POLISH POLAR RESEARCH (POL. POLAR RES.)
POLSKIE BADANIA POLARNE | 3 | 1-2 | 103—122 | 1982

Legal implications of the exploration and exploitation of Antarctica

1. Territorial claims

The first claims on the Antarctica were asserted by Great Britain in 1908 and then, in 1923 by New Zeland, in 1924 by France, in 1933 by Australia, in 1939 by Norway and in 1940 by Argentina and Chile (Hanessian 1960, Machowski 1960, 1968, Dąbrowa 1961, Taubenfeld 1961, Kish 1973). These claims did not cover the entire Antarctic territory, however in a few cases they concerned the same area. Four of the seven claimant States that is, France, Great Britain, Australia and New Zealand accepted each others' claims by signing relevant agreements (Machowski 1968). On the other hand, as to the claims of Argentina, Chile and Great Britain, covering the area between the 53° and 74° of west longitude, a severe political conflict arose among these countries in the years 1939—1947. Diplomatic activities carried out in the years 1939—1947 between the governments of Argentina and Chile were terminated in 1948 when a declaration between these States was signed and a common position against the British claims was acquired (Butler 1977). This declaration however, did not definitively solve the dispute between Argentina and Chile.

The claimant States pointed at various legal titles: Great Britain — discovery and proclamation considering it as a sufficient legal basis. Similar standpoints as to Antarctic discoveries are held by the governments of Australia, New Zealand, France and Norway who cite the practiced symbolic annexation. However, according to contemporary international law neither discovery, nor the symbolic annexation do not constitute an acquisition of sovereignty (Auburn 1970). Argentina and Chile, to support their claims focus on the arguments of the succession of rights supposedly previously gained by their metropoly, Spain, and on the theory of continuity. The theory of continuity is explained by the named States through geographic and geological arguments. Due to the glaciologic, climatic and zoologic similarities and the relative vicinity of their location, Argentina and Chile conclude that there exists a continuity of the American continent as far as to the Southern Pole. So they consider claimed regions as an integral part of the American continent. However a mojority of countries disregards these arguments, believing that America and Antarctica constitute two separate continents. Some of the claimant States cite the sector theory, which is applied in Artica with good results. On the other hand, according to the doctrine of the Socialist countries (mostly the Soviet) and part of the Western doctrine (Vander Essen 1972) this theory has no reasons

on the Southern hemisphere because 1) none of the countries' territories reaches the Antarctic Circle, 2) continents surrounding Antarctica are located over one thousand kilometers away from it, 3) a number of claimant States is located on the Northern hemisphere Auburn 1972, Greig 1978).

Such a state of affairs existed at the moment the negotiations of The Antarctic Treaty, were approached. Due to the fact that seven of the twelve participants in the negotiations were claimant States and due to the disagreement of the other States to accept these claims, a definite solution of this problem appeared to be impossible. It should be stressed that the Treaty did not cover all controversial territories. Beyond its scope was part of the area claimed by Great Britain, Argentina and Chile. The notion contained in article IV of The Antarctic Treaty is described as "freezing" the legal *status quo*. It provides that the Treatie's provisions can not be interpreted as: a) the renunciation by any Contracting Party of previously asserted right of or claims to territorial sovereignty in Antarctica; b) the renunciation or diminition of territorial claims and also provides that no activities will constitute a basis for asserting, supporting or denying a claim or create any rights of sovereignty. No new claim, or enlargement of an existing claim shall be asserted while the Treaty is in force. It follows from the mentioned provisions of the Treaty that it does not contain a formal recognition or confirmation of any territorial claims in Antarctica. It confirmed only the existing legal *status quo*. It was expected that the "frozen" territorial claims will expire in the future (Taubenfeld 1961). In spite of the lapsing of 20 years since the Treaty was signed, it did not occur (Silevič 1966).

As to the legal interpretation of the quoted article, a significant divergence of opinions exists. Some authors point out the differentiation of territorial claims. For the Treaty evidently excludes from its legal regulation claims asserted before it signing and at the same time prohibits the assertation of new claims. As to claims, depending upon the areas they concern, it seems that article IV point 2 solves the legal status of unclaimed sectors of Antarctica. As it prohibits assertation of new claims "these sectors of Antarctica constitute an undisputed international area which is not, and can not be, subject to territorial sovereignty by any State" (Kish 1973). Kish (1973) holds that recommendation IV--11 adopted by the VI-th Antarctic Treaty Consultative Meeting at Tokyo on October 31, 1970, implies the application of article IV (2) to "any new island formed by geological processes in Antarctic Treaty. Area even if they are situated within claimed sectors" (Kish 1973). It seems, that one can agree with the above basing oneself even only on the Treatie's provisions. The quoted recommendation establishes on the listed areas "zones of special protection" as to pollution but does not resolve any other problems.

The problem of claims to Antarctic regions asserted before the Treaty was signed, arises the greatest amount of controversies. The socialist doctrine holds that the asserting of any new claim, would be contradictory to the Treaty. A point of view in the Western doctrine was expressed, that from the fact that the Treaty does not permit new claims by individual States, does not derive the fact that new claims can not be asserted by a few or even by all of the Contracting Parties. Some authors

point out that the Treaty does not constitute an obstacle for the assertation of claims by States which are not Contracting Parties. Hambro (1974) believes that article IV of the Treaty can be interpreted as a permission to renounce claims and to transfer claims or to change territorial sovereignty in any other way which does not cause the enlargement of claims.

Due to the fact that the problem of claims was not definity solved, the problem of jurisdiction over persons in Antarctica couldn't have been solved as well. If the sectors theory would be applied the jurisdiction would belong to the State, in the sector of which the person would be; if the sectors would be rejected the jurisdiction would be performed by the State, of which the person is a citizen. As neither of the above mentioned solutions was accepted in article IV, it was concluded in article VIII that: "in order to ficilitate the exercise of their functions under the present Treaty, and without prejudice to the respective positions of the Contracting Parties relating to jurisdiction over all other persons in Antarctica, observers designated under paragraph I of Article VII and scientific personel exchanged under subparagraph I (b) of Article III of the Treaty, and members of the staffs accompanying any such persons, shall be subject only to the jurisdiction of the Contracting Party of which they are nationals in respect of all acts or omissions occuring while they are in Antarctica for the purpose of exercising their functions".

