Annex 646

Activities of United Nations Organizations and programmes relevant to the human environment: report of the Secretary-General, E/4553, 11 July 1968, as cited at paragraph 34 in the Expert Report of Professor Naomi Oreskes on Historical Knowledge and Awareness, in Government Circles, of the Effects of Fossil Fuel Combustion as the Cause of Climate Change, 29 January 2024 at page 91 of the Exhibit Bundle to the Written Statement submitted by the Republic of Vanuatu, 21 March 2024, pages 21-23

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QUESTION OF CONVENING AN INTERNATIONAL CONFERENCE ON PROBLEMS OF THE HUMAN ENVIRONMENT

Activities of United Nations Organizations and Programmes relevant to the Human Environment

Report of the Secretary-General

CONTENTS

GE.68-12838

70. In order to prevent adverse effects from the rapid transition from the rural to the urban way of life, WHO provides guidance and assistance on the planning, organization and operation of sanitation and health services in urban communities, including the public health aspects of housing, transport, town-planning and urbanization in general - and on the organization of public health services. The latter work includes the planning and administration of community health services in which maternal and child health have an important place, and research and guidance on mental health including problems of drug-abuse and criminality.

VI WORLD METEOROLOGICAL ORGANIZATION

71. WMO, by one of its basic terms of reference, has to further the application of meteorology to all human activities and to the solution of human problems. As the atmosphere forms important part of the environment of man, application of meteorology to the steadily increasing problems of the human environment both nationally and internationally is within the purpose of the organization and is summarized below:

Planning the use of the environment

72. Planning for a most suitable use of land with regard to economic efficiency and human wellbeing for example for agricultural regions, industrial areas, urban settlements and resort areas calls for a collection of climatological data to be used for investigating where in view of the weather conditions different activities may most suitably be carried out. Hence meteorological services promote the collection and processing of data and WMO co-ordinates these activities through its Commission for Climatology.

73. Planning in agriculture is a field where efficiency may be promoted in a particularly high degree by making use both of climatological data and weather forecasting. WMO co-ordinates these national activities within its Commission for Agricultural Meteorology, and co-operates with FAO and UNESCO to promote improved planning of agricultural activities all over the world.

74. Similar planning activities are needed in relation to the use of water resources being closely related to phenomena such as precipitation and evaporation. Here WMO promotes studies and encourages standardization through its Commission for Hydrometeorolog presently in close co-operation with UNESCO.

75. WMO has noted a growing interest in making use of meteorological data in planning urban settlements and for building and other industries. Hence WMO will arrange a symposium in Brussels in October this year on Urban Climate and Building Climatology to discuss the promotion of these fields.

76. In planning activities it is essential to know to which extent the normal atmospheric conditions are stable. Hence the problem of changes of climate enters as an important issue which has to be considered, either the changes have been introduced by man or through atmospheric events. In most cases the modifications introduced by man are not deliberate, in some other they are and it is thought that in the future man may be able to influence upon weather and climate not only at a small scale but also over larger areas, WMO, through its Commission for Atmospheric Sciences of course follows closely the development in the fields of weather modification particularly in relation to artificial precipitation, prevention of evaporation etc.

77. Closely related to the question of changes of the environment's climate is the problem of long-range weather forecasting. Obviously planning the suitable use of the human environment would be much facilitated if weather forecasts for months and seasons would be available. No such reliable methods are as yet in existence but WMO through participation in global research projects and by the launching of the World Weather Watch (WWW) takes a very active part in promoting this aim.

Protecting the atmospheric environment

78. Application of meteorology to the protection of the atmosphere is mainly related to the problem of increasing air-pollution. There are large-scale air pollution problems where we are interested in global spread of debris from nuclear tests, the increase of acidity due to increased industrialization over a large part of the globe or the increase of the carbon-dioxide in the earth's atmosphere which may change our climate. In all these cases the general circulation of the atmosphere enters as the machinery. In the case of small scale problems we are interested in the spread of pollution from a single plant or over large urban communities due to central heating with carbon fuels or from heavy motor traffic; then the meteorological parameters of greatest interest are such as turbulence, stability and wind which govern the spread and concentration of pollutants.

79. It is the task of WMO to collect information and propose standardization on methods applied for use of meteorological theory together with suitable samples of data as well as in forecasting weather conditions that forms the concentration of air pollutants in planning communities and location of plants.

80. It is also the task of WMO to encourage Members to establish "background" stations in areas of low air-pollution in order to arrive at a suitable minimum standard to be applied in consideration of an overall regional or global increase of chemical components in the atmosphere.

81. These tasks are taken care of by a working group of six specialists established by the Commission for Atmospheric Sciences of WMO. Application of air-pollution problems in planning agriculture, urban communities and industry location is dealt with by the above-mentioned Commissions for Agricultural Meteorology and Climatology.

Protection against catastrophic weather events

82. The possibility of protecting the human settlements and man in all his activities against catastrophic weather events, of course, is a very important problem for WMO. Arriving at such a protection implies both a scientific research aspect where the meteorological behaviour of the phenomena such as tropical cyclones, tornadoes and floods is studied and an applied aspect where techniques to plan for the actual protection are invented. WMO takes an active part in promoting research as well as in establishing for example with support from UNDP, warning and other protection systems. The Co-ordination in this field is taken care of by the Commissions for Synoptic Meteorology and Maritime Meteorology. The possibilities for WMO to make even larger contributions in this connexion will be further improved by the implementation of WWW.

Human biometeorology

83. WMO through its Commission for Climatology promotes also the development of the meteorological field which is concerned with the interrelation between the conditions in the atmospheric environment and human health i.e. human biometeorology.

Annex 647

Report of the United Nations Conference on the Human Environment, Declaration of the United Nations Conference on the Human Environment, A/CONF.48/14/Rev.1, 16 June 1972, pages 9-22, 43-44

A/CONF.48/14/Rev.1

REPORT
OF THE
UNITED NATIONS
CONFERENCE
ON THE
HUMAN ENVIRONMENT

Stockholm, 5-16 June 1972

UNITED NATIONS

NOTE

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

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The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.

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CONTENTS

ANNEXES

Recommendation 16

The programmes referred to in recommendation 15 should include the establishment of subregional centres to undertake, *inter alia*, the following functions:

(*a*) Training;

(*b*) Research;

(*c*) Exchange of information;

(*d*) Financial, technical and material assistance.

Recommendation 17

It is recommended that Governments and the Secretary-General take immediate steps towards the establishment of an international fund or a financial institution whose primary operative objectives will be to assist in strengthening national programmes relating to human settlements through the provision of seed capital and the extension of the necessary technical assistance to permit an effective mobilization of domestic resources for housing and the environmental improvement of human settlements.

Recommendation 18

It is recommended that the following recommendations be referred to the Disaster Relief Co-ordinator for his consideration, more particularly in the context of the preparation of a report to the Economic and Social Council:

1. *It is recommended* that the Secretary-General, with the assistance of the Disaster Relief Co-ordinator and in consultation with the appropriate bodies of the United Nations system and non-governmental bodies:

(*a*) Assess the over-all requirements for the timely and widespread distribution of warnings which the observational and communications networks must satisfy;

(*b*) Assess the needs for additional observational networks and other observational systems for natural disaster detection and warnings for tropical cyclones (typhoons, hurricanes, cyclones etc.) and their associated storm surges, torrential rains, floods, tsunamis, earthquakes etc.;

(*c*) Evaluate the existing systems for the international communication of disaster warnings, in order to determine the extent to which these require improvement;

(*d*) On the basis of these assessments, promote, through existing national and international organizations, the establishment of an effective world-wide natural disaster warning system, with special emphasis on tropical cyclones and earthquakes, taking full advantage on existing systems and plans, such as the World Weather Watch, the World Meteorological Organization's Tropical Cyclone Project, the International Tsunami Warning System, the World-Wide Standardized Seismic Network, and the Desert Locust Control Organization;

(*e*) Invite the World Meteorological Organization to promote research on the periodicity and intensity of the occurrence of droughts, with a view to developing improved forecasting techniques.

2. *It is further recommended* that the United Nations Development Programme and other appropriate international assistance agencies give priority in responding to requests from Governments for the establishment and improvement of natural disaster research programmes and warning systems.

3. *It is recommended* that the Secretary-General ensure that the United Nations system shall provide to Governments a comprehensive programme of advice and support in disaster prevention. More specifically, the question of disaster prevention should be seen as an integral part of the country programme as submitted to, and reviewed by, the United Nations Development Programme.

4. *It is recommended* that the Secretary-General take the necessary steps to ensure that the United Nations system shall assist countries with their planning for pre-disaster preparedness. To this end:

(*a*) An international programme of technical co-operation should be developed, designed to strengthen the capabilities of Governments in the field of pre-disaster planning, drawing upon the services of the resident representatives of the United Nations Development Programme;

(*b*) The United Nations Disaster Relief Office, with the assistance of relevant agencies of the United Nations, should organize plans and programmes for international co-operation in cases of natural disasters;

(*c*) As appropriate, non-governmental international agencies and individual Governments should be invited to participate in the preparation of such plans and programmes.

ENVIRONMENTAL ASPECTS OF NATURAL RESOURCES MANAGEMENT

Recommendation 19

It is recommended that the Food and Agriculture Organization of the United Nations, in co-operation with other relevant international organizations, should include in its programme questions relating to rural planning in relation to environmental policy, since environmental policy is formulated in close association with physical planning and with medium-term and long-term economic and social planning. Even in highly industrialized countries, rural areas still cover more than 90 per cent of the territory and consequently should not be regarded as a residual sector and a mere reserve of land and manpower. The programme should therefore include, in particular:

(*a*) Arrangements for exchanges of such data as are available;

(*b*) Assistance in training and informing specialists and the public, especially young people, from primary school age onwards;

(*c*) The formulation of principles for the development of rural areas, which should be understood to comprise not only agricultural areas as such but also small- and medium-sized settlements and their hinterland.

Recommendation 20

It is recommended that the Food and Agriculture Organization of the United Nations, in co-operation with other international agencies concerned, strengthen the necessary machinery for the international acquisition of knowledge and transfer of experience on soil capabilities, degradation, conservation and restoration, and to this end:

(*a*) Co-operative information exchange should be facilitated among those nations sharing similar soils, climate and agricultural conditions;

(i) The Soil Map of the World being prepared by the Food and Agriculture Organization of the United Nations, the United Nations Educational, Scientific and Cultural Organization and the International Society of Soil Science should serve to indicate those areas among which transfer of knowledge on soil potentialities and soil degradation and restoration would be most valuable;

(ii) This map should be supplemented through the establishment of international criteria and methods for the assessment of soil capabilities and degradations and the collection of additional data based upon these methods and criteria. This should permit the preparation of a World Map of Soil Degradation Hazards as a framework for information exchange in this area;

(iii) Information exchange on soil use should account for similarities in vegetation and other environmental conditions as well as those of soil, climate, and agricultural practices;

(iv) The FAO Soil Data-Processing System should be developed beyond soil productivity considerations, to include the above-mentioned data and relevant environmental parameters, and to facilitate information exchange between national soil institutions, and eventually soil-monitoring stations;

(*b*) International co-operative research on soil capabilities and conservation should be strengthened and broadened to include:

(i) Basic research on soil degradation processes in selected ecosystems under the auspices of the Man and the Biosphere Programme. This research should be directed as a matter of priority to those arid areas that are most threatened;

(ii) Applied research on soil and water conservation practices under specific land-use conditions with the assistance of the Food and Agriculture Organization of the United Nations and, where appropriate, other agencies (United Nations Educational, Scientific and Cultural Organization, World Health Organization and International Atomic Energy Agency);

(iii) Strengthening of existing research centres and, where necessary, establishment of new centres with the object of increasing the production from dry farming areas without any undue impairment of the environment;

(iv) Research on the use of suitable soils for waste disposal and recycling; the United Nations Industrial Development Organization, the Food and Agriculture Organization of the United Nations, and the World Health Organization should enter into joint consultations regarding the feasibility of an international programme in this area;

(*c*) These efforts for international co-operation in research and information exchange on soils should be closely associated with those of the UNDP/WMO/FAO/UNESCO programme of agricultural biometeorology, in order to facilitate integration of data and practical findings and to support the national programmes of conservation of soil resources recommended above;

(*d*) It should moreover be noted that in addition to the various physical and climatic phenomena which contribute to soil degradation, economic and social factors contribute to it as well; among the economic contributory factors, one which should be particularly emphasized is the payment of inadequate prices for the agricultural produce of developing countries, which prevents farmers in those countries from setting aside sufficient savings for necessary investments in soil regeneration and conservation. Consequently, urgent remedial action should be taken by the organizations concerned to give new value and stability to the prices of raw materials of the developing countries.

Recommendation 21

It is recommended that Governments, the Food and Agriculture Organization of the United Nations and the World Health Organization, in co-operation with the United Nations Educational, Scientific and Cultural Organization and the International Atomic Energy Agency, strengthen and co-ordinate international programmes for integrated pest control and reduction of the harmful effects of agro-chemicals:

(*a*) Existing international activities for the exchange of information and co-operative research and technical assistance to developing countries should be strengthened to support the national programmes described above, with particular reference to:

(i) Basic research on ecological effects of pesticides and fertilizers (MAB);

(ii) Use of radio-isotope and radiation techniques in studying the fate of pesticides in the environment (joint IAEA/FAO Division);

(iii) Evaluation of the possibility of using pesticides of biological origin in substitution for certain chemical insecticides which cause serious disturbances in the environment;

(iv) Dose and timing of fertilizers' application and their effects on soil productivity and the environment (Food and Agriculture Organization of the United Nations);

(v) Management practices and techniques for integrated pest control, including biological control (Food and Agriculture Organization of the United Nations and World Health Organization);

(vi) Establishment and/or strengthening of national and regional centres for integrated pest control, particularly in developing countries (Food and Agriculture Organization of the United Nations and World Health Organization);

(*b*) Existing expert committees of the Food and Agriculture Organization of the United Nations and the World Health Organization on various aspects of pest control should be convened periodically:

(i) To assess recent advances in the relevant fields of research mentioned above;

(ii) To review and further develop international guidelines and standards with special reference to national and ecological conditions in relation to the use of chlorinated hydrocarbons, pesticides containing heavy metals, and the use and experimentation of biological controls;

(*c*) In addition, *ad hoc* panels of experts should be convened, by the Food and Agriculture Organization of the United Nations, the World Health Organization and, where appropriate, the International Atomic Energy Agency, in order to study specific problems, and facilitate the work of the above-mentioned committees.

Recommendation 22

It is recommended that the Food and Agriculture Organization of the United Nations, under its "War on Waste" programme, place increased emphasis on control and recycling of wastes in agriculture:

(*a*) This programme should assist the national activities relating to:

(i) Control and recycling of crop residues and animal wastes;

(ii) Control and recycling of agro-industrial waste;

(iii) Use of municipal wastes as fertilizers;

(*b*) The programme should also include measures to avoid wasteful use of natural resources through the destruction of unmarketable agricultural products or their use for improper purposes.

Recommendation 23

It is recommended that Governments, in co-operation with the Food and Agriculture Organization of the United Nations and other agencies and bodies, establish and strengthen regional and international machinery for the rapid development and management of domesticated livestock of economic importance and their related environmental aspects as part of the ecosystems, particularly in areas of low annual productivity, and thus encourage the establishment of regional livestock research facilities, councils and commissions, as appropriate.

Recommendation 24

It is recommended that the Secretary-General take steps to ensure that the United Nations bodies concerned co-operate to meet the needs for new knowledge on the environmental aspects of forests and forest management:

(*a*) Where appropriate, research should be promoted, assisted, co-ordinated, or undertaken by the Man and the Biosphere Programme (UNESCO), in close co-operation with the Food and Agriculture Organization of the United Nations and the World Meteorological Organization, and with the collaboration of the International Council of Scientific Unions and the International Union of Forestry Research Organizations;

(*b*) Research on comparative legislation, land tenure, institutions, tropical forest management, the effects of the international trade in forest products on national forest environments, and public administration, should be sponsored or co-ordinated by FAO, in co-operation with other appropriate international and regional organizations;

(*c*) The Food and Agriculture Organization of the United Nations, in conjunction with the United Nations Educational, Scientific and Cultural Organization and other appropriate international organizations, should give positive advice to member countries on the important role of forests with reference to, and in conjunction with, the conservation of soil, watersheds, the protection of tourist sites and wildlife, and recreation, within the over-all framework of the interests of the biosphere.

Recommendation 25

It is recommended that the Secretary-General take steps to ensure that continuing surveillance, with the co-operation of Member States, of the world's forest cover shall be provided for through the programmes of the Food and Agriculture Organization of the United Nations and the United Nations Educational, Scientific and Cultural Organization.

(*a*) Such a World Forest Appraisal Programme would provide basic data, including data on the balance between the world's forest biomass and the prevailing environment, and changes in the forest biomass, considered to have a significant impact on the environment;

(*b*) The information could be collected from existing inventories and on-going activities and through remote-sensing techniques;

(*c*) The forest protection programme described above might be incorporated within this effort, through the use of advanced technology, such as satellites which use different types of imagery and which could constantly survey all forests.

Recommendation 26

It is recommended that the Food and Agriculture Organization of the United Nations co-ordinate an international programme for research and exchange of information on forest fires, pests and diseases:

(*a*) The programme should include data collection and dissemination, identification of potentially susceptible areas and of means of suppression; exchange of information on technologies, equipment and techniques; research, including integrated pest control and the influence of fires on forest ecosystems, to be undertaken by the International Union of Forestry Research Organizations; establishment of a forecasting system in co-operation with the World Meteorological Organization; organization of seminars and study tours; the facilitation of bilateral agreements for forest protection between neighbouring countries, and the development of effective international quarantines;

(*b*) Forest fires, pests and diseases will frequently each require separate individual treatment.

Recommendation 27

It is recommended that the Food and Agriculture Organization of the United Nations facilitate the transfer of information on forests and forest management:

(*a*) The amount of knowledge that can usefully be exchanged is limited by the differences of climatic zones and forest types;

(*b*) The exchange of information should, however, be encouraged among nations sharing similarities; considerable knowledge is already exchanged among the industrialized nations of the temperate zone;

(*c*) Opportunities exist, despite differences, for the useful transfer of information to developing countries on the environmental aspects of such items as: (i) the harvesting and industrialization of some tropical hardwoods; (ii) pine cultures; (iii) the principles of forest management systems and management science; (iv) soils and soil interpretations relating to forest management; (v) water régimes and watershed management; (vi) forest industries pollution controls, including both technical and economic data; (vii) methods for the evaluation of forest resources through sampling techniques, remote sensing, and data-processing; (viii) control of destructive fires and pest outbreaks; and (ix) co-ordination in the area of the definition and standardization of criteria and methods for the economic appraisal of forest environmental influences and for the comparison of alternative uses.

Recommendation 28

It is recommended that the Food and Agriculture Organization of the United Nations strengthen its efforts in support of forestry projects and research projects, possibly for production, in finding species which are adaptable even in areas where this is exceptionally difficult because of ecological conditions.

Recommendation 29

It is recommended that the Secretary-General ensure that the effect of pollutants upon wildlife shall be considered, where appropriate, within environmental monitoring systems. Particular attention should be paid to those species of wildlife that may serve as indicators for future wide environmental disturbances, and an ultimate impact upon human populations.

Recommendation 30

It is recommended that the Secretary-General ensure the establishment of a programme to expand present data-gathering processes so as to assess the total economic value of wildlife resources.

(*a*) Such data would facilitate the task of monitoring the current situation of animals endangered by their trade value, and demonstrate to questioning nations the value of their resources;

(*b*) Such a programme should elaborate upon current efforts of the Food and Agriculture Organization of the United Nations and might well produce a yearbook of wildlife [2] statistics.

Recommendation 31

It is recommended that the Secretary-General ensure that the appropriate United Nations agencies co-operate with the Governments of the developing countries to develop special short-term training courses on wildlife [2] management:

(*a*) Priority should be given to conversion courses for personnel trained in related disciplines such as forestry or animal husbandry;

(*b*) Special attention should be given to the establishment and support of regional training schools for technicians.

Recommendation 32

It is recommended that Governments give attention to the need to enact international conventions and treaties to protect species inhabiting international waters or those which migrate from one country to another:

(*a*) A broadly-based convention should be considered which would provide a framework by which criteria for game regulations could be agreed upon and the over-exploitation of resources curtailed by signatory countries;

(*b*) A working group should be set up as soon as possible by the appropriate authorities to consider these problems and to advise on the need for, and possible scope of, such conventions or treaties.

Recommendation 33

It is recommended that Governments agree to strengthen the International Whaling Commission, to increase international research efforts, and as a matter of urgency to call for an international agreement, under the auspices of the International Whaling Commission and involving all Governments concerned, for a 10-year moratorium on commercial whaling.

Recommendation 34

It is recommended that Governments and the Secretary-General give special attention to training requirements in the management of parks and protected areas:

(*a*) High-level training should be provided and supported:

- (i) In addition to integrating aspects of national parks planning and management into courses on forestry and other subjects, special degrees should be offered in park management; the traditional forestry, soil and geology background of the park manager must be broadened into an integrated approach;
- (ii) Graduate courses in natural resources administration should be made available in at least one major university in every continent;

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[2] Whereas elsewhere in this report the expression "wildlife" is meant to include both animals and plants, it should be understood here to be restricted to the most important animals.

(*b*) Schools offering courses in national park management at a medium-grade level should be assisted by the establishment or expansion of facilities, particularly in Latin America and Asia.

Recommendation 35

It is recommended that the Secretary-General take steps to ensure that an appropriate mechanism shall exist for the exchange of information on national parks legislation and planning and management techniques developed in some countries which could serve as guidelines to be made available to any interested country.

Recommendation 36

It is recommended that the Secretary-General take steps to ensure that the appropriate United Nations agencies shall assist the developing countries to plan for the inflow of visitors into their protected areas in such a way as to reconcile revenue and environmental considerations within the context of the recommendations approved by the Conference. The other international organizations concerned may likewise make their contribution.

Recommendation 37

It is recommended that Governments take steps to co-ordinate, and co-operate in the management of, neighbouring or contiguous protected areas. Agreement should be reached on such aspects as mutual legislation, patrolling systems, exchange of information, research projects, collaboration on measures of burning, plant and animal control, fishery regulations, censuses, tourist circuits and frontier formalities.

Recommendation 38

It is recommended that Governments take steps to set aside areas representing ecosystems of international significance for protection under international agreement.

Recommendation 39

It is recommended that Governments, in co-operation with the Secretary-General of the United Nations and the Food and Agriculture Organization of the United Nations where indicated, agree to an international programme to preserve the world's genetic resources:

(*a*) Active participation at the national and international levels is involved. It must be recognized, however, that while survey, collection, and dissemination of these genetic resources are best carried out on a regional or international basis, their actual evaluation and utilization are matters for specific institutions and individual workers; international participation in the latter should concern exchange of techniques and findings;

(*b*) An international network is required with appropriate machinery to facilitate the interchange of information and genetic material among countries;

(*c*) Both static (seed banks, culture collection etc.) and dynamic (conservation of populations in evolving natural environments) ways are needed.

(*d*) Action is necessary in six interrelated areas:

(i) Survey of genetic resources;

(ii) Inventory of collections;

(iii) Exploration and collecting;

(iv) Documentation;

(v) Evaluation and utilization;

(vi) Conservation, which represents the crucial element to which all other programmes relate;

(*e*) Although the international programme relates to all types of genetic resources, the action required for each resource will vary according to existing needs and activities.

Recommendation 40

It is recommended that Governments, in co-operation with the Secretary-General of the United Nations and the Food and Agriculture Organization of the United Nations where indicated, make inventories of the genetic resources most endangered by depletion or extinction:

(*a*) All species threatened by man's development should be included in such inventories;

(*b*) Special attention should be given to locating in this field those areas of natural genetic diversity that are disappearing;

(*c*) These inventories should be reviewed periodically and brought up to date by appropriate monitoring;

(*d*) The survey conducted by FAO in collaboration with the International Biological Programme is designed to provide information on endangered crop genetic resources by 1972, but will require extension and follow-up.

Recommendation 41

It is recommended that Governments, in co-operation with the Secretary-General of the United Nations and the Food and Agriculture Organization of the United Nations where indicated, compile or extend, as necessary, registers of existing collections of genetic resources:

(*a*) Such registers should identify which breeding and experiment stations, research institutions and Universities maintain which collections;

(*b*) Major gaps in existing collections should be identified where material is in danger of being lost;

(*c*) These inventories of collections should be transformed for computer handling and made available to all potential users;

(*d*) In respect of plants:

(i) It would be expected that the "advanced varieties" would be well represented, but that primitive materials would be found to be scarce and require subsequent action;

(ii) The action already initiated by FAO, several national institutions, and international foundations should be supported and expanded.

(*e*) In respect of micro-organisms, it is recommended that each nation develop comprehensive inventories of culture collections:

(i) A cataloguing of the large and small collections and the value of their holdings is required, rather than a listing of individual strains;

(ii) Many very small but unique collections, sometimes the works of a single specialist, are lost;

(iii) Governments should make sure that valuable gene pools held by individuals or small institutes are also held in national or regional collections.

(*f*) In respect of animal germ plasm, it is recommended that FAO establish a continuing mechanism to assess and maintain catalogues of the characteristics of domestic animal breeds, types and varieties in all nations of the world. Likewise, FAO should establish such lists where required.

(*g*) In respect of aquatic organisms, it is recommended that FAO compile a catalogue of genetic resources of cultivated species and promote intensive studies on the methods of preservation and storage of genetic material.

Recommendation 42

It is recommended that Governments, in co-operation with the Secretary-General of the United Nations and the Food and Agriculture Organization of the United Nations where indicated, initiate immediately, in co-operation with all interested parties, programmes of exploration and collection wherever endangered species have been identified which are not included in existing collections:

(*a*) An emergency programme, with the co-operation of the Man and the Biosphere Programme, of plant exploration and collection should be launched on the basis of the FAO List of Emergency Situations for a five-year period;

(*b*) With regard to forestry species, in addition to the efforts of the Danish/FAO Forest Tree Seed Centre, the International Union of Forestry Research Organizations, and the FAO Panel of Experts on Forest Gene Resources, support is needed for missions planned for Latin America, West Africa, the East Indies and India.

Recommendation 43

It is recommended that Governments, in co-operation with the Secretary-General of the United Nations and the Food and Agriculture Organization of the United Nations where indicated:

1. Recognize that conservation is a most crucial part of any genetic resources programme. Moreover, major types of genetic resources must be treated separately because:

(*a*) They are each subject to different programmes and priorities;

(*b*) They serve different uses and purposes;

(*c*) They require different expertise, techniques and facilities;

2. In respect of plant germ plasms (agriculture and forestry), organize and equip national or regional genetic resources conservation centres:

(*a*) Such centres as the National Seed Storage Laboratory in the United States of America and the Vavilov Institute of Plant Industry in the Union of Soviet Socialist Republics already provide good examples;

(*b*) Working collections should be established separately from the basic collections; these will usually be located at plant and breeding stations and will be widely distributed;

(*c*) Three classes of genetic crop resources must be conserved:

(i) High-producing varieties in current use and those they have superseded;

(ii) Primitive varieties of traditional pre-scientific agriculture (recognized as genetic treasuries for plant improvement);

(iii) Mutations induced by radiation or chemical means;

(*d*) Species contributing to environmental improvement, such as sedge used to stabilize sand-dunes, should be conserved;

(*e*) Wild or weed relatives of crop species and those wild species of actual or potential use in rangelands, industry, new crops etc. should be included;

3. In respect of plant germ plasms (agriculture and forestry), maintain gene pools of wild plant species within their natural communities. Therefore:

(*a*) It is essential that primeval forests, bushlands and grasslands which contain important forest genetic resources be identified and protected by appropriate technical and legal means; systems of reserves exist in most countries, but a strengthening of international understanding on methods of protection and on availability of material may be desired;

(*b*) Conservation of species of medical, aesthetic or research value should be assured;

(*c*) The network of biological reserves proposed by UNESCO (Man and the Biosphere Programme) should be designed, where feasible, to protect these natural communities;

(*d*) Where protection in nature becomes uncertain or impossible, then means such as seed storage or living collections in provenance trials or botanic gardens must be adopted;

4. Fully implement the programmes initiated by the FAO Panels of Experts on forest gene resources in 1968 and on plant exploration and introduction in 1970;

5. In respect of animal germ plasms, consider the desirability and feasibility of international action to preserve breeds or varieties of animals:

(*a*) Because such an endeavour would constitute a major effort beyond the scope of any one nation, FAO would be the logical executor of such a project. Close co-operation with Governments would be necessary, however. The International Union for Conservation of Nature and Natural Resources might, logically, be given responsibility for wild species, in co-operation with FAO, the Man and the Biosphere Programme (UNESCO), and Governments;

(*b*) Any such effort should also include research on methods of preserving, storing, and transporting germ plasm;

(*c*) Specific methods for the maintenance of gene pools of aquatic species should be developed;

(*d*) The recommendations of the FAO Working Party Meeting on Genetic Selection and Conservation of Genetic Resources of Fish, held in 1971, should be implemented;

6. In respect of micro-organism germ plasms, co-operatively establish and properly fund a few large regional collections:

(*a*) Full use should be made of major collections now in existence;

(*b*) In order to provide geographical distribution and access to the developing nations, regional centres should be established in Africa, Asia and Latin America and the existing centres in the developed world should be strengthened;

7. Establish conservation centres of insect germ plasm. The very difficult and long process of selecting or breeding insects conducive to biological control programmes can begin only in this manner.

Recommendation 44

It is recommended that Governments, in co-operation with the Secretary-General of the United Nations and the Food and Agriculture Organization of the United Nations where indicated, recognize that evaluation and utilization are critical corollaries to the conservation of genetic resources. In respect of crop-breeding programmes, it is recommended that Governments give special emphasis to:

(*a*) The quality of varieties and breeds and the potential for increased yields;

(*b*) The ecological conditions to which the species are adapted;

(*c*) The resistance to diseases, pests and other adverse factors;

(*d*) The need for a multiplicity of efforts so as to increase the chances of success.

Recommendation 45

It is recommended that Governments, in co-operation with the Secretary-General of the United Nations and the Food and Agriculture Organization of the United Nations where indicated:

1. Collaborate to establish a global network of national and regional institutes relating to genetic resource conservation based on agreements on the availability of material and information, on methods, on technical standards, and on the need for technical and financial assistance wherever required:

(*a*) Facilities should be designed to assure the use of the materials and information: (i) by breeders, to develop varieties and breeds both giving higher yields and having higher resistance to local pests and diseases and other adverse factors; and (ii) by users providing facilities and advice for the safest and most profitable utilization of varieties and breeds most adapted to local conditions;

(*b*) Such co-operation would apply to all genetic resource conservation centres and to all types mentioned in the foregoing recommendations;

(*c*) Standardized storage and retrieval facilities for the exchange of information and genetic material should be developed:

- (i) Information should be made generally available and its exchange facilitated through agreement on methods and technical standards;
- (ii) International standards and regulations for the shipment of materials should be agreed upon;
- (iii) Basic collections and data banks should be replicated in at least two distinct sites, and should remain a national responsibility;
- (iv) A standardized and computerized system of documentation is required;

(*d*) Technical and financial assistance should be provided where required; areas of genetic diversity are most frequently located in those countries most poorly equipped to institute the necessary programmes;

2. Recognize that the need for liaison among the parties participating in the global system of genetic resources conservation requires certain institutional innovations. To this end:

(*a*) *It is recommended* that the appropriate United Nations agency establish an international liaison unit for plant genetic resources in order:

- (i) To improve liaison between governmental and non-governmental efforts;
- (ii) To assist in the liaison and co-operation between national and regional centres, with special emphasis on international agreements on methodology and standards of conservation of genetic material, standardization and co-ordination of computerized record systems, and the exchange of information and material between such centres;
- (iii) To assist in implementing training courses in exploration, conservation and breeding methods and techniques;
- (iv) To act as a central repository for copies of computerized information on gene pools (discs and tapes);
- (v) To provide the secretariat for periodic meetings of international panels and seminars on the subject; a conference on germ plasm conservation might be convened to follow up the successful conference of 1967;
- (vi) To plan and co-ordinate the five-year emergency programme on the conservation of endangered species;
- (vii) To assist Governments further, wherever required, in implementing their national programmes;
- (viii) To promote the evaluation and utilization of genetic resources at the national and international levels;

(*b*) *It is recommended* that the appropriate United Nations agency initiate the required programme on micro-organism germ plasm:

- (i) Periodic international conferences involving those concerned with the maintenance of and research on gene pools of micro-organisms should be supported;

(ii) Such a programme might interact with the proposed regional culture centres by assuring that each centre places high priority on the training of scientists and technicians from the developing nations; acting as a necessary liaison; and lending financial assistance to those countries established outside the developed countries;

(iii) The international exchange of pure collections of micro-organisms between the major collections of the world has operated for many years and requires little re-enforcement;

(iv) Study should be conducted particularly on waste disposal and recycling, controlling diseases and pests, and food technology and nutrition;

(*c*) *It is recommended* that the Food and Agriculture Organization of the United Nations institute a programme in respect of animal germ plasm to assess and maintain catalogues of the economic characteristics of domestic animal breeds and types and of wild species and to establish gene pools of potentially useful types;

(*d*) *It is recommended* that the Man and the Biosphere project on the conservation of natural areas and the genetic material contained therein should be adequately supported.

