CONSTRUCTION AND OPERATION OF VARIANT C OF THE GABČIKOVO-NAGYMAROS PROJECT UNDER INTERNATIONAL LAW

Legal Study for the World Wide Fund for Nature (WWF)

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Foreword

In 1977 Czechoslovakia and Hungary signed a Treaty on the construction and operation of the Gabcikovo-Nagymaros hydro-electric project on the river Danube. Hungary decided in 1989 to abandon the project at Nagymaros and to call for a suspension of the construction and operation of Gabcikovo. It named as the main reason for this decision concerns about the environmental impacts of the project. Czechoslovakia did not share these concerns, and continued with the construction of the project at Gabcikovo. It partially modified the original project so that it would be able to operate it unilaterally. This unilateral solution has become known as the Variant C. At the end of October 1992, Czechoslovakia wants to dam the Danube at Cunovo and two weeks later wants to start operating Variant C.

Since 1989, Hungary has objected to the construction and operation of Variant C. It also declared the termination of the Treaty of 1977 in 1992. So far, the negotiations between the two parties have not produced any results. The matter has evolved into a serious international dispute which threatens to impair significantly the relations between the two neighbouring countries.

In this study I will analyse the Variant C of the Gabcikovo-Nagymaros project under international law. The purpose of carrying out the study is to shed light on certain legal aspects of the controversy and to identify the crucial issues. This seems to be necessary and timely, in particular, because both parties accuse each other of trying to blur the picture and providing false information to the public.

I should like to point out that the World Wide Fund for Nature (WWF) in commissioning the legal study did not instruct me to prepare an opinion providing legal arguments supporting Hungary's claim for the termination of the project. Of course, WWF has stated on many occasions that it favours a termination, or at least suspension, of the project. It has also campaigned against Variant C. However, in the present situation WWF felt that there was an urgent need for an independent legal study in order to provide the public as well as decision makers with unbiased information. WWF specifically asked me to take into account, and to evaluate critically, the arguments presented by both parties to the dispute, as well as statements of independent third party experts.

In order to ensure that no important factual or legal arguments of either side were overlooked, experts and members of the administration dealing with the case in Slovakia,

Czechoslovakia, and Hungary were provided with an earlier version of the study and invited to comment. I also had the opportunity to discuss the earlier version personally with Hungarian and Slovak experts as well with a legal adviser in the Ministry of Foreign Affairs of Slovakia during a trip to Budapest and Bratislava at the end of September 1992. Their comments have been taken into account in the preparation of the final version. However, although the Slovak side indicated to me that further written comments would be submitted before 15 October, non in fact were received.

The study has certain limitations. Those who hope to find straightforward and clear-cut answers will be disappointed. For various reasons the study does not, and cannot, provide such answers. The present case raises a number of complex factual questions, in particular, as regards the environmental impacts of Variant C. Detailed scientific evaluation is needed which would go beyond the scope of this study. But even such scientific evaluation cannot provide clear answers because this would require the ability to predict the future effects of unprecedented interference with a very large and complex ecological system.

Those who argue in favour of the project, as well as those arguing against it, admit that they cannot predict with certainty the multiple effects of Variant C on the environment, in particular on the drinking water. The supporters of Variant C, however, state that a certain risk would have to be taken and that any negative effects on the environment could be corrected by suitable measures. The opponents of the project, in contrast, believe that it would be irresponsible and unacceptable to take such risks and to endanger invaluable, and in some cases irreplaceable environmental resources. I, therefore, restricted myself to a survey of the main arguments and to a short reasoning why I adopt a certain position. Furthermore, I found it indispensable to state during the legal analysis where a different assessment of the facts might lead to different legal results.

In addition, whereas some legal questions are relatively easy to answer (e.g whether Variant C is a violation of the principles of good neighbourliness and equitable utilization) others are complex and little precedent exists. These are notably the right of Hungary to terminate the Treaty of 1977 on the grounds of a fundamental change of circumstances or a state of necessity. Here, valid legal arguments for both sides exist. Inevitably in such cases, any answer must to some extent be based on judgement, and I found it necessary to mention this in the study. I should also like to state that I do not claim that my arguments on these points, and on the case in general, are exhaustive. For reasons of clarity I often deliberately restricted myself to the presentation of the main arguments. I also felt that additional arguments, and in particular further references to legal authorities, would have

added nothing to the substance of the study but only increased its volume probably unnecessarily. Finally, I should like to mention that because the study is addressed not only to international lawyers but also to the wider public, I refrained from including footnotes. A footnoted version, which I also intend to publish, will be prepared shortly.