According to Taubenfeld (1961), the Treaty only solves the problem of jurisdiction over persons listed in Article VIII, leaving open the question of jurisdiction over other persons. A similar opinion is expressed by Hanessian (1960), who believes that "Article VIII only solves the problem of jurisdiction over observes, according to Article VII and scientific personnel exchanged under subparagraph I (b) of Article III, but it does not cover scientific and accompanying staff".

A different point of view is presented by Dąbrowa (1961) who states that from Articl VIII it follows, that persons other than those named are subject to the jurisdiction of the State in the sector of which they are. Argentina, Chile and New Zealand hold this standpoint stating that on territories to which they are asserting claims, their penal legislation applies. During the Washington Conference some States, among others the USA, USSR and Belgium, forseeing interpretational problems concerning Article VIII, considered it necessary to stress that the wording concerning jurisdiction con not be treated as a change in their territorial claims. These States also expressed their objection as to any possible attempts to the jurisdiction of any other State over their citiznes (Molodcov 1960).

A different standpoint is held by Kish (1973) who states that the Treaty excludes the problem of admissibility of sovereignty from the regulation and the absence of an effective control over Antarctica indicates the absence of valid territorial sovereignty over Antarctica, what leads to the inadmissibility of territorial jurisdiction in Antarctica. According to the quoted author "The sector claimant states have not exercised territorial jurisdiction in their claimed Antarctic sectors and, so, they have not estalished even customary rights of territorial juris-

diction in these sectors. This attitude of the sector claimant states demonstrates the absence of territorial jurisdiction in Antarctica". To support the mentioned standpoint, K i s h (1973) has the following arguments: 1. The nationality of designated observers and exchanged scientific personnel determines the state entitled to exercise jurisdiction over them in Antarctica. This special system of jurisdiction based on nationality and applied to a privileged category of persons indicates the absence of territorial jurisdiction in Antarctica. 2. Next argument for the absence of territorial jurisdiction follows from paragraph 3 of Article VIII, because "not Antarctic sectors but Antarctic stations an dexpeditions, are subject to inspection. Claimant States are not held responsible for the observance of the Antarctic Treaty within their claimed sectors. On the other hand, every State is responsible for the activities of its Antarctic stations and expeditions regards the observance of the provisions of the Treaty". 3. The consultation, provided in paragraph 2 of Article VIII, in case of disputes on the exercise of jurisdiction also confirms the absence of territorial jurisdiction in Antarctica. 4. According to the quoted author, the provisions concerning notification also testify the absence of territorial jurisdiction in Antarctica. The author concludes stating that from the fact that no state is entitled to exercise exclusive jurisdiction in an Atarctic sector follows, that every State has authority over its stations and expeditions. Conflicting claims of jurisdiction may arise in the case persons stay in the vicinity of Antarctic stations or expeditions of different nationality. Exclusive jurisdiction of a sending state is appliable to personnel and equipment on and in the vicinity of the station or expedition. On the other hand the exclusive jurisdiction of the flag State ceases to operate in respect to persons who leave the area of their Antarctic station or expedition. If these persons enter the Antarctic station or if they join another State's expedition they become subject to the jurisdiction of the flag State of their actual residence. Another opinion is represented by M a c h o w s k i (1960), who believes, that all persons staying in Antarctica for purposes provided by the Treaty are subject to the jurisdiction of States of which they are citizens. At the same time the author holds that Article VIII contains gaps and does not solve, for example, the problem of the jurisdiction over persons comming to Antarctica for purposes others than those mentioned in the Treaty, like tourism. In the light of the provisions of the Antarctic Treaty of 1959 (that is, Article VIII — WK) according to jurisdiction, Antarctica was considered as terra nullius. This means a considerable concession of the claimant States.

As practice prooved, the Treatie's provisions which constitute "claims' freezing" contributed to the peaceful international cooperation. However the expectations as to the expiring of the claims asserted before signing of the Treaty were not fullfiled, yet the Treaty prevented the arising of conflicts. The problem of territorial claims became actual again as a result of the recent attempts to establish legal regulations of exploitation of Antarctica's natural resources, still existing claims nonstitute a significant obstruction in the establishment of a legal regime of such exploitation.

2. The principle of peaceful exploitation

The principle of exclusively peaceful exploitation belongs to one of the most significant provisions of the Treaty of 1959. It is a guarantee of the implementation of the other principles of Antarctica's internatioonal legal status besed on the principle of freedom of scientific research and international cooperation (G u y e r 1973).

On the Washington Conference the Soviet delegation presented the proposal of exploiting Antarctica for peaceful purposes exclusively. The Soviet proposal containing prohibited activities specified was accepted by the participants of the Conference after making slight changes and became the basis for relevant article of the Treaty.

According to Article I (1) of the Treaty: "Antarctica shall be used for peaceful purposes only. There shall be prohibited, *inter alia*, any measures of a military nature, such as the establishment of military bases and fortifications, the carrying out of military maneuvers, as well as the testing of any type of weapons".

In the quoted article it is clearly stressed that the named types of prohibited activities are only given as examples, that is that all activities of military character are prohibited. It is considered that in spite the lack of a clear definition of the term "peaceful purposes", the Contracting Parties meant to exclude activities of obvious military character. This therefore means that the principle of exploitation for peaceful purposes prohibits only the performance of activities of military character and does not create obstacles for conducting other activities in Antarctica, such as strategic observations.

Due to the fact that paragraph 2 of the cited Article provides the possibility of using military personnel and equipment, the character of the performed activity and not the status of the persons performing it will decide whether the given activity should be considered as prohibited. Therefore the principle of peaceful use of Antarctica is not infringed when military personnel is used on stations neither when military ships or airplanes are applied in scientific research or in other peaceful purposes.

To support the accepted provisions, it is stressed in literature, that present scientific programs in Antarctica can not be conducted without the engagement of the military establishment (H a y t o n 1960).

It should be focused that the discussed provisions are appliable on mainland, in the air and in the seas surrounding Antarctica, that is, according to Article VI "the area south of 60° south Latitude, including all ice shelves". However due to the following provisions of the quoted Article, according to which "... nothing in the present Treaty shall prejudice or in any way affect the rights, or the exercise of the rights, of any State under international law with regard to the high seas within that area" they are not appliable on high seas (V i c u n a and I n f a n t e 1980). According to the Geneva Convention military activities are permitted on high seas. Hence the provisions of allowing strictly peaceful activities on Antarctica do not apply to the Southern Ocean, facilities nor devices on its floor nor to airplanes above high seas in this area.