Recommendation 46

It is recommended that Governments, and the Secretary-General in co-operation with the Food and Agriculture Organization of the United Nations and other United Nations organizations concerned, as well as development assistance agencies, take steps to support recent guidelines, recommendations and programmes of the various international fishing organizations. A large part of the needed international action has been identified with action programmes initiated by FAO and its Intergovernmental Committee on Fisheries and approximately 24 other bilateral and multilateral international commissions, councils and committees. In particular these organizations are planning and undertaking:

(*a*) Co-operative programmes such as that of LEPOR (Long-Term and Expanded Programme of Oceanic Research), GIPME (Global Investigation of Pollution in the Marine Environment) and IBP (International Biological Programme);

(*b*) Exchange of data, supplementing and expanding the services maintained by FAO and bodies within its framework in compiling, disseminating and co-ordinating information on living aquatic resources and their environment and fisheries activities;

(*c*) Evaluation and monitoring of world fishery resources, environmental conditions, stock assessment, including statistics on catch and effort, and the economics of fisheries;

(*d*) Assistance to Governments in interpreting the implications of such assessments, identifying alternative management measures, and formulating required actions;

(*e*) Special programmes and recommendations for management of stocks of fish and other aquatic animals proposed by the existing international fishery bodies. Damage to fish stocks has often occurred because regulatory action is taken too slowly. In the past, the need for management action to be nearly unanimous has reduced action to the minimum acceptable level.

Recommendation 47

It is recommended that Governments, and the Secretary-General of the United Nations in co-operation with the Food and Agriculture Organization of the United Nations and other United Nations organizations concerned, as well as development assistance agencies, take steps to ensure close participation of fishery agencies and interests in the preparations for the United Nations Conference on the Law of the Sea. In order to safeguard the marine environment and its resources through the development of effective and workable principles and laws, the information and insight of international and regional fishery bodies, as well as the national fishery agencies are essential.

Recommendation 48

It is recommended that Governments, and the Secretary-General in co-operation with the Food and Agriculture Organization of the United Nations and other United Nations organizations concerned, as well as development assistance agencies, take steps to ensure international co-operation in the research, control and regulation of the side effects of national activities in resource utilization where these affect the aquatic resources of other nations:

(*a*) Estuaries, intertidal marshes, and other near-shore and in-shore environments play a crucial role in the maintenance of several marine fish stocks. Similar problems exist in those fresh-water fisheries that occur in shared waters;

(*b*) Discharge of toxic chemicals, heavy metals, and other wastes may affect even high-seas resources;

(*c*) Certain exotic species, notably the carp, lamprey and alewife, have invaded international waters with deleterious effects as a result of unregulated unilateral action.

Recommendation 49

It is recommended that Governments, and the Secretary-General of the United Nations in co-operation with the Food and Agriculture Organization of the United Nations and other United Nations organizations concerned, as well as development assistance agencies, take steps to develop further and strengthen facilities for collecting, analysing and disseminating data on living aquatic resources and the environment in which they live:

(*a*) Data already exist concerning the total harvest from the oceans and from certain regions in respect of individual fish stocks, their quantity, and the fishing efforts expended on them, and in respect of their population structure, distribution and changes. This coverage needs to be improved and extended;

(*b*) It is clear that a much greater range of biological parameters must be monitored and analysed in order to provide an adequate basis for evaluating the interaction of stocks and managing the combined resources of many stocks. There is no institutional constraint on this expansion but a substantial increase in funding is needed by FAO and other international organizations concerned to meet this expanding need for data;

(*c*) Full utilization of present and expanded data facilities is dependent on the co-operation of Governments in developing local and regional data networks, making existing data available to FAO and to the international bodies, and formalizing the links between national and international agencies responsible for monitoring and evaluating fishery resources.

Recommendation 50

It is recommended that Governments, and the Secretary-General of the United Nations in co-operation with the Food and Agriculture Organization of the United Nations and other United Nations organizations concerned, as well as development assistance agencies, take steps to ensure full co-operation among Governments by strengthening the existing international and regional machinery for development and management of fisheries and their related environmental aspects and, in those regions where these do not exist, to encourage the establishment of fishery councils and commissions as appropriate.

(*a*) The operational efficiency of these bodies will depend largely on the ability of the participating countries to carry out their share of the activities and programmes;

(*b*) Technical support and servicing from the specialized agencies, in particular from FAO, is also required;

(*c*) The assistance of bilateral and international funding agencies will be needed to ensure the full participation of the developing countries in these activities.

Recommendation 51

It is recommended that Governments concerned consider the creation of river-basin commissions or other appropriate machinery for co-operation between interested States for water resources common to more than one jurisdiction.

(*a*) In accordance with the Charter of the United Nations and the principles of international law, full consideration must be given to the right of permanent sovereignty of each country concerned to develop its own resources;

(*b*) The following principles should be considered by the States concerned when appropriate:

- (i) Nations agree that when major water resource activities are contemplated that may have a significant environmental effect on another country, the other country should be notified well in advance of the activity envisaged;
- (ii) The basic objective of all water resource use and development activities from the environmental point of view is to ensure the best use of water and to avoid its pollution in each country;
- (iii) The net benefits of hydrologic regions common to more than one national jurisdiction are to be shared equitably by the nations affected;

(*c*) Such arrangements, when deemed appropriate by the States concerned, will permit undertaking on a regional basis:

- (i) Collection, analysis, and exchanges of hydrologic data through some international mechanism agreed upon by the States concerned;
- (ii) Joint data-collection programmes to serve planning needs;
- (iii) Assessment of environmental effects of existing water uses;
- (iv) Joint study of the causes and symptoms of problems related to water resources, taking into account the technical, economic, and social considerations of water quality control;
- (v) Rational use, including a programme of quality control, of the water resource as an environmental asset;
- (vi) Provision for the judicial and administrative protection of water rights and claims;
- (vii) Prevention and settlement of disputes with reference to the management and conservation of water resources;
- (viii) Financial and technical co-operation of a shared resource;

(*d*) Regional conferences should be organized to promote the above considerations.

Recommendation 52

It is recommended that the Secretary-General take steps to ensure that appropriate United Nations bodies support government action with regard to water resources where required:

1. Reference is made to the Food and Agriculture Organization of the United Nations, the World Health Organization, the World Meteorological Organization, the Department of Economic and Social Affairs of the United Nations Secretariat (Resources and Transport Division), the United Nations Educational, Scientific and Cultural Organization/International Hydrological Decade, the regional economic commissions and the United Nations Economic and Social Office in Beirut. For example:

(*a*) The Food and Agriculture Organization of the United Nations has established a Commission on Land and Water Use for the Middle East which promotes regional co-operation in research, training and information, *inter alia* on water management problems;

(*b*) The World Health Organization has available the International Reference Centre for Waste Disposal located at Dübendorf, Switzerland, and International Reference Centre on Community Water Supply in the Netherlands;

(*c*) The World Meteorological Organization has a Commission on Hydrology which provides guidance on data collection and on the establishment of hydrological networks;

(*d*) The Resources and Transport Division of the Department of Economic and Social Affairs, United Nations Secretariat, has the United Nations Water Resources Development Centre;

(*e*) The United Nations Educational, Scientific and Cultural Organization is sponsoring the International

Hydrological Decade programme of co-ordinated research on the quality and quantity of world water resources.

2. Similar specialized centres should be established at the regional level in developing countries for training research and information exchange on:

(*a*) Inland water pollution and waste disposal in co-operation with the World Health Organization, the Food and Agriculture Organization of the United Nations, the United Nations regional economic commissions and the United Nations Economic and Social Office in Beirut;

(*b*) Water management for rain-fed and irrigated agriculture, by the Food and Agriculture Organization of the United Nations in co-operation with the regional economic commissions and the United Nations Economic and Social Office in Beirut;

(*c*) Integrated water resources planning and management in co-operation with the Department of Economic and Social Affairs of the United Nations Secretariat (Resources and Transport Division), the regional economic commissions, and the United Nations Economic and Social Office in Beirut.

Recommendation 53

It is recommended that the Secretary-General take steps to ensure that the United Nations system is prepared to provide technical and financial assistance to Governments when requested in the different functions of water resources management:

(*a*) Surveys and inventories;

(*b*) Water resources administration and policies, including:

(i) The establishment of institutional frameworks;

(ii) Economic structures of water resources management and development;

(iii) Water resources law and legislation;

(*c*) Planning and management techniques, including:

(i) The assignment of water quality standards;

(ii) The implementation of appropriate technology;

(iii) More efficient use and re-use of limited water supplies;

(*d*) Basic and applied studies and research;

(*e*) Transfer of existing knowledge;

(*f*) Continuing support of the programme of the International Hydrological Decade.

Recommendation 54

It is recommended that the Secretary-General take steps to establish a roster of experts who would be available to assist Governments, upon request, to anticipate and evaluate the environmental effects of major water development projects. Governments would have the opportunity of consulting teams of experts drawn from this roster, in the first stages of project planning. Guidelines could be prepared to assist in the review and choices of alternatives.

Recommendation 55

It is recommended that the Secretary-General take steps to conduct an exploratory programme to assess the actual and potential environmental effects of water management upon the oceans, define terms and estimate the costs for a comprehensive programme of action, and establish and maintain as far as possible:

(*a*) A world registry of major or otherwise important rivers arranged regionally and classified according to their discharge of water and pollutants;

(*b*) A world registry of clean rivers which would be defined in accordance with internationally agreed quality criteria and to which nations would contribute on a voluntary basis:

(i) The oceans are the ultimate recipient for the natural and man-made wastes discharged into the river systems of the continents;

(ii) Changes in the amount of river-flow into the oceans, as well as in its distribution in space and time, may considerably affect the physical, chemical and biological régime of the estuary regions and influence the oceanic water systems;

(iii) It would be desirable for nations to declare their intention to have admitted to the world registry of clean rivers those rivers within their jurisdiction that meet the quality criteria as defined and to declare their further intention to ensure that certain other rivers shall meet those quality criteria by some target date.

Recommendation 56

It is recommended that the Secretary-General provide the appropriate vehicle for the exchange of information on mining and mineral processing.

(*a*) Improved accessibility and dissemination of existing information is required; the body of literature and experience is already larger than one would think.

(*b*) Possibilities include the accumulation of information on: (i) the environmental conditions of mine sites; (ii) the action taken in respect of the environment; and (iii) the positive and negative environmental repercussions.

(*c*) Such a body of information could be used for prediction. Criteria for the planning and management of mineral production would emerge and would indicate where certain kinds of mining should be limited, where reclamation costs would be particularly high, or where other problems would arise.

(*d*) The appropriate United Nations bodies should make efforts to assist the developing countries by, *inter alia*, providing adequate information for each country on the technology for preventing present or future environmentally adverse effects of mining and the adverse health and safety effects associated with the mineral industry and by accepting technical trainees and sending experts.

Recommendation 57

It is recommended that the Secretary-General take steps to ensure proper collection, measurement and analysis of data relating to the environmental effects of energy use and production within appropriate monitoring systems.

(*a*) The design and operation of such networks should include, in particular, monitoring the environmental levels resulting from emission of carbon dioxide, sulphur dioxide, oxidants, nitrogen oxides (NO_x), heat and particulates, as well as those from releases of oil and radioactivity;

(*b*) In each case the objective is to learn more about the relationships between such levels and the effects on weather, human health, plant and animal life, and amenity values.

Recommendation 58

It is recommended that the Secretary-General take steps to give special attention to providing a mechanism for the exchange of information on energy:

(*a*) The rationalization and integration of resource management for energy will clearly require a solid understanding of the complexity of the problem and of the multiplicity of alternative solutions;

(*b*) Access to the large body of existing information should be facilitated:

(i) Data on the environmental consequences of different energy systems should be provided through an exchange of national experiences, studies, seminars, and other appropriate meetings;

(ii) A continually updated register of research involving both entire systems and each of its stages should be maintained.

Recommendation 59

It is recommended that the Secretary-General take steps to ensure that a comprehensive study be promptly undertaken with the aim of submitting a first report, at the latest in 1975, on available energy sources, new technology, and consumption trends, in order to assist in providing a basis for the most effective development of the world's energy resources, with due regard to the environmental effects of energy production and use: such a study to be carried out in collaboration with appropriate international bodies such as the International Atomic Energy Agency and the Organisation for Economic Co-operation and Development.

Recommendation 60

It is recommended that the Secretary-General, in co-operation with Governments concerned and the appropriate international agencies, arrange for systematic audits of natural resource development projects in representative ecosystems of international significance to be undertaken jointly with the Governments concerned after, and where feasible before, the implementation of such projects.[3]

[3] Projects might include new agricultural settlement of sub-tropical and tropical zones, irrigation and drainage in arid zones, tropical forestry development, major hydroelectric developments, land reclamation works in tropical lowland coastal areas, and settlement of nomads in semi-arid zones. The cost of audits in developing countries should not be imputed to the costs of the resource development projects but financed from separate international sources.

Recommendation 61

It is recommended that the Secretary-General, in co-operation with Governments concerned and the appropriate international agencies, provide that pilot studies be conducted in representative ecosystems of international significance to assess the environmental impact of alternative approaches to the survey, planning and development of resource projects.

Recommendation 62

It is recommended that the Secretary-General, in co-operation with Governments concerned and the appropriate international agencies, provide that studies be conducted to find out the connexion between the distribution of natural resources and people's welfare and the reasons for possible discrepancies.

Recommendation 63

It is recommended that the Secretary-General take steps to ensure that international development assistance agencies, in co-operation with recipient Governments, intensify efforts to revise and broaden the criteria of development project analysis to incorporate environmental impact considerations.

Recommendation 64

It is recommended that the Secretary-General take steps to ensure that the United Nations agencies concerned undertake studies on the relative costs and benefits of synthetic *versus* natural products serving identical uses.

Recommendation 65

It is recommended that the Man and the Biosphere Programme be vigorously pursued by the United Nations Educational, Scientific and Cultural Organization in co-operation with other United Nations organizations and other international scientific organizations.

Recommendation 66

It is recommended that the World Meteorological Organization initiate or intensify studies on the inter-relationships of resource development and meteorology.

Recommendation 67

It is recommended that the Secretary-General, in co-operation with interested Governments and United Nations specialized agencies, take the necessary steps to encourage the further development of remote-sensing techniques for resources surveys and the utilization of these techniques on the basis of proper international arrangements.

Recommendation 68

It is recommended that the Secretary-General, in co-operation with the appropriate agencies of the United Nations and other international organizations, promote jointly with interested Governments the development of methods for the integrated planning and management of natural resources, and provide, when requested, advice to Governments on such methods, in accordance with the particular environmental circumstances of each country.

Recommendation 69

It is recommended that the Food and Agriculture Organization of the United Nations expand its present programme on the stabilization of marginal lands.

IDENTIFICATION AND CONTROL OF POLLUTANTS OF BROAD INTERNATIONAL SIGNIFICANCE

A. POLLUTION GENERALLY

Recommendation 70

It is recommended that Governments be mindful of activities in which there is an appreciable risk of effects on climate, and to this end:

(*a*) Carefully evaluate the likelihood and magnitude of climatic effects and disseminate their findings to the maximum extent feasible before embarking on such activities;

(*b*) Consult fully other interested States when activities carrying a risk of such effects are being contemplated or implemented.

Recommendation 71

It is recommended that Governments use the best practicable means available to minimize the release to the environment of toxic or dangerous substances, especially if they are persistent substances such as heavy metals and organochlorine compounds, until it has been demonstrated that their release will not give rise to unacceptable risks or unless their use is essential to human health or food production, in which case appropriate control measures should be applied.

Recommendation 72

It is recommended that in establishing standards for pollutants of international significance, Governments take into account the relevant standards proposed by competent international organizations, and concert with other concerned Governments and the competent international organizations in planning and carrying out control programmes for pollutants distributed beyond the national jurisdiction from which they are released.

Recommendation 73

It is recommended that Governments actively support, and contribute to, international programmes to acquire knowledge for the assessment of pollutant sources, pathways, exposures and risks and that those Governments in a position to do so provide educational, technical and other forms of assistance to facilitate broad participation by countries regardless of their economic or technical advancement.

Recommendation 74

It is recommended that the Secretary-General, drawing on the resources of the entire United Nations system, and with the active support of Governments and appropriate scientific and other international bodies:

(*a*) Increase the capability of the United Nations system to provide awareness and advance warning of deleterious effects to human health and well-being from man-made pollutants;

(*b*) Provide this information in a form which is useful to policy-makers at the national level;

(*c*) Assist those Governments which desire to incorporate these and other environmental factors into national planning processes;

(*d*) Improve the international acceptability of procedures for testing pollutants and contaminants by:

(i) International division of labour in carrying out the large-scale testing programmes needed;

(ii) Development of international schedules of tests for evaluation of the environmental impact potential of specific contaminants or products. Such a schedule of tests should include consideration of both short-term and long-term effects of all kinds, and should be reviewed and brought up to date from time to time to take into account new knowledge and techniques;

(iii) Development and implementation of an international intercalibration programme for sampling and analytical techniques to permit more meaningful comparisons of national data;

(*e*) Develop plans for an International Registry of Data on Chemicals in the Environment based on a collection of available scientific data on the environmental behaviour of the most important man-made chemicals and containing production figures of the potentially most harmful chemicals, together with their pathways from factory *via* utilization to ultimate disposal or recirculation.

Recommendation 75

It is recommended that, without reducing in any way their attention to non-radioactive pollutants, Governments should:

(*a*) Explore with the International Atomic Energy Agency and the World Health Organization the feasibility of developing a registry of releases to the biosphere of significant quantities of radioactive materials;

(*b*) Support and expand, under the International Atomic Energy Agency and appropriate international organizations, international co-operation on radioactive waste problems, including problems of mining and tailings and also including co-ordination of plans for the siting of fuel-reprocessing plants in relation to the siting of the ultimate storage areas, considering also the transportation problems.

Recommendation 76

It is recommended:

(*a*) That a major effort be undertaken to develop monitoring and both epidemiological and experimental research programmes providing data for early warning and prevention of the deleterious effects of the various environmental agents, acting singly or in combination, to which man is increasingly exposed, directly or indirectly, and for the assessment of their potential risks to human health, with particular regard to the risks of mutagenicity, teratogenicity and carcinogenicity. Such programmes should be guided and co-ordinated by the World Health Organization;

(*b*) That the World Health Organization co-ordinate the development and implementation of an appropriate international collection and dissemination system to correlate medical, environmental and family-history data;

(*c*) That Governments actively support and contribute to international programmes for research and development of guidelines concerning environmental factors in the work environment.

Recommendation 77

It is recommended that the World Health Organization, in collaboration with the relevant agencies, in the context of an approved programme, and with a view to suggesting necessary action, assist Governments, particularly those of developing countries, in undertaking co-ordinated programmes of monitoring of air and water and in establishing monitoring systems in areas where there may be a risk to health from pollution.

Recommendation 78

It is recommended that internationally co-ordinated programmes of research and monitoring of food contamination by chemical and biological agent be established and developed jointly by the Food and Agriculture Organization of the United Nations and the World Health Organization, taking into account national programmes, and that the results of monitoring be expeditiously assembled, evaluated and made available so as to provide early information on rising trends of contamination and on levels that may be considered undesirable or may lead to unsafe human intakes.

Recommendation 79

It is recommended:

(*a*) That approximately 10 baseline stations be set up, with the consent of the States involved, in areas remote from all sources of pollution in order to monitor long-term global trends in atmospheric constituents and properties which may cause changes in meteorological properties, including climatic changes;

(*b*) That a much larger network of not less than 100 stations be set up, with the consent of the States involved, for monitoring properties and constituents of the atmosphere on a regional basis and especially changes in the distribution and concentration of contaminants;

(*c*) That these programmes be guided and co-ordinated by the World Meteorological Organization;

(*d*) That the World Meteorological Organization, in co-operation with the International Council of Scientific Unions (ICSU), continue to carry out the Global Atmospheric Research Programme (GARP), and if necessary establish new programmes to understand better the general circulation of the atmosphere and the causes of climatic changes whether these causes are natural or the result of man's activities.

Recommendation 80

It is recommended that the Secretary-General ensure:

(*a*) That research activities in terrestrial ecology be encouraged, supported and co-ordinated through the appropriate agencies, so as to provide adequate knowledge of the inputs, movements, residence times and ecological effects of pollutants identified as critical;

(*b*) That regional and global networks of existing and, where necessary, new research stations, research centres, and biological reserves be designated or established within the framework of the Man and the Biosphere Programme (MAB) in all major ecological regions, to facilitate intensive analysis of the structure and functioning of ecosystems under natural or managed conditions;

(*c*) That the feasibility of using stations participating in this programme for surveillance of the effects of pollutants on ecosystems be investigated;

(*d*) That programmes such as the Man and the Biosphere Programme be used to the extent possible to monitor: (i) the accumulation of hazardous compounds in biological and abiotic material at representative sites; (ii) the effect of such accumulation on the reproductive success and population size of selected species.

Recommendation 81

It is recommended that the World Health Organization, together with the international organizations concerned, continue to study, and establish, primary standards for the protection of the human organism, especially from pollutants that are common to air, water and food, as a basis for the establishment of derived working limits.

Recommendation 82

It is recommended that increased support be given to the Codex Alimentarius Commission to develop international standards for pollutants in food and a code of ethics for international food trade, and that the capabilities of the Food and Agriculture Organization of the United Nations and the World Health Organization to assist materially and to guide developing countries in the field of food control be increased.

Recommendation 83

It is recommended that the appropriate United Nations agencies develop agreed procedures for setting derived working limits for common air and water contaminants.

Recommendation 84

It is recommended that Governments make available, through the International Referral System established in pursuance of recommendation 101 of this Conference, such information as may be requested on their pollution research and pollution control activities, including legislative and administrative arrangements, research on more efficient pollution control technology, and cost-benefit methodology.

Recommendation 85

It is recommended that any mechanism for co-ordinating and stimulating the actions of the different United Nations organs in connexion with environmental problems include among its functions:

(*a*) Development of an internationally accepted procedure for the identification of pollutants of international significance and for the definition of the degree and scope of international concern;

(*b*) Consideration of the appointment of appropriate intergovernmental, expert bodies to assess quantitatively the exposures, risks, pathways and sources of pollutants of international significance;

(*c*) Review and co-ordination of international co-operation for pollution control, ensuring in particular that needed measures shall be taken and that measures taken in regard to various media and sources shall be consistent with one another;

(*d*) Examination of the needs for technical assistance to Governments in the study of pollution problems, in particular those involving international distribution of pollutants;

(*e*) Encouragement of the establishment of consultation mechanisms for speedy implementation of concerted abatement programmes with particular emphasis on regional activities.

B. Marine pollution

Recommendation 86

It is recommended that Governments, with the assistance and guidance of appropriate United Nations bodies, in particular the Joint Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP):

(*a*) Accept and implement available instruments on the control of the maritime sources of marine pollution;

(*b*) Ensure that the provisions of such instruments are compiled with by ships flying their flags and by ships operating in areas under their jurisdiction and that adequate provisions are made for reviewing the effectiveness of, and revising, existing and proposed international measures for control of marine pollution;

(*c*) Ensure that ocean dumping by their nationals anywhere, or by any person in areas under their jurisdiction, is controlled and that Governments shall continue to work towards the completion of, and bringing into force as soon as possible of, an over-all instrument for the control of ocean dumping as well as needed regional agreements within the framework of this instrument, in particular for enclosed and semi-enclosed seas, which are more at risk from pollution;

(*d*) Refer the draft articles and annexes contained in the report of the intergovernmental meetings at Reykjavik, Iceland, in April 1972 and in London in May 1972 to the United Nations Committee on the Peaceful Uses of the Seabed and the Ocean Floor beyond the Limits of National Jurisdiction at its session in July/August 1972 for information and comments and to a conference of Governments to be convened by the Government of the United Kingdom of Great Britain and Northern Ireland in consultation with the Secretary-General of the United Nations before November 1972 for further consideration, with a view to opening the proposed convention for signature at a place to be decided by that Conference, preferably before the end of 1972;

(*e*) Participate fully in the 1973 Intergovernmental Maritime Consultative Organization (IMCO) Conference on Maritime Pollution and the Conference on the Law of the Sea scheduled to begin in 1973, as well as in regional efforts, with a view to bringing all significant sources of pollution within the marine environment, including radioactive pollution from nuclear surface ships and submarines, and in particular in enclosed and semi-enclosed seas, under appropriate controls and particularly to complete elimination of deliberate pollution by oil from ships, with the goal of achieving this by the middle of the present decade;

(*f*) Strengthen national controls over land-based sources of marine pollution, in particular in enclosed and semi-enclosed seas, and recognize that, in some circumstances, the discharge of residual heat from nuclear and other power-stations may constitute a potential hazard to marine ecosystems.

Recommendation 87

It is recommended that Governments:

(*a*) Support national research and monitoring efforts that contribute to agreed international programmes for research and monitoring in the marine environment, in particular the Global Investigation of Pollution in the Marine Environment (GIPME) and the Integrated Global Ocean Station System (IGOSS);

(*b*) Provide to the United Nations, the Food and Agriculture Organization of the United Nations and the United Nations Conference on Trade and Development, as appropriate to the data-gathering activities of each, statistics on the production and use of toxic or dangerous substances that are potential marine pollutants, especially if they are persistent;

(*c*) Expand their support to components of the United Nations system concerned with research and monitoring in the marine environment and adopt the measures required to improve the constitutional, financial and operational basis under which the Intergovernmental Oceanographic Commission is at present operating so as to make it an effective joint mechanism for the Governments and United Nations organizations concerned (United Nations Educational, Scientific and Cultural Organization, Food and Agriculture Organization of the United Nations, World Meteorological Organization, Inter-Governmental Maritime Consultative Organization, United Nations) and in order that it may be able to take on additional responsibilities for the promotion and co-ordination of scientific programmes and services.

Recommendation 88

It is recommended that the Secretary-General, together with the sponsoring agencies, make it possible for the Joint Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP):

(*a*) To re-examine annually, and revise as required, its "Review of Harmful Chemical Substances", with a view to elaborating further its assessment of sources, pathways and resulting risks of marine pollutants;

(*b*) To assemble, having regard to other work in progress, scientific data and to provide advice on scientific aspects of marine pollution, especially those of an interdisciplinary nature.

Chapter VII

ATTENDANCE AND ORGANIZATION OF WORK

12. The United Nations Conference on the Human Environment was held at Stockholm from 5 to 16 June 1972.

A. Participants

13. Representatives of the following 113 States invited in accordance with General Assembly resolution 2850 (XXVI) took part in the Conference: Afghanistan, Algeria, Argentina, Australia, Austria, Bahrein, Bangladesh, Belgium, Bolivia, Botswana, Brazil, Burundi, Cameroon, Canada, Central African Republic, Ceylon, Chad, Chile, China, Colombia, Congo, Costa Rica, Cyprus, Dahomey, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Ethiopia, Federal Republic of Germany, Fiji, Finland, France, Gabon, Ghana, Greece, Guatemala, Guinea, Guyana, Haiti, Holy See, Honduras, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Ivory Coast, Jamaica, Japan, Jordan, Kenya, Kuwait, Lebanon, Lesotho, Liberia, Libyan Arab Republic, Liechtenstein, Luxembourg, Madagascar, Malawi, Malaysia, Malta, Mauritania, Mauritius, Mexico, Monaco, Morocco, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Pakistan, Panama, Peru, Philippines, Portugal, Republic of Korea, Republic of Viet-Nam, Romania, San Marino, Senegal, Singapore, South Africa, Spain, Sudan, Swaziland, Sweden, Switzerland, Syrian Arab Republic, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, Uganda, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, United States of America, Uruguay, Venezuela, Yemen, Yugoslavia, Zaire, Zambia.

14. The Secretary-General of the United Nations was present at the Conference. The Conference was attended also by representatives of the Secretary-General from the Department of Economic and Social Affairs, the regional economic commissions, the United Nations Economic and Social Office in Beirut, the United Nations Conference on Trade and Development, the United Nations Industrial Development Organization and the United Nations Development Programme. A representative of the United Nations Institute for Training and Research was also present.

15. The following specialized agencies were represented: International Labour Organisation, Food and Agriculture Organization of the United Nations, United Nations Educational, Scientific and Cultural Organization, International Civil Aviation Organization, World Health Organization, International Bank for Reconstruction and Development, International Monetary Fund, Universal Postal Union, International Telecommunication Union, World Meteorological Organization, and Inter-Governmental Maritime Consultative Organization. The International Atomic Energy Agency and the General Agreement on Tariffs and Trade were also represented.

16. Observers from a number of intergovernmental organizations participated in the Conference.

17. Representatives of numerous international non-governmental organizations invited to the Conference also participated.

B. Opening of the Conference

18. The Conference was opened by the Secretary-General of the United Nations.

19. At its 1st plenary meeting it also heard an address by the Secretary-General of the Conference (see chapter VIII below) and a report by the Chairman of the Preparatory Committee on pre-Conference consultations.

C. Election of the President

20. At its 1st plenary meeting, on 5 June 1972, the Conference elected Ingemund Bengtsson (Sweden) as President of the Conference. The President then addressed the Conference.

D. Rules of procedure

21. At its 1st plenary meeting, on 5 June 1972, the Conference adopted with two amendments the draft rules of procedure approved by the General Assembly (A/CONF.48/3): in rule 6 it increased the number of Vice-Presidents from 8 to 27 and it changed the title of the Rapporteur of the Conference to "Rapporteur General".

E. Election of officers other than the President

22. At its 1st plenary meeting, the Conference elected the following 26 Vice-Presidents:[1] Mohamed Khaled Kheladi (Algeria), Eduardo Bradley (Argentina), Peter Howson (Australia), Ingrid Leodolter (Austria), Jack Davis (Canada), Tang Ke (China), Mostafa Tolba

[1] At its 18th plenary meeting, on 15 June 1972, the Conference decided that the two posts of Vice-President of the Conference and Vice-Chairman of the First Committee that had been left vacant when the Conference elected its officers at its 1st plenary meeting should not be filled.

(Egypt), Robert Poujade (France), Alfredo Obiols Gómez (Guatemala), C. Subramanian (India), Eskandar Firouz (Iran), Motoo Ogiso (Japan), A. Al-Adwani (Kuwait), Francisco Vizcaino Murray (Mexico), Adebayo Adedeji (Nigeria), S. G. Bakhash Raisani (Pakistan), J. Llosa Pautrat (Peru), Florin Iorgulescu (Romania), Habib Thiam (Senegal), A. B. Gamedze (Swaziland), Peter Walker (United Kingdom of Great Britain and Northern Ireland), Russell E. Train (United States of America), S. García Pintos (Uruguay), Z. Petrinovic (Yugoslavia), B. Engulu (Zaire), S. Kalulu (Zambia).

23. It elected Keith Johnson (Jamaica) as Rapporteur General.

24. It elected the chairmen and rapporteurs of the three main committees, and the vice-chairmen of the Second and Third Committees. The officers elected were as follows:

First Committee: [1] Helena Benítez (Philippines), *Chairman*; S. Bedaya-Ngaro (Central African Republic), *Rapporteur*

Second Committee: J. Odero Jowi (Kenya), *Chairman*; Ahmed Al-Chelebi (Iraq), *Vice-Chairman*; L. J. Mosterman (Netherlands), *Rapporteur*

Third Committee: Carlos Calero Rodrigues (Brazil), *Chairman*; Yilmaz Gurer (Turkey), *Vice-Chairman*; A. M. Ali-Hassan (Sudan), *Rapporteur*

F. Adoption of the agenda

25. The Conference, at its 1st plenary meeting, adopted the following agenda (A/CONF.48/1):

1. Opening of the Conference
2. Election of the President
3. Adoption of the rules of procedure
4. Constitution of committees
5. Election of the officers other than the President
6. Credentials of representatives to the Conference:
   (*a*) Appointment of the Credentials Committee
   (*b*) Report of the Credentials Committee
7. Adoption of the agenda
8. General debate
9. Declaration on the Human Environment
10. Planning and management of human settmements for environmental quality (subject area I)
11. Environmental aspects of natural resources management (subject area II)
12. Identification and control of pollutants of broad international significance (subject area III)
13. Educational, informational, social and cultural aspects of environmental issues (subject area IV)
14. Development and environment (subject area V)
15. International organizational implications of action proposals (subject area VI)
16. Adoption of plan of action
17. Adoption of the report of the Conference

G. Constitution of subsidiary bodies

26. In accordance with rule 4 of the rules of procedure, the Conference, at its 1st plenary meeting, established a Credentials Committee, composed, in accordance with rule 5, of the following States: Australia, Colombia, France, Ireland, Liberia, Sudan, Syrian Arab Republic, United States of America and Yugoslavia.[2]

27. In accordance with rule 44 of the rules of procedure, the Conference at its 1st plenary meeting established three main committees to study the substantive items of its agenda.