However, I believe that the study provides, despite these limitations, a complete and thorough analysis of the dispute between Czechoslovakia and Hungary over the Variant C of the Gabcikovo-Nagymaros project. It will have achieved its purpose if it contributes to a more objective and sober discussion of the case in public, and among the parties concerned.

Brussels, October 1992 Georg M. Berrisch

OUTLINE

PART THREE: SUMMARY OF RESULTS AND CONCLUDING REMARKS

PART ONE: FACTS

A. History of the Gabcikovo-Nagymaros Project

The project dates back to the 1950s when Hungary and Czechoslovakia first discussed plans to construct two power stations at Gabcikovo and Nagymaros. They were intended to operate in the peak operation mode, a novelty for hydro-electric power stations on low lands. The plans for the project also included a large scale diversion and modification of the flow of the Danube. It was regarded as a means to strengthen the relationships between the two countries and to bring economic development to the region.

After more than 10 years of planning the Hungarian People's Republic and the Czechoslovak Socialist Republic signed a *Treaty Concerning the Construction and Operation of the Gabcikovo-Nagymaros System of Locks* (the "1977 Treaty") on 16 September 1977 in Budapest. It came into force on 30 June 1978. Already on 6 May 1976 the two parties had signed at Bratislava an agreement on a so-called joint contractual plan (the "Agreement"). The Agreement laid down detailed rules for the mutual assistance during the construction, and set the years 1986 to 1990 as target for starting operation of the Gabcikovo-Nagymaros system of locks.

On 10 October 1983 the parties signed a protocol modifying the 1977 Treaty, and postponing the project for five years. Also the Agreement was modified and the final deadline was set to 1995. On 6 February 1989 the Agreement was once more modified and the deadline was then changed to 1994.

Work on the constructions for the Gabcikovo power station started in 1978. In the early 1980s Hungary realized that the project apparently exceeded its financial and technical capabilities and it concluded private contracts with foreign companies for construction and financing. In particular, it assigned work at the Dunakiliti head-water station to an Austrian company financed by Austrian loans, and work at the downstream channel to a Yugoslav company. Hungary also decided to postpone the construction of the dam of Nagymaros until 1988 because of lack of finances.

Due to an increased activity of environmental groups in Hungary, resistance and protest of the Hungarian population against the Gabcikovo-Nagymaros project grew significantly at the beginning of 1988. Upon a report received from the Hungarian government, the

Parliament of Hungary demanded on 7 October 1988 that a study on the ecological risks of the project be undertaken. A preliminary investigation of the project then revealed significant insufficiencies of the ecological and technical assessment during the planning process. On 13 May 1989 the Hungarian government suspended the construction at Nagymaros, and on 24 May 1989 informed the government of Czechoslovakia accordingly. This step of the Hungarian government was approved by the Hungarian Parliament on 2 June 1989, which also authorized the government to enter into negotiations on the termination of the 1977 Treaty.

On 20 July 1989 a meeting took place between the prime ministers of Hungary and Czechoslovakia during which Hungary announced the suspension of the construction at Nagymaros and Dunakiliti until 31 October 1989. It furthermore proposed to suspend the project for three to five years in order to have sufficient time to evaluate alternatives.

On 25 July 1989, and further through a diplomatic note dated 18 August 1989, the Czechoslovak government, for the first time, informed Hungary on the possibility of a unilateral provisional solution. This solution became known as the "Variant C". Hungary protested against Variant C on 4 October 1989.

On 31 October 1989 the Hungarian Parliament adopted a resolution to abandon the peak operation mode at the Gabcikovo dam and to abandon the construction of the Nagymaros dam. The Parliament also called for further investigation into the matter. Subsequently, Hungary terminated all contracts with private parties on the financing and construction of the various premises. All private contractors were compensated.

After the change of governments in Czechoslovakia and Hungary, further negotiations between the two parties took place in 1990, in particular after April 1991. During these negotiations, Hungary aimed at an agreement to abandon the project or at least to suspend it until the ecological risks were sufficiently investigated. It was also generally willing to compensate Czechoslovakia and to assist in the construction of alternative power stations. Czechoslovakia took the position that work on the constructions for the Gabcikovo power-station and its eventual operation could not be suspended given the fact that large parts of the constructions were ready. It also disagreed with Hungary's assessment of the ecological risks of the project.