For the fullfilment of the provisions of Article I which stipulates exclusively peaceful exploitation of Antarctica of great importance is the prohibition, formulated in Article V, of "any nuclear explosions in Antarctica and the disposal there of radioactive waste material..."

The inclusion of the provisions on the denuclearization of Antactica was not discussed in the introductory phase of the talks nor was it found on the agenda of the Washington Conference. The delegation of Argentina made a suggestion on October 19, 1959 of incorporating relevant provisions into the Treaty. After a longlasting discussion and after considering alternative proposals, the Conference finally accepted article V in the reading the Soviet delegation proposed.

At the same time it should be stressed, that article V of the Treaty does not constitute an obstacle for the exploitation of atomic energy in Antarctica for peaceful purposes.

Article V (2) also states that "in the event of the conclusion of international agreements concerning the use of nuclear energy, including nuclear explosions and the disposal of radioactive waste material, to which all of the Contracting Parties whose representatives are entited to participate in the meetings provided for under Article IX are parties, the rules established under such agreements shall appy in Antarctica".

The above mentioned provisions were influenced by the talks being held in Geneva on the global agreement on prohibition of nuclear test. The reason was to assure the applicability of the future global agreement in Antarctica. Hence the provisions of the Moscow Treaty of 1963 on the partial prohibition of nuclear tests are ipso jure also appliable to the Antarctic Treaty area. It is focused in literature that the applicability of the Moscow Treaty in Antarctica obliges all States participating in consulative meetings, even if they are not parties to the Moscow Treaty. This concerns France, taking part in the consultative meetings, which is not party to the Moscow Treaty (K i s h 1973). It should be pointed out though, that the Antarctic Treaty prohibits all types of tests, while the Moscow Treaty — only the nuclear tests in the atmosphere, the outer space and under water. Moscow Treaty does not prohibit underground tests. Article V of the Antarctic Treaty contains provisions prohibiting "any nuclear explosions" what means also the prohibition of underground tests and those under ice. It is also noted in literature that the prohibition of underground explosions in Antarctica may folow from Article I/1/b of the Moscow Treaty, according to which all nuclear tests beyond limits of national sovereignty are prohibited. Since entire Antarctica lies "beyond limits of national sovereignty", the Moscow Treatie's provisions on underground tests apply also on the mainland area of Antarctica (K i s h 1973).

According to Article I/1/a of the Moscow Treaty nuclear tests in the atmosphere, in outer space, on territorial seas as well as on high seas are prohibited. Thus the Moscow Treatie's provisions prohibit nuclear tests in seas surrounding Antarctica.

Due to the importance of the peaceful use for all activities in Antarctica, this was broadly discussed during consultative meetings. During the first meeting which took place in July, 1961 three recommendations concerning peaceful use were adopted (I—I, I—III, I—XIII). Recommendation I—XIII was of greatest significance, since it concerned prevention of applying in Antarctica nuclear technique in a way con-

tridictory to the provisions of Article V(1) of the Antarctic Treaty. During the following Consultative Meetings the peaceful character of activities in Antarctica was very often stressed and a number of recommentations was adopted to this end. Aside from the above mentioned, recommendations II—1, II—VIII, IV—27, VI—7, VII—7 concern the peaceful character of activities in Antactica. Of great significance is the recommendation adopted at a meeting in Oslo in 1975. This recommendation concerns the anual exchange of information on the implementations of the Treatie's provisions. Consultative Meeting Members adoppted also a detailed system of information exchange, which allows to decide whether or not the described activities are of peaceful character. Other recommendations also serve this purpose — by elaborating systems of periodical information exchanges concerning scientific programs (recommendation I—I), scientific data (recommendation I—III and I—I), expeditions to Antarctica (recommendation I—VI and II—IV), logistic problems (I—VII) and scientific and research rockets (VI—12).

During the nearly twenty years since the Antarctic Treaty entered into force no violation of the principle of the exclusively peaceful character of the activities was noted. In literature the contents and implementation of the Treatie's provisions on the use of Antarctica for peaceful purposes are evaluated very positively (Oxman 1978). Machowski (1968) holds, that the provisions of this international instrument assured exploitation for peaceful purposes only of this part of the world and guaranted the freedom of scientific research and created favorable conditions for further development of broad international cooperation between Contracting Parties, openning, at the same time, analogous perspectivies for potential Signatories. The demilitarization of Antarctica is considered also as a basis for its legal status and a guarantee for the implementation of the principle of freedom of scientific research (Janks 1958).

The fact that there were no violations of the principle of peaceful use of Antarctica is closely tied with the effective system of control (Simsarian 1966). According to the Article VII, each Contracting Party has the right to designate observers. Observers shall be nationals of the Concracting Parties which designate them. The names of observers shall be communicated to every other Concracting Party and like notice shall be given of the termination of their appointment. According to paragraph 2 and 3 of the Article VII each observer shall have complete freedom of access at any time to any or all area of Antarctica including all stations, installations, and equipment within those areas; al ships and aircraft at points of discharging and embarking cargoes or personnel in Antarctica, shall be open at all times to inspection. The following paragraph of this Article allows the parties to conduct aerial observation at any time over all areas of Antarctica.

3. Freedom of scientific investigation and its limitations

The principle of the use of Antarctica for peaceful purposes only and the freezing of the territorial claims created favorable conditions for the development of scientific research. According to Article II of

the Treaty "freedom of scientific investigation in Antarctica and cooperation toward that end, as applied during the International Geohysical Year, shallow continue, subject to the provisions of the present Treaty". Article III specifies the above statement and provides that "a) information regarding plans for scientific programs in Antarctica shall be exchanged to permit maximum economy and efficiency of operations; b) scientific personnel shall be exchanged in Antarctica between expeditions and stations; c) scientific observations and results from Antarctica shall be exchanged and made freely available".

Kish (1973) believs that the freedom of scientific investigation provided by the Treaty covers the installment of stations and the sending of expeditions.