28. It allocated to the First Committee the following agenda items:

Planning and management of human settlements for environmental quality (agenda item 10)

Educational, informational, social and cultural aspects of environmental quality (agenda item 13)

Draft recommendations 85, 98 (*b*) and 99 contained in document A/CONF.48/7

29. It allocated to the Second Committee the following agenda items:

Environmental aspects of natural resources management (agenda item 11)

Development and environment (agenda item 14)

30. It allocated to the Third Committee the following agenda items:

Identification and control of pollutants of broad international significance (agenda item 12)

International organizational implications of action proposals (agenda item 15)

31. The report of the Credentials Committee is given in annex I.

32. At its 7th plenary meeting, on 8 June 1972, the Conference decided to set up a Working Group on the Declaration on the Human Environment.[3] The report of the Working Group is given in annex II.

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[2] Rule 5 of the rules of procedure of the Conference provided that the composition should be the same as that of the Credentials Committee of the General Assembly at its twenty-sixth session. As Mongolia, Somalia and the Union of Soviet Socialist Republics, members of the General Assembly's Credentials Committee, were not represented at the Conference, it was agreed that their places should be taken by the Sudan, the Syrian Arab Republic and Yugoslavia.

[3] See chapter IX.

Annex 648

“Growth in United Nations membership”, *United Nations*

Growth in United Nations membership

1945-1950 1950s 1960s 1970s 1980s 1990s 2000-Present

Original 51 Members (1945)

Argentina, Australia, Belgium, Bolivia (https://www.un.org/en/about-us/member-states/bolivia), Brazil, Byelorussian Soviet Socialist Republic (https://www.un.org/en/about-us/member-states/belarus), Canada, Chile, China, Colombia, Costa Rica, Cuba, Czechoslovakia (https://www.un.org/en/about-us/member-states/czechoslovakia), Denmark, Dominican Republic, Ecuador, Egypt (https://www.un.org/en/about-us/member-states/egypt), El Salvador, Ethiopia, France, Greece, Guatemala, Haiti, Honduras, India, Iran (https://www.un.org/en/about-us/member-states/iran), Iraq, Lebanon, Liberia, Luxembourg, Mexico, Netherlands, New Zealand, Nicaragua, Norway, Panama, Paraguay, Peru, Philippine Republic (https://www.un.org/en/about-us/member-states/philippines), Poland, Saudi Arabia, Syria (https://www.un.org/en/about-us/member-states/syrian-arab-republic), Turkey, Ukrainian Soviet Socialist Republic (https://www.un.org/en/about-us/member-states/ukraine), Union of South Africa (https://www.un.org/en/about-us/member-states/south-africa), Union of Soviet Socialist Republics (https://www.un.org/en/about-us/member-states/russian-federation), United Kingdom, United States, Uruguay, Venezuela, Yugoslavia (https://www.un.org/en/member-states/yugoslavia)

55 Members (1946)

57 Members (1947)

58 Members (1948)

59 Members (1949)

60 Members (1950)

76 Members (1955)

80 Members (1956)

82 Members (1957)

82 Members (1958)*

99 Members (1960)

104 Members (1961)*

110 Members (1962)

113 Members (1963)

115 Members (1964)*

117 Members (1965)*

122 Members (1966)*

123 Members (1967)

126 Members (1968)

127 Members (1970)

132 Members (1971)

135 Members (1973)

138 Members (1974)

144 Members (1975)

147 Members (1976)

149 Members (1977)

151 Members (1978)

152 Members (1979)

154 Members (1980)

157 Members (1981)

158 Members (1983)

159 Members (1984)

159 Members (1990)*

166 Members (1991)

179 Members (1992)

184 Members (1993)*

185 Members (1994)

188 Members (1999)

189 Members (2000)*

191 Members (2002)

192 Members (2006)

193 Members (2011)

MEMBER STATES

Membership (https://www.un.org/en/about-us/about-un-membership)

- About UN Membership (https://www.un.org/en/about-us/about-un-membership)
- List of UN Member States (https://www.un.org/en/about-us/member-states)
- Member States on the Record (https://www.un.org/en/library/unms)
- Growth in UN Membership (https://www.un.org/en/about-us/growth-in-un-membership)
- Membership of Principal UN Organs (https://www.un.org/en/about-us/membership-of-principal-un-organs)
- Contributions to UN regular budget (https://www.un.org/en/ga/contributions/budget.shtml)
- Honour Roll: Contribution Received in Full (http://www.un.org/en/ga/contributions/honourroll.shtml)
- Arrears in the Payment of Contribution (http://www.un.org/en/ga/about/art19.shtml)

Permanent Missions (https://bluebook.unmeetings.org/)

- New York (https://bluebook.unmeetings.org/)
- Geneva (http://www.unog.ch/80256EE600582E34/(httpPages)/8CEC446B720477DA80256EF8004CB68C?OpenDocument&count=10000&cntxt=D57E0&cookielang=en)
- Vienna (http://www.unodc.org/missions/index.html)

Permanent Observers (https://www.un.org/en/about-us/about-permanent-observers)

About Permanent Observers (https://www.un.org/en/about-us/about-permanent-observers)

Non-Member States (https://www.un.org/en/about-us/non-member-states)

Intergovernmental and Other Organizations (https://www.un.org/en/about-us/intergovernmental-and-other-organizations)

Specialized Agencies (https://www.un.org/en/about-us/specialized-agencies)

Quick links for delegates

Delegate (UN Intranet - iSeek for Member States) **(http://www.un.org/en/delegate)**

Blue Book **(https://bluebook.unmeetings.org/)**

Delegates' Handbook **(https://www.un.org/dgacm/en/content/protocol/delegates-handbook)**

Manual of Protocol **(https://www.un.org/dgacm/en/content/protocol/manual-of-protocol)**

(https://www.addtoany.com/share#url=https%3A%2F%2Fwww.un.org%2Fen%2Fab
us%2Fgrowth-in-un-
membership&title=Growth%20in%20United%20Nations%20membership%20%7C%20Unit
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(/#whatsapp)

MAIN BODIES

- General Assembly (http://www.un.org/en/ga/)
- Security Council (https://www.un.org/securitycouncil/)
- Economic and Social Council (http://www.un.org/en/ecosoc/)
- Trusteeship Council (https://www.un.org/en/about-us/trusteeship-council)
- International Court of Justice (http://www.icj-cij.org/en)
- Secretariat (https://www.un.org/en/about-us/secretariat)

DEPARTMENTS / OFFICES

- New York (https://www.un.org/en/about-us/secretariat)
- Geneva (http://www.unog.ch/)
- Nairobi (http://www.unon.org/)
- Vienna (http://www.unvienna.org/)

- UN System Directory (http://www.unsceb.org/directory/)
- UN System Chart (https://www.un.org/sites/un2.un.org/files/un_system_chart.pdf)
- Global Leadership (https://www.un.org/sg/en/global-leadership/home)
- UN Information Centres (https://www.un.org/en/department-of-global-communications/worldwide/united-nations-information-centres)

RESOURCES / SERVICES

- Emergency information (http://emergency.un.org/)
- Reporting Wrongdoing (https://oios.un.org/report-wrongdoing)
- UN Journal (https://journal.un.org/)
- Documents (https://www.un.org/en/our-work/documents)
- Guidelines for gender-inclusive language (http://www.un.org/en/gender-inclusive-language/)
- Databases (https://www.un.org/en/library/page/databases)
- Library (https://www.un.org/library)
- UN iLibrary (http://www.un-ilibrary.org/)
- UN Chronicle (https://www.un.org/en/chronicle)
- UN Yearbook (https://www.un.org/en/yearbook)
- Bookshop (https://shop.un.org/)
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- Media Accreditation (http://www.un.org/en/media/accreditation/)
- NGO accreditation at ECOSOC (http://csonet.org/index.php?menu=34)
- NGO accreditation at DGC (https://www.un.org/en/civil-society/page/application)
- Visitors' services (http://visit.un.org/)
- Exhibits (https://www.un.org/exhibits)
- Procurement (http://www.un.org/Depts/ptd/welcome-united-nations-procurement-division-unpd)
- Employment (https://careers.un.org/lbw/Home.aspx)
- Internships (https://careers.un.org/lbw/home.aspx?viewtype=IP)
- Model UN (https://www.un.org/en/mun)
- Academic Impact (/en/academicimpact)
- UN Archives (https://archives.un.org/)
- UN Audiovisual Library (http://www.unmultimedia.org/avlibrary/)
- How to donate to the UN system (https://www.un.org/en/about-us/how-to-donate-to-the-un-system)
- Information on COVID-19 (Coronavirus) (https://www.un.org/en/coronavirus)
- Africa Renewal (https://www.un.org/africarenewal/)
- Ten ways the UN makes a difference (https://www.un.org/sites/un2.un.org/files/uncard_2023_e.pdf)
- High-level summits 2023 (https://www.un.org/summits2023)

KEY DOCUMENTS

- UN Charter (https://www.un.org/en/about-us/un-charter)

- Universal Declaration of Human Rights (https://www.un.org/en/about-us/universal-declaration-of-human-rights)
- Convention on the Rights of the Child (http://www.unicef.org/crc/)
- Statute of the International Court of Justice (https://www.un.org/en/about-us/un-charter/statute-of-the-international-court-of-justice)
- Annual Report of the Secretary-General on the Work of the Organization (https://www.un.org/annualreport/)

NEWS AND MEDIA

- News (https://news.un.org/en/)
- Press Releases (http://www.un.org/press/en/)
- Briefings (http://www.un.org/press/en/content/noon-briefings)
- Spokesperson (http://www.un.org/sg/spokesperson/)
- Photos (https://dam.media.un.org/)
- UNIfeed (http://www.unmultimedia.org/tv/unifeed/)
- UN Web TV (https://webtv.un.org/en)
- UN Video (https://www.un.org/en/video)
- Social Media (https://www.un.org/en/get-involved/social-media)
- The Essential UN (http://www.un.org/en/essential-un/)
- Awake at Night podcast (https://www.un.org/en/awake-at-night)

ISSUES / CAMPAIGNS

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- Observances (https://www.un.org/en/observances)
- Sustainable Development Goals (http://www.un.org/sustainabledevelopment/)
- Our Common Agenda (https://www.un.org/en/common-agenda)
- Summit of the Future (https://www.un.org/en/summit-of-the-future)
- Climate Action (http://www.un.org/en/climatechange/)
- UN and Sustainability (https://www.un.org/en/about-us/un-and-sustainability)
- Action for Peacekeeping (A4P) (https://www.un.org/en/A4P/)
- Global Ceasefire (https://www.un.org/en/globalceasefire)
- Global Crisis Response Group (https://news.un.org/pages/global-crisis-response-group/)
- Call to Action for Human Rights (https://www.un.org/en/content/action-for-human-rights/index.shtml)
- Disability Inclusion Strategy (https://www.un.org/en/content/disabilitystrategy/)
- Fight Racism (https://www.un.org/en/fight-racism)
- Hate Speech (https://www.un.org/en/hate-speech)
- LGBTIQ+ People (https://www.un.org/lgbtiq-people)
- Safety of Journalists (https://www.un.org/en/safety-journalists)
- Rule of Law (https://www.un.org/ruleoflaw/)
- Action to Counter Terrorism (http://www.un.org/en/counterterrorism/)
- Victims of Terrorism (http://www.un.org/victimsofterrorism/en)
- Children and Armed Conflict (https://childrenandarmedconflict.un.org/)

- Violence Against Children (SRSG) (https://violenceagainstchildren.un.org/)
- Sexual Violence in Conflict (https://www.un.org/sexualviolenceinconflict/)
- Refugees and Migrants (http://refugeesmigrants.un.org/)
- Action Agenda on Internal Displacement (https://www.un.org/en/content/action-agenda-on-internal-displacement/)
- Spotlight Initiative (http://www.un.org/en/spotlight-initiative/index.shtml)
- Preventing Sexual Exploitation and Abuse (https://www.un.org/preventing-sexual-exploitation-and-abuse/)
- Prevention of Genocide and the Responsibility to Protect (http://www.un.org/en/preventgenocide/)
- The Rwanda Genocide (http://www.un.org/en/preventgenocide/rwanda/)
- The Holocaust (http://www.un.org/en/holocaustremembrance/)
- The Question of Palestine (https://www.un.org/unispal/)
- The Transatlantic Slave Trade (https://www.un.org/en/rememberslavery)
- Decolonization (https://www.un.org/dppa/decolonization/en)
- Messengers of Peace (https://www.un.org/en/mop)
- Roadmap for Digital Cooperation (https://www.un.org/en/content/digital-cooperation-roadmap/)
- Digital Financing Task Force (https://www.un.org/en/digital-financing-taskforce)
- Data Strategy (https://www.un.org/datastrategy)
- Countering Disinformation (https://www.un.org/en/countering-disinformation)
- UN75: 2020 and Beyond (https://www.un.org/en/un75)
- Women Rise for All (https://www.un.org/en/coronavirus/women-rise-for-all)
- Stop the Red Sea Catastrophe (https://www.un.org/StopRedSeaSpill)
- Black Sea Grain Initiative Joint Coordination Centre (https://www.un.org/black-sea-grain-initiative)
- Türkiye-Syria Earthquake Response (Donate) (https://www.un.org/en/turkiye-syria-earthquake-response)
- Israel-Gaza Crisis (https://www.un.org/en/situation-in-occupied-palestine-and-israel)

Annex 649

Third Report on State responsibility by James Crawford, Special Rapporteur, A/CN.4/507, *International Law Commission*, 15 March 2000, pages 47-52

STATE RESPONSIBILITY

[Agenda item 3]

DOCUMENT A/CN.4/507 and Add. 1–4*

Third report on State responsibility, by Mr. James Crawford, Special Rapporteur

[*Original: English*]
[*15 March, 15 June, 10 and 18 July and 4 August 2000*]

CONTENTS

* Incorporating A/CN.4/507/Add.1/Corr.1, A/CN.4/507/Add.2/Corr.1 and 2 and A/CN.4/507/Add.3/Corr.1.

LIST OF TABLES

3. Compensation

(a) *Existing article 44*

147. Article 44 provides:

Compensation

1. The injured State is entitled to obtain from the State which has committed an internationally wrongful act compensation for the damage caused by that act, if and to the extent that the damage is not made good by restitution in kind.

2. For the purposes of the present article, compensation covers any economically assessable damage sustained by the injured State, and may include interest and, where appropriate, loss of profits.

148. Despite the formal priority given to restitution by article 43, the commentary to article 44 acknowledges that "[c]ompensation is the main and central remedy resorted to following an internationally wrongful act".[282] Monetary compensation differs from payments tendered or awarded by way of satisfaction in that its function is purely compensatory; it is intended to represent, as far as may be, the damage suffered by the injured State as a result of the breach. But despite the large number of decided cases before arbitral tribunals in which issues of the assessment of compensation have been faced, the commentary declines to go into detail in article 44, on the basis that "the rules on compensation were bound to be relatively general and flexible".[283] The commentary does discuss questions of causation, including the influence of multiple causes,[284] but on the central issue of the assessment of compensation it confines itself to such general statements as "compensation is the appropriate remedy for 'economically assessable damage' that is to say damage which is susceptible of being evaluated in economic terms",[285] including for moral and material damage.[286] Compensation is thought of as confined to monetary payments,[287] although there is no reason why it could not also take the form, as agreed, of other forms of value.

149. The commentary goes on to discuss the award of interest and loss of profits. Interest is dealt with below as a separate category.[288] Loss of profits is discussed at length, but rather inconclusively. The commentary notes that:

[C]ompensation for *lucrum cessans* is less widely accepted in the literature and in practice than is reparation for *damnum emergens*. If loss of profits is to be awarded, it would seem inappropriate to award interest on the profit-earning capital over the same period of time, simply because the capital sum cannot be earning interest *and** be notionally employed in earning profits at one and the same time … The essential aim is to avoid 'double recovery' in all forms of reparation.[289]

After a review of relevant case law (including divergent decisions of the Iran-United States Claims Tribunal in cases involving expropriation of property), the commentary concludes that:

In view of the divergences of opinion which exist with regard to compensation for *lucrum cessans*, the Commission has come to the conclusion that it would be extremely difficult to arrive in this respect at specific rules commanding a large measure of support … The state of the law on all these questions is … not sufficiently settled and the Commission at this stage, felt unable to give precise answers to these questions or to formulate specific rules relating to them. It has therefore felt it preferable to leave it to the States involved or to any third party involved in the settlement of the dispute to determine in each case whether compensation for loss of profits should be paid.[290]

In the event, article 44, paragraph 2, says only that compensation "may include … where appropriate, loss of profits", an endorsement as lukewarm as can be imagined.

150. Government comments on article 44 raise a number of important questions. The first is whether a more detailed provision is needed. Some Governments are of the view that, given the complexity and importance of the issues involved, further guidance on the standard of compensation under customary international law would be welcome—in particular so far as concerns "the assessment of pecuniary damage", including interest and loss of profits.[291] France criticises the "overly concise" drafting of article 44 (all the more so if compared to the detailed treatment of articles 45–46) and advocates a return "to a more analytical version" based on the work done by Mr. Arangio-Ruiz in his second report on State responsibility[292] and on international practice and jurisprudence.[293] By contrast, others stress the need for some flexibility in dealing with specific cases; in their view it is sufficient to set out the general principle of compensation in article 44. They also note that "detailed and comprehensive consideration of the law on reparation and compensation would take considerable time and would delay the completion of the Commission's work".[294]

151. As to the content of that general principle, there is support for the view that in principle the amount of compensation payable is precisely the value the injured State would have received, if restitution had been provided. The United States regards the present drafting of article 44, paragraph 1, as a "long-established principle reflected in customary international law and innumerable bilateral and multilateral agreements". In its view, the fact that compensation is to be provided to the extent that restitu-

[282] *Yearbook … 1993*, vol. II (Part Two), commentary to article 8 [present art. 44], p. 67, para. (1).

[283] Ibid., p. 68, para. (3).

[284] Ibid., pp. 68–70, paras. (6)–(13). See paragraphs 27–29 and 31–37 above, for discussion.

[285] *Yearbook … 1993*, vol. II (Part Two), commentary to article 8 [present art. 44], p. 71, para. (16).

[286] Ibid., para. (17).

[287] Ibid., para. (18), citing Grotius, *De Jure Belli ac Pacis: Libri Tres*, book II, chap. XVII, sect. XXII: "money is the common measure of valuable things".

[288] See paragraphs 195–214 below.

[289] *Yearbook … 1993*, vol. II (Part Two), commentary to article 8 [present art. 44], p. 73, para. (27).

[290] Ibid., p. 76, para. (39).

[291] *Yearbook … 1998* (footnote 35 above), p. 147, Denmark on behalf of the Nordic countries; see also A/CN.4/496, pp. 19–20, para. 125 (emphasizing the need for greater legal security) and A/CN.4/504, p. 19, para. 71 (footnote 3 above).

[292] *Yearbook … 1989* (see footnote 21 above).

[293] *Yearbook … 1998* (footnote 35 above), p. 147; see also A/CN.4/496, p. 20, para. 125, and A/CN.4/504, p. 19, para. 71 (taking as an example "the principle whereby damage suffered by a national [is] the measure of damage suffered by the State") (footnote 3 above).

[294] A/CN.4/496 (see footnote 3 above), p. 19, para. 124.

tion is not makes it clear that the amount of compensation due should be equivalent to the value of restitution.[295] By contrast, Japan is concerned by a possible interpretation of paragraph 1, according to which "the wrongdoing State would be able to reject the request made by the injured State for (financial) compensation with the excuse that restitution in kind had not been proved completely impossible". Such a reading of the provision would thus "severely restrict the freedom of the injured State to choose whatever form of full reparation it deems appropriate".[296]

152. Another issue concerns the need to refer to interest and loss of profits in article 44, paragraph 2, and the proper formulation of any such reference. Some Governments consider it unnecessary to specify as a legal obligation the payment of interest and compensation for loss of profits.[297] This is apparently the view adopted by France, which proposes reformulating the paragraph as follows:

> For the purposes of the present article, the compensable damage deriving from an internationally wrongful act is any loss connected with such act by an uninterrupted causal link.[298]

On the other hand, a number of Governments firmly assert that, "to the extent that it represents the actual loss suffered by the claimant, the payment of interest is not an optional matter but an obligation".[299] Accordingly, paragraph 2 should provide that compensation "shall" (rather than "may") include interest.[300] The United States refers to decisions of the Iran-United States Claims Tribunal and UNCC in support of its view that the present drafting of paragraph 2 "goes counter not only to the overwhelming majority of case law on the subject but also undermines the 'full reparation' principle".[301]

153. These comments raise a number of issues as to article 44. One of these, the question of interest, is dealt with separately below.[302] But the main issue raised is whether article 44 should spell out in more detail accepted principles of assessment of compensation, as well as what limitations might be expressed on the assessment of full compensation, to avoid imposing disproportionate burdens on the responsible State.

(b) *Assessment of compensation: general principle or detailed criteria?*

154. In his second report, Mr. Arangio-Ruiz discussed "reparation by equivalent" in some detail, proposing two alternative articles, one shorter and one rather more detailed. As its commentary implies, the Commission preferred the shorter version, which became article 44.[303] In consequence, some of the issues discussed by Mr. Arangio-Ruiz in his report—the distinction between moral injury to individuals and to the State, the distinction between lawful and unlawful expropriation, methods of assessing the value of property taken, especially where this is done on a "going concern" basisare only dealt with briefly, if at all, in article 44 and its commentary.

155. There is, evidently, a need for caution in laying down more specific rules relating to compensation. Although a good deal of guidance is available in certain fields (notably diplomatic protection, especially as concerns takings of, or damage to, property), there have been relatively few recent reasoned awards dealing with the assessment of material damage as between State and State (i.e. outside the field of diplomatic protection). Damages have been sought in approximately one third of cases commenced before ICJ, but so far, the Court has only awarded damages in one case—the *Corfu Channel* case.[304] Indeed it has been argued that the Court has shown some aversion to awards of damages as compared with declaratory or other relief. For example in the *Nuclear Tests* case, it held that the case was moot following the French commitment not to conduct further atmospheric tests, notwithstanding an unfulfilled New Zealand demand for compensation.[305] In the case concerning the *Gabčíkovo-Nagymaros Project*, where both parties claimed substantial compensation against the other, the Court first affirmed the classical rules as to reparation and compensation, then went on to suggest that a "zero-sum agreement" for damages (as distinct from financial contributions to the continuing project) would be appropriate. The relevant passage reads:

> It is a well-established rule of international law that an injured State is entitled to obtain compensation from the State which has committed an internationally wrongful act for the damage caused by it. In the present Judgment, the Court has concluded that both Parties committed internationally wrongful acts, and it has noted that those acts gave rise to the damage sustained by the Parties; consequently, Hungary and Slovakia are both under an obligation to pay compensation and are both entitled to obtain compensation.
>
> Slovakia is accordingly entitled to compensation for the damage suffered by Czechoslovakia as well as by itself as a result of Hungary's

[295] *Yearbook … 1998* (footnote 35 above), pp. 147–148; the United States particularly refers to the *"Lusitania"* (see footnote 16 above) and *Letelier and Moffitt* (ILM, vol. XXXI (1992)) cases, and notices that that principle "has been applied to wrongful death cases as well".

[296] *Yearbook … 1999* (footnote 43 above), p. 108.

[297] A/CN.4/504 (footnote 3 above), p. 19, para. 71.

[298] *Yearbook … 1998* (footnote 35 above), p. 148.

[299] Ibid., United Kingdom, p. 147; see also A/CN.4/496 (footnote 3 above), p. 20, para. 125 ("the payment of interest should be the basic and general rule for compensation").

[300] *Yearbook … 1998* (footnote 35 above), p. 148, the United States, considering that article 44 would represent "a step backwards in the international law of reparation" in the absence of such a revision. See also A/CN.4/504 (footnote 3 above), p. 19, para. 71, where one Government argues that replacing "may" by "shall" would "deprive the wrongdoing State of an incentive to delay payment of compensation" while another favours the idea that "a sufficient grace period" for the payment of compensation be allowed to the wrongdoing State before fixing the provision of interest. Governments suggesting this substitution do not seem to favour the deletion of the words "where appropriate" before "loss of profits" (see Mongolia, *Yearbook … 1998* (footnote 35 above), p. 147).

[301] *Yearbook … 1998* (footnote 35 above), p. 148.

[302] See paragraphs 195–214 below.

[303] See Mr. Arangio-Ruiz's second report, *Yearbook … 1989* (footnote 21 above), pp. 8–30, paras. 20–105, and p. 56, for the text of his proposals. For the report of the Drafting Committee see *Yearbook … 1992*, vol. I, pp. 219–220, paras. 39–52. Since 1989, there have been further developments in jurisprudence and practice, summarized, inter alia, by Iovane, op. cit.; Decaux, loc. cit.; as well as in the sources cited below. The general comparative law experience is well summarized by Stoll, "Consequences of liability: remedies".

[304] *I.C.J. Reports 1949* (see footnote 69 above), p. 249. See Gray, op. cit., pp. 77–95, for a somewhat sceptical account of the practice.

[305] *Nuclear Tests (New Zealand* v. *France), Judgment, I.C.J. Reports 1974*, pp. 475–476, paras. 55–58. Cf. *Request for an Examination of the Situation in Accordance with Paragraph 63 of the Court's Judgment of 20 December 1974 in the* Nuclear Tests (New Zealand *v.* France) *Case, Order of 22 September 1995, I.C.J. Reports 1995*, p. 305, para. 59.

decision to suspend and subsequently abandon the works at Nagymaros and Dunakiliti, as those actions caused the postponement of the putting into operation of the Gabčíkovo power plant, and changes in its mode of operation once in service.

Hungary is entitled to compensation for the damage sustained as a result of the diversion of the Danube, since Czechoslovakia, by putting into operation Variant C, and Slovakia, in maintaining it in service, deprived Hungary of its rightful part in the shared water resources, and exploited those resources essentially for their own benefit.

Given the fact, however, that there have been intersecting wrongs by both Parties, the Court wishes to observe that the issue of compensation could satisfactorily be resolved in the framework of an overall settlement if each of the Parties were to renounce or cancel all financial claims and counter-claims.[306]

In both cases, it may be inferred, the Court did not regard issues of compensation (as distinct from a return to legality or the cessation of allegedly wrongful conduct) as being at the heart of the case. But in the *Gabčíkovo-Nagymaros Project* case, in particular, it reaffirmed the established law of reparation, including compensation, in State-to-State cases. Moreover too much should not be read into the absence of awards of compensation by the Court. In some cases States have preferred to settle claims by the payment of damages (on a without prejudice basis) rather than see a case go to judgement on the merits,[307] or even on jurisdiction.[308] In others, the parties have sought to settle questions after an award or judgement on the principle of responsibility, or the case has been discontinued for other reasons.[309] Several pending cases involve, or include, claims for reparation, as well as a number of counter-claims for reparation.[310]

156. Apart from ICJ, other established courts and tribunals are dealing with issues of reparation, including compensation.

(*a*) The Iran-United States Claims Tribunal has developed a substantial jurisprudence on questions of assessment of damage and the valuation of expropriated property. There are substantial outstanding State-to-State claims for reparation;[311]

(*b*) Human rights courts and other bodies, in particular the European and Inter-American Court of Human Rights, have developed a body of jurisprudence dealing with what article 41 (formerly 50) of the European Convention on Human Rights refers to as "just satisfaction".[312] Hitherto, amounts of compensation or damages awarded or recommended by these bodies have generally been modest, though the practice is developing;[313]

(*c*) ICSID tribunals under the Convention on the settlement of investment disputes between States and nationals of other States have jurisdiction to award damages or other remedies in cases concerning investments arising between States parties and nationals of other States. Some of these claims involve direct recourse to international law;[314]

(*d*) The International Tribunal on the Law of the Sea awarded substantial damages in various categories, plus interest, in its first case decided on the merits;[315]

(*e*) UNCC is a non-judicial body established by the Security Council to deal with compensation claims against Iraq arising "directly" from its invasion of Kuwait in 1990.[316] The UNCC mandate is to decide upon the liability of Iraq "under international law",[317] and UNCC has laid down guidelines for the award of compensation which are subject to the approval of the Governing Council (consisting of the members of the Security Council). These guidelines have been applied to the processing of a very large number of claims.[318]

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[306] *I.C.J. Reports 1997* (see footnote 18 above), p. 81, paras. 152–153. See also pages 168–169, para. 34 (Judge Oda).

[307] As in *Certain Phosphate Lands in Nauru (Nauru* v. *Australia), Preliminary Objections, Judgment, I.C.J. Reports 1992*, p. 240, and for the Court's order of discontinuance following the settlement, ibid., *Order of 13 September 1993, I.C.J. Reports 1993*, p. 322; case concerning *Passage through the Great Belt (Finland* v. *Denmark), Order of 10 September 1992, I.C.J. Reports 1992*, p. 348 (order of discontinuance following settlement).

[308] As in *Aerial Incident of 3 July 1988 (Islamic Republic of Iran* v. *United States of America), Order of 22 February 1996, I.C.J. Reports 1996*, p. 9 (order of discontinuance following settlement).

[309] The case concerning *Military and Paramilitary Activities in and against Nicaragua* was withdrawn after Nicaragua's written pleadings on compensation had been filed (*Military and Paramilitary Activities in and against Nicaragua (Nicaragua* v. *United States of America), Order of 26 September 1991, I.C.J. Reports 1991*, p. 47 (order of discontinuance)).

[310] Counter-claims have been held admissible in the following cases: *Application of the Convention on the Prevention and Punishment of the Crime of Genocide, Counter-claims, Order of 17 December 1997, I.C.J. Reports 1997*, p. 243; *Oil Platforms (Islamic Republic of Iran* v. *United States of America), Counter-Claim, Order of 10 March 1998, I.C.J. Reports 1998*, p. 190; and *Land and Maritime Boundary between Cameroon and Nigeria, Order of 30 June 1999, I.C.J. Reports 1999*, p. 983.

[311] For reviews of the Tribunal's jurisprudence on valuation and compensation see, inter alia, Aldrich, *The Jurisprudence of the Iran-United States Claims Tribunal*, chaps. 5–6 and 12; Brower and Brueschke, *The Iran-United States Claims Tribunal*, chaps. 14–18; Pellonpää, "Compensable claims before the Tribunal: expropriation claims"; and Stewart, "Compensation and valuation issues".

[312] Article 41 (renumbered by Protocol No. 11) provides:

> "If the Court finds that there has been a violation of the Convention or the protocols thereto, and if the internal law of the High Contracting Party concerned allows only partial reparation to be made, the Court shall, if necessary, afford just satisfaction to the injured party."

In the practice of the Court, "satisfaction" has included elements both of compensation and satisfaction in the sense of the draft articles.

[313] See the helpful review by Shelton, op. cit., pp. 214–291. See further paragraph 157 below.

[314] See, for example, *Asian Agricultural Products Limited* v. *Republic of Sri Lanka* (1990), *ICSID Reports* (Cambridge University Press, 1997), vol. 4, p. 245.

[315] *M.V. "Saiga" (No. 2) (Saint Vincent and the Grenadines* v. *Guinea), Judgment, ITLOS Reports 1999*, pp. 65–67, paras. 170–177.

[316] See paragraph 28 above. In addition to the works there cited, see Boelaert-Suominen, "Iraqi war reparations and the laws of war: a discussion of the current work of the United Nations Compensation Commission with specific reference to environmental damage during warfare"; Christenson, "State responsibility and the UN Compensation Commission: compensating victims of crimes of State"; Gattini, "La riparazione dei danni di guerra causati dall'Iraq"; Graefrath, "Iraqi reparations and the Security Council"; and Romano, "Woe to the vanquished? A comparison of the reparations process after World War I (1914–18) and the Gulf war (1990–91)".

[317] Security Council resolution 687 (1991), para. 16.