The parties discussed several possibilities for the settlement of their dispute. Among them was an offer by European Community for "good office" (*bon offices*), in particular to

assist in the establishment of a trilateral committee of experts. The Commission of the European Communities, however, made the offer subject to the conditions that both parties agree to accept the findings of the expert committee as the basis for further negotiations, and that the parties do not undertake any steps while experts are at work which would prejudice possible actions to be undertaken on the basis of the study's findings. The parties could agree on the first condition. Hungary, however, interpreted the second condition as meaning that construction of Variant C would have to be suspended during the work of the committee, whereas Czechoslovakia held that this is not the case. It insisted on continuing the construction because it could, for economic reasons, not afford a suspension. This disagreement could not be overcome and the committee was never established.

In fact, during the whole period of negotiations, Czechoslovakia had continued with the construction of Variant C and on 23 April 1992 it announced that it would start operating on 31 October 1992.

On 8 May 1992 Hungary once again proposed a discussion on the 1977 Treaty and on the dispute between the two parties, provided that work on Variant C is suspended. Czechoslovakia did not react to this proposal. Finally, on 19 May 1992 Hungary handed over a declaration on the termination of the 1977 Treaty to the government of Czechoslovakia. This declaration contained a detailed reasoning for the termination and was accompanied by a "note verbal" It is not known whether Czechoslovakia or Slovakia reacted to the declaration.

Since then, Czechoslovakia has continued with the construction of Variant C, and recently, started pumping water from the Danube into the canal in order to test the operation of the turbines at the Gabcikovo dam. Czechoslovakia now intends to beginn with the closing of the Danube on 22 October 1992 and start operating Variant C two weeks later.

B. The Original Project as Laid down in the 1977 Treaty

In the 1977 Treaty the parties agreed to construct the Gabcikovo-Nagymaros system of locks which should constitute a single and indivisible operational system of works (Article 1.1). At Dunakiliti, where the Danube constitutes the border between the two countries, a head water installation should be constructed and the Danube should be dammed in a water reservoir of some 60 km^2. Two thirds of it were to be on Czechoslovak and one third on Hungarian territory. From there the water should flow for 17 kms through a by-pass canal

up to 730 meters wide to the hydro-electric power station at Gabcikovo, and again for 8 kms through a canal back to the original bed of the Danube. A second power station was to be build at Nagymaros more than 100 kms downstream. In addition, the parties agreed to undertake significant modifications of the Danube river bed between Dunakiliti and Nagymaros (Article 1.2 and 1.3). The technical specifications of the project were dealt with in the Agreement (Article 1.4).

The project was to be a joint investment (Article 1.1), and costs were to be born jointly and in equal measure (Article 5.1). Each party had specified responsibilities as to the construction and operation of the project (Article 5.5). The major constructions, i.e. the Dunakiliti head-water installation, the by-pass canal, the Gabcikovo power-station and series of locks, and the Nagymaros power-station and series of locks should be owned jointly by the parties (Article 8). They also should use and benefit jointly from the operation (Article 9.1).

The 1977 Treaty also contained some provisions on the protection of the environment. The parties agreed to ensure that the water of the Danube should not be impaired as a result of the construction and operation of the system of locks (Article 15.1) and that they should, through the means specified in the joint contractual plan, ensure compliance with the obligations for the protection of nature arising in connection with the construction and operation of the system of locks (Article 19). Furthermore, the bed of the Danube, including the old bed of the Danube, should be maintained and the provisions of agreement on frontier waters in force between the two parties should be taken into account (Article 16).

Finally, the 1977 Treaty contained provisions on the frontier between the two parties which, according to existing agreements, is the main navigation line (Talweg) of the river bed of the Danube. Article 22.1 of the 1977 Treaty provided that, apart from minor revisions, the state frontier should be the centre line of the "present" main navigation line. Details should be regulated in a separate treaty to be concluded between the parties (Article 22.2). However, such a treaty has never been concluded.

C. Variant C

When Hungary decided in 1989 to suspend the Gabcikovo-Nagymaros project, large parts of the constructions necessary for the operation of the Gabcikovo power-station and system

of locks were ready. These were the Dunakiliti head-water station, the water reservoir, the by-pass canal and the Gabcikovo power-station and system of locks itself.

