee, 64th session, 7, paras 37–38.

167. LEG 64/4/2, 6 March 1991, 5–6, and LEG 64/4/2/Corr. 1, 19 March 1991, submission in regard to agenda item 4.

168. LEG 66/9, 26 March 1992, Report, 12–3, paras 59–61.

169. LEG 67/3/6, 4 September 1992, Submission by Mexico and the United States on sovereign immunity, 1 (discussion); 2 (proposal); LEG 67/9, 13 October 1992, Report of the Legal Committee, 67th session, 14, paras 66–69.

170. LEG 72/4, 20 January 1995 and LEG 73/WP. 1, 12 October 1995, Draft Report, 3, para 10.

171. LEG/CONF/6, 13 October 1969, *Marine Pollution Damage Conference 1969,* 48; LEG/CONF/Conf/3*, *ibid.*, 200, observations by Singapore.

172. Art. II (1).

173. Art. I (1).

174. Art. II (4).

175. Art. III (d).

176. Art. III (a), (b), (c).

177. Art. V.

178. Art. VI.

179. LEG/CONF/Conf/3*, September 1969, *Marine Pollution Damage Conference 1969*, 195.

180. LEG/CONF/C.l/SR.6, *ibid.*, 309–10, interventions by Cameroon, Ghana, Venezuela, Guatemala, Indonesia.

181. *Ibid.*, p. 311, intervention by Cameroon.

182. LEG/CONF/C.1/SR.6, *Marine Pollution Damage Conference 1969*, 310, intervention by Yugoslavia.

183. *Ibid.*, 311.

184. LEG/CONF/C.1/WP.4, 14 November 1969, *ibid.*, 250; LEG/CONF/C.1/SR.6, *ibid.*, 308–9.

185. Intervention by the Philippines & Greece, *ibid.*, 309; Intervention by Syria, *ibid.*, p. 310.

186. LEG/CONF/Conf/3*, September 1969, *ibid.*, 197–8, 223.

187. LEG/CONF/C.1/SR.6, *ibid.*, p. 309.

188. *Ibid.*, 311–12.

189. *Ibid.*, 309–11, interventions by the USSR, Bulgaria, Ukraine.

190. *Ibid.*, 310–311.

191. *Ibid.*, 311.

192. International Conference on Marine Pollution, 1973.

193. MP/CONF/6, 10 October 1973, International Conference on Marine Pollution, 1973, Note by the Secretariat, 11.

194. MP/CONF/SR. 13, 4 March 1974, *inter alia*, agenda item 8, 25.

195. Birnie & Boyle, *op. cit.*, 286.

196. *Infra*, 6.2.8. C & 6.2.9.

197. Birnie & Boyle, *op. cit.*, 288.

198. Wildeboer, *op. cit.*, 1.

199. *Ibid.*, 27.

200. *Ibid.*, 26–28.

201. Le Clère, *L 'Assistance aux Navires et le Sauvetage des Epaves* (1954), 52–3.

202. Protocol, Art. 1.

203. Wildeboer, *op. cit.*, 31.

204. 1926 International Convention for the Unification of Certain Rules relating to the Immunity of State-owned vessels, Art. 3, paras 1 (2) & 3; 1940 Montevideo Treaty on International Commercial Navigation Law, Arts 36 & 39.

205. *Comité*, Conference of Rijeka, Yugoslavia, 1959, discussed by Wildeboer, *op. cit.*, 30–31.

206. *Supra*, 5.2.1. A.

207. Art. 4(1); entered into force on 15 August 1977.

208. As of February 1994; Source: The Ratification of Maritime Conventions, Lloyd's of London Press Ltd., vol. I.

209. LEG/CONF.7/11, 31 January 1989, International Conference on Salvage, 1989, Observations by France.

210. LEG XLVI/5, 17 July 1981, Report of the *Comité* on the question of salvage, p. 1.

211. Art. 13 (1) (b) and Art. 14; *Supra*, 5.2.1. B.

212. Art. 8 (1) (b) and 8 (2) (c).

213. Art. 9.

214. Art: 1–2 (2), *Comité* draft Annexed to LEG XLVI/5, 17 July 1981

215. LEG 52/4, 3 July 1984, Note by the Secretariat, Annex 2: *Comité*, Report to IMO on the draft international convention on salvage, 13.