[318] The UNCC guidelines and decisions are to be found at http://www2.unog.ch/uncc/decision.htm. Of particular relevance for present purposes are the following:

Decision 3 of 18 October 1991, Personal injury and mental pain and anguish (S/AC.26/1991/3);

Decision 7 of 16 March 1992, Criteria for additional categories of claims (S/AC.26/1991/7/Rev.1);

(*Continued on next page.*)

157. Whenever a particular tribunal or other body is established with competence to deal with claims for State responsibility and to award compensation, the question arises whether the resulting decisions form part of a "special regime" for reparation, amounting to a *lex specialis*. There are no doubt, to a greater or lesser degree, elements of a *lex specialis* in the work of the bodies mentioned above (as well as in relation to the WTO dispute settlement mechanism, the focus of which is firmly on cessation rather than reparation[319]). In principle, States are free to establish mechanisms for the settlement of disputes which focus only on certain aspects of the consequences of responsibility, in effect waiving or leaving to one side other aspects. But there is a presumption against the creation of wholly self-contained regimes in the field of reparation, and it is the case that each of the bodies mentioned in the preceding paragraph has been influenced to a greater or lesser degree by the standard of reparation under general international law. Moreover practice in this field is notably dynamic, though it is significant that appeal is still being made to the *Chorzów Factory* principle[320] as well as to the work of this Commission. For example the leading decision of the Inter-American Court of Human Rights on the question of reparation contains the following passage:

> Reparation of harm brought about by the violation of an international obligation consists in full restitution (*restitutio in integrum*), which includes the restoration of the prior situation, the reparation of the consequences of the violation, and indemnification for patrimonial and non-patrimonial damages, including emotional harm.
>
> As to emotional harm, the Court holds that indemnity may be awarded under international law and, in particular, in the case of human rights violations. Indemnification must be based upon the principles of equity.
>
> …
>
> Article 63 (1) of the American Convention … does not refer to or limit the ability to ensure the effectiveness of the means of reparation available under the internal law of the State Party responsible for the violation, so [the Court] is not limited by the defects, imperfections or deficiencies of national law, but functions independently of it.
>
> This implies that, in order to fix the corresponding indemnity, the Court must rely upon the American Convention and the applicable principles of international law.[321]

Similarly in the *Papamichalopoulos* case, the European Court of Human Rights noted that:

> The unlawfulness of such a dispossession inevitably affects the criteria to be used for determining the reparation owed by the respondent State, since the pecuniary consequences of a lawful expropriation cannot be assimilated to those of an unlawful dispossession. In this connection, international case-law, of courts or arbitration tribunals, affords the Court a precious source of inspiration; although that case-law concerns more particularly the expropriation of industrial and commercial undertakings, the principles identified in that field are valid for situations such as the one in the instant case.[322]

158. The possibility that decisions of specialist international tribunals on compensation may involve elements of a *lex specialis* is thus no reason for the Commission to resile from the principle of full compensation embodied in article 44. On the other hand, it is a reason for hesitating to spell out in more specific detail the content of that principle, since it is and is likely to continue to be applied in different ways by different bodies and in different contexts. And there are two further reasons for caution:

(*a*) In the first place, much of the controversy over quantification of damages arises in relation to expropriated property, where (except in special cases such as *Chorzów Factory* itself,[323] or *Papamichalopoulos*[324]), the question is the content of the primary obligation of compensation. It is not the Commission's function in relation to the present draft articles to develop the substantive distinction between lawful and unlawful takings, or to specify the content of any primary obligation.[325]

(*Footnote 318 continued.*)

Decision 8 of 24 January 1992, Determination of ceilings for compensation for mental pain and anguish (S/AC.26/1992/8);

Decision 9 of 6 March 1992, Propositions and conclusions on compensation for business losses: types of damages and their valuation (S/AC.26/1992/9);

Decision 11 of 26 June 1992, Eligibility for compensation of members of the Allied Coalition Armed Forces (S/AC.26/1992/11);

Decision 13 of 24 September 1992, Further measures to avoid multiple recovery of compensation by claimants (S/AC.26/1992/13);

Decision 15 of 18 December 1992, Compensation for business losses resulting from Iraq's unlawful invasion and occupation of Kuwait where the trade embargo and related measures were also a cause (S/AC.26/1992/15);

Decision 16 of 18 December 1992, Awards of interest (S/AC.26/1992/16);

Decision 19 of 24 March 1994, Military costs (S/AC.26/Dec.19 (1994));

Decision 40 of 17 December 1996, Well Blowout Control Claim (S/AC.26/Dec.40 (1996)).

[319] Marrakesh Agreement establishing the World Trade Organization, annex 2 (Understanding on Rules and Procedures governing the Settlement of Disputes), especially article 3, paragraph 7, which provides for compensation "only if the immediate withdrawal of the measure is impracticable and as a temporary measure pending the withdrawal of the measure which is inconsistent with a covered agreement". For WTO purposes, "compensation" refers to the future conduct, not past conduct (ibid., art. 22). On the distinction between cessation and reparation for WTO purposes, see, for example, WTO, "Report of the Panel, Australia: subsidies provided to producers and exporters of automotive leather" (WT/DS126/RW and Corr.1) (21 January 2000), para. 6.49.

[320] See footnote 49 above.

[321] Inter-American Court of Human Rights, *Velásquez Rodríguez* v. *Honduras*, Compensatory Damages, Judgment of 21 July 1989, Series C, No. 7, paras. 26–27 and 30–31.

[322] *Papamichalopoulos and Others* v. *Greece*, European Court of Human Rights, *Series A: Judgments and Decisions*, vol. 330–B, *Judgment of 31 October 1995 (article 50)* (Council of Europe, Strasbourg, 1996), p. 59, para. 36. The Court went on to cite the *Chorzów Factory* dictum (ibid.) (see footnote 49 above). Generally on the development of standards of compensation in the field of human rights, see Shelton, op. cit.; Randelzhofer and Tomuschat, eds., *State Responsibility and the Individual: Reparation in Instances of Grave Violations of Human Rights*; and Pisillo Mazzeschi, "La riparazione per violazione dei diritti umani nel diritto internazionale e nella Convenzione europea".

[323] See footnote 49 above.

[324] See footnote 322 above.

[325] On issues of expropriation and the value of income-producing property, see, for example, Erasmus, *Compensation for Expropriation: A Comparative Study*; Norton, "A law of the future or a law of the past? Modern tribunals and the international law of expropriation"; Penrose, Joffe and Stevens, "Nationalisation of foreign-owned property for a public purpose: an economic perspective on appropriate compensation"; Lieblich, "Determinations by international tribunals of the economic value of expropriated enterprises", and "Determining the economic value of expropriated income-producing property in international arbitrations"; Friedland and Wong, "Measuring damages for the deprivation of income-producing assets: ICSID case studies"; Khalilian, "The place of discounted cash flow in international commercial arbitrations: awards by Iran-United States Claims Tribunal"; Chatterjee, "The use of the discounted cash flow method in the assessment of compensa-

(*b*) Secondly, now that the Commission has decided to deal with diplomatic protection as a separate topic (albeit a topic within the general field of responsibility), questions of quantification arising in the context of injury to aliens are more appropriately dealt with as part of that topic.

159. Despite these considerations, it can be argued that, if there do exist clear and more detailed rules in relation to the assessment of compensation that can be stated—either as a matter of pure codification or progressive development—then they should be stated. The difficulty is that it is very unclear whether there are such rules, as distinct from the general principles stated in articles 42 and 44.[326] The decisions reflect the wide variety of factual situations, the influence of particular primary obligations,[327] evaluations of the respective behaviour of the parties (both in terms of the gravity of the breach and their subsequent conduct), and, more generally, a concern to reach an equitable and acceptable outcome. As Aldrich observes, "when [international judges] are making a complex judgment such as one regarding the amount of compensation due for the expropriation of rights … equitable considerations will inevitably be taken into account, whether acknowledged or not".[328] Experience in this and other contexts shows that, while illustrations can be given of the operation of equitable considerations and of proportionality in international law, the attempt to specify them in detail is likely to fail.

160. For these reasons, the Special Rapporteur agrees with the decision taken by the Commission at its forty-fourth session in 1992 to formulate article 44 in general and flexible terms.[329] A number of specific limitations on the principle of full compensation in particular the rule against double recovery and, perhaps, the *non ultra petita* rule can be stated, although these relate more to the invocation of responsibility than to the determination of quantum at the level of principle. They will accordingly be considered below, as will the issue of mitigation of responsibility.[330]

(c) *Limitations on compensation*

161. One question that does need consideration, however, is that of limiting compensation. Legal systems are generally concerned to avoid creating liabilities in an indeterminate amount in respect of an indeterminate class, and the special context of inter-State relations if anything aggravates such concerns. There are no *general* equivalents in international law to the limitation of actions or the limitation of liability which are used in national law for this purpose. The State is not a limited liability corporation, and there is no formal mechanism for dealing with issues of State insolvency. Given the capacity of States to interfere in the life of peoples and in economic relations, and the growth of substantive international law affecting both, the potential for indeterminate liability undoubtedly existseven if it has usually not arisen in practice.[331]

162. The issue of limiting crippling compensation claims has already been discussed in the context of former article 42, paragraph 3, which provides that reparation should not result in depriving a population of its own means of subsistence.[332] For the reasons given, that provision is unnecessary so far as restitution and satisfaction are concerned, but it does merit consideration in the context of compensation, since the rules relating to directness or proximity of damage are not guaranteed to prevent very large amounts being awarded by way of compensation in certain cases.

163. A robust answer to these concerns is that they are exaggerated, that compensation is only payable where loss has actually been suffered as a result (direct, proximate, not too remote) of the internationally wrongful act of a State, and that in such cases there is no justification for requiring the victim(s) to bear the loss. Moreover if States wish to establish limitation of liability regimes in particular fields of ultrahazardous activity (e.g. oil pollution, nuclear accidents) they can always do so. In particular, the consistent outcome of orderly claims procedures (whether they involve lump-sum agreements or mixed claims commissions or tribunals) has been a significant overall reduction of compensation payable compared with amounts claimed.[333] According to this view there is no case for a general provision on the subject.

164. The Special Rapporteur is inclined to agree. It is a matter for the Commission, however, to consider whether article 42, paragraph 3, or some similar provision should be inserted in article 44 to deal with cases of catastrophic and unforeseen liabilities. In any event, the question of mitigation of responsibility and mitigation of damages by reference to the conduct of the injured State do have a place in the draft and are discussed below.[334]

(d) *Conclusion*

165. For these reasons, the Special Rapporteur proposes that article 44 read as follows:

"Compensation

"A State which has committed an internationally wrongful act is obliged to compensate for any economically assessable damage caused thereby, to the extent that such damage is not made good by restitution."

As compared with the version adopted on first reading, certain changes of wording have been made, essentially

tion: comments on the recent World Bank guidelines on the treatment of foreign direct investment"; and Dagan, *Unjust Enrichment: A Study of Private Law and Public Values*, chap. 6 (International law).

[326] As Mr. Arangio-Ruiz also concluded (*Yearbook … 1989* (see footnote 21 above), p. 11, para. 28).

[327] A matter particularly emphasized by Brownlie, op. cit., pp. 222–227.

[328] Aldrich, op. cit., p. 242. The passage quoted refers to the question of assessment of compensation for "rights to lift and sell petroleum products", but it is of more general application.

[329] *Yearbook … 1992*, vol. I, 2288th meeting, p. 220, para. 48.

[330] Paras. 215–222 below.

[331] See, for example, the Chernobyl affair, which did not, however, give rise to any actual claims of responsibility (Woodliffe, "Chernobyl: four years on", pp. 466–468).

[332] See paragraphs 38–42 above.

[333] See footnote 78 above. Similar outcomes can be observed with the earlier mixed tribunals.

[334] See paragraphs 195–214 below.

minor in character. First, consistently with other articles in this part, article 44 is expressed as an obligation of the responsible State. The invocation of that responsibility by the injured State or States will be dealt with in part two *bis*. Evidently each State would only be entitled to invoke the obligation to pay compensation to the extent that it has itself suffered damage, or to the extent that it is duly claiming for damage suffered by its nationals.[335] Secondly, the two paragraphs of former article 44 have been subsumed into a single paragraph, covering all economically assessable damage. There is no need to mention loss of profits as a separate head of damage, especially since any such mention will inevitably have to be qualified (giving rise to the "decodifying" effect which some Governments complained of in the earlier text[336]). Compensation for loss of profits is available in some circumstances and not others, but to attempt to spell these out would contradict the underlying strategy of article 44 as a general statement of principle. The commentary can deal with the different heads of compensable damage (including loss of profits) in a more substantial way. The subject of interest will be dealt with in a separate article.[337]

166. It will be a matter for the Commission to decide whether a more detailed formulation of the principle of compensation is required in the text of article 44, in which case proposals will be made in a further instalment of the present report. The Special Rapporteur would, however, prefer a more discursive treatment in the commentary of the internationally recognized body of compensation rules and principles relating to the measure of damages. Among other things, it will be possible to do this with the necessary degree of flexibility.

4. Satisfaction

(a) *Existing article 45*

167. Article 45 provides:

Satisfaction

1. The injured State is entitled to obtain from the State which has committed an internationally wrongful act satisfaction for the damage, in particular moral damage, caused by that act, if and to the extent necessary to provide full reparation.

2. Satisfaction may take the form of one or more of the following:

(*a*) An apology;

(*b*) Nominal damages;

(*c*) In cases of gross infringement of the rights of the injured State, damages reflecting the gravity of the infringement;

(*d*) In cases where the internationally wrongful act arose from the serious misconduct of officials or from criminal conduct of officials or private parties, disciplinary action against, or punishment of, those responsible.

3. The right of the injured State to obtain satisfaction does not justify demands which would impair the dignity of the State which has committed the internationally wrongful act.

168. According to the commentary, satisfaction is intended to cover "only the non-material damage to the State", otherwise referred to as its "moral injury".[338] Earlier writers expressed this in terms such as "honour" or "dignity": the terms now have a rather archaic quality, although "dignity" survives in article 45, paragraph 3. Paragraph 1, in referring to "satisfaction for the damage, in particular moral damage, caused by that act", is intended to designate "any non-material damage suffered by a State as a result of an internationally wrongful act". This is the subject matter of satisfaction.[339]

169. The commentary notes that satisfaction is a "rather exceptional" remedy, which is not available in every case. This is conveyed by the use of the term "if and to [the] extent necessary to provide full reparation".[340] Paragraph 2 provides a list of measures by way of satisfaction. Thus an apology, which "encompasses regrets, excuses, saluting the flag, etc. ... occupies a significant place in international jurisprudence": even if some of its forms (such as saluting the flag) "seem to have disappeared in recent practice", requests for apologies have increased in frequency and importance.[341] Another form, not mentioned in paragraph 2, is "recognition by an international tribunal of the unlawfulness of the offending State's conduct".[342]

170. Damages "reflecting the gravity of the infringement" are "of an exceptional nature … given to the injured party over and above the actual loss, when the wrong done was aggravated by circumstances of violence, oppression, malice, fraud or wicked conduct on the part of the wrongdoing party".[343] Thus in the *"Rainbow Warrior"* case, the Secretary-General of the United Nations decided that France should formally apologise for the breach and pay US$ 7 million to New Zealand; this far exceeded the actual damage suffered and was plainly an award by way of satisfaction.[344] The commentary does not suggest that this mode of satisfaction is limited to "international crimes" as defined in former article 19. Even in relation to "delicts", satisfaction performs a function which, whether or not "afflictive" is expressive of the seriousness of the case and of the injury done, and in this sense is an aspect of full reparation.[345]

171. The sanctioning of responsible officials is also quite frequently sought and granted, but its "extensive application … might result in undue interference in the internal affairs of States. [The Commission] has therefore limited the scope of application of subparagraph (*d*) to

[335] The extent to which a State may claim on behalf of persons or companies injured by the internationally wrongful act of a State will be dealt with in more detail in the topic of diplomatic protection.

[336] See paragraphs 149 and 152 above.

[337] See paragraphs 195–214 below.

[338] *Yearbook … 1993*, vol. II (Part Two), commentary to article 10 [present art. 45], p. 77, para. (4).

[339] Ibid., para. (5).

[340] Ibid., para. (6).

[341] Ibid., pp. 78–79, para. (9).

[342] Ibid., p. 79, para. (10).

[343] Ibid., para. (12).

[344] Ibid., pp. 79–80, para. (13).

[345] Ibid., pp. 80–81, paras. (21)–(24).

Annex 650

“Draft Articles on Responsibility of States for Internationally Wrongful Acts with commentaries”, Report of the Commission to the General Assembly on the work of its fifty-third session, Yearbook of the International Law Commission, A/CN.4/SER.A/2001/Add.1 (Part 2), *International Law Commission*, 10 August 2001, pages 91-94, 124-125, 140-141

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NOTE

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Volume I: summary records of the meetings of the session;

Volume II (Part One): reports of special rapporteurs and other documents considered during the session;

Volume II (Part Two): report of the Commission to the General Assembly.

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taken.[447] But assurances and guarantees of non-repetition will not always be appropriate, even if demanded. Much will depend on the circumstances of the case, including the nature of the obligation and of the breach. The rather exceptional character of the measures is indicated by the words "if circumstances so require" at the end of subparagraph (*b*). The obligation of the responsible State with respect to assurances and guarantees of non-repetition is formulated in flexible terms in order to prevent the kinds of abusive or excessive claims which characterized some demands for assurances and guarantees by States in the past.

Article 31. Reparation

1. The responsible State is under an obligation to make full reparation for the injury caused by the internationally wrongful act.

2. Injury includes any damage, whether material or moral, caused by the internationally wrongful act of a State.

Commentary

(1) The obligation to make full reparation is the second general obligation of the responsible State consequent upon the commission of an internationally wrongful act. The general principle of the consequences of the commission of an internationally wrongful act was stated by PCIJ in the *Factory at Chorzów* case:

> It is a principle of international law that the breach of an engagement involves an obligation to make reparation in an adequate form. Reparation therefore is the indispensable complement of a failure to apply a convention and there is no necessity for this to be stated in the convention itself. Differences relating to reparations, which may be due by reason of failure to apply a convention, are consequently differences relating to its application.[448]

In this passage, which has been cited and applied on many occasions,[449] the Court was using the term "reparation" in its most general sense. It was rejecting a Polish argument that jurisdiction to interpret and apply a treaty did not entail jurisdiction to deal with disputes over the form and quantum of reparation to be made. By that stage of the dispute, Germany was no longer seeking for its national the return of the factory in question or of the property seized with it.

(2) In a subsequent phase of the same case, the Court went on to specify in more detail the content of the obligation of reparation. It said:

> The essential principle contained in the actual notion of an illegal act—a principle which seems to be established by international practice and in particular by the decisions of arbitral tribunals—is that reparation must, as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed. Restitution in kind, or, if this is not possible, payment of a sum corresponding to the value which a restitution in kind would bear; the award, if need be, of damages for loss sustained which would not be covered by restitution in kind or payment in place of it—such are the principles which should serve to determine the amount of compensation due for an act contrary to international law.[450]

In the first sentence, the Court gave a general definition of reparation, emphasizing that its function was the re-establishment of the situation affected by the breach.[451] In the second sentence, it dealt with that aspect of reparation encompassed by "compensation" for an unlawful act—that is, restitution or its value, and in addition damages for loss sustained as a result of the wrongful act.

(3) The obligation placed on the responsible State by article 31 is to make "full reparation" in the *Factory at Chorzów* sense. In other words, the responsible State must endeavour to "wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed"[452] through the provision of one or more of the forms of reparation set out in chapter II of this part.

(4) The general obligation of reparation is formulated in article 31 as the immediate corollary of a State's responsibility, i.e. as an obligation of the responsible State resulting from the breach, rather than as a right of an injured State or States. This formulation avoids the difficulties that might arise where the same obligation is owed simultaneously to several, many or all States, only a few of which are specially affected by the breach. But quite apart from the questions raised when there is more than one State entitled to invoke responsibility,[453] the general obligation of reparation arises automatically upon commission of an internationally wrongful act and is not, as such, contingent upon a demand or protest by any State, even if the form which reparation should take in the circumstances may depend on the response of the injured State or States.

(5) The responsible State's obligation to make full reparation relates to the "injury caused by the internationally wrongful act". The notion of "injury", defined in *paragraph 2*, is to be understood as including any damage caused by that act. In particular, in accordance with paragraph 2, "injury" includes any material or moral damage caused thereby. This formulation is intended both as inclusive, covering both material and moral damage broadly understood, and as limitative, excluding merely abstract concerns or general interests of a State which is individu-

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to the British Naval Commanders to molest no German merchantmen in places not in the vicinity of the seat of war", Martens, *op. cit.* (footnote 441 above), vol. XXIX, p. 456 at p. 486.

[447] In the *Trail Smelter* case (see footnote 253 above), the arbitral tribunal specified measures to be adopted by the Trail Smelter, including measures designed to "prevent future significant fumigations in the United States" (p. 1934). Requests to modify or repeal legislation are frequently made by international bodies. See, e.g., the decisions of the Human Rights Committee: *Torres Ramirez* v. *Uruguay*, decision of 23 July 1980, *Official Records of the General Assembly, Thirty-fifth Session, Supplement No. 40* (A/35/40), p. 126, para. 19; *Lanza* v. *Uruguay*, decision of 3 April 1980, *ibid.*, p. 119, para. 17; and *Dermit Barbato* v. *Uruguay*, decision of 21 October 1982, *ibid.*, *Thirty-eighth Session, Supplement No. 40* (A/38/40), p. 133, para. 11.

[448] *Factory at Chorzów, Jurisdiction* (see footnote 34 above).

[449] Cf. the ICJ reference to this decision in *LaGrand, Judgment* (footnote 119 above), p. 485, para. 48.

[450] *Factory at Chorzów, Merits* (see footnote 34 above), p. 47.

[451] Cf. P.-M. Dupuy, "Le fait générateur de la responsabilité internationale des États", *Collected Courses ... 1984–V* (Dordrecht, Martinus Nijhoff, 1986), vol. 188, p. 9, at p. 94, who uses the term *restauration*.

[452] *Factory at Chorzów, Merits* (see footnote 34 above), p. 47.

[453] For the States entitled to invoke responsibility, see articles 42 and 48 and commentaries. For the situation where there is a plurality of injured States, see article 46 and commentary.

ally unaffected by the breach.[454] "Material" damage here refers to damage to property or other interests of the State and its nationals which is assessable in financial terms. "Moral" damage includes such items as individual pain and suffering, loss of loved ones or personal affront associated with an intrusion on one's home or private life. Questions of reparation for such forms of damage are dealt with in more detail in chapter II of this Part.[455]

(6) The question whether damage to a protected interest is a necessary element of an internationally wrongful act has already been discussed.[456] There is in general no such requirement; rather this is a matter which is determined by the relevant primary rule. In some cases, the gist of a wrong is the causing of actual harm to another State. In some cases what matters is the failure to take necessary precautions to prevent harm even if in the event no harm occurs. In some cases there is an outright commitment to perform a specified act, e.g. to incorporate uniform rules into internal law. In each case the primary obligation will determine what is required. Hence, article 12 defines a breach of an international obligation as a failure to conform with an obligation.

(7) As a corollary there is no general requirement, over and above any requirements laid down by the relevant primary obligation, that a State should have suffered material harm or damage before it can seek reparation for a breach. The existence of actual damage will be highly relevant to the form and quantum of reparation. But there is no general requirement of material harm or damage for a State to be entitled to seek some form of reparation. In the *"Rainbow Warrior"* arbitration it was initially argued that "in the theory of international responsibility, damage is necessary to provide a basis for liability to make reparation", but the parties subsequently agreed that:

> Unlawful action against non-material interests, such as acts affecting the honor, dignity or prestige of a State, entitle the victim State to receive adequate reparation, even if those acts have not resulted in a pecuniary or material loss for the claimant State.[457]

The tribunal held that the breach by France had "provoked indignation and public outrage in New Zealand and caused a new, additional non-material damage … of a moral, political and legal nature, resulting from the affront to the dignity and prestige not only of New Zealand as such, but of its highest judicial and executive authorities as well".[458]

(8) Where two States have agreed to engage in particular conduct, the failure by one State to perform the obligation necessarily concerns the other. A promise has been broken and the right of the other State to performance correspondingly infringed. For the secondary rules of State responsibility to intervene at this stage and to prescribe that there is no responsibility because no identifiable harm or damage has occurred would be unwarranted. If the parties had wished to commit themselves to that formulation of the obligation they could have done so. In many cases, the damage that may follow from a breach (e.g. harm to a fishery from fishing in the closed season, harm to the environment by emissions exceeding the prescribed limit, abstraction from a river of more than the permitted amount) may be distant, contingent or uncertain. Nonetheless, States may enter into immediate and unconditional commitments in their mutual long-term interest in such fields. Accordingly, article 31 defines "injury" in a broad and inclusive way, leaving it to the primary obligations to specify what is required in each case.

(9) Paragraph 2 addresses a further issue, namely the question of a causal link between the internationally wrongful act and the injury. It is only "[i]njury … caused by the internationally wrongful act of a State" for which full reparation must be made. This phrase is used to make clear that the subject matter of reparation is, globally, the injury resulting from and ascribable to the wrongful act, rather than any and all consequences flowing from an internationally wrongful act.

(10) The allocation of injury or loss to a wrongful act is, in principle, a legal and not only a historical or causal process. Various terms are used to describe the link which must exist between the wrongful act and the injury in order for the obligation of reparation to arise. For example, reference may be made to losses "attributable to [the wrongful] act as a proximate cause",[459] or to damage which is "too indirect, remote, and uncertain to be appraised",[460] or to "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" the wrongful act.[461] Thus, causality in fact is a necessary

[454] Although not individually injured, such States may be entitled to invoke responsibility in respect of breaches of certain classes of obligation in the general interest, pursuant to article 48. Generally on notions of injury and damage, see B. Bollecker-Stern, *Le préjudice dans la théorie de la responsabilité internationale* (Paris, Pedone, 1973); B. Graefrath, "Responsibility and damages caused: relationship between responsibility and damages", *Collected Courses … 1984–II* (The Hague, Nijhoff, 1985), vol. 185, p. 95; A. Tanzi, "Is damage a distinct condition for the existence of an internationally wrongful act?", Spinedi and Simma, eds., *op. cit.* (footnote 175 above), p. 1; and Brownlie, *System of the Law of Nations …* (footnote 92 above), pp. 53–88.

[455] See especially article 36 and commentary.

[456] See paragraph (9) of the commentary to article 2.

[457] *"Rainbow Warrior"* (see footnote 46 above), pp. 266–267, paras. 107 and 109.

[458] *Ibid.*, p. 267, para. 110.

[459] See United States-German Mixed Claims Commission, *Administrative Decision No. II*, UNRIAA, vol. VII (Sales No. 1956.V.5), p. 23, at p. 30 (1923). See also *Dix* (footnote 178 above), p. 121, and the Canadian statement of claim following the disintegration of the *Cosmos 954* Soviet nuclear-powered satellite over its territory in 1978, ILM, vol. 18 (1979), p. 907, para. 23.

[460] See the *Trail Smelter* arbitration (footnote 253 above), p. 1931. See also A. Hauriou, "Les dommages indirects dans les arbitrages internationaux", RGDIP, vol. 31 (1924), p. 209, citing the *"Alabama"* arbitration as the most striking application of the rule excluding "indirect" damage (footnote 87 above).

[461] Security Council resolution 687 (1991) of 3 April 1991, para. 16. This was a resolution adopted with reference to Chapter VII of the Charter of the United Nations, but it is expressed to reflect Iraq's liability "under international law … as a result of its unlawful invasion and occupation of Kuwait". UNCC and its Governing Council have provided some guidance on the interpretation of the requirements of directness and causation under paragraph 16. See, e.g., Recommendations made by the panel of Commissioners concerning individual claims for serious personal injury or death (category "B" claims), report of 14 April 1994 (S/AC.26/1994/1), approved by the Governing Council in its decision 20 of 26 May 1994 (S/AC.26/Dec.20 (1994)); Report and recommendations made by the panel of Commissioners appointed to review the Well Blowout Control Claim (the "WBC claim"), of 15 November 1996 (S/AC.26/1996/5/Annex), paras. 66–86, approved by the Governing

but not a sufficient condition for reparation. There is a further element, associated with the exclusion of injury that is too "remote" or "consequential" to be the subject of reparation. In some cases, the criterion of "directness" may be used,[462] in others "foreseeability"[463] or "proximity".[464] But other factors may also be relevant: for example, whether State organs deliberately caused the harm in question, or whether the harm caused was within the ambit of the rule which was breached, having regard to the purpose of that rule.[465] In other words, the requirement of a causal link is not necessarily the same in relation to every breach of an international obligation. In international as in national law, the question of remoteness of damage "is not a part of the law which can be satisfactorily solved by search for a single verbal formula".[466] The notion of a sufficient causal link which is not too remote is embodied in the general requirement in article 31 that the injury should be in consequence of the wrongful act, but without the addition of any particular qualifying phrase.

(11) A further element affecting the scope of reparation is the question of mitigation of damage. Even the wholly innocent victim of wrongful conduct is expected to act reasonably when confronted by the injury. Although often expressed in terms of a "duty to mitigate", this is not a legal obligation which itself gives rise to responsibility. It is rather that a failure to mitigate by the injured party may preclude recovery to that extent.[467] The point was clearly made in this sense by ICJ in the *Gabčíkovo-Nagymaros Project* case:

> Slovakia also maintained that it was acting under a duty to mitigate damages when it carried out Variant C. It stated that "It is a general principle of international law that a party injured by the non-performance of another contract party must seek to mitigate the damage he has sustained".
>
> It would follow from such a principle that an injured State which has failed to take the necessary measures to limit the damage sustained would not be entitled to claim compensation for that damage which could have been avoided. While this principle might thus provide a basis for the calculation of damages, it could not, on the other hand, justify an otherwise wrongful act.[468]

(12) Often two separate factors combine to cause damage. In the *United States Diplomatic and Consular Staff in Tehran* case,[469] the initial seizure of the hostages by militant students (not at that time acting as organs or agents of the State) was attributable to the combination of the students' own independent action and the failure of the Iranian authorities to take necessary steps to protect the embassy. In the *Corfu Channel* case,[470] the damage to the British ships was caused both by the action of a third State in laying the mines and the action of Albania in failing to warn of their presence. Although, in such cases, the injury in question was effectively caused by a combination of factors, only one of which is to be ascribed to the responsible State, international practice and the decisions of international tribunals do not support the reduction or attenuation of reparation for concurrent causes,[471] except in cases of contributory fault.[472] In the *Corfu Channel* case, for example, the United Kingdom recovered the full amount of its claim against Albania based on the latter's wrongful failure to warn of the mines even though Albania had not itself laid the mines.[473] Such a result should follow *a fortiori* in cases where the concurrent cause is not the act of another State (which might be held separately responsible) but of private individuals, or some natural event such as a flood. In the *United States Diplomatic and Consular Staff in Tehran* case, the Islamic Republic of Iran was held to be fully responsible for the detention of the hostages from the moment of its failure to protect them.[474]

(13) It is true that cases can occur where an identifiable element of injury can properly be allocated to one of several concurrently operating causes alone. But unless some part of the injury can be shown to be severable in causal terms from that attributed to the responsible State, the latter is held responsible for all the consequences, not being too remote, of its wrongful conduct. Indeed, in the *Zafiro* claim the tribunal went further and in effect placed the

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Council in its decision 40 of 17 December 1996 (S/AC.26/Dec.40 (1996)).

[462] As in Security Council resolution 687 (1991), para. 16.

[463] See, e.g., the *"Naulilaa"* case (footnote 337 above), p. 1031.

[464] For comparative reviews of issues of causation and remoteness, see, e.g., H. L. A. Hart and A. M. Honoré, *Causation in the Law*, 2nd ed. (Oxford, Clarendon Press, 1985); A. M. Honoré, "Causation and remoteness of damage", *International Encyclopedia of Comparative Law*, A. Tunc, ed. (Tübingen, Mohr/The Hague, Martinus Nijhoff, 1983), vol. XI, part I, chap. 7; Zweigert and Kötz, *op. cit.* (footnote 251 above), pp. 601–627, in particular pp. 609 et seq.; and B. S. Markesinis, *The German Law of Obligations: Volume II The Law of Torts: A Comparative Introduction*, 3rd ed. (Oxford, Clarendon Press, 1997), pp. 95–108, with many references to the literature.

[465] See, e.g., the decision of the Iran-United States Claims Tribunal in *The Islamic Republic of Iran* v. *The United States of America*, cases A15 (IV) and A24, Award No. 590–A15 (IV)/A24–FT, 28 December 1998, *World Trade and Arbitration Materials*, vol. 11, No. 2 (1999), p. 45.

[466] P. S. Atiyah, *An Introduction to the Law of Contract*, 5th ed. (Oxford, Clarendon Press, 1995), p. 466.

[467] In the WBC claim, a UNCC panel noted that "under the general principles of international law relating to mitigation of damages … the Claimant was not only permitted but indeed obligated to take reasonable steps to … mitigate the loss, damage or injury being caused" report of 15 November 1996 (S/AC.26/1996/5/Annex) (see footnote 461 above), para. 54.

[468] *Gabčíkovo-Nagymaros Project* (see footnote 27 above), p. 55, para. 80.

[469] *United States Diplomatic and Consular Staff in Tehran* (see footnote 59 above), pp. 29–32.

[470] *Corfu Channel*, *Merits* (see footnote 35 above), pp. 17–18 and 22–23.