Freedom of scientific investigations is limited by provisions of the Treaty providing for: A) the use of Antarctica for peaceful purposes only, B) the notification system, C) inspection, D) preservation of flora and fauna, E) preservation of historical places.

ad B) Provisions concerning notification (Article VII (5)) obliged States to inform other Contracting Parties about "a) All expeditions to and within Antarctica, on the part of its ship or nationals, and all expeditions to Antarctica organised in or proceeding from its territory, b) All stations in Antarctica occupied by its nationals; and c) Any military personnel or equipment intended to be introduced by it into Antarctica subject to the conditions perscribed in paragraph 2 of Article I to the present Treaty".

The notification is required in many cases under the recommendations adopted at the Contracting Parties' Meetings. The previously mentioned recommendation III—1 provides for the exchange of information about landing spots in Antarctica. According to the provisions of Article VII (4) this information may be helpful for aerial observations of Antarctica. It may also facilitate aircraft inspections at points of discharging or embarking, according to the provisions of Article VII (3). Recommendation III—2 provides for the exchange, of a list of all unoccupied buildings, shelters etc. belonging to parties. These lists should be exchanged before the end of November each year. Recommenndation IV—27 obliges the governments of States which are organising tourist expeditions, or others of non scientific character, to inform, as quickly as possible, on such an expedition. This information should be passed to all governments, whose stations the given expedition pans to visit. Recommendation VI—2 concerns the exchange of information on telecommunication facilities and determines the dates and conditions of the exchange of this information.

The above mentioned recommendations constitute only examples of situations when notification is required. A number of further examples is contained in recommendations concerning the preservation of flora and fauna.

ad C) The inspection system was explicitly described in Article VII (1—4) and its accomplishment arises no problems in practice.

ad D) The problem of the preservation of flora and fauna was not regulated by the Treaty. Yet numerous recommendations, were dedicated to this problem. The recommendations contain, among others, the general principles of proceedings in order to preserve and conserve flora and fauna (recommendation 1—8), they establish a specific preser-

vation of certain species of flora and fauna (recommendations VI—16), they establish areas under special protection (recommendations IV—1 to IV—16), they provide for special measures in order to prevent pollution of the environment (recommendation VI—4).

ad E) The question of the protection of historical places was not regulated by the Treaty. Relevant provisions (restricting the freedom of installing stations) are contained in the recommendation I—9, according to which governments are obliged to undertake all necessary steps to protect graves, biuldings and historical places from damages or devastation.

4. Legal regulation of the exploitation of biological resources

The first commercial activity in Antarctica was whaling, which began already in the beginning of the XIX century. The long lasting wasteful exploitation lead to the extermination of whales.

The first convention concerning whaling was signed in 1931. The conventation was signed due to the initiative of professor Michał Siedlecki. 26 States among which was Poland were parties to this convention. It was August Zalewski who signed it in the name of Poland. The convention, determined, *inter alia*, an admitable quantity and seasons of whaling and forms of control (M o u t o n 1962). However, in spite of the undertaken measures, more small whales than ever before were killed in the years 1937—1938.

The following convention on the preservation of whales was signed in 1946, in Washington and the International Whaling Commission (IWC) was created (G a m b e l l 1977). The convention established *inter alia* protected species, seasons and dates of whaling as well as quantities of whaling (H a m a n e v 1980).

A further step towards the preservation of whales was the resolution adopted by the UN Conference "Man and his Environment" held in Stockholm, in 1972, which provided for moratorium of whaling for 10 years.

Like whaling, already in the beginning of the XIX century sealing was begun. Similarly the wasteful exploitation lead to the nearly total extermination of some species. The first steps toward their protection were undertaken in 1910, though vast protective activities were began in the sixties at Consultative Meetings. In 1961 recommendation I—VII established the prohibition of certain types of activities constituing interference into the seals' life conditions. In 1964, in recommendation III—II, voluntary regulation of the pelagial sealing south of 60° of latitude was established. Further restrictions on sealing were adopted on the IV and V Consultative Meetings. However the small effectiveness of the undertaken measures influenced the decision of signing a special convention. The Convention, signed in 1972 in London, provides for the protection of 4 of the 6 species which appear in Antarctica and a strict reglamentation of the sealing of the remaining species.

Commercial fishing began in Antarctic waters only in the seventies. Fish resources have so far not been strictly determined. Krill must be the focal point of any analysis of the living resources of the Southern

Ocean because of it remarcable abundance and central place in the Antarctic ecosystem. This derives also from the fact, that the estimated amount of krill which can be harvested from the Southern Ocean, without disturbing the ecosystem's stability, has a biomass close to the quantity of the entire, worldwide fishing (Rakusa-Suszczewski 1979). At the same time, the significant consequences, which uncontrolled and unlimitted exploitation of krill may lead to, are stressed (Burton 1979, Alvarson 1980).

The Treaty of 1959 does not contain species provisions concerning the protection of Antarctic biological resources. According to Article IX, representatives of the Contracting Parties were to take care of this problem during consultative meetings. Provisions concerning protection were adopted already during the first Consultative Meeting. By the recommendation I—VIII they established the "general rules of preservation and protection of the living resources in Antarctica". These principles provide for the limitation and strict control of a number of activities constituing a threat to Antarctic's environment. Based on these principles, which were confirmed in recommendation II—III, was recommendation III—VII which established "measures for the protection of Antarctic flora and fauna" containing more detailed provisions. At the same time, according to Article VIII of the Antarctic Treaty 17 areas of special protection were established. The recommendation (III—IX, III—X, IV—18, IV—19, IV—20, VI—9, VII—2, VIII—2 and IX—2) regulate now the preservation of land living resources of Antarctica.

The protection of Antarctic's marine living resources was regulated seperately. In the recommendation VIII—10 entitled "Antarctic Marine Living Resources" it was stated, among others that there exists a necessity of adoption of rules of conservation, conducting scientific investigation and rational use of these resources. At the same time governments and SCAR were recommended to undertake suitable steps to this end. Recommendation IX—2 and recommendation X—2 determined more precisely these activities.

However, it is stressed in literature, that the measures undertaken for protection of Antarctic living resources were insufficient. This influenced the decision of elaborating a special Convention on the conservation of Antarctic marine living resources. The signing of the convention on October 11, 1980 was preceeded by 5 sessions of a special conference, which took place in the years 1978—1980. 15 States participated in the conference and later signed the Convention. Argentina, Australia, Belgium, Chile, DDR, France, Great Britain, GFR, Japan, New Zealand, Norway, Poland, South Africa, USA and the USSR complete the list of Concracting Parties.