216. LEG 52/9, 21 September 1984, Report of the Legal Committee, 52nd session, 9–10, paras 37 & 42; LEG 53/8, 3 January 1985, Report of the Legal Committee, 53rd session, 11–12, paras 44–45; LEG 54/7, 26 April 1985, Report of the Legal Committee, 54th session, 12–13, paras 48–52.

217. LEG 56/9, 21 April 1986, Report of the Legal Committee, 56th session, 5–7, 15–18.

218. LEG 57/3/Add.1, 15 May 1986, Note by the Secretariat, proposal for new para 2(f), 5.

219. LEG 57/7, 30 September 1986, U.S. Submission, 1.

220. LEG 57/12 7 November 1986, Report of the of Legal Committee, 57th session, 22–23, paras 106–111, 24–25, paras 118–123.

221. LEG/58/12 of 28 October 1987, Report of the Legal Committee, 58th session, 4–6, paras 15–22.

222. *Ibid.*, paras 9–11, 44–53.

223. LEG/CONF.7/10, 31 January 1989, Observations by FRG, 10, para 8.

224. LEG/CONF.7/13, 8 February 1989, Submission by the United States, 1–2.

225. *Ibid.*, 3, Proposed Art. 25 bis.

226. LEG/CONF.7/CW/WP.10, 18 April 1989, Proposal submitted by Spain, amendment to Art. 25.

227. LEG/CONF.7/CW/RD/5, 25 April 1989, Consideration of draft Art. 25 on State-owned vessels, p. 2.

228. See too final text of Art. 5 on Salvage operations controlled by public authorities; Art. 25 on State-owned cargoes, Art. 26 on Humanitarian cargoes and LEG/CONF.7/CW/RD/8, 26 April 1989, which records the formal adoption of the relevant provisions.

229. Source: IMO/Lloyd's data as at 1 February 1998.

230. 1969 Vienna Convention on the Law of Treaties, Art. 30, (3).

231. LEG 52/9, 21 September 1984, Report of the Legal Committee, 52nd session, 4, para 16.

232. Report to IMO on the draft international convention on salvage (...) "designed to replace the International Convention for the Unification of Certain Rules of Law to (sic) Assistance and Salvage at Sea made in Brussels on 23 September 1910."

233. *E.g.*, the UK is a party to all three Salvage Instruments.

234. Art. 1 (1) b.

235. LEG 52/4, 3 July 1984, Note by the Secretariat, Annex 2, *Comité*, Report to IMO on the draft international convention on salvage, 13.

236. *Supra*, 3.1.4.

237. Other disasters mentioned during the preparatory sessions were: Kharg 5 (an accident with an Iranian Tanker near Morocco, 1989/90) and Porto Santo Island (1990): OPPR/PM/10, 19 April 1990, Agenda item 3, 2, para 5.

238. Res A. 674(16) 19 October 1989 on International Co-operation on Oil Pollution Preparedness and Response, adopted unanimously.

239. OPPR/PM/3, 19 March 1990 Agenda items 2, 3 and 4, with attached report of the Working Group on Preparations for the Conference, (MEPC 29/WP. 17).

240. OPPR/PM/5, 23 March 1990, agenda items 2, 3, and 4; Extract from the Report of the MEPC 29th session, Note by the Secretariat, 2, para 13.3.

241. OPPR/PM/15, 11 June 1990, Report of the Preparatory Meeting, held from 14–18 May 1990; The meeting was attended, *inter alia*, by delegations of the following countries: Bahrain, China, France, India, Kuwait, Saudi Arabia, USSR, United States, UK, Sweden, Denmark.... Iran and Iraq were not represented. (*ibid.*, 2).