[471] This approach is consistent with the way in which these issues are generally dealt with in national law. "It is the very general rule that if a tortfeasor's behaviour is held to be a cause of the victim's harm, the tortfeasor is liable to pay for all of the harm so caused, notwithstanding that there was a concurrent cause of that harm and that another is responsible for that cause … In other words, the liability of a tortfeasor is not affected *vis-à-vis* the victim by the consideration that another is concurrently liable.": T. Weir, "Complex liabilities", A. Tunc, ed., *op. cit.* (footnote 464 above), part 2, chap. 12, p. 43. The United States relied on this comparative law experience in its pleadings in the *Aerial Incident of 27 July 1955* case when it said, referring to Article 38, paragraph 1 (*c*) and (*d*), of the ICJ Statute, that "in all civilized countries the rule is substantially the same. An aggrieved plaintiff may sue any or all joint tortfeasors, jointly or severally, although he may collect from them, or any one or more of them, only the full amount of his damage" (Memorial of 2 December 1958 (see footnote 363 above), p. 229).

[472] See article 39 and commentary.

[473] See *Corfu Channel, Assessment of Amount of Compensation, Judgment, I.C.J. Reports 1949*, p. 244, at p. 250.

[474] *United States Diplomatic and Consular Staff in Tehran* (see footnote 59 above), pp. 31–33.

onus on the responsible State to show what proportion of the damage was *not* attributable to its conduct. It said:

We think it clear that not all of the damage was done by the Chinese crew of the *Zafiro*. The evidence indicates that an unascertainable part was done by Filipino insurgents, and makes it likely that some part was done by the Chinese employees of the company. But we do not consider that the burden is on Great Britain to prove exactly what items of damage are chargeable to the *Zafiro*. As the Chinese crew of the *Zafiro* are shown to have participated to a substantial extent and the part chargeable to unknown wrongdoers can not be identified, we are constrained to hold the United States liable for the whole.

In view, however, of our finding that a considerable, though unascertainable, part of the damage is not chargeable to the Chinese crew of the *Zafiro*, we hold that interest on the claims should not be allowed.[475]

(14) Concerns are sometimes expressed that a general principle of reparation of all loss flowing from a breach might lead to reparation which is out of all proportion to the gravity of the breach. However, the notion of "proportionality" applies differently to the different forms of reparation.[476] It is addressed, as appropriate, in the individual articles in chapter II dealing with the forms of reparation.

Article 32. Irrelevance of internal law

The responsible State may not rely on the provisions of its internal law as justification for failure to comply with its obligations under this Part.

Commentary

(1) Article 3 concerns the role of internal law in the characterization of an act as wrongful. Article 32 makes clear the irrelevance of a State's internal law to compliance with the obligations of cessation and reparation. It provides that a State which has committed an internationally wrongful act may not invoke its internal law as a justification for failure to comply with its obligations under this part. Between them, articles 3 and 32 give effect for the purposes of State responsibility to the general principle that a State may not rely on its internal law as a justification for its failure to comply with its international obligations.[477]Although practical difficulties may arise for a State organ confronted with an obstacle to compliance posed by the rules of the internal legal system under which it is bound to operate, the State is not entitled to oppose its internal law or practice as a legal barrier to the fulfilment of an international obligation arising under Part Two.

(2) Article 32 is modelled on article 27 of the 1969 Vienna Convention, which provides that a party may not invoke the provisions of its internal law as justification for its failure to perform a treaty. This general principle is equally applicable to the international obligations deriving from the rules of State responsibility set out in Part Two. The principle may be qualified by the relevant primary rule, or by a *lex specialis*, such as article 50 of the European Convention on Human Rights, which provides for just satisfaction in lieu of full reparation "if the internal law of the High Contracting Party concerned allows only partial reparation to be made".[478]

(3) The principle that a responsible State may not rely on the provisions of its internal law as justification for failure to comply with its obligations arising out of the commission of an internationally wrongful act is supported both by State practice and international decisions. For example, the dispute between Japan and the United States in 1906 over California's discriminatory education policies was resolved by the revision of the Californian legislation.[479] In the incident concerning article 61, paragraph 2, of the Weimar Constitution (Constitution of the Reich of 11 August 1919), a constitutional amendment was provided for in order to ensure the discharge of the obligation deriving from article 80 of the Treaty of Peace between the Allied and Associated Powers and Germany (Treaty of Versailles).[480] In the *Peter Pázmány University* case, PCIJ specified that the property to be returned should be "freed from any measure of transfer, compulsory administration, or sequestration".[481] In short, international law does not recognize that the obligations of a responsible State under Part Two are subject to the State's internal legal system nor does it allow internal law to count as an excuse for non-performance of the obligations of cessation and reparation.

Article 33. Scope of international obligations set out in this Part

1. The obligations of the responsible State set out in this Part may be owed to another State, to several States, or to the international community as a whole, depending in particular on the character and content of the international obligation and on the circumstances of the breach.

2. This Part is without prejudice to any right, arising from the international responsibility of a State, which may accrue directly to any person or entity other than a State.

Commentary

(1) Article 33 concludes the provisions of chapter I of Part Two by clarifying the scope and effect of the international obligations covered by the Part. In particular, *paragraph 1* makes it clear that identifying the State or States towards which the responsible State's obligations in Part Two exist depends both on the primary rule establishing

[475] The *Zafiro* case (see footnote 154 above), pp. 164–165.

[476] See articles 35 (*b*), 37, paragraph 3, and 39 and commentaries.

[477] See paragraphs (2) to (4) of the commentary to article 3.

[478] Article 41 of the Convention, as amended by Protocol No. 11 to the Convention for the Protection of Human Rights and Fundamental Freedoms, restructuring the control machinery established thereby. Other examples include article 32 of the Revised General Act for the Pacific Settlement of International Disputes and article 30 of the European Convention for the Peaceful Settlement of Disputes.

[479] See R. L. Buell, "The development of the anti-Japanese agitation in the United States", *Political Science Quarterly*, vol. 37 (1922), pp. 620 et seq.

[480] See *British and Foreign State Papers, 1919* (London, HM Stationery Office, 1922), vol. 112, p. 1094.

[481] *Appeal from a Judgment of the Hungaro/Czechoslovak Mixed Arbitral Tribunal (The Peter Pázmány University), Judgment, 1933, P.C.I.J., Series A/B, No. 61*, p. 208, at p. 249.

of the legal situation, it may not be clear whether they are claiming as injured States or as States invoking responsibility in the common or general interest under article 48. Indeed, in such cases it may not be necessary to decide into which category they fall, provided it is clear that they fall into one or the other. Where there is more than one injured State claiming compensation on its own account or on account of its nationals, evidently each State will be limited to the damage actually suffered. Circumstances might also arise in which several States injured by the same act made incompatible claims. For example, one State may claim restitution whereas the other may prefer compensation. If restitution is indivisible in such a case and the election of the second State is valid, it may be that compensation is appropriate in respect of both claims.[707] In any event, two injured States each claiming in respect of the same wrongful act would be expected to coordinate their claims so as to avoid double recovery. As ICJ pointed out in its advisory opinion on *Reparation for Injuries*, "International tribunals are already familiar with the problem of a claim in which two or more national States are interested, and they know how to protect the defendant State in such a case".[708]

Article 47. Plurality of responsible States

1. Where several States are responsible for the same internationally wrongful act, the responsibility of each State may be invoked in relation to that act.

2. Paragraph 1:

(*a*) does not permit any injured State to recover, by way of compensation, more than the damage it has suffered;

(*b*) is without prejudice to any right of recourse against the other responsible States.

Commentary

(1) Article 47 deals with the situation where there is a plurality of responsible States in respect of the same wrongful act. It states the general principle that in such cases each State is separately responsible for the conduct attributable to it, and that responsibility is not diminished or reduced by the fact that one or more other States are also responsible for the same act.

(2) Several States may be responsible for the same internationally wrongful act in a range of circumstances. For example, two or more States might combine in carrying out together an internationally wrongful act in circumstances where they may be regarded as acting jointly in respect of the entire operation. In that case the injured State can hold each responsible State to account for the wrongful conduct as a whole. Or two States may act through a common organ which carries out the conduct in question, e.g. a joint authority responsible for the management of a boundary river. Or one State may direct and control another State in the commission of the same internationally wrongful act by the latter, such that both are responsible for the act.[709]

(3) It is important not to assume that internal law concepts and rules in this field can be applied directly to international law. Terms such as "joint", "joint and several" and "solidary" responsibility derive from different legal traditions[710] and analogies must be applied with care. In international law, the general principle in the case of a plurality of responsible States is that each State is separately responsible for conduct attributable to it in the sense of article 2. The principle of independent responsibility reflects the position under general international law, in the absence of agreement to the contrary between the States concerned.[711] In the application of that principle, however, the situation can arise where a single course of conduct is at the same time attributable to several States and is internationally wrongful for each of them. It is to such cases that article 47 is addressed.

(4) In the *Certain Phosphate Lands in Nauru* case,[712] Australia, the sole respondent, had administered Nauru as a trust territory under the Trusteeship Agreement on behalf of the three States concerned. Australia argued that it could not be sued alone by Nauru, but only jointly with the other two States concerned. Australia argued that the two States were necessary parties to the case and that in accordance with the principle formulated in *Monetary Gold*,[713] the claim against Australia alone was inadmissible. It also argued that the responsibility of the three States making up the Administering Authority was "solidary" and that a claim could not be made against only one of them. The Court rejected both arguments. On the question of "solidary" responsibility it said:

> Australia has raised the question whether the liability of the three States would be "joint and several" (*solidaire*), so that any one of the three would be liable to make full reparation for damage flowing from any breach of the obligations of the Administering Authority, and not merely a one-third or some other proportionate share. This … is independent of the question whether Australia can be sued alone. The Court does not consider that any reason has been shown why a claim brought against only one of the three States should be declared inadmissible *in limine litis* merely because that claim raises questions of the administration of the Territory, which was shared with two other States. It cannot be denied that Australia had obligations under the Trusteeship Agreement, in its capacity as one of the three States forming the Administering Authority, and there is nothing in the character of that Agreement which debars the Court from considering a claim of a breach of those obligations by Australia.[714]

The Court was careful to add that its decision on jurisdiction "does not settle the question whether reparation

[707] Cf. *Forests of Central Rhodopia*, where the arbitrator declined to award restitution, *inter alia*, on the ground that not all the persons or entities interested in restitution had claimed (see footnote 382 above), p. 1432.

[708] *Reparation for Injuries* (see footnote 38 above), p. 186.

[709] See article 17 and commentary.

[710] For a comparative survey of internal laws on solidary or joint liability, see T. Weir, *loc. cit.* (footnote 471 above), vol. XI, especially pp. 43–44, sects. 79–81.

[711] See paragraphs (1) to (5) of the introductory commentary to chapter IV of Part One.

[712] See footnote 230 above.

[713] See footnote 286 above. See also paragraph (11) of the commentary to article 16.

[714] *Certain Phosphate Lands in Nauru, Preliminary Objections* (see footnote 230 above), pp. 258–259, para. 48.

would be due from Australia, if found responsible, for the whole or only for part of the damage Nauru alleges it has suffered, regard being had to the characteristics of the Mandate and Trusteeship Systems … and, in particular, the special role played by Australia in the administration of the Territory".[715]

(5) The extent of responsibility for conduct carried on by a number of States is sometimes addressed in treaties.[716] A well-known example is the Convention on International Liability for Damage Caused by Space Objects. Article IV, paragraph 1, provides expressly for "joint and several liability" where damage is suffered by a third State as a result of a collision between two space objects launched by two States. In some cases liability is strict; in others it is based on fault. Article IV, paragraph 2, provides:

> In all cases of joint and several liability referred to in paragraph 1 … the burden of compensation for the damage shall be apportioned between the first two States in accordance with the extent to which they were at fault; if the extent of the fault of each of these States cannot be established, the burden of compensation shall be apportioned equally between them. Such apportionment shall be without prejudice to the right of the third State to seek the entire compensation due under this Convention from any or all of the launching States which are jointly and severally liable.[717]

This is clearly a *lex specialis*, and it concerns liability for lawful conduct rather than responsibility in the sense of the present articles.[718] At the same time, it indicates what a regime of "joint and several" liability might amount to so far as an injured State is concerned.

(6) According to *paragraph 1* of article 47, where several States are responsible for the same internationally wrongful act, the responsibility of each State may be invoked in relation to that act. The general rule in international law is that of separate responsibility of a State for its own wrongful acts and paragraph 1 reflects this general rule. Paragraph 1 neither recognizes a general rule of joint and several responsibility, nor does it exclude the possibility that two or more States will be responsible for the same internationally wrongful act. Whether this is so will depend on the circumstances and on the international obligations of each of the States concerned.

(7) Under paragraph 1 of article 47, where several States are each responsible for the same internationally wrongful act, the responsibility of each may be separately invoked by an injured State in the sense of article 42. The consequences that flow from the wrongful act, for example in terms of reparation, will be those which flow from the provisions of Part Two in relation to that State.

(8) Article 47 only addresses the situation of a plurality of responsible States in relation to the same internationally wrongful act. The identification of such an act will depend on the particular primary obligation, and cannot be prescribed in the abstract. Of course, situations can also arise where several States by separate internationally wrongful conduct have contributed to causing the same damage. For example, several States might contribute to polluting a river by the separate discharge of pollutants. In the *Corfu Channel* incident, it appears that Yugoslavia actually laid the mines and would have been responsible for the damage they caused. ICJ held that Albania was responsible to the United Kingdom for the same damage on the basis that it knew or should have known of the presence of the mines and of the attempt by the British ships to exercise their right of transit, but failed to warn the ships.[719] Yet, it was not suggested that Albania's responsibility for failure to warn was reduced, let alone precluded, by reason of the concurrent responsibility of a third State. In such cases, the responsibility of each participating State is determined individually, on the basis of its own conduct and by reference to its own international obligations.

(9) The general principle set out in paragraph 1 of article 47 is subject to the two provisos set out in *paragraph 2*. *Subparagraph* (a) addresses the question of double recovery by the injured State. It provides that the injured State may not recover, by way of compensation, more than the damage suffered.[720] This provision is designed to protect the responsible States, whose obligation to compensate is limited by the damage suffered. The principle is only concerned to ensure against the actual recovery of more than the amount of the damage. It would not exclude simultaneous awards against two or more responsible States, but the award would be satisfied so far as the injured State is concerned by payment in full made by any one of them.

(10) The second proviso, in *subparagraph* (b), recognizes that where there is more than one responsible State in respect of the same injury, questions of contribution may arise between them. This is specifically envisaged, for example, in articles IV, paragraph 2, and V, paragraph 2, of the Convention on International Liability for Damage Caused by Space Objects. On the other hand, there may be cases where recourse by one responsible State against another should not be allowed. Subparagraph (*b*) does not address the question of contribution among several States which are responsible for the same wrongful act; it merely provides that the general principle stated in paragraph 1 is without prejudice to any right of recourse which one responsible State may have against any other responsible State.

[715] *Ibid*., p. 262, para. 56. The case was subsequently withdrawn by agreement, Australia agreeing to pay by instalments an amount corresponding to the full amount of Nauru's claim. Subsequently, the two other Governments agreed to contribute to the payments made under the settlement. See *Certain Phosphate Lands in Nauru, Order* (footnote 232 above) and the settlement agreement (*ibid.*).

[716] A special case is the responsibility of the European Union and its member States under "mixed agreements", where the Union and all or some members are parties in their own name. See, e.g., annex IX to the United Nations Convention on the Law of the Sea. Generally on mixed agreements, see, e.g., A. Rosas, "Mixed Union mixed agreements", *International Law Aspects of the European Union*, M. Koskenniemi, ed. (The Hague, Kluwer, 1998), p. 125.

[717] See also article V, paragraph 2, which provides for indemnification between States which are jointly and severally liable.

[718] See paragraph 4 of the general commentary for the distinction between international responsibility for wrongful acts and international liability arising from lawful conduct.

[719] *Corfu Channel, Merits* (see footnote 35 above), pp. 22–23.

[720] Such a principle was affirmed, for example, by PCIJ in the *Factory at Chorzów, Merits* case (see footnote 34 above), when it held that a remedy sought by Germany could not be granted "or the same compensation would be awarded twice over" (p. 59); see also pp. 45 and 49.

Article 55. Lex specialis

These articles do not apply where and to the extent that the conditions for the existence of an internationally wrongful act or the content or implementation of the international responsibility of a State are governed by special rules of international law.

Commentary

(1) When defining the primary obligations that apply between them, States often make special provision for the legal consequences of breaches of those obligations, and even for determining whether there has been such a breach. The question then is whether those provisions are exclusive, i.e. whether the consequences which would otherwise apply under general international law, or the rules that might otherwise have applied for determining a breach, are thereby excluded. A treaty may expressly provide for its relationship with other rules. Often, however, it will not do so and the question will then arise whether the specific provision is to coexist with or exclude the general rule that would otherwise apply.

(2) Article 55 provides that the articles do not apply where and to the extent that the conditions for the existence of an internationally wrongful act or its legal consequences are determined by special rules of international law. It reflects the maxim *lex specialis derogat legi generali*. Although it may provide an important indication, this is only one of a number of possible approaches towards determining which of several rules potentially applicable is to prevail or whether the rules simply coexist. Another gives priority, as between the parties, to the rule which is later in time.[817] In certain cases the consequences that follow from a breach of some overriding rule may themselves have a peremptory character. For example, States cannot, even as between themselves, provide for legal consequences of a breach of their mutual obligations which would authorize acts contrary to peremptory norms of general international law. Thus, the assumption of article 55 is that the special rules in question have at least the same legal rank as those expressed in the articles. On that basis, article 55 makes it clear that the present articles operate in a residual way.

(3) It will depend on the special rule to establish the extent to which the more general rules on State responsibility set out in the present articles are displaced by that rule. In some cases, it will be clear from the language of a treaty or other text that only the consequences specified are to flow. Where that is so, the consequence will be "determined" by the special rule and the principle embodied in article 55 will apply. In other cases, one aspect of the general law may be modified, leaving other aspects still applicable. An example of the former is the WTO Understanding on Rules and Procedures governing the Settlement of Disputes as it relates to certain remedies.[818] An example of the latter is article 41 of Protocol No. 11 to the European Convention on Human Rights.[819] Both concern matters dealt with in Part Two of the articles. The same considerations apply to Part One. Thus, a particular treaty might impose obligations on a State but define the "State" for that purpose in a way which produces different consequences than would otherwise flow from the rules of attribution in chapter II.[820] Or a treaty might exclude a State from relying on *force majeure* or necessity.

(4) For the *lex specialis* principle to apply it is not enough that the same subject matter is dealt with by two provisions; there must be some actual inconsistency between them, or else a discernible intention that one provision is to exclude the other. Thus, the question is essentially one of interpretation. For example, in the *Neumeister* case, the European Court of Human Rights held that the specific obligation in article 5, paragraph 5, of the European Convention on Human Rights for compensation for unlawful arrest or detention did not prevail over the more general provision for compensation in article 50. In the Court's view, to have applied the *lex specialis* principle to article 5, paragraph 5, would have led to "consequences incompatible with the aim and object of the Convention".[821] It was sufficient, in applying article 50, to take account of the specific provision.[822]

(5) Article 55 is designed to cover both "strong" forms of *lex specialis*, including what are often referred to as self-contained regimes, as well as "weaker" forms such as specific treaty provisions on a single point, for example, a specific treaty provision excluding restitution. PCIJ referred to the notion of a self-contained regime in the *S.S. "Wimbledon"* case with respect to the transit provisions concerning the Kiel Canal in the Treaty of Versailles,[823]

[817] See paragraph 3 of article 30 of the 1969 Vienna Convention.

[818] See Marrakesh Agreement establishing the World Trade Organization, annex 2, especially art. 3, para. 7, which provides for compensation "only if the immediate withdrawal of the measure is impractical and as a temporary measure pending the withdrawal of the measure which is inconsistent with a covered agreement". For WTO purposes, "compensation" refers to the future conduct, not past conduct, and involves a form of countermeasure. See article 22 of the Understanding. On the distinction between cessation and reparation for WTO purposes, see, e.g., Report of the Panel, Australia–Subsidies Provided to Producers and Exporters of Automotive Leather (footnote 431 above).

[819] See paragraph (2) of the commentary to article 32.

[820] Thus, article 1 of the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment only applies to torture committed "by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity". This is probably narrower than the bases for attribution of conduct to the State in Part One, chapter II. Cf. "federal" clauses, allowing certain component units of the State to be excluded from the scope of a treaty or limiting obligations of the federal State with respect to such units (e.g. article 34 of the Convention for the Protection of the World Cultural and Natural Heritage).

[821] *Neumeister* v. *Austria, Eur. Court H.R., Series A, No. 17* (1974), paras. 28–31, especially para. 30.

[822] See also *Mavrommatis* (footnote 236 above), pp. 29–33; *Marcu Colleanu* v. *German State*, *Recueil des décisions des tribunaux arbitraux mixtes institués par les traités de paix* (Paris, Sirey, 1930), vol. IX, p. 216 (1929); WTO, Report of the Panel, Turkey–Restrictions on Imports of Textile and Clothing Products (footnote 130 above), paras. 9.87–9.95; *Case concerning a dispute between Argentina and Chile concerning the Beagle Channel*, UNRIAA, vol. XXI (Sales No. E/F. 95.V.2), p. 53, at p. 100, para. 39 (1977). See further C. W. Jenks, "The conflict of law-making treaties", BYBIL, *1953*, vol. 30, p. 401; M. McDougal, H. D. Lasswell and J. C. Miller, *The Interpretation of International Agreements and World Public Order: Principles of Content and Procedure* (New Haven Press, 1994), pp. 200–206; and P. Reuter, *Introduction to the Law of Treaties* (footnote 300 above), para. 201.

[823] *S.S. "Wimbledon"* (see footnote 34 above), pp. 23–24.

as did ICJ in the *United States Diplomatic and Consular Staff in Tehran* case with respect to remedies for abuse of diplomatic and consular privileges.[824]

(6) The principle stated in article 55 applies to the articles as a whole. This point is made clear by the use of language ("the conditions for the existence of an internationally wrongful act or the content or implementation of the international responsibility of a State") which reflects the content of each of Parts One, Two and Three.

Article 56. Questions of State responsibility not regulated by these articles

The applicable rules of international law continue to govern questions concerning the responsibility of a State for an internationally wrongful act to the extent that they are not regulated by these articles.

Commentary

(1) The present articles set out by way of codification and progressive development the general secondary rules of State responsibility. In that context, article 56 has two functions. First, it preserves the application of the rules of customary international law concerning State responsibility on matters not covered by the articles. Secondly, it preserves other rules concerning the effects of a breach of an international obligation which do not involve issues of State responsibility but stem from the law of treaties or other areas of international law. It complements the *lex specialis* principle stated in article 55. Like article 55, it is not limited to the legal consequences of wrongful acts but applies to the whole regime of State responsibility set out in the articles.

(2) As to the first of these functions, the articles do not purport to state all the consequences of an internationally wrongful act even under existing international law and there is no intention of precluding the further development of the law on State responsibility. For example, the principle of law expressed in the maxim *ex injuria jus non oritur* may generate new legal consequences in the field of responsibility.[825] In this respect, article 56 mirrors the preambular paragraph of the 1969 Vienna Convention which affirms that "the rules of customary international law will continue to govern questions not regulated by the provisions of the present Convention". However, matters of State responsibility are not only regulated by customary international law but also by some treaties; hence article 56 refers to the "applicable rules of international law".

(3) A second function served by article 56 is to make it clear that the present articles are not concerned with any legal effects of a breach of an international obligation which do not flow from the rules of State responsibility, but stem from the law of treaties or other areas of law. Examples include the invalidity of a treaty procured by an unlawful use of force,[826] the exclusion of reliance on a fundamental change of circumstances where the change in question results from a breach of an international obligation of the invoking State to any other State party,[827] or the termination of the international obligation violated in the case of a material breach of a bilateral treaty.[828]

Article 57. Responsibility of an international organization

These articles are without prejudice to any question of the responsibility under international law of an international organization, or of any State for the conduct of an international organization.

Commentary

(1) Article 57 is a saving clause which reserves two related issues from the scope of the articles. These concern, first, any question involving the responsibility of international organizations, and secondly, any question concerning the responsibility of any State for the conduct of an international organization.

(2) In accordance with the articles prepared by the Commission on other topics, the expression "international organization" means an "intergovernmental organization".[829] Such an organization possesses separate legal personality under international law,[830] and is responsible for its own acts, i.e. for acts which are carried out by the organization through its own organs or officials.[831] By contrast, where a number of States act together through their own organs as distinct from those of an international organization, the conduct in question is that of the States concerned, in accordance with the principles set out in chapter II of Part One. In such cases, as article 47 confirms, each State remains responsible for its own conduct.

[824] *United States Diplomatic and Consular Staff in Tehran* (see footnote 59 above), at p. 40, para. 86. See paragraph (15) of the commentary to article 50 and also B. Simma, "Self-contained regimes", NYIL, 1985, vol. 16, p. 111.

[825] Another possible example, related to the determination whether there has been a breach of an international obligation, is the so-called principle of "approximate application", formulated by Sir Hersch Lauterpacht in *Admissibility of Hearings of Petitioners by the Committee on South West Africa, Advisory Opinion, I.C.J. Reports 1956*, p. 23, at p. 46. In the *Gabčíkovo-Nagymaros Project* case (see footnote 27 above), the Court said that "even if such a principle existed, it could by definition only be employed within the limits of the treaty in question" (p. 53, para. 76). See also S. Rosenne, *Breach of Treaty* (footnote 411 above), pp. 96–101.

[826] 1969 Vienna Convention, art. 52.

[827] *Ibid*., art. 62, para. 2 (*b*).

[828] *Ibid*., art. 60, para 1.

[829] See article 2, paragraph 1 (*i*), of the Vienna Convention on the Law of Treaties between States and International Organizations or between International Organizations (hereinafter "the 1986 Vienna Convention").

[830] A firm foundation for the international personality of the United Nations is laid in the advisory opinion of the Court in *Reparation for Injuries* (see footnote 38 above), at p. 179.

[831] As the Court has observed, "the question of immunity from legal process is distinct from the issue of compensation for any damages incurred as a result of acts performed by the United Nations or by its agents acting in their official capacity. The United Nations may be required to bear responsibility for the damage arising from such acts", *Difference Relating to Immunity from Legal Process of a Special Rapporteur of the Commission on Human Rights* (see footnote 56 above).

Annex 651

"Commentaries on the Draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities", Report of the International Law Commission Fifty-eighth session, Yearbook of the International Law Commission, A/CN.4/SER.A/2006/Add.l (Part 2), *International Law Commission*, 2006, pages 64-72

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qualifies "damage" to stress the transboundary orientation of the scope of the present principles.

(12) Another important consideration which delimits the scope of application is that transboundary harm caused by State policies in trade, monetary, socio-economic or similar fields is excluded from the scope of the present principles.[327] Thus, significant transboundary harm must have been caused by the "physical consequences" of activities in question.

Principle 2. Use of terms

For the purposes of the present draft principles:

(*a*) "damage" means significant damage caused to persons, property or the environment; and includes:

(i) loss of life or personal injury;

(ii) loss of, or damage to, property, including property which forms part of the cultural heritage;

(iii) loss or damage by impairment of the environment;

(iv) the costs of reasonable measures of reinstatement of the property, or environment, including natural resources;

(v) the costs of reasonable response measures;

(*b*) "environment" includes: natural resources, both abiotic and biotic, such as air, water, soil, fauna and flora and the interaction between the same factors; and the characteristic aspects of the landscape;

(*c*) "hazardous activity" means an activity which involves a risk of causing significant harm;

(*d*) "State of origin" means the State in the territory or otherwise under the jurisdiction or control of which the hazardous activity is carried out;

(*e*) "transboundary damage" means damage caused to persons, property or the environment in the territory or in other places under the jurisdiction or control of a State other than the State of origin;

(*f*) "victim" means any natural or legal person or State that suffers damage;

(*g*) "operator" means any person in command or control of the activity at the time the incident causing transboundary damage occurs.

Commentary

(1) The present "Use of terms" seeks to define and set out the meaning of the terms or concepts used in the present draft principles. The definition of "damage" is crucial for the purposes of the present draft principles. The elements of damage are identified in part to set out the basis of claims for damage. Before identifying the elements of damage, it is important to note that damage, to be eligible for compensation, should reach a certain threshold. For example, the *Trail Smelter* award addressed an injury by fumes, when the case is of "serious consequences" and the injury is established by clear and convincing evidence.[328] The *Lake Lanoux* award made reference to serious injury.[329] A number of conventions have also referred to "significant", "serious" or "substantial" harm or damage as the threshold for giving rise to legal claims.[330] "Significant" has also been used in other legal instruments and domestic law.[331] The threshold is designed to prevent frivolous or vexatious claims.

(*Footnote 326 continued.*)

See also article 1, paragraph 15 of the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA), which defines damage to the Antarctic environment or dependent or associated ecosystems; and the Convention on the Law of the Non-Navigational Uses of International Watercourses which seeks in article 7 to "prevent the causing of significant harm". Article 2 (*b*) of Annex VI to the Protocol on Environmental Protection to the Antarctic Treaty on Liability Arising From Environmental Emergencies defines "environmental emergency" as "any accidental event that … results in, or imminently threatens to result in, any significant and harmful impact on the Antarctic environment".

[327] See *Yearbook ... 2001*, vol. II (Part Two) and corrigendum, p. 151 (paragraphs (16)–(17) of the commentary to article 1 of the draft articles on prevention).

[328] *Trail Smelter* (see footnote 226 above), at p. 1965.

[329] *Lake Lanoux Arbitration (France* v. *Spain)*, UNRIAA, vol. XII (Sales No. 1963.V.3), p. 281.

[330] See, for example, article 4, paragraph 2 of the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA); paragraphs 1 and 2 of article 2 of the Convention on Environmental Impact Assessment in a Transboundary Context; article 1 (*d*) of the Convention on the Transboundary Effects of Industrial Accidents; and article 7 of the Convention on the Law of the Non-Navigational Uses of International Watercourses. See also P. N. Okowa, *State Responsibility for Transboundary Air Pollution in International Law*, Oxford University Press, 2000, p. 176; and R. Lefeber, *Transboundary Environmental Interference and the Origin of State Liability* , The Hague, Kluwer Law International, 1996, pp. 86–89, who notes the felt need for a threshold and examines the rationale for and the possible ways of explaining the meaning of the threshold of "significant harm". See also J. G. Lammers, *Pollution of International Watercourses: a Search for Substantive Rules and Principles of Law*, The Hague, Martinus Nijhoff Publishers, 1984, pp. 346–347; and R. Wolfrum, "Purposes and principles of international environmental law", *German Yearbook of International Law*, vol. 33 (1990), pp. 308–330, at p. 311. As a general rule, noting the importance of a threshold of damage for triggering claims for restoration and compensation, while considering environmental damage, it is suggested that "the more the effects deviate from the state that would be regarded as being sustainable and the less foreseeable and limited the consequential losses are, the closer the effects come to the threshold of significance". This is to be determined against a "baseline condition", which States generally define or should define (R. Wolfrum, Ch. Langenfeld and P. Minnerop, *Environmental Liability in International Law: Towards a Coherent Conception*, Berlin, Erich Schmidt Verlag, 2005, p. 501).

[331] See, for example, article 5 of the draft convention on industrial and agricultural uses of international rivers and lakes, prepared by the Inter-American Juridical Committee in 1965 (Organization of American States, *Ríos y lagos internacionales (utilización para fines agrícolas e industriales)*, 4th ed. rev. (OEA/Ser.1/VI, CIJ-75 Rev.2), Washington D.C., 1971, p. 132; Guidelines on responsibility and liability regarding transboundary water pollution, elaborated by the United Nations Economic Commission for Europe in 1990 (ENVWA/R.45, annex); article X of the Helsinki Rules on the Uses of the Waters of International Rivers (International Law Association, *Report of the Fifty-second Conference, Helsinki, 1966*, London, 1967, p. 496); article 16 of the Berlin Rules on Equitable Use and Sustainable Development of Waters (*ibid., Report of the Seventy-First Conference, Berlin, 16–21 August 2004*, London, 2004, p. 334); paragraphs 1 and 2 of General Assembly resolution 2995 (XXVII) of 15 December 1972 concerning cooperation between States in the field of the environment; paragraph 6 of the annex to OECD Council recommendation C(74)224 of 14 November 1974 on principles concerning transfrontier pollution (OECD, *OECD*

(2) The term "significant" is understood to refer to something more than "detectable" but need not be at the level of "serious" or "substantial".[332] The harm must lead to a real detrimental effect on matters such as, for example, human health, industry, property, environment or agriculture in other States. Such detrimental effects must be susceptible of being measured by factual and objective standards. The ecological unity of the planet does not correspond to political boundaries. In carrying out lawful activities within their own territories, States have impacts on each other. These mutual impacts, so long as they have not reached the level of "significant", are considered tolerable and do not fall within the scope of the present draft principles.