The Dunakiliti head-water station was on Hungarian territory and, thus, could not be operated by Czechoslovakia without the co-operation (or consent) of Hungary. Therefore, Czechoslovakia decided to build a new head-water station 11 kms upstream at Cunovo where the Danube is still totally on Czechoslovak territory. The new head-water station shall be only a few hundred meters away from the point where the Danube becomes a boundary river. Czechoslovakia also restricted the water reservoir to its territory, and prolonged the by-pass canal accordingly.

Czechoslovakia intends to begin with the closing of the Danube on 22 October 1992 and to start operating Variant C two weeks later. From then on it will divert at the new Cunovo head-water station, for a trial-period of up to two years, an average 1.400 m^3/sec of the water of the Danube into the reservoir and the canal. Only 600 m^3/sec (or 30 % of the average flow of 2000 m^3/sec) will remain in the (old) river bed. The diverted water will be returned to the Danube at the point originally foreseen in 1977 Treaty.

After the trial period the amount of water diverted will be increased to 1.650 m^3/sec, thus leaving only an average of 350m^3/sec (or 17,5%) in the (old) river bed. Czechoslovakia has claimed that the amount of water that will eventually be diverted depends upon the outcome of investigations to be undertaken during the trial period that shall also take into account environmental aspects

Czechoslovakia also stated recently that, should Hungary not change its position and further refuse to participate in the project, it will build a further, and rather small power station on its territory close to the Dunakiliti head-water station. The purpose of this further power station shall be to allow the diversion of some water into the side dams of the old river bed. Works on the premise have not started yet.

D. Ecological, Technical and Economic Assessment of the Variant C and Possible Alternatives

It is surprising that for a project of the magnitude of the originally envisaged Gabcikovo-Nagymaros system of locks only very few and apparently superficial studies on ecological, economic and technical aspects have been carried out during the planning process. It was

only since the mid-1980s that upon the initiative and under the guidance of the Hungarian government and environmental groups like Duna Kör (Danube Circle) and the World Wide Fund for Nature (WWF) such studies were undertaken. Later, Slovak scientists also studied the matter more thoroughly, and the Slovak government asked the Canadian engineering company Hydro-Quebec Int., which itself engages in the construction of large hydro-electric dams, for its opinion. Hydro-Quebec Int. issued a very critical report and recommended further investigations in the environmental impacts of the project as well as an environmental impact assessment. Further important hydrological studies were started only in 1990 under the "PHARE" programm of the European Communities. Final results of these studies are expected not before 1994, i.e. long time after the intended operation on Variant C.

The ecological, economic and technical assessment of Variant C and its possible alternatives raise a number of complex and technical issues. It cannot be the purpose of the present study to deal with those issues in detail nor to evaluate the reasonableness of the results of the different studies. However, those results will in the following be briefly summarized and they form the basis for the legal analysis. Because the Slovak side contests many of the findings of the various studies, their objections shall also be presented and commented on briefly. It should be noted that the facts as set out below also apply with regard to the original project as envisaged in the 1977 Treaty.

I. Ecological Assessment

The studies show that Variant C will have severe negative ecological impacts. Some of the ecological damage has already occurred through the construction of the facilities, in particular the water reservoir and the canal. Large areas at the banks of the Danube have been destroyed and forests cut down, especially in the inundation zones. However, most of the ecological damage will occur only after operation of the project has started and the water of the Danube has been diverted into the reservoir and the canal.

East of Bratislava, on both sides of the border, one of the largest drinking water reservoirs in Europe can be found. Although it is yet not fully developed, it already supplies a large percentage of the Hungarian and Slovakian population with drinking water. The drinking water is mainly gained through wells close to the river-banks, and, therefore, the quality of the drinking water depends to a large extent on the infiltration from the Danube through layers of certain sediments on the upmost part of the Danube river bed. The slow flowing

water in the reservoir and the canal as well as in the old bed of the Danube caused by the diversion of the water will result in larger deposits of polluted silt, and, thus, endanger the supply and quality of the drinking water. Self-purification processes are significantly reduced in artificial canals and can, together with increased anaerobic conditions near the bottom, imper the water quality of the Danube. In addition, the changing level of the water table might cause different movements in the ground water and the drinking water reservoir. Because certain areas of the drinking water reservoir are already polluted (e.g. though pesticides or industrial affluents), this could lead to significant pollution of the whole reservoir.