According to the provisions of the Convention, it "applies to the Antarctic marine living resources of the area south of 60° South latitude and to the Antarctic marine living resources of the area between that latitude and the Antarctic Convergence which form part of the Antarctic marine ecosystem".

The Convention placed pecial obligation on Parties, who are not Parties of the Antarctic Treaty, to respect, in mutual relations a number of provisions contained in the Antarctic Treaty. This concerns articles I and V of the Treaty (according to article III of the Convention) and articles IV and VI of the Treaty (article IV of the Conven-

tion). Furthermore (according to article III of the Convention). Furthermore (according to article V of the Convention) the States accepted the special obligation and responsibility of Antarctic Treaty Consultative Parties for the protection of Antarctic marine living resources. The States agreed also to observe the recommendations concerning protection of the Antarctic environment adopted by Consultative Parties. Of noticable significance is the provision (article VI), that nothing in this Convention derogates from the rights and obligations of Contracting Parties under the International Convention for the Regulation of whaling and Convention for the Conservation of Antarctic Seals.

For the purpose of assuring efficient conservation, three organs were established:

— The Commission (articles VII—XIII, XIX),
— The Scientific Committe (articles XIV—XVI),
— The Executive Secretary (article XVII).

The Commission. According to article VII of the Convention members of the Commission are: a) Contracting Parties which participated in the meeting at which this Convention was adopted; b) States Parties which acceeded to the Convention, pursuant to article XXIX during the time when they are engaged in research or harvesting of the Antarctic marine living resources; c) regional economic integration organizations which acceeded to the Convention pursuant to Article XXIX during such time as their States members are so entitled.

For the purpose of acheiving the Convention's goals, *inter alia*, the Commission shall:

— facilitate research into and studies of Antarctic marine living resources and its ecosystem;
— compile data on pouplation of living resources, statistics data concerning the harvesting and shall disseminate this data;
— adot conservation measures and evaluate their effectiveness;
— implement the system of inspection and observation.

In exercising its functions the Commission will fully take into account the recommendations of the Scientific Committee and of the Consultative Meetings.

Decisions on matters of substance will be taken by consensus, others by a simple majority. The headquarters of the Commission is located at Hobart, Tasmania (Australia); the Commission shall hold annual meetings. The first meeting will be held within 3 months of the entry into force of this Convention, however not later than within one year. This Commission will elect a Chairman and Vicechairman (which can not be representatives of the some State), will amend the rules of procedure and establish such auxiliary bodies as are inevitable for the performance of its functions (Article XIII).

The Scientific Committee for the conservation of Antarctic marine living resources. The Scientific Committee, persuant to Article XIV of the Convention, is a consultative body to the Commission. It members constitute of members of the Commission represented by adequately qualified representatives, experts and advisers.

Debates of the Scientific Committee will be held at the Commission's headquarters; the first will be held within 3 months of the Commission's meeting. The Committee will establish rules of procedure which will be approved by the Commission. The Committee may obtain help from required on an ad hoc basis experts and establish, with the consent of the Commission, such subsidiary organs as it may consider necessary to exercise its functions (Article XIV, pt. 3, Art. XV and XVI).

The Committee is supposed to constitute a forum for consultation and cooperation as to the collection and exchange of information, to encourage cooperation in the field of investigation and broaden the knowledge concerning the marine living resources and the ecosystem of Antarctica.

The Committee shall conduct such activities as the Commission may direct and, among others, shall:

— establish critera and methods concerning the conservation;
— analyse data concerning the direct and indirect results of the exploitation of living resources;
— propose changes of methods and measures of preservation;
— transmit to the Commission relevant reports and formulate proposals of international and national programs of scientific investigation of living resources (Article XV).

The Executive Secretary. The Secretary shall be appointed by the Commission for four years (with the possibility of being reappointed) and will act on conditions determined by the Commission. He shall appoint members, of the Secretariat, with whom he will exercise functions determined by the Commission (Article XVII).

The budget. The Commission will adopt its budget and thus of the Scentific Committee, based on the Secretarie's project, during its annual meetlings. During the first 5 years within the entry into force of the Convention the contributions of all members shall be equal. Later the contribution of each member will be determined depending upon the criteria of the quantity of harvests and equal sharing. The Commission will etablish the principles of applying both of these criteria (article XIX).

Duties of States. The members of the Commission will annually provide, to the greatest extent possible, to the Commission and Scientific Committee, such data and information as is required for the exercising of their functions.

Each Contracting Partie shall take steps to assure compliance with the Convention's provisions and measures of conservation adopted by the Commission; will undertake appropriate efforts consistant with the Charter of the United Nations, to the end that no one egages in any activity contrary with the objectives of the Convention and will notify the Commission if any of activity comes to its attention (Article XXII).

To assure broad international cooperation the Convention provides for the cooperation of the Commission nad the Scientific Committee with Conultative Parties, FAO and other Agencies of the UN, the SCAR and SCOR Committees and any other organizations which may be invited as observers to their meetings.

The system of inspection. It seems, that the observation and inspection system provided for in Article XXIV constitutes the most important guarantee of the accomplishment of the Convention's provisions. This system will be elaborated by the Commission and will cover the procedures of boarding and inspection exercised by observers and inspectors appointed by members of the Commission. It will also cover the procedures for flag State sanctions on the basis of the inspection's effects. Observation and inspections will be held on board vessels engaged in scientific research or harvesting in the area to which the Convention applies. Observers and inspectors designated by the Commission shall remain subject to the jurisdiction of the State of which they are nationals, and shall report to the member of the Commission which appointed them. This State shall present the given report to the Commission. Until a system of observation and inspection is established, members of the Commission will elaborate temporary principles of designating observers and inspectors, who will act according to the above mentioned rules (article XXIV).

The resolving of dispte s. All disputes among Parties concerning the interpretation or application of the Convention will be resolved by means of negotiation, mediation, conciliation, arbitration, juridical settlement or other peaceful measures of their own choice.