(3) The determination of "significant damage" involves both factual and objective criteria, and a value determination. The latter is dependent on the circumstances of a particular case and the period in which it is made. For instance, a deprivation which is considered significant in one region may not necessarily be so in another. A certain deprivation at a particular time might not be considered "significant" because scientific knowledge or human appreciation at that specific time might have considered such deprivation tolerable. However, that view might later change and the same deprivation might then be considered "significant damage". For instance, the sensitivity of the international community to air and water pollution levels has been constantly changing.

(4) Paragraph (*a*) defines "damage" as significant damage caused to persons, property or the environment. Subparagraphs (i) and (ii) cover personal injury and property damage, including some aspects of consequential economic loss, as well as property, which forms part of the national cultural heritage, which may be State property.

(5) Damage does not occur in isolation or in a vacuum. It occurs to somebody or something; it may be to a person or property. In subparagraph (i), damage to persons includes loss of life or personal injury. There are examples in domestic law[333] and treaty practice.[334] Even those liability regimes that exclude application of injury to persons recognize that other rules would apply.[335] Those regimes that are silent on the matter do not seem to entirely exclude the possible submission of a claim under this heading of damage.[336]

(6) In subparagraph (ii) damage to property includes loss of or damage to property. Property includes movable and immovable property. There are examples in domestic law[337] and in treaty practice.[338] Some liability regimes exclude claims concerning damage to property of the person liable on the policy consideration which seeks to deny a tortfeasor the opportunity to benefit from one's own wrongs. Article 2, paragraph 2 (*c*) (ii) of the Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal, article 2, paragraph 7(*b*) of the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment and article 2, paragraph 2 (*d*) (ii) of the Protocol on Civil Liability and Compensation for Damage caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters contain provisions to this effect.

(7) Traditionally, proprietary rights have been more closely related to the private rights of the individual rather than rights of the public. An individual would face

and the Environment, Paris, 1986, p. 142, reprinted in ILM, vol. 14, No. 1 (January 1975), p. 246); the Memorandum of Intent constituting an agreement concerning transboundary air pollution, between the Government of the United States and the Government of Canada, of 5 August 1980 (United Nations, *Treaty Series*, vol. 1274, No. 21009, p. 235); and article 7 of the Agreement between Mexico and the United States of America on co-operation for the protection and improvement of the environment in the border area, signed on 14 August 1983 (*ibid*., vol. 1352, No. 22805, p. 71, reproduced in ILM, vol. 22, No. 5 (September 1983), p. 1025). The United States has also used the word "significant" in its domestic law dealing with environmental issues. See American Law Institute, *Restatement of the Law Third, The Foreign Relations Law of the United States*, vol. 2, St. Paul (Minnesota), American Law Institute Publishers, 1987, pp. 111–112.

[332] See *Yearbook ...2001*, vol. II (Part Two) and corrigendum, p. 152 (paragraphs (4)–(5) of the commentary to article 2 of the draft articles on prevention).

[333] Germany's Environmental Liability Act, for example, covers anyone who suffers death or personal injury. Finland's Act on Compensation for Environmental Damage, the Swedish Environmental Code, and Denmark's Act on Compensation for Environmental Damage all cover personal injury. See generally P. Wetterstein, "Environmental damage in the legal systems of the Nordic countries and Germany", in M. Bowman and A. Boyle (eds.), *Environmental Damage in International Law and Comparative Law: Problems of Definition and Valuation*, Oxford University Press, 2002, pp. 223–242.

[334] Some liability regimes provide as follows: article I, paragraph 1 (*k*) of the Vienna Convention on civil liability for nuclear damage defines nuclear damage to include "(i) loss of life, any personal injury or any loss of, or damage to, property …"; article I, paragraph 1(*k*) of the Protocol to amend the Vienna Convention on civil liability for nuclear damage also refers to "(i) loss of life or personal injury; (ii) loss of or damage to property"; article I.B.vii) of the Protocol to amend the Convention on Third Party Liability in the field of Nuclear Energy of 29 July 1960, as amended by the Additional Protocol of 28 January 1964 and by the Protocol of 16 November 1982, defines nuclear damage to include "1. loss of life or personal injury …; 2. loss of or damage to property …"; the Convention on Civil Liability for Damage caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels (CRTD) defines the concept of "damage" in paragraph 10 of article 1 as "(a) loss of life or personal injury ...; (b) loss of or damage to property ..."; the Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal defines "damage", in article 2, paragraph 2 (*c*), as: "(i) Loss of life or personal injury; (ii) Loss of or damage to property other than property held by the person liable in accordance with the present Protocol"; the Protocol on Civil Liability and Compensation for Damage caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters defines damage in article 2 paragraph 2 (*d*), as: "(i) Loss of life or personal injury; (ii) Loss of, or damage to, property other than property held by the person liable in accordance with the Protocol"; and the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment defines damage in article 2, paragraph 7 as: "a. loss of life or personal injury; b. loss or damage to property other than to the installation itself or property held under the control of the operator, at the site of the dangerous activity".

[335] Directive 2004/35/CE of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage (see footnote 316 above) does not apply to cases of personal injury, to damage to private property or to any economic loss and does not affect any rights regarding such types of damages.

[336] Pollution damage is defined in article 1, paragraph 6 of the International Convention on Civil Liability for Oil Pollution Damage and in article 2, paragraph 3 of the 1992 Protocol to amend the International Convention on Civil Liability for Oil Pollution Damage.

[337] For example, Finland's Act on Compensation for Environmental Damage covers damage to property, chapter 32 of the Swedish Environmental Code also provides for compensation for damage to property and Denmark's Act on Compensation for Environmental Damage covers damage to property.

[338] See the examples in footnote 334 above.

no difficulty to pursue a claim concerning his personal or proprietary rights. These are claims concerning possessory or proprietary interests which are involved in loss of life or personal injury or loss of or damage to property. Furthermore, tort law has also tended to cover damage that may relate to economic losses. In this connection, a distinction is often made between consequential and pure economic losses.[339]

(8) For the purposes of the present draft principles, consequential economic losses are covered under subparagraphs (i) and (ii). Such losses are the result of a loss of life or personal injury or damage to property. These would include loss of earnings due to personal injury. Such damage is supported in treaty practice[340] and under domestic law although different approaches are followed, including in respect of compensation for loss of income.[341] Other economic loss may arise that is not linked to personal injury or damage to property. In the absence of a specific legal provision for claims covering loss of income, it would be reasonable to expect that if an incident involving a hazardous activity directly causes loss of income, efforts would be made to ensure the victim is not left uncompensated.

(9) Subparagraph (ii) also covers property which forms part of cultural heritage. State property may be included in the national cultural heritage. It embraces a wide range of aspects, including monuments, buildings and sites, while natural heritage denotes natural features and sites and geological and physical formations. Their value cannot easily be quantifiable in monetary terms but lies in their historical, artistic, scientific, aesthetic, ethnological or anthropological importance or in their conservation or natural beauty. The 1972 Convention for the protection of world cultural and natural heritage has a comprehensive definition of "cultural heritage".[342] Not all civil liability regimes include aspects concerning cultural heritage under this head. For example, the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment includes in its definition of "environment", property which forms part of the cultural heritage and, to that extent, cultural heritage may also be embraced by the broader definition of "environment".[343]

(10) Respecting and safeguarding cultural property are primary considerations in times of peace as they are in times of armed conflict. This principle is asserted in the Convention for the Protection of Cultural Property in the Event of Armed Conflict. Moreover, international humanitarian law prohibits commission of hostilities directed against historical monuments and works of art which constitute the cultural heritage of peoples.[344]

(11) Subparagraphs (iii) to (v) deal with claims that are usually associated with damage to the environment. They may all be treated as parts of one whole concept. Together, they constitute the essential elements inclusive in a definition of damage to the environment. These subparagraphs are concerned with questions concerning damage to the

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[339] See B. Sandvik and S. Suikkari, "Harm and reparation in international treaty regimes: an overview", in P. Wetterstein (ed.), *op. cit.* (footnote 323 above), p. 57. See generally E. H. P. Brans, *Liability for Damage to Public Natural Resources: Standing, Damage and Damage Assessment*, The Hague, Kluwer Law International, 2001, pp. 9–63. See also the eleventh report on international liability for injurious consequences arising out of acts not prohibited by international law of Special Rapporteur Julio Barboza (footnote 285 above).

[340] See, for example, article I (1) (*k*) of the Vienna Convention on civil liability for nuclear damage as modified by article 2, paragraph 2 of the Protocol to amend the Convention, which defines "nuclear damage" as including "each of the following to the extent determined by the law of the competent court– (iii) economic loss arising from loss or damage referred to in sub-paragraph (i) or (ii), insofar as not included in those sub-paragraphs, if incurred by a person entitled to claim in respect of such loss or damage; … (vii) any other economic loss, other than any caused by the impairment of the environment, if permitted by the general law on civil liability of the competent court …". See also article 1 (*f*) of the Convention on Supplementary Compensation for Nuclear Damage, which covers each of the following to the extent determined by the law of the competent court: "(iii) economic loss arising from loss or damage referred to in sub-paragraph (i) or (ii), insofar as not included in those sub-paragraphs, if incurred by a person entitled to claim in respect of such loss or damage; … (vii) any other economic loss, other than any caused by the impairment of the environment, if permitted by the general law on civil liability of the competent court". Article I.B.vii) of the Protocol to amend the Convention on Third Party Liability in the field of Nuclear Energy of 29 July 1960, as amended by the Additional Protocol of 28 January 1964 and by the Protocol of 16 November 1982, defines "nuclear damage" as including "each of the following to the extent determined by the law of the competent court, (3) economic loss arising from loss or damage referred to in sub-paragraph 1 or 2 above insofar as not included in those sub-paragraphs, if incurred by a person entitled to claim in respect of such loss or damage".

[341] For example, under subsection 2702 (*b*) of the United States Oil Pollution Act any person may recover damages for injury to, or economic losses resulting from, the destruction of real or personal property which shall be recoverable by a claimant who owns or leases such property. The subsection also provides that any person may recover "damages equal to the *loss of profits or impairment of earning capacity** due to the injury, destruction, or loss of real property, personal property …" (*United States Code 2000 Edition containing the general and permanent laws of the United States, in force on January 2, 2001*, vol. 18, Washington D.C., United States Government Printing Office, 2001, p. 694). Similarly, section 252 of the German Civil Code provides that any loss of profit is to be compensated.

[342] Article 1 defines "cultural heritage" for purposes of the Convention as:

"—monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;

—groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;

—sites: works of man or the combined works of nature and of man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view."

See also the definition of "cultural property" in article 1 of the Convention for the Protection of Cultural Property in the Event of Armed Conflict, which essentially covers movable and immovable property of great importance to the cultural heritage of peoples. See also the Convention on the means of prohibiting and preventing the illicit import, export and transfer of ownership of cultural property; and the Convention for the Safeguarding of the Intangible Cultural Heritage.

[343] See also article 1, paragraph 2 of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes.

[344] See article 53 of the Protocol additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts and article 16 of the Protocol additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of non-international armed conflicts. See also the Hague Conventions respecting the Laws and Customs of War on Land, particularly Convention IV (articles 27 and 56 of the Regulations concerning the Laws and Customs of War on Land, in annex to Conventions II and IV of 1899 and 1907) and Convention IX concerning Bombardment by Naval Forces in Time of War (article 5).

environment *per se*. This is damage caused by the hazardous activity to the environment itself with or without simultaneously causing damage to persons or property, and hence is independent of any damage to such persons and property. The broader reference to claims concerning the environment incorporated in subparagraphs (iii)–(v) thus not only builds upon trends that have already become prominent as part of recently concluded international liability regimes,[345] but opens up possibilities for further developments of the law for the protection of the environment *per se*.[346]

(12) An oil spill off a seacoast may immediately lead to lost business for the tourism and fishing industry within the precincts of the incident. Such claims have led to claims of pure economic loss in the past without much success. However, some liability regimes now recognize this head of compensable damage.[347] Article 2 (*d*) (iii) of the Protocol on Civil Liability and Compensation for Damage caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters and article 2, paragraph 2 (*d*) (iii) of the Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal cover loss of income directly deriving from an economic interest in any use of the environment, incurred as a result of impairment of the environment, taking into account savings and costs.[348] In the case of the Protocol on Civil Liability and Compensation for Damage caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters, such interest should be a "legally protected interest". Examples also exist at the domestic level.[349]

(13) Subparagraph (iii) relates to the form that damage to the environment would take. This would include "loss or damage by impairment". Impairment includes injury to, modification, alteration, deterioration, destruction or loss. This entails diminution of quality, value or excellence in an injurious fashion. Claims concerning loss of income directly deriving from an economic interest in any use of the environment, incurred as a result of impairment of the environment, may fall under this heading.

(14) In other instances of damage to the environment *per se*, it is not easy to establish standing. Some aspects of the environment do not belong to anyone, and are generally considered to be common property (*res communis omnium*) not open to private possession, as opposed

[345] For an analysis of these developments, see L. de la Fayette, "The concept of environmental damage in international liability regimes", in Bowman and Boyle (eds.), *op. cit.* (footnote 333 above) pp. 149–189. See also Brans, *op. cit.* (footnote 339 above), chap. 7, concerning international civil liability for damage to natural resources.

[346] Italian law, for example, appears to go further in recognizing damage to the environment *per se* and Italy is also a signatory to the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment. In the *Patmos* case, Italy lodged a claim for 5,000 million lire before the court of Messina, Italy, for ecological damage caused to its territorial waters as a result of 1,000 tonnes of oil spilled into the sea following a collision between the Greek oil tanker Patmos and the Spanish tanker Castillo de Monte Aragon on 21 March 1985. While the lower Court rejected its claim, the higher Court on appeal upheld its claim in *Patmos II*. According to the Court,

"although the notion of environmental damage cannot be grasped by resorting to any mathematical or accounting method, it can be evaluated in the light of the economic relevance that the destruction, deterioration, or alteration of the environment has *per se* and for the community, which benefits from environmental resources and, in particular, from marine resources in a variety of ways (food, health, tourism, research, biological studies)" (A Bianchi, "Harm to the environment in Italian practice: the interaction of international law and domestic law", in P. Wetterstein (ed.), *op. cit.* (see footnote 323 above), p. 116).

Noting that these benefits are the object of protection of the State, it was held that the State can claim, as a trustee of the community, compensation for the diminished economic value of the environment. The Court also observed that the loss involved not being assignable any market value, compensation can only be provided on the basis of an equitable appraisal. The Court, after rejecting the report received from experts on the quantification of damages, which attempted to quantify the damage on the basis of the nekton (fish) which the biomass could have produced had it not been polluted, resorted to an equitable appraisal and awarded 2,100 million lire. Incidentally, this award fell within the limits of liability of the owner, as set by the IOPC Fund, and was not appealed or contested, see generally Bianchi, *loc. cit.* (above), pp. 113–129, at p. 103. See also M. C. Maffei, "The compensation for ecological damage in the '*Patmos*' case", in F. Francioni and T. Scovazzi (eds.), *International Responsibility for Environmental Harm*, London, Graham and Trotman, 1991.

[347] See Wetterstein, "A proprietary or possessory interest ... ", *loc. cit.* (footnote 323 above), p. 37. On the need to limit the concept of "directly related" "pure economic loss" with a view not to open floodgates or enter "damages lottery" encouraging indeterminate liability which will then be a disincentive to get proper insurance or economic perspective, see L. Bergkamp, *Liability and Environment: Private and Public Law Aspects of Civil Liability for Environmental Harm in an International Context*, The Hague, Kluwer, 2001, pp. 346–350. It is also suggested that such an unlimited approach may limit "the acceptance of the definition of damage and thus, it has to be solved on the national level" (Wolfrum, Langenfeld and Minnerop, *op. cit.* (footnote 330 above) p. 503).

Directive 2004/35/CE of the European Parliament and of the Council covers environmental damage in article 2 (see footnote 316 above).

[348] See also article 1, paragraph 1 (*k*) of the Vienna Convention on civil liability for nuclear damage as modified by article 2, paragraph 2 of the Protocol to amend the Convention, which states that nuclear damage includes each of the following damages "to the extent determined by the law of the competent court: … (v) loss of income deriving from an economic interest in any use or enjoyment of the environment, incurred as a result of a significant impairment of that environment, and insofar as not included in sub-paragraph (ii)". See also the Convention on Supplementary Compensation for Nuclear Damage, article 1 (*f*): "(v) loss of income deriving from an economic interest in any use or enjoyment of the environment, incurred as a result of a significant impairment of that environment, and insofar as not included in subparagraph (ii)". Article I.B.vii) of the Protocol to amend the Convention on Third Party Liability in the field of Nuclear Energy of 29 July 1960, as amended by the Additional Protocol of 28 January 1964 and by the Protocol of 16 November 1982 defines nuclear damage as "each of the following to the extent determined by the law of the competent court: … 5. loss of income deriving from a direct economic interest in any use or enjoyment of the environment, incurred as a result of a significant impairment of that environment, and insofar as not included in subparagraph 2". See also, for example, article 2, paragraph 7 *d* of the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment; the Convention on the Transboundary Effects of Industrial Accidents (article 1 (*c*)); the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (articles 1–2); the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA) (article 8, paragraph 2 (*a*), (*b*) and (*d*)); and the Convention on Civil Liability for Damage caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels (CRTD) (article 10 (*c*)).

[349] Subsection 2702 (*b*) of the United States Oil Pollution Act provides that any person may recover "[d]amages equal to the *loss of profits or impairment of earning capacity** due to the injury, destruction, or loss of … natural resources" (see footnote 341 above). Finland's Act on Compensation for Environmental Damage includes pure economic loss, except where such losses are insignificant. Chapter 32 of the Swedish Environmental Code also provides for pure economic loss. Pure economic loss not caused by criminal behaviour is compensable only to the extent that it is significant. Denmark's Act on Compensation for Environmental Damage covers economic loss and reasonable costs for preventive measures or for the restoration of the environment. See generally Wetterstein, "Environmental damage in the legal systems … ", *loc. cit.* (footnote 333 above), pp. 222–242.

to *res nullius*, that is, property not belonging to anyone but open to private possession. A person does not have an individual right to such common property and would not ordinarily have standing to pursue a claim in respect of damage to such property.[350] Moreover, it is not always easy to appreciate who may suffer loss of ecological or aesthetic values or be injured as a consequence for purposes of establishing a claim. States instead may hold such property in trust, and usually public authorities and more recently, public interest groups, have been given standing to pursue claims.[351]

(15) It may be noted that the references to "costs of reasonable measures of reinstatement" in subparagraph (iv) and reasonable costs of clean-up associated with the "costs of reasonable response measures" in subparagraph (v) are recent concepts. These elements of damage have gained recognition because, as noted by one commentator, "there is a clear shift towards a greater focus on damage to the environment *per se*, rather than primarily on damage to persons and to property".[352] Subparagraph (iv) includes in the concept of damage an element of the type of compensation that is available, namely reasonable costs of measures of reinstatement. Recent treaty practice[353] and domestic law[354] has tended to acknowledge the importance of such measures, but has left it to domestic law to indicate who may be entitled to take such measures. Such measures have been described as any reasonable measures aiming to assess, reinstate or restore damaged or destroyed components of the environment or where this is not possible, to introduce, where appropriate, the equivalent of these components into the environment.[355]

(16) The reference to "reasonable" is intended to indicate that the costs of such measures should not be excessively disproportionate to the usefulness resulting from the measure. In the *Zoe Colocotroni case*, the United States First Circuit Court of Appeals stated:

[Recoverable costs are costs] reasonably to be incurred ... to restore or rehabilitate the environment in the affected area to its pre-existing condition, or as close thereto as is possible without grossly disproportionate expenditures. The focus in determining such a remedy should be [on] the steps a reasonable and prudent sovereign or agency would take to mitigate the harm done by the pollution, with attention to such factors as technical feasibility, harmful side effects, compatibility with or duplication of such regeneration as is naturally to be expected, and the extent to which efforts beyond a certain point would become either redundant or disproportionately expensive.[356]

(17) Subparagraph (v) includes costs of reasonable response measures in the concept of damage as an element of available compensation. Recent treaty practice has tended to acknowledge the importance of such measures, but has left it to domestic law to indicate who may be entitled to take such measures.[357] Such measures include

[350] In *Burgess* v. *M/V Tamano*, the court noted that "[i]t is also uncontroverted that the right to finish or to harvest clams … is not the private right of any individual, but is a public right held by the State 'in trust for the common benefit of the people'" (opinion of 27 July 1973, United States District Court, Maine, *Federal Supplement*, vol. 370 (1973), p. 247).

[351] Under the United States Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), United States Code Annotated, title 42, chapter 103, sections 9601 *et seq.*; the Clean Water Act of 1977, *ibid.*, title 33, chapter 26, section 1251; the Oil Pollution Act of 1990 (see footnote 341 above), sections 2701 *et seq.*, the United States "Congress empowered government agencies with management jurisdiction over natural resources to act as trustees to assess and recover damages ... [t]he public trust is defined broadly to encompass 'natural resources' ... belonging to, managed by, held in trust by, appertaining to or otherwise controlled by Federal, state or local governments or Indian tribes".

[352] De la Fayette, *loc. cit.* (footnote 345 above), at pp. 166–167.

[353] See, for example, article 1, paragraph 1 (*k*) (iv) of the Vienna Convention on civil liability for nuclear damage as modified by article 2, paragraph 2 of the Protocol to amend the Convention: "the costs of measures of reinstatement of impaired environment, unless such impairment is insignificant, if such measures are actually taken or to be taken, and insofar as not included in sub-paragraph (ii)"; and article I.B.vii of the Protocol to amend the Convention on Third Party Liability in the field of Nuclear Energy of 29 July 1960, as amended by the Additional Protocol of 28 January 1964 and by the Protocol of 16 November 1982: "the costs of measures of reinstatement of impaired environment, unless such impairment is insignificant, if such measures are actually taken or to be taken, and insofar as not included in sub-paragraph 2". Article 1, paragraph 6 of the International Convention on Civil Liability for Oil Pollution Damage refers to "impairment of the environment other than loss of profit from such impairment", and specifies that compensation for such impairment "shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken". See also article 2, paragraph 2 (*c*) (iv) and (*d*) of the Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal; articles 2, 7 (*c*) and 8 of the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment; and article 2, paragraph 2 (*d*) (iv) and (*g*) of the Protocol on Civil Liability and Compensation for Damage caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters.

[354] German law allows for reimbursement of reasonable costs of reinstatement and restoration of environmental damage through making good the loss suffered by individuals but that may also involve restoring the environment to its *status quo*. Section 16 of Germany's Environmental Liability Act and section 32 of the German Genetic Engineering Act provide that in the event of impairment of a natural complex, section 251 (2) of the German Civil Code is to be applied with the proviso that the expenses of restoring the *status quo* shall not be deemed unreasonable merely because it exceeds the value of the object concerned. See Wolfrum, Langenfeld and Minnerop, *op. cit.* (footnote 330 above), pp. 223–303 ("Part 5: Environmental liability law in Germany (Grote/Renke)"), at p. 278.

[355] It may be noted that in the context of the work of the UNCC, a recent decision sanctioned compensation in respect of three projects: for loss of rangeland and habitats, Jordan received $160 million; for shoreline preserves, Kuwait got $8 million; and Saudi Arabia was awarded $46 million by way of replacing ecological services that were irreversibly lost in the wake of the 1991 Gulf War. See the report and recommendations made by the Panel of Commissioners concerning the fifth instalment of "F4" claims (S/AC.26/2005/10), technical annexes I–III, See also P. H. Sand, "Compensation for environmental damage from the 1991 Gulf War", *Environmental Policy and Law*, vol. 35, No. 6 (December 2005), pp. 244–249, at p. 247.

[356] *Commonwealth of Puerto Rico,* et al. v. *Zoe Colocotroni*, et al., 628 F.2d, p. 652, United States Court of Appeals, First Circuit, 1980, cited in C. de la Rue, "Environmental damage assessment", in R. P. Kröner (ed.), *Transnational Environmental Liability and Insurance*, London, Graham and Trotman, 1993, p. 72.

[357] See, for example, article I, paragraph 1 (*k*) (vi) of the Vienna Convention on civil liability for nuclear damage as modified by article 2, paragraph 2 of the Protocol to amend the Convention: "the costs of preventive measures, and further loss or damage caused by such measures"; the Convention on Supplementary Compensation for Nuclear Damage, article 1 (*f*) (vi): "the costs of preventive measures, and further loss or damage caused by such measures"; and the Protocol to amend the Convention on Third Party Liability in the field of Nuclear Energy of 29 July 1960, as amended by the Additional Protocol of 28 January 1964 and by the Protocol of 16 November 1982, article I.B.vii): "the costs of preventive measures, and further loss or damage caused by such measures, in the case of subparagraphs 1 to 5 above, to the extent that the loss or damage arises out of or results from ionising radiation emitted by any source of radiation inside a nuclear installation, or emitted from nuclear fuel or radioactive products or waste". Article 1, paragraph 6 of the 1992 Protocol to amend the International Convention on Civil Liability for Oil Pollution Damage refers to costs of preventive measures and further loss or damage caused by preventive measures.

any reasonable measures taken by any person including public authorities, following the occurrence of the transboundary damage, to prevent, minimize or mitigate possible loss or damage or to arrange for environmental clean-up. The response measures must be reasonable.

(18) Recent trends are also encouraging in allowing compensation for loss of "non-use value" of the environment. There is some support for this claim from the Commission itself when it adopted its draft articles on State responsibility for internationally wrongful acts, even though it is admitted that such damage is difficult to quantify.[358] The recent decisions of the United Nations Compensation Commission (UNCC) in opting for a broad interpretation of the term "environmental damage" is a pointer of developments to come. In the case of the "F4" category of environmental and public health claims, the F4 Panel of the UNCC allowed claims for compensation for damage to natural resources without commercial value (so-called "pure" environmental damage) and also claims where there was only a temporary loss of resource use during the period prior to full restoration.[359]

(19) Paragraph (*b*) defines "environment". Environment could be defined in different ways for different purposes and it is appropriate to bear in mind that there is no universally accepted definition. It is considered useful, however, to offer a working definition for the purposes of the present draft principles. It helps to put into perspective the scope of the remedial action required in respect of environmental damage.[360]

(20) "Environment" could be defined in a restricted way, limiting it exclusively to natural resources, such as air, soil, water, fauna and flora, and their interaction. A broader definition could embrace environmental values also. The Commission has opted to include in the definition the latter, also encompassing non-service values such as aesthetic aspects of the landscape.[361] This includes the enjoyment of nature because of its natural beauty and its recreational attributes and opportunities associated with it. This broader approach is justified by the general and residual character of the present draft principles.[362]

(21) Moreover, the Commission in taking such a holistic approach is, in the words of the ICJ in the *Gabčíkovo–Nagymaros Project* case:

> mindful that, in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the limitations inherent in the very mechanism of reparation of this type of damage.[363]

(22) Furthermore, a broader definition would attenuate any limitation imposed by the remedial responses acceptable in the various liability regimes and as reflected in commentary in respect of subparagraphs (iv) and (v) above.

(23) Thus, the reference in paragraph (*b*) to "natural resources … and the interaction" of its factors embraces the idea of a restricted concept of environment within a protected ecosystem,[364] while the reference to "the characteristic aspects of the landscape" denotes an acknowledgement of a broader concept of environment.[365] The

See also article 2, paragraph 2 (*c*) (v) and (*d*) of the Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal; article 2, paragraphs 7 (*d*) and 9 of the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment; and article 2, paragraph 2 (*d*) (v) and (*h*) of the Protocol on Civil Liability and Compensation for Damage caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters. Article 2 (*f*) of Annex VI to the Protocol on Environmental Protection to the Antarctic Treaty on Liability Arising From Environmental Emergencies defines response action as "reasonable measures taken after an environmental emergency has occurred to avoid, minimise or contain the impact of that environmental emergency, which to that end may include clean-up in appropriate circumstances, and includes determining the extent of that emergency and its impact".

358 "[E]nvironmental damage will often extend beyond that which can be readily quantified in terms of clean-up costs and property devaluation. Damage to such environmental values (biodiversity, amenity, etc.—sometimes referred to as 'non-use values') is, as a matter of principle, no less real and compensable than damage to property, though it may be difficult to quantify" (*Yearbook ... 2001*, vol. II (Part Two) and corrigendum, p. 101 (para. (15) of the commentary to article 36)).

359 See the report and recommendations made by the Panel of Commissioners concerning the fifth instalment of "F4" claims (footnote 355 above). See also Sand, "Compensation for environmental damage …", *loc. cit.* (*ibid.*), p. 247. Elaborated in five instalment reports, the awards recommended by the F4 Panel and approved without change by the Governing Council amount to $5.26 billion, "the largest … in the history of international environmental law" (Sand, "Compensation for environmental damage…", *loc. cit.* (*ibid.*), p. 245). See also the *Guidelines for the Follow-up Programme for Environmental Awards* of the UNCC (*ibid.*), pp. 276–281.

360 See the Communication from the Commission to the Council and Parliament and the Economic and Social Committee: Green Paper on remedying environmental damage, COM (93) 47 final, of 14 May 1993, p. 10.

361 For a philosophical analysis underpinning a regime for damage to biodiversity, see M. Bowman, "Biodiversity, intrinsic value and the definition and valuation of environmental harm", in Bowman and Boyle (eds.), *op. cit.* (footnote 333 above), pp. 41–61. Article 2 of the Convention for the protection of the world cultural and natural heritage defines "natural heritage" as "natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view; geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation; natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty".

362 For a concise discussion of the differing approaches on the definition of environmental damage, see Ph. Sands, *Principles of International Environmental Law*, 2nd ed., Cambridge University Press, 2003, pp. 876–878.

363 *Gabčíkovo–Nagymaros Project (Hungary/Slovakia), Judgment, I.C.J. Reports 1997*, p. 7, at p. 78, para. 140. The Court in this connection also alluded to the need to keep in view the inter-generational and intra-generational interests and the contemporary demand to promote the concept of sustainable development.

364 Under article 2 of the Convention on Biological Diversity, "'[e]cosystem' means a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit". Under article 1, paragraph 15 of the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA),

> "'[d]amage to the Antarctic environment or dependent or associated ecosystems' means any impact on the living or non-living components of that environment or those ecosystems, including harm to atmospheric, marine or terrestrial life, beyond that which is negligible or which has been assessed and judged to be acceptable pursuant to this Convention".

365 Article 2, paragraph 10 of the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment contains a non-exhaustive list of components of the environment which includes: "natural resources both abiotic and biotic, such as air, water, soil, fauna and flora and the interaction between the same factors; property which forms part of the cultural heritage; and the characteristic

(*Continued on next page.*)

definition of "natural resources" covers living and non-living natural resources, including their ecosystems.

(24) Paragraph (*c*) defines "hazardous activity" by reference to any activity which has a risk of causing transboundary harm. It is understood that such risk of harm should be through its physical consequences, thereby excluding such impacts as may be caused by trade, monetary, socio-economic or fiscal policies. The commentary concerning the scope of application of these draft principles above has explained the meaning and significance of the terms involved.

(25) Paragraph (*d*) defines the State of origin. This means the State in the territory or otherwise under jurisdiction or control of which the hazardous activity is carried out. The term "territory", "jurisdiction", or "control" is understood in the same way as in the draft articles on prevention.[366] Other terms are also used for the purpose of the present principles. They include, as defined under the draft articles on prevention, the "State likely to be affected" (a State on whose territory or in other places under whose jurisdiction or control there is the risk of significant transboundary harm) and there may be more than one such State likely to be affected in relation to any given situation of transboundary damage. The draft principles also use the term "States concerned" (the State of origin, any State affected and any State likely to be affected). "State affected" is not defined by the draft articles on prevention. For the purposes of the present draft principles it would be the States in whose territory, or in places under jurisdiction or control of which, damage occurs as a result of an incident concerning a hazardous activity in the State of origin. More than one State may be so affected. These terms have not been defined in the "Use of terms" for reasons of balance and economy.

(26) Paragraph (*e*) defines "transboundary damage". It refers to damage occurring in one State because of an accident or incident involving a hazardous activity with effect in another State. This concept is based on the well-accepted notions of territory, jurisdiction or control by a State. In that sense, it refers to damage caused in the territory or in other places outside the territory but under the jurisdiction or control of a State other than the State in the territory or otherwise under the jurisdiction or control of which the hazardous activities are carried out. It does not matter whether or not the States in question share a common border. This definition includes, for example, activities conducted under the jurisdiction or control of a State such as on its ships or platforms on the high seas, with effects on the territory of another State or in places under its jurisdiction or control. However, it goes without stating that some other possibilities could also be involved, which may not be readily contemplated.

(27) The definition is intended to clearly identify and distinguish a State under whose jurisdiction or control an activity covered by these principles is conducted, from a State which has suffered the injurious impact.

(28) As is often the case with incidents falling within the scope of the present draft principles, there may be victims both within the State of origin and within the other States where damage is suffered. In the disbursement of compensation, particularly in terms of the funds expected to be made available to victims as envisaged in draft principle 4 below, some funds may also be made available for damage suffered in the State of origin. Article XI of the Convention on Supplementary Compensation for Nuclear Damage envisages such a system.