242. Documents distributed as OPPR/PM/2 and OPPR/PM/3 respectively.

243. See Annexes 2 and 3 attached to OPPR/PM/15.

244. OPPR/CONF/INF.1 of 26 November 1990.

245. OPPR/CONF/21 of 19 November 1990, Conference, Agenda item 6, Submission by the United States, Annex.

246. The only change was the substitution of the term "Convention" for "Article": OPPR/CONF/CW/RD/2, 20 November 1990.

247. *Supra*, 6.2.5. C, D.
248. Draft Arts. IV, VI, VII, VIII.
249. Draft Art. V.
250. Proposed Art. III (1) and (2), submitted by Germany, the Netherlands and the UK in 1995: see Draft text in Annex to LEG 73/11, 8 August 1995, Legal Committee, 73rd session, agenda item 11.
251. LEG 73/11, 2, para 10.

Chapter VII

1. *Supra*, 5.2.2. B.
2. *Supra*, 5.2.3. C & D.
3. *Supra*, 4.3 and 4.2.3.
4. *Supra*, 5.2.4. A.
5. *Supra*, 6.2.5. B.
6. Birnie & Boyle, *op. cit.*, 267.
7. *Supra*, 6.2.7, 6.2.8.
8. *Supra*, 5.2.1. A.
9. For the adjective "Humanitarian" has a definite connotation with the term "armed conflict."
10. *Supra*, 6.2.7.
11. *Supra*, 4.2.2.
12. *Supra*, 6.2.7. A; Birnie & Boyle, *op. cit.*, 287 argue that the prohibition to take measures against warships under the convention would nevertheless have to cede in case of "necessity."
13. *Supra*, 6.2.9.
14. *Supra*, 2.1, 3.1.4.
15. *Supra*, 6.2.9.
16. Amongst others: Kuwait, United States, UK, Saudi Arabia
17. OPPR/PM/14, 30 April 1990, Prep. Meeting, Agenda item 2.
18. OPPR/PM/3, 19 March 1990, Agenda items 2, 3 and 4, with attached Report of the Working Group on Preparations for the Conference, (MEPC 29/WP.17), Annex I, 2, para 8, 4, para 15 and Annex 2 with compromise resolution.
19. Conference Resolution 10, 30 *ILM* (1991), 760.
20. *Supra*, 4.2.4.
21. OPPR/PM/3, 19 March 1990, Annex 2, 2.
22. *IMO News* (1991), No 1., 1
23. Conference Resolution 2, 30 *ILM*(1991), 753.
24. Conference Resolution 3, *ibid.*, 754.
25. *IMO News* (1991), No. 1, 1.
26. *Supra*, 3.1.4.
27. *IMO News* (1991), No. 1, 3.
28. *Supra*, 3.1.2.
29. Mann-Borgese, *op. cit.*, 106; VI *OSIR*, No. 10 (18 March 1983), 1; No. 14 (15 April 1983), 1; No. 16 (29 April 1983), 1; No. 21 (3 June 1983), 1; No. 44 (11 November 1983), 2.
30. See on the conditions set by two private companies, Norpol and Red Adair: VI *OSIR*, No. 20 (27 May 1983), 1; No. 25 (1 July 1983), 1.
31. *Ibid.*, No. 38 (30 September 1983), 1; No. 44 (7 October 1983), 1.
32. Letter of 23 December 1983, UN Doc. S/16238, De Guttry & Ronzitti, *op. cit.*, 89-90.
33. *Supra*, 3.1.2.

34. It is noteworthy that the Organisation itself was a recent one, having been established onl 1 January 1981: Amin, in Malek, *op. cit.*, 139.
35. *Supra*, 2.1, 2.2.5.A.
36. *Supra*, 3.2.
37. *Supra*, 6.2.5. C & D.
38. Following Art. XXI (a).
39. Art. I (1).
40. *Supra*, 2.4.2, 2.4.3, 3.3.3.

Chapter VIII

1. *ICJ Rep.* (1996), 226 at 242, para 30, *in fine*.