If the dispute will not be resoved this way, with the consent, in each case, of all Parties indispute, it will be refered for settlement to the International Court of Justice or to arbitration. In cases when it is agreed to refered the dispute to arbitration, an Arbitral Tribune shell be constituted (article XXV). The annex contains rules of establishing and the procedure of the Arbitral Tribune. According to its provisions. The Party commencing procedings shall communicate the name of an arbitrator to the other Party which, in turn, within a period of forty days following such notification, shall communicate the name of the second arbitrator. The Parties shall, within a period of sixty days following the appointment to the secon darbitrator, appoint the third arbitrator, who shall not be a national of either Party and shall not be of the same nationality as either of the first two arbitrators. The third arbitrator shall ppreside over the tribunal.

If the second arbitrator has not been appointed within the prescribed period, or if the Parties have not reached agreement within the prescribed period on the appointment of the third arbitrator, that arbitrator shall be appointed, at the request of either Party, by the Secreatry-General of the Permanent Court of Arbitration, from among persons of international stannding not having the nationality of a State which is a Party to this Convention.

The arbitral tribunal shall decide where its headquarters will be located and shall adopt its own rules of procedure. The award of the arbitral tribunal shall be made by a majority of its members, who may not abstain from voting. Any Contracting Party which is not a Party to the disput emay intervene in the proceedings with the consent of the arbitral tribunal. The award of the arbitral tribunal shall be final and binding on all Parties to the dispute and on any Party which intervenes in the proceedings and shall be complited with without delay. The arbitral tribunal shall interpret the award at the request of one of

the Parties to the dispute or of any intervening Party. Unless the arbitral tribunal determines otherwise because of the particular circumstances of the case, the expenses of the tribunal, including the remuneration of its members, shall be borne by the Parties to the dispute in equal shares.

The Convention was opened for signature at Canberra from 1 August to 31 December 1980, by all of States who participated in the Conference which took place from May 7 to 20 1980. The Convention is subject to ratification, acceptance or approval by signatory States. Relevant documents will be deposited to the Government of Australia, who was designated as the depositary.

The Conventation will enter into force on the thirtieth day after depositing the eigth document of ratification, acceptance or approval; as to States and regional integrational organizations, which accude to the Convention after its entry into force — on the thirtieth day after depositing the relevant document.

The Convention may be ammended.

Each State may withdraw from the Convention on June 30 of any year by giving written notice to the Depositary, no later than by Jannuary 1 of the same year. The Depositary, upon receipt of such a notice shall communicaty it forth to other Concracting Parties. The withdrawal from this Convention of members of the Commission does not affect their financial obligations deriving from the Convention.

Text of the Convention have been prepared in English, French, Russian and Spanish and are equally authentic.

The Convention is subject to registration persuant to Article 102 of the Charter of United Nations.

5. The legal status of mineral resources

During the seventies the problem of the exploitation of Antarctic mineral resources gained noticeable significance. Scientific investigation contributed reliable data concerning the existence in Antarctica of petrol and natural gas as well as coal, nickel, platinum, coper, chromium, cobal and gold (Alexander 1978, Dugger 1978). Water from glaciers is also considered as one of Antarctic resources which may be exploited in the future.

Basing on information obtained through geological research of chosen zones of Antarctica, done during the last 10—15 years, 4 categories of potencial mineral resources of Antarctica are determined: 1) resources — identified minerals, which could be exploitated with the use of present technology; 2) conditional resources — identified, but for economical reasons can't exploitated at present; 3) hipotetical resources — not yet discovered, which might exist in already knows areas of exploitation; 4) speculative resources — those, which might be located beyond already known areas of exploitation.

It should be stressed that the identification and future exploitation is complicated because of the geografic conditions: Antarctica is covered in 98% by ice thick for 2 thousand meters. The temperature is as law as —50°C. It is estimated that presently the exploitation of the shelf's

resources is more possible ,in spite of the considerable depth of their location (the Antarctic shelf is covered by a nearly 500 meter thick layer of water) and in spite of the danger for ships and installations created by glaciers.

In spite of significant difficulties connected with the exploitation and in spite of the yet unsattisfactory recognising of the mineral resources of the Antarctic Continent, these problems are the subject of numerous discussions and controversies on Consultative Meetings. The existing divergence of opinions as to the question of the principles of exploitation is connected with the unresolved, in the Treaty, problem of territorial claims. Moreover the problem of the exploitation of mineral resources was not even mentioned in the Treaty of 1959. This is due to the fact, that in the moment of its negotiation and signing of the Treaty the mineral resources were not known and their commercial exploitation was not possible in those days.

Attempts of interpreting the Treaty of 1959, leading to the determination whether or not exploitation of natural resources is acceptable follow authors to contradictory conclusions. The authors who hold, that the exploitaion of mineral resources is prohibited use the argument, that the main goal of activities in Antactica, according to the Treaty of 1959, are scientific research, which would be impossible if industrial exploitation, which leads to the irreversible pollution of the environment, was to be commenced. J. N. Barnes, a member of the USA delegation to consultative meetings stated that "Exploitation of oil would be catastrofical. It could threaten the exploitation of living resources, which may play a significant part in providing the starving world with proteins" (The Washington Post, September 17, 1979). Yet this point of view is criticized since the irreversible pollution of the environment, however very possible, does not necessarily have to be the reult of exploitation. Other authors underline the fact, that the Antarctic Treaty provides the use of Antarctica for peaceful purposes and for the benefic of mankind, while exploitation, as well as scientific investigation are peaceful activities and they may be exercised for the benefit of mankind.

Due to the growth of the interest in exploitation, the problem of the legal status of Antarctic mineral resources was discused during Consultative Meetings. For the first time this problem was the subject of informal consultation on the sixth Meeting, in Tokyo, in 1970. In 1972, during the seventh Meeting, in Wellington, recommendation VII—6 was adopted. In this recommendation the need of further discussions was expressed and it was stated that such expoitation may cause problems as to the protection of the environment. During the eight Consultative Meeting in 1975, in Oslo, a recommendation (VIII—14) which provided for analisis of the exploitation and exploration of mineral resources, was adopted. During a special preparatory meeting in 1976 the SCAR (Scientific Committee on Antarctic Research) was asked to investigate the influence of the possible exploration and exploitation of minerals on the Antarctic environment. In the report presented the SCAR experts determined the exploitation of carbohydrates as the most possible and at the same time as the one creating the greatest risk for the environment (SCAR Bulletin 1977).