The fact that only 15 to 30% of the present water flow will remain in the Danube will cause the drying out and, thus, destruction of the ecosystem in the inundation zones on both sides of the river. This ecosystem is highly complex and depends on the seasonal dynamics of the river, i.e. the constant, but neverthless irregular, change of high and low water. The inundation zones at the Danube are extremely valuable with regard to their high bio-diversity, and because they are still almost undestroyed. Like all inundation zones they also contribute very much to the self-cleaning ability of the river.

The diversion of the Danube will also have an extremely negative impact on the fauna in the old river bed of the Danube as well as in the water reservoir and the canal. The water reservoir and the canal will be highly artificial and alien biotopes. Most studies expect that only very few species of fish will be able to live in that new environment.

The diversion of the water will further have significant impacts on the level of the water table. Close to the old river bed of the Danube, but also a few kms away, the water table will be lowered. Not only in the former inundation zones this will further contribute to the destruction of the ecosystem. Furthermore, it will cause significant loss in crops in this fertile region. In the areas close to the new water reservoir, the water table will be raised. This will happen rather quickly and therefore also have negative impacts on flora and fauna as well as on crops.

Finally, once the water of the Danube flows through the reservoir and the canal, the inundation zones no longer serve as an absorber in case of (large) high waters. Further downstream such high waters could then constitute a significant risk, because they will occur there on a much larger scale. Of course, even after operation of Variant C such high waters could, at least partially, also be directed into the (old) river bed of the Danube. However, in such case flooding of the former inundation zones will occur extremely fast,

and, because the ecology in this area will change and will no longer be adapted to such floods, will very likely cause further ecological damage.

II. Economic Assessment

Variant C is a multi-purposes project as it shall produce energy, improve navigation, and provide protection against high waters in that area. However, the main economic reason behind the project is Czechoslovakia's, respectively Slovakia's, demand for energy. But most of the studies suggest that the Variant C is a very inefficient way to produce energy and that its economic costs and negative impacts far outweigh its benefits.

Czechoslovakia and Slovakia have incurred and continue to incur enormous financing costs for building Variant C. In addition, maintenance and operation of the premises will result in further costs, in particular as evidence suggests that the quality of the construction is not always good. In contrast to the enormous costs incurred in the past and to be expected for the future, the power station will only generate 320 MW and will contribute only a small proportion to Slovakia's energy production. Furthermore, repayment of loans obtained from foreign companies will not be done in cash but in energy produced at Gabcikovo. It must therefore be expected that for the foreseeable future Slovakia will not enjoy the economic benefits from the project. It should be added that one of the reasons why Hungary opted out of the project was that, because of the need to pay back loans in energy, it would not benefit from the project until about 2005. No financing could be obtained from international institutions (e.g. the World Bank or the EBRD).

In addition to the direct costs, Variant C will also cause negative economic impacts on both sides of the border. Where the water table is lowered, revenues from agriculture and forestry are expected to decrease significantly. In addition, new irrigation measures have to be developed and financed. As regards fishing, the studies suggest that commercial and recreational fishing will no longer be possible. Both countries will also have to undertake additional and costly efforts as for drinking water purification because of the reasons discussed above. Finally, the project will, because of its negative environmental impacts and the creation of an artificial scenery, reduce the possibilities to develop tourism in that region.

III. Technical Assessment

The technical assessment of Variant C focused in particular on geological and seismological aspects. It was found that the geological studies undertaken during the planning period were insufficient. The site originally envisaged for the Gabcikovo dam was on a young geological fault. It was then only slightly changed and the Gabcikovo dam is now only some 600 meters away from that young geological fault.

Also the seismological studies carried out during the planning period were insufficient. Evidence now suggests that the Gabcikovo dam, and in particular the dikes constituting the canal, are not stable for the earthquake risk in the region.

Finally, there is evidence suggesting that the constructions in general are not safe. This applies especially to the canal which, in addition, does not have any security locks in its entire length of 26 kms.

However, further studies on these issues are still to be undertaken but results will only be available after operation of Variant C has started.