(29) Paragraph (*f*) defines "victim". The definition includes natural and legal persons, and includes the State as custodian of public property.[367] This definition is linked to and may be deduced from the definition of damage in paragraph (*a*) which includes damage to persons, property or the environment.[368] A person who suffers personal injury or damage or loss of property would be a victim for the purposes of the draft principles. A group of persons or a municipality ("*commune*") could also be a victim. In the *People of Enewetek* case, the Marshall Islands Nuclear Claims Tribunal, established under the 1987 Marshall Islands Nuclear Claims Tribunal Act, considered questions of compensation in respect of the people of Enewetek for past and future loss of use of the Enewetak Atoll; for restoration of Enewetak to a safe and productive state; and for the hardships suffered by the people of Enewetak as a result of their relocation attendant to their loss of use occasioned by the nuclear tests conducted on the atoll.[369] In the *Amoco Cadiz* litigation, following the Amoco Cadiz supertanker disaster off Brittany, the French administrative *départements* of Côtes du Nord and Finistère and numerous "*communes*", and various French individuals, businesses and associations sued the owner of the Amoco Cadiz, and its parent company in the United States. The claims involved lost business. The French

(*Footnote 365 continued.*)

aspects of the landscape"; article 1 (*c*) of the Convention on the Transboundary Effects of Industrial Accidents refers to the adverse consequences of industrial accidents on "(i) [h]uman beings, flora and fauna; (ii) [s]oil, water, air and landscape; (iii) [t]he interaction between the factors in (i) and (ii); (iv) [m]aterial assets and cultural heritage, including historical monuments"; article 1, paragraph 2 of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes says that "effects on the environment include effects on human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interaction among these factors; they also include effects on the cultural heritage or socio-economic conditions resulting from alterations to those factors".

[366] *Yearbook ... 2001*, vol. II (Part Two) and corrigendum, pp. 150–151 (paras. (7)–(10) of the commentary to draft article 1).

[367] On the contribution of Edith Brown Weiss to the development of the concept of "stewardship" or "trusteeship" as striking "a deep chord with Islamic, Judeo-Christian, African, and other traditions", and for the view that "[s]ome forms of public trusteeships are incorporated in most legal systems" including the United Kingdom and India, see R. Mushkat, *International Environmental Law and Asian Values: Legal Norms and Cultural Influences*, Vancouver, UBC Press, 2004, p. 18. See also J. Razzaque, *Public Interest Environmental Litigation in India,Pakistan and Bangladesh*, The Hague, Kluwer Law International, 2004, p. 424, for the role of public trust doctrine in Bangladesh, India and Pakistan.

[368] In respect of international criminal law, see the Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power, General Assembly resolution 40/34 of 29 November 1985. See also the Rome Statute of the International Criminal Court (article 79).

[369] *In the Matter of the People of Enewetak*, ILM, vol. 39, No. 5 (September 2000), pp. 1214 *et seq*. In December 1947, the population of Enewetak was moved from Enewetak Atoll to Ujelang Atoll. At the time of the move, the acreage of the Enewetek Atoll was 1,919.49 acres. Upon their return on 1 October 1980, 43 tests of atomic devices had been conducted, at which time 815.33 acres were returned for use, another 949.8 acres were not available for use and an additional 154.36 acres had been vaporized (*ibid.*, p. 1214).

Government itself laid claims for recovery of pollution damages and clean-up costs.[370]

(30) The definition of "victim" is thus linked to the question of standing. Some liability regimes, such as the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment and the Directive 2004/35/CE of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage, provide standing for NGOs.[371] The 1998 Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters also gives standing to NGOs to act on behalf of public environmental interests. Victims may also be those designated under national laws to act as public trustees to safeguard those resources and hence may have the legal standing to sue. The concept of "public trust" in many jurisdictions provides proper standing to different designated persons to lay claims for restoration and clean-up in case of any transboundary damage.[372] For example, under the United States Oil Pollution Act, such a right is given to the United States Government, a state, an Indian tribe and a foreign Government. Under the United States Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended in 1986 by the Superfund Amendments and Reauthorization Act, *locus standi* has been given only to the federal Government, authorized representatives of states, as trustees of natural resources, or by designated trustees of Indian tribes. In some other jurisdictions, public authorities have been given a similar right of recourse. Thus, Norwegian law provides standing to private organizations and societies to claim restoration costs. In France, some environmental associations have been given the right to claim compensation in criminal cases involving violation of certain environmental statutes. The Supreme Court of India has entertained petitions from individuals or groups of individuals under its well-developed public interest litigation cases or class action suits to protect the environment from damage and has awarded compensation to victims of industrial and chemical pollution.[373]

(31) Paragraph (*g*) defines "operator". There is no general definition of "operator" under international law, although the term is employed in domestic law[374] and in treaty practice. In the latter, the nuclear damage regimes impose liability on the operator.[375] The definition of "operator" would vary, however, depending upon the nature of the activity. The channelling of liability onto one single entity, whether owner or operator, is the hallmark of strict liability regimes. Thus, some person other than the operator may be specifically identified as liable depending on the interests involved in respect of a particular hazardous activity. For example, at the 1969 Conference leading to the adoption of the 1969 International Convention on Civil Liability for Pollution Damage, the possibility existed of imposing liability on the shipowner or the cargo owner or both.[376] Under an agreed compromise, the shipowner was made strictly liable.[377]

(32) The draft principles envisage the definition of "operator" in functional terms and it is based on a factual determination as to who has use, control and direction of the object at the relevant time. Such a definition

[370] See *In the Matter of: Oil Spill by the Amoco Cadiz off the coast of France on March 16, 1978*, United States Court of Appeals for the Seventh Circuit, 954 F.2d 1279. See also M. C. Maffei, *loc. cit.* (footnote 346 above), p. 381.

[371] See article 18 of the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment and article 12 of Directive 2004/35/CE of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage (footnote 316 above).

[372] P. Wetterstein, "A proprietary or possessory interest ...", *loc. cit.* (footnote 323 above), pp. 50–51.

[373] See Law Commission of India, *One Hundred Eighty Sixth Report on Proposal to Constitute Environmental Courts*, September 2003, p. 31 (available at http://lawcommissionofindia.nic.in/reports.htm). Articles 32 and 226 of the Indian Constitution provide for writ jurisdiction of the Supreme Court and the High Courts of India in this regard. The Courts have also used article 21 of the Indian Constitution and expanded the meaning of "life" to include the "right to a healthy environment". See also Razzaque, *op. cit.* (footnote 367 above), pp. 314–315, 429 and 443, where the author refers to arguments that the liberal standing provided before the courts of Bangladesh, India and Pakistan to bring environmental causes of action have led to the immobility and inefficiency in administration as well as the clogging of cases before the courts. This contribution is noteworthy for the overall assessment of progress made and reforms needed in the subcontinent to promote protection of the environment.

[374] For domestic law, see, for example, the 1990 Oil Pollution Act (footnote 341 above), in which the following individuals may be held liable: (*a*) a responsible party such as the owner or operator of a vessel, onshore and offshore facility, deepwater port and pipeline; (*b*) the "guarantor", the "person other than the responsible party, who provides evidence of financial responsibility for a responsible party"; and (*c*) third parties (individuals other than those mentioned in the first two categories, their agents or employees or their independent contractors, whose conduct is the sole cause of injury). See also the United States Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (footnote 351 above).

[375] See, for example, the Convention on third party liability in the field of nuclear energy and the Protocol to amend the Convention on Third Party Liability in the field of Nuclear Energy of 29 July 1960, as amended by the Additional Protocol of 28 January 1964 and by the Protocol of 16 November 1982: "'operator' in relation to a nuclear installation means to the person designated or recognised by the competent public authority as the operator of that installation" (common article 1 (vi)). See also the Vienna Convention on civil liability for nuclear damage (operator) (article IV); the Protocol to amend the Vienna Convention on civil liability for nuclear damage ("operator") (article 1 (*c*)); and the Convention on the Liability of Operators of Nuclear Ships ("operator of nuclear ships") (article II).

[376] See *Official Records of the International Legal Conference on Marine Pollution Damage, 1969*, Inter-Governmental Maritime Consultative Organization, 1973 (LEG/CONF/C.2/SR.2–13), cited in D. W. Abecassis and R. L. Jarashow, *Oil Pollution from Ships: International, United Kingdom and United States Law and Practice*, 2nd ed., London, Stevens and Sons, 1985, p. 253. Some regimes that attach liability to the shipowner are the 1992 Protocol to amend the International Convention on Civil Liability for Pollution Damage (art. III, para. 1); the International Convention on Civil Liability for Bunker Oil Pollution Damage (art. 3); and the 1996 International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS Convention) (art. 7, para. 1).

[377] See also the Convention on Civil Liability for Damage caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels (CRTD), which defines "carrier" with respect to inland navigation vessels as "the person who at the time of the incident controls the use of the vehicle on board which the dangerous goods are carried" (art. 1, para. 8); the International Convention on Civil Liability for Oil Pollution Damage resulting from Exploration for and Exploitation of Seabed Mineral Resources defines the operator of a continental shelf installation to include, in the absence of a designation by a Contracting Party, "the person who is in overall control of the activities carried on at the installation" (art. 1, para. 3); and under the EU Directive 2004/35/CE of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage (footnote 316 above), which attaches liability to the operator, the term "operator" includes any natural or legal, private or public person who operates or controls the occupational activity.

is generally in conformity with notions prevailing in civil law.[378] More generally, while no basic definition of "operator" has been developed, "recognition has been gained for the notion that by operator is meant one in actual, legal or economic control of the polluting activity".[379]

(33) The term "command" connotes an ability to use or control some instrumentality. Thus it may include the person making use of an aircraft at the time of the damage, or the owner of the aircraft if he retained the rights of navigation.[380] It should be clear, however, that the term "operator" would not include employees who work or are in control of the activity at the relevant time.[381] The term "control" denotes power or authority to manage, direct, regulate, administer or oversee.[382] This could cover the person to whom decisive power over the technical functioning of an activity has been delegated, including the holder of a permit or authorization for such an activity or the person registering or notifying such an activity.[383] It may also include a parent company or other related entity, whether corporate or not, particularly if that entity has actual control of the operation.[384] An operator may be a public or private entity. It is envisaged that a State could be an operator for purposes of the present definition.

(34) The phrase "at the time of the incident" is intended to establish a connection between the operator and the transboundary harm. The looser and less concrete the link between the incident in question and the property claimed to have been damaged, the less certain the right to get compensation.

[378] See E. Reid, "Liability for dangerous activities: a comparative analysis", *International and Comparative Law Quarterly*, vol. 48 (October 1999), pp. 731–756, at p. 755.

[379] M.-L. Larsson, *The Law of Environmental Damage: Liability and Reparation*, The Hague, Kluwer Law International, 1999, p. 401.

[380] See the Convention on damage caused by foreign aircraft to third parties on the surface (article 12).

[381] See article 2 (*c*) of Annex VI to the Protocol on Environmental Protection to the Antarctic Treaty on Liability Arising From Environmental Emergencies: "'operator' means any natural or juridical person, whether governmental or non-governmental, which organises activities to be carried out in the Antarctic Treaty area. An operator does not include a natural person who is an employee, contractor, subcontractor, or agent of, or who is in the service of, a natural or juridical person, whether governmental or non-governmental, which organises activities to be carried out in the Antarctic Treaty area, and does not include a juridical person that is a contractor or subcontractor acting on behalf of a State operator".

[382] The definition of "ship owner" in the International Convention on Civil Liability for Bunker Oil Pollution is broad. It includes "the registered owner, bareboat charterer, manager and operator of the ship" (art. 1, para. 3).

[383] See Directive 2004/35/CE of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage (footnote 316 above), article 2, para. 6.

[384] Under article 8 of the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA), the primary liability lies with the *operator*, which is defined in article 1, paragraph 11 as "a Party; or an agency or instrumentality of a Party; or a juridical person established under the law of a Party; or a joint venture consisting exclusively of any combination of the foregoing". Pursuant to section 16.1 of the Standard clauses for exploration contract annexed to the Regulations on the Prospecting and Exploration for Polymetallic Nodules in the Area adopted by the International Seabed Authority on 13 July 2000, the *contractor* is "liable for the actual amount of any damage, including damage to the marine environment, arising out of its wrongful acts or omissions, and those of its employees, subcontractors, agents and all persons engaged in working or acting for them" (ISBA/6/A/18, Annex 4, Clause 16).

Principle 3. Purposes

The purposes of the present draft principles are:

(*a*) to ensure prompt and adequate compensation to victims of transboundary damage; and

(*b*) to preserve and protect the environment in the event of transboundary damage, especially with respect to mitigation of damage to the environment and its restoration or reinstatement.

Commentary

(1) The two-fold purpose of the present draft principles is to ensure protection to victims suffering damage from transboundary harm and to preserve and protect the environment *per se* as common resource of the community.

(2) The purpose of ensuring protection to victims suffering damage from transboundary harm has been an essential element from the inception of the study of the topic by the Commission. In his schematic outline, Robert Q. Quentin-Baxter focused on the need to protect victims, which required "measures of prevention that as far as possible avoid a risk of loss or injury and, in so far as that is not possible, measures of reparation", so that "an innocent victim should not be left to bear his loss or injury".[385] The former consideration is already addressed by the draft articles on prevention.[386]

(3) The notion of prompt and adequate compensation in paragraph (*a*) reflects the understanding and the desire that victims of transboundary damage should not have to wait long in order to be compensated. The importance of ensuring prompt and adequate compensation to victims of transboundary damage has its underlying premise in the *Trail Smelter* arbitration[387] and the *Corfu Channel* case,[388] as further elaborated and encapsulated in principle 21 of the Stockholm Declaration, namely:

> 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 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.[389]

(4) The notion of liability and compensation for victims is also reflected in principle 22 of the Stockholm Declaration, wherein a common conviction is expressed that:

[385] *Yearbook ... 1982,* vol. II (Part One), document A/CN.4/360, p. 63, para. 53 (schematic outline, section 5, paras. 2–3).

[386] See footnote 292 above.

[387] "[U]nder the principles of international law, … 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 consequences and the injury is established by clear and convincing evidence" (*Trail Smelter* (see footnote 226 above), p. 1965).

[388] In this case, the Court stated that it was "every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States" (*Corfu Channel* (see footnote 197 above), at p. 22).

[389] See footnote 312 above.

Annex 652

"Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law", Report of the Study Group of the International Law Commission, finalised by Mr Martti Koskenniemi, A/CN.4/L.682 and Add.1, 13 April 2006, pages 17-20, 104-106

FRAGMENTATION OF INTERNATIONAL LAW: DIFFICULTIES ARISING FROM THE DIVERSIFICATION AND EXPANSION OF INTERNATIONAL LAW

[Agenda item 11]

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Report of the Study Group of the International Law Commission, finalized by Mr. Martti Koskenniemi**

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CONTENTS

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cedures Governing the Settlement of Disputes limits jurisdiction only to claims that arise under agreements covered by WTO, there is no explicit provision identifying the scope of applicable law.[44] By contrast, for example, Article 38 of the Statute of the International Court of Justice, by listing the sources that the Court should have recourse to in deciding cases, does identify the law to be applied by the Court.[45] Similarly, the United Nations Convention on the Law of the Sea provides that the International Tribunal on the Law of the Sea has "jurisdiction over any dispute concerning the interpretation or application of this Convention" and that, when deciding cases, it "shall apply this Convention and other rules of international law not incompatible with this Convention".[46] As no such explicit provision exists in the Understanding on Rules and Procedures Governing the Settlement of Disputes, the question of the scope of applicable law has seemed problematic. However, WTO is certainly not the only context in which a treaty body has been set up without any express mention that it should apply international law. As will be argued at length, especially in chapters II and V below, treaties covered by WTO are creations of, and constantly interact with, other norms of international law.[47] As the WTO Appellate Body stated in its very first case, "the General Agreement [on Tariffs and Trade of 1994] is not to be read in clinical isolation from public international law".[48] What this means in practice is by no means straightforward, but it states what has never been seriously doubted by any international tribunal or treaty-body: that, even as the jurisdiction of a body is limited (as it always—even in the case of the International Court of Justice—is), its exercise of that jurisdiction is controlled by the normative environment.

rights", EJIL, vol. 13, No. 4 (2002), p. 753, at pp. 757–779; A. Lindroos and M. Mehling, "Dispelling the chimera of 'self-contained regimes' international law and the WTO", EJIL, vol. 16, No. 5 (2005), p. 857, at pp. 860–866.

[44] Articles 1, para. 1; 3, para. 2; 7; 11 and 19, para. 2, of the Understanding on Rules and Procedures Governing the Settlement of Disputes have been used to argue both in favour of and against a more extensive scope of applicable law in WTO dispute settlement. See, for example, Bartels, "Applicable law…" (footnote 43 above), pp. 502–509, and Lindroos and Mehling, "Dispelling the chimera of 'self-contained regimes'…" (footnote 43 above), pp. 873–875; see also WTO Panel report, *Korea—Measures Affecting Government Procurement*, WT/DS163/R, adopted 19 June 2000, para. 7.101, footnote 755.

[45] See, for example, Bartels, "Applicable law…" (footnote 43 above), pp. 501–502, and Palmeter and Mavroidis (footnote 43 above), pp. 398–399.

[46] Articles 288, para. 1, and 293, para. 1, of the United Nations Convention on the Law of the Sea.

[47] For instance, Palmeter and Mavroidis (see footnote 43 above), pp. 398–399; J. P. Trachtman, "The domain of WTO dispute resolution", *Harvard International Law Journal*, vol. 40, No. 2 (spring 1999), p. 333; Bartels, "Applicable law…" (footnote 43 above), pp. 501–502; Pauwelyn, "The role of public international law in the WTO…" (footnote 43 above), pp. 554–566; Pauwelyn, *Conflict of Norms…* (footnote 21 above); Marceau, "WTO dispute settlement and human rights" (footnote 43 above), pp. 757–779; Lindroos and Mehling, "Dispelling the chimera of 'self-contained regimes'…" (footnote 43 above), pp. 860–866.

[48] *United States—Standards for Reformulated and Conventional Gasoline*, WTO Appellate Body report, WT/DS2/AB/R, adopted 20 May 1996, p. 17. Similarly, for example, in *Korea—Measures Affecting Government Procurement* (see footnote 44 above), the Panel stated in paragraph 7.96 that "[c]ustomary international law applies generally to the economic relations between the WTO [m]embers. Such international law applies to the extent that the WTO treaty agreements do not 'contract out' from it."

Chapter II

Conflicts between special law and general law

46. This chapter deals with the case where a normative conflict is characterized by a relationship of "speciality" *versus* "generality" between the conflicting norms. The chapter is in five parts. Section A provides a framework for the discussion of conflicts where the speciality or generality of conflicting norms becomes an issue. Section B outlines the role and nature of the *lex specialis* rule as a pragmatic mechanism for dealing with situations where two rules of international law that are both valid and applicable deal with the same subject matter differently.[49] Section C gives an overview of the case law and academic discussion on "self-contained regimes". Section D is a brief discussion of regionalism in international law. Section E presents conclusions on conflicts between special law and general law.

A. Introduction

47. One of the most well-known techniques for analysing normative conflicts focuses on the generality *versus* the particularity of the conflicting norms. In this regard, it is possible to distinguish three types of conflict:

(*a*) Conflicts between general law and a particular, unorthodox interpretation of general law;

(*b*) Conflicts between general law and a particular rule that claims to exist as an exception to it; and

(*c*) Conflicts between two types of special law.

48. Fragmentation appears differently in each of these three types of conflict. While the first type is really about the effects of differing legal interpretations in a complex institutional environment, and therefore falls strictly speaking outside the scope of the Commission's study, the latter two denote genuine types of conflict where the law itself (in contrast to some putative interpretation of it) appears differently depending on which normative framework is used to examine it.[50] Each of the three types of conflict is illustrated briefly below.

1. Fragmentation through conflicting interpretations of general law

49. In the *Tadić* case in 1999, the Appeals Chamber of the International Tribunal for the Former Yugoslavia

[49] To say that a rule is "valid" is to point to its being a part of the ("valid") legal order. To say it is applicable means that it provides rights, obligations or powers to a legal subject in a particular situation.

[50] See discussion of the dependence of normative conflict of different conceptual frameworks in Koskenniemi and Leino, "Fragmentation of international law? …" (footnote 14 above), pp. 553–579.

considered the responsibility of Serbia and Montenegro for the acts of the Bosnian Serb militia in the conflict in the former Yugoslavia. For this purpose it examined the jurisprudence of the International Court of Justice in the *Military and Paramilitary Activities in and against Nicaragua* case of 1986. In the latter case, the United States was not held responsible for the acts of the Nicaraguan *contras* despite organizing, financing, training and equipping them. Such involvement failed to meet the test of "effective control".[51] The International Tribunal for the Former Yugoslavia, for its part, concluded that "effective control" set too high a threshold for holding an outside power legally accountable for domestic unrest. It was sufficient for the power to have "a role in organising, coordinating or planning the military actions of the military group"—*i.e.* to exercise "overall control" over them—for the conflict to be an "international armed conflict".[52]

50. The contrast between *Military and Paramilitary Activities in and against Nicaragua* and *Tadić* is an example of a normative conflict between an earlier and a later interpretation of a rule of general international law.[53] *Tadić* does not suggest that "overall control" exists alongside "effective control", either as an exception to the general law or as a special (local) regime governing the conflict in the former Yugoslavia. It seeks to *replace* that standard altogether.

51. The point is not to take a stand in favour of either *Tadić* or *Military and Paramilitary Activities in and against Nicaragua*, only to illustrate the type of normative conflict where two institutions faced with analogous facts interpret the law in differing ways. This is a common occurrence in any legal system, but its consequences for the international legal system, which lacks a proper institutional hierarchy, might seem particularly problematic. Imagine, for example, a case where two institutions interpret the general (and largely uncodified) law concerning title to territory differently. For one institution, State A has validly acquired title to a piece of territory that another institution regards as part of State B. In the absence of a superior institution that could decide such a conflict, States A and B could not undertake official acts with regard to the territory in question with confidence that those acts would be given legal effect by outside powers or institutions. Similar problems would emerge in regard to any conflicting interpretations concerning a general law granting legal status.

52. Differing views about the content of general law create two types of problem. First, they diminish legal security. Legal subjects are no longer able to predict the reaction of official institutions to their behaviour and to plan their activity accordingly. Second, they place legal subjects in an unequal position *vis-à-vis* each other. The rights they enjoy depend on which jurisdiction is seized to enforce them. Most domestic laws deal with these problems by means of appeals. An authority (usually a court) at a higher hierarchical level will provide a formally authoritative ruling.[54] Such authority is not normally present in international law. To the extent that such conflicts emerge and are considered a problem (which need not always be the case), they can only be dealt with by legislative or administrative means. Either States adopt a *new law* that settles the conflict, or the institutions will seek to coordinate their jurisprudence in the future.

2. Fragmentation through the emergence of special law as an exception to general law

53. A different case is one where an institution makes a decision that deviates from how situations of a similar type have been decided in the past because the new case is held not to come under the general rule, but to form an *exception* to it. This may be illustrated by how human rights organs have dealt with reservations. In the *Belilos v. Switzerland* case (1988), the European Court of Human Rights viewed a declaration made by Switzerland in its instrument of ratification as in fact a reservation, struck it down as incompatible with the object and purpose of the European Convention on Human Rights, and held Switzerland bound by the Convention "irrespective of the validity of the declaration".[55] In subsequent cases, the European Court has pointed out that the normal rules on reservations to treaties do not as such apply to human rights law. In the Court's view:

> a fundamental difference in the role and purpose of the respective tribunals [*i.e.* of the International Court of Justice and the European Court of Human Rights], coupled with the existence of a practice of unconditional acceptance … , provides a compelling basis for distinguishing Convention practice from that of the International Court.[56]

54. Again, the point is neither to endorse nor to criticize the European Court of Human Rights but to point to a phenomenon which, whatever one may think about it, has to do with the emergence of exceptions or patterns of exception in regard to some subject matter that deviate from the general law and that are justified because of the special properties of that subject matter.

3. Fragmentation as differentiation between types of special law

55. Finally, a third case is a conflict between different types of special law. This may be illustrated by reference to debates on trade and the environment. In the 1998 *EC—Hormones* case, the WTO Appellate Body considered the

[51] *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America)*, Merits, Judgment of 27 June 1986, *I.C.J. Reports 1986*, p. 14, at pp. 64–65, para. 115.

[52] *Prosecutor v. Duško Tadić*, Appeals Chamber, International Tribunal for the Former Yugoslavia, case No. IT-94-1-A, judgment of 15 July 1999, *Judicial Reports 1999*, p. 3, at pp. 47–62, paras. 115, 116–145; ILM, vol. 38, No. 6 (November 1999), pp. 1540–1546.

[53] This need not be the only—nor indeed the correct—interpretation of the contrast between the two cases. As some commentators have suggested, the cases can also be distinguished from each other on the basis of their facts. In this case, there would be no normative conflict. Whichever view seems better founded, the point of principle remains: it cannot be excluded that two tribunals faced with similar facts may interpret the applicable law differently.

[54] From a theoretical perspective, the position of courts is absolutely central in managing the functional differentiation—*i.e.* fragmentation—within the law. Coherence here is based on the duty to decide even "hard cases". See, in this regard, especially N. Luhmann, *Law as a Social System,* (trans. K. A. Zeigert, ed. F. Kastner and others), Oxford, Oxford University Press, 2004, in particular pp. 284–296.

[55] *Belilos v. Switzerland*, judgment of 29 April 1988, European Court of Human Rights, Series A, No. 132, p. 28, para. 60.

[56] *Loizidou v. Turkey*, preliminary objections, judgment of 23 March 1995, European Court of Human Rights, Series A, No. 310, p. 29, para. 85.

status of the so-called "precautionary principle" under treaties covered by WTO, especially the Agreement on the Application of Sanitary and Phytosanitary Measures. It concluded that, whatever the status of that principle in "international environmental law", it had not become binding for the WTO.[57] This approach suggests that "environmental law" and "trade law" might be governed by different principles. Which rule to apply would then depend on how a case would be qualified in this regard. This might seem problematic, as denominations such as "trade law" or "environmental law" have no clear boundaries. For example, maritime transport of oil has links to both trade and the environment, as well as to rules on the law of the sea. Should the obligations of a ship owner in regard to the technical particularities of a ship, for instance, be determined by reference to what is reasonable from the perspective of oil transport considered as a commercial activity or as an environmentally dangerous activity? The responses are bound to vary depending on which is chosen as the relevant frame of legal interpretation.

B. The function and scope of the *lex specialis* maxim

1. *Lex specialis* in international law

(a) *Legal doctrine*

56. The principle that special law derogates from general law is a widely accepted maxim of legal interpretation and technique for the resolution of normative conflicts.[58] It suggests that, if a matter is regulated by a general standard as well as by a more specific rule, then the latter should take precedence over the former. The relationship between the general standard and the specific rule may, however, be conceived in two ways. One is the case where the specific rule should be read and understood within the confines or against the background of the general standard, typically as an elaboration, updating or technical specification thereof.[59] The specific and the general both point, as it were, in the same direction.

57. Sometimes *lex specialis* is, however, understood more narrowly to cover the case where two legal provisions, both of which are valid and applicable, are in no express hierarchical relationship and provide incompatible direction on how to deal with the same set of facts. In such a case, *lex specialis* appears as a conflict resolution technique. It suggests that, instead of the (general) rule, one should apply the (specific) exception.[60] In both cases, however, priority falls on the provision that is "special", *i.e.* the rule with a more precisely delimited scope of application.[61]

58. Nonetheless, the maxim does not admit of automatic application. In particular, two sets of difficulties may be highlighted. First, it is often hard to distinguish what is "general" and what is "particular", and, by focusing on the substantive coverage of a provision or the number of legal subjects to whom it is directed, one may arrive at different conclusions. An example would be provided by the relationship between a territorially limited general regime and a universal treaty on some specific subject.[62] Second, the principle also has an unclear relationship to other maxims of interpretation or conflict resolution techniques, such as the principle *lex posterior derogat legi priori* (later law overrides prior law), and may be offset by normative hierarchies or informal views about "relevance" or "importance".[63]

59. The idea that special enjoys priority over general has a long pedigree in international jurisprudence as well. Its rationale was already being clearly expressed by Grotius:

> *What rules ought to be observed in such cases* [*i.e.* where parts of a document are in conflict]. … Among agreements which are equal … that should be given preference which is most specific and approaches most nearly to the subject in hand; for special provisions are ordinarily more effective than those that are general.[64]

60. This passage refers to two reasons why the *lex specialis* rule is so widely accepted. A special rule is more to the point ("approaches most nearly to the subject in hand") than a general one and it regulates the matter more effectively ("are ordinarily more effective") than general rules. This could also be expressed by saying that special rules are better able to take account of particular circumstances. The need to comply with them is felt more acutely than is the case with general rules.[65] They have greater clarity and definiteness and are thus often felt to be

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[57] *EC Measures Concerning Meat and Meat Products (Hormones),* WTO Appellate Body report, WT/DS26/AB/R, WT/DS48/AB/R, adopted 13 February 1998, paras. 123–125.

[58] The principle *lex specialis derogat legi generali* has a long history; the principle was included in the *Corpus Iuris Civilis*. See Papinian, Dig. 48, 19, 41 and Dig. 50, 17, 80. The latter states: "*In toto iure generi per speciem derogatur et illud potissimum habetur, quod ad speciem derectum est*" ("In the whole of law, species takes precedence over genus, and anything that relates to species is regarded as most the important") (*The Digest of Justinian*, vol. IV, Philadelphia, University of Pennsylvania Press, 1985, Latin text ed. T. Mommsen and P. Krueger, trans. ed. A. Watson). Some of its alternative formulations are "*generalibus specialia derogant*", "*generi per speciem derogatur*" and "*specialia generalibus, non generalia specialibus*". This report does not deal with another close variant, namely the *ejusdem generis* rule, *i.e.* the rule of interpretation according to which special words control the meaning of general ones. For a discussion, see A. D. McNair, *The Law of Treaties,* Oxford, Clarendon Press, 1961, pp. 393–399.

[59] This understanding appears, for example, in Mus (see footnote 21 above), at p. 218. Fitzmaurice, too, thinks there is *lex specialis* when "a matter governed by a specific provision … is thereby taken out of the scope of a general provision" (G. Fitzmaurice, "The law and procedure of the International Court of Justice 1951–4: treaty interpretation and other treaty points", *British Year Book of International Law 1957*, vol. 33, p. 203, at p. 236).

[60] A. Peczenik, *Juridikens metodproblem,* Stockholm, Gebers, 1980, p. 106.

[61] That is, when the description of the scope of application in one provision contains at least one quality that is not singled out in the other. K. Larenz, *Methodenlehre der Rechtswissenschaft,* Berlin, Springer, 1975, pp. 251–252.

[62] Such conflicts, Jenks suggests, can only be decided on their merits. See Jenks (footnote 8 above), p. 447.

[63] For different possibilities, see H. T. Klami, "Legal heuristics: a theoretical skeleton", *Oikeustiede–Jurisprudentia* XV (1982), pp. 46–53. See also Sadat-Akhavi (footnote 21 above), pp. 189–191. For examples of cases where a more general treaty overrides a more specific one because of its "relevance" or "overriding character", see *ibid.,* pp. 114–125 and 125–131 and *passim*. Ian Sinclair speaks of a mixture of techniques and maxims in *The Vienna Convention on the Law of Treaties*, 2nd ed., Manchester, Manchester University Press, 1984, pp. 95–98.

[64] H. Grotius, *De Jure Belli ac Pacis: Libri Tres,* J. Brown Scott (ed.), *The Classics of International Law*, Oxford, Clarendon Press, 1925, book II, chap. XVI, sect. XXIX, p. 428.

[65] For the reasoning behind the need to prefer "special" over "general", see also Dupuy, "L'unité de l'ordre juridique international…" (footnote 14 above), pp. 428–429.

"harder" or "more binding" than general rules, which may stay in the background and be applied only rarely. Moreover, *lex specialis* may also seem useful as it may provide better access to what the parties may have willed.[66]

61. It is therefore no wonder that the literature generally accepts *lex specialis* as a valid maxim of interpretation or conflict resolution technique in public international law, too, though it is seldom given lengthy treatment. The classical writers (Pufendorf, de Vattel) accepted it among other techniques as a matter of course.[67] Anzilotti gave it a rather absolute formulation: "*in toto iure genus per speciem derogatur; la norme de droit particulier l'emporte sur la norme générale*". As was consistent with his voluntarism, a treaty between two States would prevail over a multilateral treaty just as the latter would have priority over customary law.[68] For him, as, for example, for Charles Rousseau, the power of the *lex specialis* maxim lay in the way in which it seemed to realize party will.[69] For Georges Scelle, by contrast, a special rule would only rarely be allowed to override what he called "*l'économie d'ensemble*" of the general law. It followed from his sociological anti-voluntarism that general regulation, expressive of an objective sociological interest, would always prevent contracting out by individual States.[70]

62. It seems clear, however, that both approaches are too absolute—either too respectful of the wills of individual States or not respectful enough of the need to deviate from abstract maxims. Later lawyers have stressed the relativity of the *lex specialis* principle, the need to balance it with *lex posterior,* and the hierarchical status that the more general provision may enjoy.[71]

63. The Commission has outlined its application at some length in the commentary to article 55 of the draft articles on responsibility of States for internationally wrongful acts:

Article 55. Lex specialis

These articles do not apply where and to the extent that the conditions for the existence of an internationally wrongful act or the content or implementation of the international responsibility of a State are governed by special rules of international law.