The problem of the exploitation of natural resources was discussed during a preparatory meeting in Paris, in 1976.

During this meeting, the Parties established the following principles: 1) the Parties will play an active and leading role in the management of the Antarctic mineral resources; 2) The Antarctic Treaty must be fully respected; 3) The protecton of the unique environment and ecosystem of Antarctica must be subject to main care; 4) Parties interested in the exploration and exploitation of Antarctic mineral sources will take into account the benefit of the entire mankind in Antarctica.

Eventhough the Consultative Meetings are Confidential, Western sources inform that the Parties did not accept a common standpoint and that the opinions expressed were diamerically opposed to each other: from demands of accepting unilateral exploitation subject only to the protection of the environment (USA), to the demands of establishing a moratorium for 10—15 years (USSR and Japan) (Mitchell 1977). A significant step towards agreeing these contradictory standpoints was undertaken during the ninth Consultative Meeting which took place in London, in 1977. In an unanimously accepted recommendation (IX—1, § 8) the Parties vigorously recommended their governments the withholding from exploration and exploitation of Antarctic mineral resources, in the time, when Parties are acting for the establishing of relevant regulations based on the consensus. In the recommendation it was also stated, that there exists the need of new experts meeting on the protection of the environments from the oil pollution in Antarctica. The above mentioned principles, accepted during the preparatory meeting in 1976, were also confirmed. Furthermore, it was agreed upon that rules of exploitation can not be contradictory of Article IV of the Antarctic Treaty. The special preparatory meeting concerning mineral resources was decided upon. Such a meeting took place in July 1979, in Washington. A report from it was presented to the working group on the political and legal aspects of the exploration and exploitation of mineral resources, which held its proceedings during the tenth meeting, in October 1979. The exploitation of Antarctic mineral resources was also discussed by a group of experts on the ecological, technnological and other aspects of the exploration and exploitation of mineral resources (established under paragraph 3 of recommendation IX—1), which met in June, 1979 in Washingon. The final report was presented to the Working Group on the scientific aspects and the protection of the environment. This group held its proceedings during the tenth Consultative Meeting.

The Consultative Meeting concerning the problem of the exploitation of Antarctic mineral resources, took place on December 8 through 12, 1980. Due to the divergence of opinions, the participants were able to present only a short, formal communique.

The legal status of Antarctic mineral resources in closely related with territorial claims. On one hand Argentina, Australia, Chile, France, Great Britain, Norway and New Zealand are asserting their claims, on the other hand, other States, Parties to the Treaty of 1959 — Belgium, Brasil, Czechoslovakia, Denmark, DDR, Japan, Holland, Poland, Romania, South Africa, USA and USSR do not recognise territorial

claims in Antarctica. According to Article IV, of the Treaty of 1959, all claims are "frozen" while the Treaty is in force.

According to the claiman States, mineral resources and their exploitation are subject to their internal legislation. However it should be focused, that on a considerable part of Antarctica there are conflicting claims and that no claims have been asserted to a large part of Antarctica. In literature severe doubts are expressed as to the possibility of exploitation according to the internal legislation of claimant States.

According to the States, which do not recognise the territorial claims, all natural resources may be subject to free exploitation, and as *res nullius*, may be subject to free appropriation. It is also proposed to recognise the Antarctic mineral resources a common heritage of mankind. This would, as a consequence, exclude appropriation by States.

At the present moment it seems difficult to point out which of the above mentioned, mutually excluding, ideas will finally prevail. However due to the fact, that commercial exploitation of Antarctic mineral resources will not be undertaken in the near future, this problem was, until recently, considered as not very urgent.

Much attention is given to the legal aspects of the exploitation of the Antarctic shelf, from which the exploitation will be probably begun. According to the law of the sea, coastal States have sovereign rights on shelf, which is a natural prolongation of the continent. Therefore states, which asserted claims in Antarctica, treat the shelf and its natural resources as ones laying within the limits of their jurisdiction. On the other hand States, which do not recognise the territorial claims, do not accept this standpoint, since, according to them, there are no "coastal States" in Antarctica. Therefore there exists a necessity of a final resolution of the problems of territorial claims to establish a legal status of the Antarctic shelf and its resources. The suggested submission of sea surrounding Antarctica to the Sea Bed Authority, discussed by the III Conference of the Law of the Sea — seems little possible.

For future settlements it will be significant to undertake decisions concerning the delimitation of the sea floor subjesct to the Treaty of 1959 and the new law of the sea.

6. Conclusions

The main goal of the Antarctic Treaty of 1959 was the promotion of scientific investigation in Antarctica and international cooperation in this domain. Provisions concerning territorial claims and peaceful use of Antarctica served that goal.

The provisions "freezing" territoial claims derived, on one hand, from the attitude of the claimant States, and on the other from the expectations, that the claims will expire. In spite of the fact that these hopes proved to be fruitless, it should be stressed that it did not constitute an obstacle either for the development of scientific research or for the exploitation of Antarctica exclusively for peaceful purposes. It was also not an obstacle in the legal regulation of the exploitation of Antarctic living resources. Yet the lack of a final solution of the problem of

territorial claims constitutes a significant obstacle in the regulation of the exploitation of mineral resources located both on mainland and in the shelf.

One of the main principles of the Antarctic Treaty was the use of Antarctica for peaceful purposes only. The Treaty does not contain a definition of "peaceful purposes" and the prohibited types of activities are only given by examples, in practice the accomplishment of this principle does not encounter problems. No violations of this principle have been noticed. The fact that the Treaty of 1959 was the first international agreement prohibiting nuclear tests deserves to be stressed. This is due among others, to the establishment of an effective system of inspection and control.

The freedom of scientific investigation is subject to several limitations provided by the Treaty. However in practice these limitations did not constitute any obstacles in the development of activities in this domain.

The questions of the exploitation of living and mineral resources remained beyond the scope of the Antarctic Treaty.

The so far undertaken measures of protection of living resources of Antarctica which concerned specific species (whaling conventions, the convention for the Conservation of Antarctic Seals) proved to be not effective enough. The effectiveness of Consultative Meetings' recommendations is also critically evaluated. Just the Convention on the Conservation of Antarctic Marine Living Resources, signed in September 1980 introduces an entire system of protection and rational use of these resources.