IV. Alternatives to Variant C

Several studies have also dealt with possible alternatives to the construction and operation of the Variant C. These studies show that Slovakia's demand for energy could be served through the construction of new, or the modernization of existing, caloric power stations. This would be cheaper, in particular in the long run, even considering the costs already incurred for the construction of Variant C. Furthermore, there is an enormous potential to increase efficiency in the use of energy.

It must also be noted that organizations like the World Bank or the European Bank for Reconstruction and Development have indicated their unwillingness in environmental policy statements and operational directives to support and finance Variant C because of its negative environmental impacts. However, assistance might be obtained from those institutions for the construction of alternative or modernization of existing power stations, or measures for a more efficient use of energy.

As regards the intention to economically develop the area through the operation of Variant C, tourism is a suitable alternative because of the still rather undisturbed nature in that area. Tourism could be fostered through the establishment of a trilateral national park including areas on Czechoslovak, Hungarian and Austrian territory.

These alternatives would not diminish the use of the Danube for navigation. Certainly, operation of Variant C would improve shipping on the Danube. But, shipping already is possible in the present situation. Even without operating Variant C, it will be possible to fulfill the 1988 recommendation of the Danube Commission stating that in that area navigation with vessels having a draught of up to 2,5 meters shall be ensured. This can be done through certain measures regulating the flow of the river without changing the hydrology of the Danube. Thus, the improvements of navigation through Variant C must be considered as marginal and even unnecessary.

V. Assessment of Czechoslovakia's and Slovakia's Objections

Several of the above statements on the ecological, economic, and technical assessment as well as the possible alternatives of Variant C are disputed by the Slovak side. Most importantly, Slovakia claims that the project will not have a negative but a positive impact on the quality and quantity of the drinking-water reservoir. It is also said to improve the environment in that area in general. Furthermore, the Slovak side claims that the operation of the project is essential for the prevention of further erosion of the river bed and for effective, and urgently needed, flood protection.

It is, for reasons mentioned above, beyond the scope and purpose of this study to provide a detailed evaluation of the dispute of the parties over the facts of the present case. Nevertheless, it seems indispensable, for reason of fairness, to summarize Slovakia's arguments, and to briefly comment on them.

Concerning the effects on Variant C on the drinking-water, which is the most important concern of Hungary, Slovakia states that the upper layers of the ground-water are already polluted by pesticides and industrial affluents. Therefore, it would in any event be necessary to drill wells deep enough to reach into levels still unaffected by such pollution. Slovakia claims that Variant C would have no effect on such deeper levels of the reservoir. Furthermore, it holds that polluted silt contained in the water will be directed to certain places, and infiltration to other places where sediments of polluted silt will not be found.

However, even the Slovak company constructing Variant C (Vodohospodárska Vystavba Bratislava) admits in a press-brochure of April 1992 outlining the stand-point of the Czechoslovak side that there can be no certainty that the project might nevertheless have negative impacts on the drinking-water. It states that there would be a certain minimal risk but claims that studies had proved that any possible negative impact could be controlled by suitable measures.

Thus, it can be stated that there is no doubt that Variant C constitutes an interference with the underground drinking-water reservoir. This reservoir is, because of the geological particularities in that area, very large, and certainly larger than any reservoir for which the effects of damming a river providing the primary source of infiltration have been studied so far. The effects of Variant C, or any other interference, on that reservoir cannot be predicted with certainty. However, as most studies show that Variant C will cause unpredictable (negative) changes in the reservoir, it seems to be at least a wise precaution, if not an absolute necessity, to await the results of further studies on that matter before interfering with it. This conclusion is also supported by the above mentioned report of Hydro-Quebec Int.. In addition, if the effects of any interference with the reservoir cannot be predicted, it is also highly questionable whether negative impacts could be corrected through suitable measures. This requires precisely the ability to predict the effects of such measures; otherwise the case is used as an experiment.

Slovakia further argues that the environment would be improved through the operation of Variant C. This argument is based, first, on the assumption that the erosion of the Danube river bed, caused by various damming of the Danube further upstream (in Austria and Germany), leads to a constant gradual ecological destruction of the Danube region. Variant C is said to be the way to stop that erosion. The second reason presented is that artificial floods could be created in the (former) inundation zones which would have less negative effects than the "uncontrolled floods" brought about by nature.