64. This provision establishes normative priority for any special rules in its field of application. Or, as the Commission explains in the commentary, it means "that the present articles operate in a residual way".[72] The provision clearly expresses the wish of the Commission to allow States to develop, apply and derogate from the general rules of State responsibility by agreement between themselves. Yet, of course, such power cannot be unlimited: rules that derogate must have at least the same rank as those they derogate from. It is hard to see how States could, for example, derogate from those aspects of the general law on State responsibility that define the conditions of operation of "serious breaches of obligations under peremptory norms of general international law".[73]

65. In doctrine, *lex specialis* is usually discussed as one factor among others in treaty interpretation (arts. 31–33 of the 1969 Vienna Convention) or in dealing with the question of successive treaties (art. 30 of the 1969 Vienna Convention, especially in relation to the principle of *lex posterior*).[74] Although the principle did not find its way into the text of the Convention, it was still observed during the drafting process that, among techniques for resolving conflicts between treaties, it was useful to pay attention to the extent to which a treaty might be "special" in relation to another treaty.[75]

66. But there is no reason to limit the operation of *lex specialis* to relationships between treaties. Jennings and Watts, for instance, indicate that the principle "has sometimes been applied in order to resolve apparent conflicts between two differing and potentially applicable

[66] See also Pauwelyn, *Conflict of Norms...* (footnote 21 above), p. 388. For the voluntarist understanding of *lex specialis*, rebuttable in view of other evidence, see N. Kontou, *The Termination and Revision of Treaties in the Light of New Customary International Law,* Oxford, Clarendon Press, 1994, p. 142 and references.

[67] S. Pufendorf, *Le droit de la nature et des gens, ou Système général des principes les plus importants de la morale, de la jurisprudence, et de la politique* (trans. J. Barbeyrac), Basel, Thourneisen, 1732, book V, chap. XII, pp. 138–140; E. de Vattel, *Le droit des gens, ou Principes de la loi naturelle, appliqués à la conduite et aux affaires des nations et des souverains* (London, 1758), Washington, D.C., Carnegie Institution, 1916, vol. I, book II, chap. XVII, para. 316.

[68] D. Anzilotti, *Cours de droit international*, vol. I (trans. G. Gidel), Paris, Sirey, 1929, p. 103.

[69] Rousseau, "De la compatibilité des normes juridiques contradictoires…" (see footnote 36 above), p. 177.

[70] G. Scelle, *Manuel de droit international public*, Paris, Domat-Montchrestien, 1948, p. 642.

[71] See, for example, A. Cavaglieri, "Règles générales du droit de la paix", *Recueil des cours de l'Académie de droit international de La Haye, 1929-I,* vol. 26, p. 334; G. E. do Nascimento e Silva, "Le facteur temps et les traités", *Recueil des cours de l'Académie de droit international de La Haye, 1977-I,* vol. 154, p. 246.

[72] Para. (2) of the commentary to article 55 of the draft articles on responsibility of States for internationally wrongful acts, *Yearbook ... 2001*, vol. II (Part Two) and corrigendum, p. 140.

[73] Commentaries to arts. 40–41 and 48, *ibid.*, pp. 112–116, 126–128.

[74] In addition to sources already cited, see, for example, Rousseau, "De la compatibilité des normes juridiques contradictoires…" (footnote 36 above), pp. 133–192, especially pp. 177–178, 188–189; Jenks (footnote 8 above), pp. 401–453, especially pp. 446–447; M. Zuleeg, "Vertragskonkurrenz im Völkerrecht. Teil I: Verträge zwischen souveränen Staaten", *German Yearbook of International Law*, vol. 20 (1977), pp. 247, especially pp. 256–259; W. Czapliński and G. Danilenko, "Conflicts of norms in international law", *Netherlands Yearbook of International Law*, vol. XXI (1990), p. 3, at pp. 20–21; Kontou (footnote 66 above), pp. 141–144; M. Fitzmaurice and O. Elias, *Contemporary Issues in the Law of Treaties*, Utrecht, Eleven International Publishing, 2005, especially pp. 314–348. See also M. S. McDougal, H. D. Lasswell and J. C. Miller, *The Interpretation of International Agreements and World Public Order: Principles of Content and Procedure,* New Haven/Dordrecht, New Haven Press/Martinus Nijhoff, 1994, pp. 199–206; Sinclair (footnote 63 above), p. 98; A. Aust, *Modern Treaty Law and Practice*, Cambridge, Cambridge University Press, 2000, p. 201. See also P. Daillier and A. Pellet, *Droit international public*, 7th ed., Paris, LGDJ, 2002, p. 271 (discussing *lex specialis* in the context of art. 30, para. 3, of the 1969 Vienna Convention). Very few commentators expressly reject the principle. See, however, U. Linderfalk, *Om tolkningen av traktater,* Lund, Lunds Universitet, 2001, pp. 353–354 (viewing it as covered by some techniques but overridden by others).

[75] Statement by the Expert Consultant (Waldock), *Official Records of the United Nations Conference on the Law of Treaties, second session, Vienna, 9 April–22 May 1969, Summary records of the plenary meetings and of the meetings of the Committee of the Whole* (A/CONF.39/11/Add.1, United Nations publication, Sales No. E.68.V.7), 91st meeting of the Committee of the Whole, 16 April 1969, p. 253. See also P. Reuter, *Introduction au droit des traités*, 2nd rev. ed., Paris, Presses Universitaires de France, 1985, p. 112.

ANNEX

DRAFT CONCLUSIONS OF THE WORK OF THE STUDY GROUP, FINALIZED BY MR. MARTTI KOSKENNIEMI

A. Introduction

1. At its fifty-fourth session (2002), the International Law Commission established a Study Group to examine the topic "Fragmentation of international law: difficulties arising from the diversification and expansion of international law".[1] At its fifty-fifth session (2003), the Commission adopted a tentative schedule for work to be carried out during the remaining part of the quinquennium (2003–2006) and allocated to five of its members the task of preparing outlines on the following topics:

(*a*) The function and scope of the *lex specialis* rule and the question of self-contained regimes (Mr. Martti Koskenniemi);

(*b*) The interpretation of treaties in the light of "any relevant rules of international law applicable in the relations between the parties" (art. 31, para. 3 (*c*), of the 1969 Vienna Convention), in the context of general developments in international law and concerns of the international community (Mr. William Mansfield);

(*c*) The application of successive treaties relating to the same subject matter (art. 30 of the 1969 Vienna Convention) (Mr. Teodor Melescanu);

(*d*) The modification of multilateral treaties between certain of the parties only (art. 41 of the 1969 Vienna Convention) (Mr. Riad Daoudi); and

(*e*) Hierarchy in international law: *jus cogens*, obligations *erga omnes* and Article 103 of the Charter of the United Nations as conflict rules (Mr. Zdzislaw Galicki).[2]

2. During its fifty-sixth (2004) and fifty-seventh (2005) sessions, the Study Group received a number of outlines and studies on these topics. It affirmed that it was its intention to prepare, as the substantive outcome of its work, a single collective document consisting of two parts. One would be a "relatively large analytical study" that would summarize the content of the various individual reports and the discussions of the Study Group. This forms the bulk of the report prepared by the Chairperson of the Study Group in 2006. The other part would be "a condensed set of conclusions, guidelines or principles emerging from the studies and the discussions in the Study Group".[3] As the Study Group itself held, and the Commission endorsed, these should be "a concrete, practice-oriented set of brief statements that would work, on the one hand, as the summary and conclusions of the Study Group's work and, on the other hand, as a set of practical guidelines to help in thinking about and dealing with the issue of fragmentation in legal practice".[4]

[1] *Yearbook … 2002*, vol. II (Part Two), paras. 492–494.

[2] *Yearbook … 2003*, vol. II (Part Two), paras. 424–428.

[3] *Yearbook … 2005*, vol. II (Part Two), para. 448.

[4] *Ibid.*

3. This annex sets out a draft for those "conclusions, guidelines or principles". The draft reproduces the result of the extensive deliberations the Study Group had undertaken in 2004 and 2005. They are a collective product by the members of the Study Group.

4. It should be noted, however, that:

(*a*) Only the formulation of conclusions 1 to 23, based on the studies referred to in paragraphs 1 (*a*)–(*c*) above, have so far been provisionally agreed to by the Study Group;

(*b*) Draft conclusions 24 to 32, dealing with the topic referred to in paragraph 1 (*d*) above under the general title of "Conflicts between successive norms", have been neither presented to nor discussed in the Study Group. They have been formulated by the Chairperson of the Study Group as a proposal to be discussed during the fifty-eighth session (2006);

(*c*) Draft conclusions 33 to 43 are based on the report referred to in paragraph 1 (*e*) above. They were distributed to the Study Group in 2005 but have not been subjected to in-depth discussion. It is proposed that they be discussed and adopted in the course of the finalization of the Study Group's work during the Commission's fifty-eighth session in 2006.

5. The Chairperson of the Study Group wishes to reproduce all the draft conclusions below. The suggestion is that the conclusions would be adopted by the Study Group and submitted to the Commission for appropriate action.

B. Draft conclusions of the work of the Study Group on "Fragmentation of international law: difficulties arising from the diversification and expansion of international law"

(a) *General*

(1) *International law as a legal system*. International law is a legal system. Its rules and principles (*i.e.* its norms) act in relation to and should be interpreted against the background of other rules and principles. As a legal system, international law is not a random collection of such norms. There are meaningful relationships between them. Norms may thus exist at higher and lower hierarchical levels, their formulation may involve greater or lesser generality and specificity, and their validity may date back to earlier or later moments in time.

(2) In applying international law, it is often necessary to determine the precise relationship between two or more rules and principles that are both valid and applicable in respect of a situation.[5] For that purpose, the relevant relationships fall into two general types:

[5] That two norms are valid in regard to a situation means that they each cover the facts of which the situation consists. That two norms are applicable in a situation means that they have binding force in respect to the legal subjects finding themselves in the relevant situation.

– *Relationships of interpretation*. This is the case where one norm assists in the interpretation of another. A norm may assist in the interpretation of another norm for example as an application, clarification, updating or modification of the latter. In such situation, both norms are applied in conjunction.

– *Relationships of conflict*. This is the case where two norms that are both valid and applicable point to incompatible decisions so that a choice must be made between them. The basic rules concerning the resolution of normative conflicts are to be found in the 1969 Vienna Convention.

(3) *The Vienna Convention on the Law of Treaties*. When seeking to determine the relationship of two of more norms to each other, the norms should be interpreted in accordance with or analogously to the 1969 Vienna Convention and especially the provisions in its articles 31 to 33 having to do with the interpretation of treaties.

(4) *The principle of harmonization*. It is a generally accepted principle that when several norms bear on a single issue they should, to the extent possible, be interpreted so as giving rise to a single set of compatible obligations.

(b) *The maxim "*lex specialis derogat legi generali*"*

(5) *General principle*. The maxim *lex specialis derogat legi generali* is a generally accepted technique of interpretation and conflict resolution in international law. It suggests that, whenever two or more norms deal with the same subject matter, priority should be given to the norm that is more specific. The principle may be applicable in several contexts: between provisions within a single treaty, between provisions within two or more treaties, between a treaty and a non-treaty standard, as well as between two non-treaty standards. The source of the norm (whether treaty, custom or general principle of law) is not decisive for the determination of the more specific standard. However, in practice treaties often act as *lex specialis* by reference to the relevant customary law and general principles.

(6) *Contextual appreciation*. The relationship between the *lex specialis* maxim and other norms of interpretation or conflict solution cannot be determined in a general way. Which consideration should be predominant—*i.e.* whether it is the speciality or the time of emergence of the norm—should be decided contextually.

(7) *Rationale for the principle*. That special law has priority over general law is justified by the fact that such special law, being more concrete, often takes better account of the particular features of the context in which it is to be applied than any applicable general law. Its application may also often create a more equitable result and it may often better reflect the intent of the legal subjects.

(8) *Dispositive nature of most international law*. Most international law is dispositive. This means both that it may be applied, clarified, updated or modified as well as be set aside by special law.

(9) *The effect of* lex specialis *on general law*. The application of the special law does not normally extinguish the relevant general law. That general law will remain valid and applicable and will, in accordance with the principle of harmonization under paragraph (4) above, continue to give direction for the interpretation and application of the relevant special law and will become fully applicable in situations not provided for by the latter.

(10) *Non-derogability*. Certain types of general law[6] may not, however, be derogated from by special law. *Jus cogens* is expressly non-derogable. Other considerations that may provide a reason for concluding that a general law is non-derogable include the following:

– Whether the general law was intended to be non-derogable;

– Whether non-derogability may be inferred from the form or the nature of the general law;

– Whether derogation might frustrate the *purpose* of the general law;

– Whether third party beneficiaries may be negatively affected by derogation; and

– Whether the balance of rights and obligations established in the general law would be negatively affected by derogation.

A norm that purports to set aside or derogate from a norm that is non-derogable will be invalid.

(c) *Special ("self-contained") regimes*

(11) *Special ("self-contained") regimes as* lex specialis. A group of rules and principles concerned with a particular subject matter may form a special regime ("self-contained regime") and be applicable as *lex specialis*. Such special regimes often have their own institutions to administer the relevant rules.

(12) Three types of special regime may be distinguished:

– Sometimes violation of a particular group of (primary) rules is accompanied by a special set of (secondary) rules concerning breach and reactions to breach. This is the main case provided for under article 55 of the Commission's draft articles on responsibility of States for internationally wrongful acts.[7]

– Sometimes, however, a special regime is formed by a set of special rules, including rights and obligations, relating to a special subject matter. Such rules may concern a geographical area (*e.g.* a treaty on the protection of a particular river) or some substantive matter (*e.g.* a treaty on the regulation of the uses of a particular weapon). Such a special regime may emerge on the basis of a single treaty, several treaties, or treaty and treaties plus non-treaty developments (subsequent practice or customary law).

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[6] [The notion of "general law" may yet need to be clarified.]

[7] *Yearbook ... 2001*, vol. II (Part Two) and corrigendum, pp. 140–141.

– Finally, sometimes all the rules and principles that regulate a certain problem area are collected together so as to express a "special regime". Expressions such as "law of the sea", "humanitarian law", "human rights law", "environmental law" and "trade law", *etc.*, give expression to some such regimes. For interpretative purposes, such regimes may often be considered as wholes.

(13) *Effect of the "speciality" of a regime*. The significance of a special regime lies in the way its norms express a unified object and purpose. Thus, their interpretation and application should, to the extent possible, reflect that object and purpose.

(14) *The relationship between special regimes and general international law*. A special regime may derogate from general law under the same conditions as *lex specialis* generally (see paras. (6) and (8) above).

(15) *The role of general law in special regimes I: gap-filling*. The scope of special laws is by definition narrower than that of general laws. It will thus frequently be the case that a matter not regulated by special law will arise in the institutions charged to administer it. In such cases, the relevant general law will be applicable.

(16) *The role of general law in special regimes II: failure of special regimes*. Special regimes or the institutions set up by them may fail to operate as intended. In such case, the relevant general law becomes applicable. Failure should be inferred when the special laws have no reasonable prospect of appropriately addressing the objectives for which they were enacted. It could be manifested, for example, by the failure of the regime's institutions to fulfil the purposes allotted to them, endemic non-compliance by one or several of the parties, desuetude, withdrawal by parties instrumental for the regime, among other causes. Whether a regime has "failed" in this sense, however, needs to be decided above all by an interpretation of its constitutional instruments.

(d) *Article 31, paragraph 3 (*c*), of the Vienna Convention on the Law of Treaties*

(17) *Systemic integration*. Article 31, paragraph 3 (*c*), of the 1969 Vienna Convention provides one means, within the framework of the Convention, through which relationships of interpretation (referred to in para. (2) above) may be applied. It requires the interpreter of a treaty to take into account "[a]ny relevant rules of international law applicable in the relations between the parties". The article gives expression to the objective of "systemic integration", according to which, whatever their subject matter, treaties are a creation of the international legal system and their operation is predicated upon that fact.

(18) *Interpretation as integration in the system*. Systemic integration governs all treaty interpretation, the other relevant aspects of which are set out in the other paragraphs of articles 31 and 32 of the 1969 Vienna Convention. These paragraphs describe a process of legal reasoning, in which particular elements will have greater or less relevance depending upon the nature of the treaty provisions in the context of interpretation. In many cases, the issue of interpretation will be capable of resolution within the framework of the treaty itself. Article 31, paragraph 3 (*c*), deals with the case where material sources external to the treaty are relevant in its interpretation. These may include other treaties, customary rules or general principles of law.

(19) *Application of systemic integration*. Where a treaty functions in the context of other agreements, the objective of systemic integration will apply as a presumption with both positive and negative aspects:

(*a*) *Positive presumption*: The parties are taken to refer to customary international law and general principles of law for all questions which the treaty does not itself resolve in express terms.

(*b*) *Negative presumption*: In entering into treaty obligations, the parties do not intend to act inconsistently with [generally recognized] principles of international law.

Of course, if any other result is indicated by ordinary methods of treaty interpretation, that should be given effect, unless the relevant principle were part of *jus cogens.*

(20) *Application of custom and general principles of law*. Customary international law and general principles of law are of particular relevance to the interpretation of a treaty under article 31, paragraph 3 (*c*), especially where:

(*a*) The treaty rule is unclear or open-textured;

(*b*) The terms used in the treaty have a recognized meaning in customary international law or under general principles of law;

(*c*) The treaty is silent on the applicable law and it is necessary for the interpreter, applying the positive presumption in paragraph (19) (*b*) above, to look for rules developed in another part of international law to resolve the point.

(21) *Application of other treaty rules*. Article 31, paragraph 3 (*c*), also requires the interpreter to consider other treaty-based rules so as to arrive at a consistent meaning. Such other rules are of particular relevance where parties to the treaty under interpretation are also parties to the other treaty, where the treaty rule has passed into or expresses customary international law or where they provide evidence of the common understanding of the parties as to the object and purpose of the treaty under interpretation or as to the meaning of a particular term.

(22) *Inter-temporality*. International law is a dynamic legal system. Whether in applying article 31, paragraph 3 (*c*), the interpreter should refer to rules of international law in force at the time of the conclusion of the treaty or may also take into account subsequent changes in the law depends generally on the meaning of the treaty, as ascertained on the basis of articles 31 and 32 of the 1969 Vienna Convention. However, the meaning of a treaty provision may also be affected by subsequent developments irrespective of the original will of the parties, especially where these subsequent developments are reflected in customary law and general principles of law.

Annex 653

Report of the 27th Session of the Indian Ocean Tuna Commission, IOTC-2023-S27-R[E], 8-12 May 2023, pages 9-10

Report of the 27th Session of the Indian Ocean Tuna Commission

Mauritius, 8-12 May 2023

DISTRIBUTION:
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TABLE OF CONTENTS

1. Opening of the session

1. The 27th Session of the Indian Ocean Tuna Commission (IOTC) was opened and chaired by the IOTC Chairperson Ms Jung-re Riley Kim (Rep. of Korea).
2. The Honourable Sudheer Maudhoo, Minister of Blue Economy, Marine Resources, Fisheries and Shipping and the Honourable Alan Ganoo Minister of Land Transport and Light Rail, and Minister of Foreign Affairs, Regional Integration and International Trade, made opening addresses.
3. The 27th Session of the Commission was held in a hybrid format, with delegations present physically in the meeting room, and other participants attending by videoconference.

2. Letters of credentials

4. Letters of Credentials were received from 29 Contracting Parties and 1 Cooperating Non-contracting Party (Liberia). Yemen participated virtually, while Sudan did not participate. The list of CPC participants is provided in Appendix 1.
5. The Executive Secretary reminded members that the content of the letters of credentials should be in accordance with the template provided in Appendix I of the IOTC Rules of Procedure.

3. Admission of Observers

6. Pursuant to Article VII of the Agreement establishing the IOTC, the Commission admitted 29 Observers (including the invited experts), in accordance with Rule XIV of the IOTC Rules of Procedure (2014).
7. The list of participants, as listed in the letters of credentials, is provided in Appendix 1.

4. Adoption of the agenda and arrangements for the session

8. The adopted agenda (IOTC-2023-S27-01c) is provided in Appendix 2. The documents presented to the Commission are listed in Appendix 3.

5. On the recruitment of the new IOTC Executive Secretary

9. The Commission recalled that the Executive Secretary, Dr Chris O'Brien will retire on 30 June 2023, and given S27 was his last Commission meeting, **EXPRESSED** its appreciation to Dr O'Brien for his work over the past six years.
10. Following the recruitment process that started in May 2022, and in accordance with the IOTC Rules of Procedure, the Commission unanimously **APPROVED** the appointment of Dr Paul de Bruyn as the next IOTC Executive Secretary, and **REQUESTED** the Director, Fisheries and Aquaculture Division FAO to make this outcome known to the Director General of FAO.

6. Determination of the status of the membership of United Kingdom "BIOT" in the IOTC

11. The Commission **NOTED** the following statement from the United Kingdom:

    "The United Kingdom takes note that the last IOTC Session agreed that its consultations with the United Kingdom had started and that a final determination, in accordance with Article IV of the IOTC Agreement will be made at Session 27. The United Kingdom delegation wishes to point out that, in its view, there has not been adequate consultation between the United Kingdom and the IOTC. It expresses its willingness to engage fully in these consultations and commits to clarify the status of its membership before the end of the year."

12. The Commission **NOTED** the following statement from Mauritius:

    "The Mauritius delegation takes note of the statement just made by the United Kingdom delegation expressing its commitment to clarify, before the end of this year, the status of its membership in IOTC in accordance with Article IV of the IOTC Agreement. Since the United Kingdom has pointed out that, in its view, there has not been adequate consultation with the Commission, the Mauritius delegation urges the Secretariat to conclude these consultations as soon as possible. In view of the commitment given by the United Kingdom to clarify the status of its membership before the end of the year, Mauritius, in a spirit of flexibility, has no objection to the Commission agreeing to this arrangement."

13. The Commission **NOTED** the United Kingdom's commitment to clarify the status of its IOTC Membership before the end of the year and requested the Secretariat to notify CPCs as soon as a communication on this matter is received.

7. Update on the implementation of decisions of the Commission in 2022 (S26)

14. The Commission **NOTED** paper IOTC-2023-S27-02 which provided the Commission with information on the progress made during the inter-sessional period on the requests for action made at its 26th Session in 2022.

8. Report of the Scientific Committee

15. The Commission **NOTED** the report of the 25th Session of the Scientific Committee (SC) (IOTC–2022–SC25–R) which was presented by the SC Chair, Prof. Toshihide Kitakado (Japan). A total of 130 delegates and other participants, comprising 104 delegates from 25 Contracting Parties and 25 delegates from 11 observer organisations, including Invited Experts participated in SC25.
16. The Commission **NOTED** that all scientific working group and working party meetings had been successfully held in 2022, utilising videoconference platforms and a shortened format. The Commission also **NOTED** that the Scientific Committee meeting had been held in the Seychelles using a hybrid format and that the MPF was used to support the attendance of participants to that meeting.
17. The Commission **NOTED** that 26 National Reports were submitted to the IOTC Secretariat in 2022 by CPCs and that this was an increase when compared with the 21 reports provided by CPCs in 2021.
18. The Commission **NOTED** the concern expressed by several members that the lack of basic data for some species has resulted in their stock status being assessed as uncertain. The Commission **URGED** all members to submit data to improve the assessments for species under the IOTC mandate.
19. The Commission **NOTED** the request from several members to provide capacity building to improve participation in the IOTC stock assessment processes. Although this is particularly relevant for the discussions regarding Management Strategy Evaluation (MSE) it is also an issue for the complex stock assessments currently being conducted by the SC.
20. The Commission **NOTED** a request by a member to provide information on stock status on the high seas and separately for within EEZs. The SC Chair explained that the current understanding of the stock structure of most IOTC species does not allow for this kind of separation, as the stocks are commonly highly migratory and cross these management boundaries. In addition, the data provided by most members is not sufficiently spatially stratified to be able to separate the catch between these regions accurately.

The status of tropical and temperate tunas

21. The Commission **NOTED** that the current status of tropical and temperate tunas are as follows:

Bigeye tuna In 2022 a new stock assessment was carried out for bigeye tuna in the IOTC area of competence to update the stock assessment undertaken in 2019. On the weight-of-evidence available in 2022, the bigeye tuna stock is determined to be **overfished** and **subject to overfishing**. As IOTC agreed on a bigeye Management Procedure (Res. 22/03) it should be noted that the stock assessment is not used to provide a recommendation on the TAC.
Yellowfin tuna No new stock assessment was carried out for yellowfin tuna in 2022 and so the advice is based on the 2021 assessment. On the weight-of-evidence available since 2018, the yellowfin tuna stock is determined to remain **overfished** and **subject to overfishing**.
Skipjack tuna

Annex 654

“History of the European Union 1970-79”, *European Union*

European Union

History of the European Union 1970-79

A growing Community – the first new members join

Denmark, Ireland and the United Kingdom join the European Communities on 1 January 1973, raising the number of member countries to 9. The Arab-Israeli war of October 1973 triggers an energy crisis and economic problems in Europe.

Democracy spreads in Europe with the overthrow of the dictatorships in Greece, Portugal and Spain. Regional policy starts to transfer huge sums of money to create jobs and infrastructure in poorer areas. The first direct elections by citizens of members of the European Parliament take place in 1979.

1970s – Environmental protection on the agenda

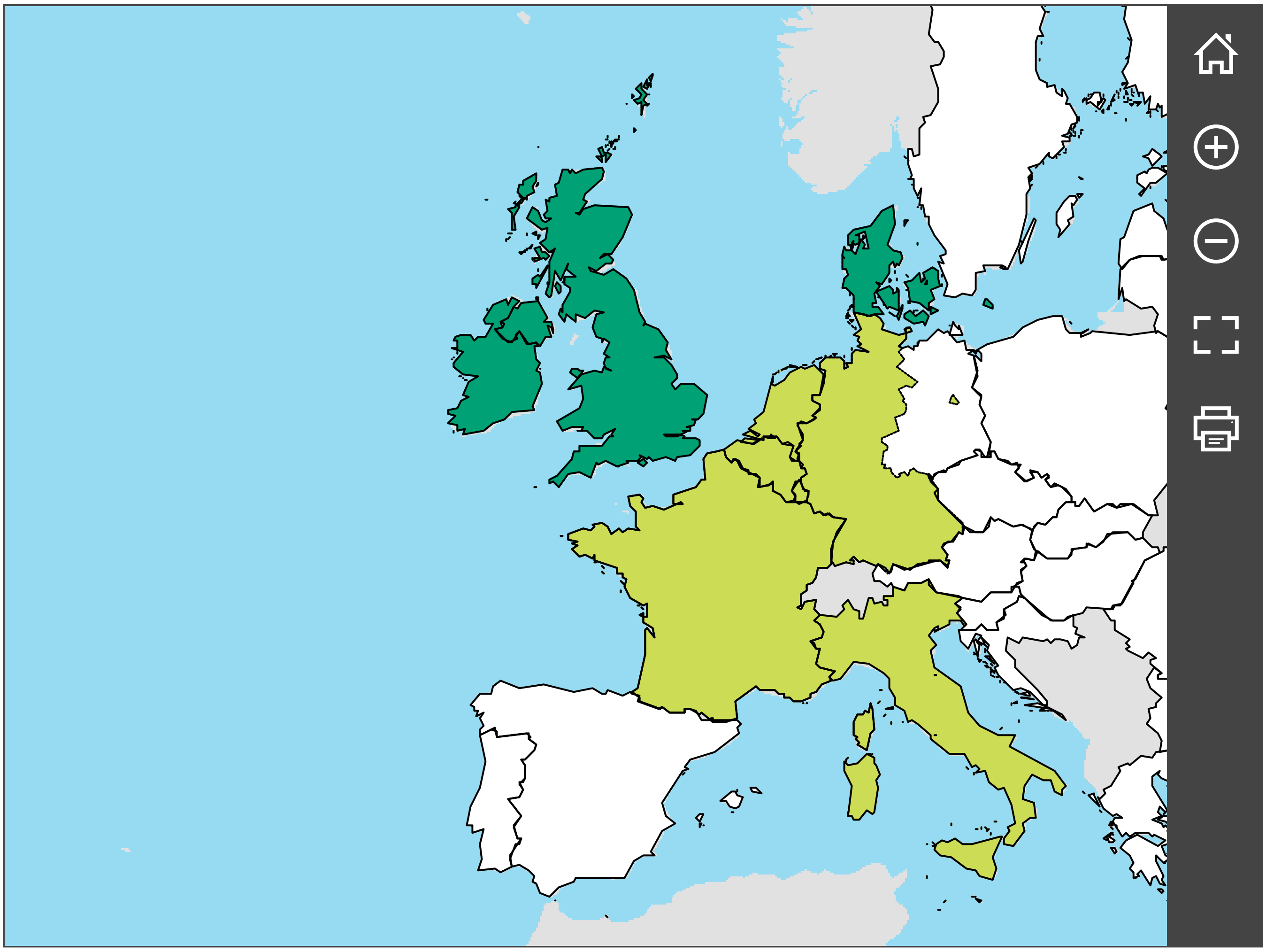
The European communities adopt laws to protect the environment, introducing the notion of 'the polluter pays'. Many environmental NGOs are founded.

1 January 1973 – From 6 to 9 member countries

The 6 members become 9 when Denmark, Ireland and the United Kingdom formally join the European Communities.

Member countries: Federal Republic of Germany, France, Italy, Netherlands, Belgium, Luxembourg

New Member countries: Denmark, Ireland, United Kingdom



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[All EU member countries and when they joined](https://european-union.europa.eu)

1973 – Oil crisis hits Europe

Following an Arab-Israeli war in October, Middle East oil-producing nations impose big price increases and restrict sales to certain European countries. This creates economic problems throughout the EEC.

10 December 1974 – Reducing disparities

between the regions

To show their solidarity, leaders of the EEC agree to set up a major new fund under European regional policy *(https://ec.europa.eu/regional_policy/policy/what/history_en)*. Its purpose is to transfer money from rich to poor regions – to improve infrastructure, attract investment and create jobs. The European Regional Development Fund *(https://ec.europa.eu/regional_policy/funding/erdf_en)* is created the following year.

1974-75 – New democracies in Portugal, Greece and Spain

The overthrow of the Salazar regime in Portugal and the collapse of military rule in Greece in 1974, together with the death of General Franco of Spain in 1975, mark the end of these dictatorships in Europe. The 3 countries commit themselves to democratic government — an important step towards qualifying for future membership of the European Communities.

June 1979 – First direct elections to the European Parliament

European citizens directly elect the members of the European Parliament *(https://www.europarl.europa.eu/news/en)* for the first time. Previously members were delegated by national parliaments. Members sit in pan-European political groups *(https://www.europarl.europa.eu/meps/en/home)*, not in national delegations.

Further information

Historical archives of EU institutions *(/principles-countries-history/history-eu/historical-archives-eu-institutions_en)*

Annex 655

"UPU Adopts UN Resolution on Chagos Archipelago", *Universal Postal Union Press Release*, 27 August 2021

Press release: UPU adopts UN resolution on Chagos Archipelago

Published: 27.08.2021

Abidjan/Berne. The Universal Postal Union (UPU) – the UN specialized agency for postal matters – has formally acknowledged the Chagos Archipelago as an integral part of the territory of Mauritius.

The decision was made by member countries participating in the UPU's 27th Universal Postal Congress in Abidjan, Côte d'Ivoire, and passed with 77 votes. There were six votes against the decision and 41 abstentions.

As a result of the decision, the UPU will no longer register, distribute or forward postage stamps issued by the "British Indian Ocean Territory". The Chagos Archipelago was previously recognized as part of the Overseas Territories of the United Kingdom.

In May 2019, following advice from the International Court of Justice, the UN General Assembly instructed the UN and its specialized agencies to recognize Mauritius' sovereignty over the Chagos Archipelago and refrain from recognizing or implementing any measure taken by or on behalf of, the "British Indian Ocean Territory".

As a UN specialized agency, the UPU is required to cooperate with and assist the UN and its principal and subsidiary organs and therefore brought the matter to its primary governing body, the Congress, for decision.

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Congress Press release