It seems, that the system adopted in the Convention may be fully effective if adequate principles of control (observation and inspection) will be adopted, according to relevant provisions of the Convention.

The Convention, adopted by consensus, after longlasting and ardous negotiations, should be adequate for the interests of States presently carrying out activities in Antarctica as well as for the possible future parties to the Convention. Yet much depends upon the Commission and the Scientific Committee and the effectiveness of cooperation with other organizations. The standards for the rational exploitation, protection of living resources and the preservation of balance of the Antarctic ecosystem should be stablished.

Also contributions to the Commission's budget should be decided upon. Only two basis criteria, the application of which should be precisely deliberated upon, were listed in the Convention.

It should be stressed, that the Convention confirmed the previously adopted measures of protection and conservation of Antarctic living resources, broadening these measures considerably at the same time.

The exploitation of mineral resources was also beyond the scope of the Antarctic Treaty. Presently great interest in the exploitation of Antarctic mineral resources exists. It is estamated, that the exploitation of hydrocarbons will be the first to be initiated. A great amount of attention was dedicated to the estimated exploitation during a following Consultative Parties Meetings. The lack of solutions in this question derives from to lack of any provisions whatsoever concerning exploitation activities in the Treaty, as well as from the existing territorial claims in Antarctica. The initiation of exploitation, without previously

adopted legal principles could lead to a situation, where exploitation in claimed areas would be subject to the legislation of claimant States. It should however be stressed that there exist conflicting claims.

In areas to which no claims were asserted the exploitation would remain subject to jurisdiction of the exploiting State, However it was above stated, that the Treaty of 1959 can not be interpreted as one prohibiting the exploitation of natural resources, yet it should be recognisted that the exploitation without international regulation would be very unfavorable. This would lead to unlimited exploitation of the unclaimed regions of Antarctica. In claimed areas the exploitation would be subject to bilateral agreements of claimant State and exploiting State.

At the same time the necessity of bearing in mind the general legal principles regulating activities in Antarctica in the future regime of the exploitation of mineral resources, is stressed.

7. References

1. Alexander F. C. 1978 — A Recommended Approach to the Antarctic Resources Problem — University of Miami, Law Review, 2: 371—426.
2. Alverson D. L. 1980 — Tug-of-War for the Antarctic Krill — Ocean Development and Internat. Law J., 2: 171—181.
3. Auburn F. M. 1970 — The White Desert — The International and Comparative Law Quarterly, 19: 229—256.
4. Auburn F. M. 1972 — Un sub-sistema international "Fosil" — Revista de Derecho Internacionaly y ciencias diplomatics, 41—42: 5—11.
5. Auburn F. M. 1978 — Legal Implications of Petroleum Resources of the Antarctic Continental Shelf. (In: Ocean Yearbook 1, Ed. E. Mann, N. Ginsburg) — Chicago, London, 500—515.
6. Burton S. J. 1979 — New Stresses on the Antarctic Treaty: Toward International Legal Institutions Governing Antarctic Resources — Virginia Law Review, 3: 425—512.
7. Butler S. O. 1977 — Owning Antarctica: Cooperation and Jurisdiction at the South Pole — J. of Internat. Affairs, 31: 35—51.
8. Dąbrowa S. 1961 — Spór o Antarktykę — Sprawy Międzynarodowe, 12: 67—78.
9. Dugger J. A. 1978 — Exploiting Antarctic Mineral Resources — Technology, Economies and the Environment — University of Miami Law Review, 2: 315—341.
10. Gambell R. 1977 — Role of the International Whaling Commission — Marine Policy, October, 301—310.
11. Greig D. W. 1978 — Territorial Sovereignty and the Status of Antarctica — Australian Outlook, 2: 117—129.
12. Guyer R. E. 1973 — The Antarctic System — Recueil des Cours, 153—226.
13. Hamanev I. W. 1980 — Živye resursy Antarktiki — Sovet. Gosudarstvo i Pravo, 6: 87—90.
14. Hambro E. 1974 — Some notes on the Future of the Antarctic Treaty Collaboration — Amer. J. Internat. Law, 68: 210—235.
15. Hayton A. 1960 — The Antarctic Settllement of 1959 — J. Internat. Law. 52: 349—371.

16. Hanessian J. 1960 — The Antarctic Treaty 1959 — The Internat. Comparative Law Querterly, 9: 436—474.
17. Jenks J. 1958 — The Common Law of Mankind — London, 380 pp.
18. Kish J. 1973 — The Law of International Spaces — Leiden, 236 pp.
19. Machowski J. 1960 — Traktat w sprawie Antarktyki — Sprawy Międzynarodowe, 3: 95—101.
20. Machowski J. 1968 — Sytuacja Antarktyki w świetle prawa międzynarodowego — Wrocław, 201 pp.
21. Mitchell B. 1977 — Resources in Antarctica — Marine Policy, 1: 91—101.
22. Molodcov S. 1960 — Dogovor ob Antarktike — Sovet. Gosudarstvo i Pravo, 5: 70—85.
23. Mouton M. W. 1962 — The International Regime of the Polar Regions — Recueil des Cours, 176—284.
24. Oxman B. H. 1978 — The Antarctic Regime — University of Miami, Law Review, 2: 285—299.
25. Rakusa-Suszczewski S. 1979 — Dlaczego Antarktyda? — Warszawa, 225 pp.
26. Silevič S. 1966 — Antarktika v miravoj ekonomike i politike — Meždunarodna Ekonomika i Meždunarodnye Otnošenija, 11: 137—152.
27. Simsarian J. 1966 — Inspection Experience under the Antarctic Treaty and the International Atomic Energy Agency — Amer. J. Internat. Law, 72: 502—516.
28. SCAR Bulletin 1977, 57: 209—214.
29. Taubenfeld H. J. 1961 — A Treaty for Antarctica — Internat. Concilation, 531: 245—268.
30. Van der Essen P. 1972 — L'Economie des Regions Polaires. Realisations et Perspectives — Chronique de Politique Etrangère, 4: 391—460.
31. Vicuna F. O., Infante M. T. 1980 — Le droit de la mer dans l'Antarctique — Revue General de Droit International Public, 1: 341—351.

Paper received 6 June 1981

Krystyna Wiewiórowska