It is correct that erosion of the Danube river occurred (and continues to occur). This erosion must, for a number of reasons, be stopped. However, there are several alternatives to Variant C available (e.g. placing small barrages on the river bed). Such alternatives have been employed successfully in other regions (e.g. the Upper-Rhine). They also have the advantage that they would cause almost no, or at least much less, erosion of the river bed further downstream than Variant C. In addition, they are less costly.

Regarding the second reason presented by Slovakia, it must be stated that it is simply an illusion to assume that man-made artificial floods could replace natural floods. It is precisely the irregularity of nature that is of vital importance for the ecology, and the high bio-diversity, in the inundation zones. Furthermore, Variant C will so significantly reduce the overall amount of water that flows into the inundation zones that the ecology will necessarily be severely damaged, even if from time to time man-made floods are allowed.

Finally, Slovakia claims that operating Variant C is necessary in order to ensure effective protection against floods in the area north of the Danube and east on Bratislava. In particular the villages between the Danube and the canal would have to be protected. The Slovak side states that other means against flood protection would not be suitable in the present case for two reasons. First, a solution would have to be implemented quickly, and secondly, any other solutions would constitute an even more significant interference with the environment in the inundation zones.

Czechoslovakia has, of course, a legitimate interest in an effective protection of its citizens against floods. But Variant C is neither the only means available, nor seems it to be the best solution. First, the dikes built in the course of the construction of the water reservoir already constitute a very effective, and immediately available flood protection without putting Variant C into operation. It is only necessary to build a small dike so that the water cannot not enter the canal. Furthermore, it is possible to reinforce the existing older dikes in the inundation zones. Finally, if Variant C were to provide effective flood protection, it would be necessary to direct almost all of the water through the reservoir and the canal, and to let only a rather small amount flow into the former inundation zones. Thus, they can no longer absorb part of the high water, and the high water will, as stated above, occur further downstream of Gabcikovo on a much larger scale.

E. Concluding Remarks on the Facts

One of the major reasons, why the parties failed, until now, to reach a solution of their dispute is a fundamental disagreement on the facts of the case. This is true, first of all, as regards the ecological, economic and technical assessment of the project and its possible alternatives. But the parties also accuse each other of being responsible for the failure of the negotiations, and of providing wrong information to the public. It is not the purpose of this study to deal with such accusation because they are largely irrelevant for the legal analysis and would only blurr the picture. The legal analysis is, therefore, strictly based on

the facts as stated above. Where necessary, it will be pointed out that certain facts are disputed.

PART TWO: CONSTRUCTION AND OPERATION OF VARIANT C UNDER INTERNATIONAL LAW

A. Survey of the Analysis

The study will first look at Variant C under the rules of customary international law and then under bilateral and multilateral agreements in force between the two parties, with the exception of the 1977 Treaty. Only after it has been established whether the Variant C is in accordance with the rules of customary international law and the provisions contained in those agreements, the study will undertake to look at the implications of the 1977 Treaty.

This approach may seem unusual because it starts from general rules rather than focussing first on the specific rules agreed upon by the parties in the 1977 Treaty. The reason behind that approach is that different questions have to be asked when looking at the 1977 Treaty depending on the outcome of the analysis whether Variant C is in accordance with other rules of international law. If it is indeed in accordance with the rules of customary international law and agreements in force between the two parties, one has to ask whether the 1977 Treaty forbids Variant C. If, however, it has been shown that Variant C violates rules of customary international law and agreements in force between the two parties, one has to ask whether the 1977 Treaty allows Czechoslovakia to carry out the Variant C. In both cases it is, of course, necessary to examine the status of the 1977 Treaty.

B. Violation of Rules of Customary International Law and Boundary Agreements

I. Rules of Customary International Law

In the present case two fields of customary international law are of particular relevance. They are the law on the non-navigational use of international watercourses and international environmental law. Both fields of law overlap to some extent and the two most important principles of customary international law applicable in the present case are contained and have been developed in both of them. They are the principle of equitable utilization and the principle of good neighbourliness.