Abbreviations and Acronyms

1974-77 GDC	Geneva Diplomatic Conference on the Reaffirmation and Development of International Law Applicable in Armed Conflicts, 1974-1977
AFDI	Annuaire Français de Droit International
AJIL	American Journal of International Law
AJPIL	Austrian Journal of Public and International Law
Am. U.J. Intl L & Policy	American University Journal of International Law and Policy
Ann. IDI	Annuaire de L'Institut de Droit International Yearbook of the Institut de Droit International
ASIL Proceedings	Proceedings of the American Society of International Law
AYIL	Australian Yearbook of International Law
BYIL	British Yearbook of International Law
CLC	Civil Liability Convention
CLQ	Cornell Law Quarterly
Colo. JIEL & P	Colorado Journal of International Environmental Law and Policy
COLREGS	Collision Regulations
Comité	Comité Maritime International
CTBT	Comprehensive Test Ban Treaty
CYIL	Canadian Yearbook of International Law
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EILR	Emory International Law Review
EJIL	European Journal of International Law

ENMOD	Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques
EPIL	Encyclopedia of Public International Law
GYIL	German Yearbook of International Law
Hague Recueil	Recueil des Cours de l'Académie de Droit International de La Haye
Harv. ILJ	Harvard International Law Journal
HLR	Harvard Law Review
HNS Convention	Hazardous and Noxious Substances Convention
Houston JIL	Houston Journal of International Law
IAEA	International Atomic Energy Agency
ICJ Rep	International Court of Justice Reports
ICLQ	International and Comparative Law Quarterly
ICRC Review	International Review of the Red Cross
IEL	International Environmental Law
IJC	International Court of Justice
IJECL	International Journal of Estuarine and Coastal Law
IJMCL	International Journal of Marine and Coastal Law
ILA	International Law Association
ILC	International Law Commission
ILC Yearbook	Yearbook of the International Law Commission
ILM	International Legal Materials
ILR	International Law Review
IMCO	International Maritime Consultative Organisation
IMO	International Maritime Organisation
Ind. J. Global Legal Stud.	Indiana Journal of Global Legal Studies
Institut	Institut de Droit International
Int. L. & Armed Conflict Comm.	International Law and Armed Conflict Commentary

IUCN	International Union for the Conservation of Nature
IYHR	Israel Yearbook on Human Rights
JACL	Journal of Armed Conflict Law
JMLC	Journal of Maritime Law and Commerce
LNTS	League of Nations Treaty Series
MARPOL	International Convention for the Prevention of the Pollution by Ships
Mil. LR	Military Law Review
NEPA	National Environmental Policy Act (U.S.)
NILR	Netherlands International Law Review
NYIL	Netherlands Yearbook of International Law
ODIL	Ocean Development and International Law
OECD	Organisation for Economic Co-operation and Development
OOTW	Operations Other Than War
OPRC Convention	Convention Oil Pollution Preparedness, Response and Co-operation
OSIR	Oil Spill Intelligence Report
PCIJ	Permanent Court of International Justice (Reports)
PTBT	Partial Test Ban Treaty
RBDI	Revue Belge de Droit International
RDMDG	Revue de Droit Militaire et de Droit de la Guerre
Rev. Int. Stud.	Review of International Studies
RGDIP	Recueil Général de Droit International Public
RIAA	Reports of International Arbitration Awards
SC	United Nations Security Council
SCLR	Southern Californian Law Review
SJIL	Stanford Journal of International Law

SOLAS Convention	Safety of Life at Sea Convention
UKTS	United Kingdom Treaty Series
UN/ECE	United Nations Economic Commission for Europe
UNCC	United Nations Compensation Commission
UNCED	United Nations Conference on Environment and Development
UNCHE	United Nations Conference on the Human Environment
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	United Nations Environment Programme
UNGAOR	United Nations General Assembly Official Records
UNTS	United Nations Treaty Series
VJIL	Virginia Journal of International Law
VJTL	Vanderbilt Journal of Transnational Law
WCED	World Commission on Environment and Development
WHO	World Health Organisation
ZöR	Zeitschrift für öffentliches Recht

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