Before analysing the Variant C under customary international law, one introductory remark on the nature of international environmental law in general shall be made. States seldom commit themselves to binding legal instruments on the protection of the environment because they do not want to be restricted in their sovereignty over the exploitation of their natural resources and the carrying-out of economic activities on their territory. Therefore, many of the famous international declarations on principles of international environmental law (e.g. the *1972 Stockholm Declaration; 1974 UN Resolution 3129 (XXVII) on Co-operation in the Field of the Environment Concerning Natural Resources Shared by Two or More States* (the *"1974 Shared Natural Resources Resolution"); 1982 UN World Charter for Nature; UNEP Draft Principles on Conduct in the Field of the Environment for the Guidance of States in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States* (the *"UNEP Draft Principles"*); and recently the *Rio Declaration*) as such do not directly create legally binding obligations for States. The same is true for statements issued by international summits of heads of states on the subject and the recommendations of international study groups (e.g. the legal principles contained in the *Brundtland Report on Our Common Future*). These legally non-binding instruments are commonly referred to as "soft-law" Soft law does not directly impose legally binding but rather morally compelling obligations upon a state.

However, the above-mentioned sources of soft law, in particular the various UN Declarations and the *UNEP Draft Principles*, are not without legal relevance. First, they can be referred to when interpreting binding rules of international law. Secondly, they often turn out to be the basis for the development of binding rules of customary international law. Thirdly, they can serve as evidence for the establishment of such binding rules of customary international law. And finally, they also sometimes repeat legal principles of customary law.

With regard to the two above-mentioned principles of customary international law, the work of two international organizations is of particular interest. The first is the International Law Commission (ILC) which is a sub-organ of the General Assembly of the United Nations. The second organization is the International Law Association (ILA), a non-governmental organization founded in 1873. Both organizations have as their objectives to contribute to the codification of international law in the sense that they try to restate and systemize those rules which they believe reflect the current customary law. In addition, both organizations have as their second objectives to contribute to the development of international law. It is therefore necessary to evaluate in each case whether

a given rule proposed by one of these organizations constitute a codification or a development of international law.

1. Substantive Rules

a) The Principle of Equitable Utilization

The principle of equitable utilization has been developed in the context of the international law on rivers. It was first established in the *River Oder* case by the Permanent International Court of Justice (P.I.C.J.) where the Court held:

> "But consideration is given to the manner in which States have regarded the concrete situations arising out of the fact that a single waterway traverses or separates the territory of more than one State... it is at once seen that a solution of the problem has been sought not in the idea of a right of passage in favour of upstream States, but in that of a community of interests of riparian States. This community of interests in a navigable river becomes the basis of a common legal right, the essential features of which are the perfect equality of all riparian states in the use of the whole course of the river..."

In the *Lac Lanoux* arbitration which concerned a dispute between France and Spain, the principle was also been referred to in a specific environmental context. France intended to carry out works for the use of the lake which flows into the Carol river and into the territory of Spain. In particular, it intended to partially divert the water, but let all water return into the Carol before the river flows into Spain. Even though the tribunal in that case denied a violation of international law by France because the French project had no impact on the quality of the water, it made clear that if the water would have been polluted or its temperature had been raised, Spain could have claimed that the project is abandoned.

It is firm to say that the principle of equitable utilization is generally accepted as a rule of customary international law. It has also been employed outside the context of international rivers and is expressed in the *1974 Shared Natural Resources Resolution* and in Article 3 of the *1974 UN Charter of Economic Rights and Duties of States*. The *UNEP Draft Principles* (principle 1) also refers to the principle of equitable utilization.

The ILA incorporated the principle of equitable utilization in Article IV of its famous *Helsinki Rules on the Use of Waters on International Rivers* (the "*Helsinki Rules*") adopted in 1966 reading:

> "Each basin State is entitled, within its territory, to a reasonable and equitable share in the beneficial uses of the waters of an international drainage basin"

Most recently the ILC has elaborated on the same principle in its *Draft Principles on the Use of International Watercourses* (the "*Watercourses Draft*"). Article 5 of the *Watercourses Draft* stipulates:

> 1. Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimum utilization thereof and benefits therefrom consistent with adequate protection of the international watercourse.
> 2. Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilize the international watercourse as provided in paragraph 1 of this article and the duty to co-operate in the protection and development thereof, as provided in the present articles."

The crucial question is, of course, how to determine what utilization of the watercourse is equitable. Both the *Helsinki Rules* (Article V) as well as the ILC *Watercourses Draft* (Article 6) list various factors for the determination. Article 6 of the ILC *Watercourses Draft* reads:

> 1. Utilization of an international watercourse in an equitable and reasonable manner within the meaning of article 5 requires taking into account all relevant factors and circumstances, including:
> (a) geographic, hydrographic, hydrological, climatic and other factors of a natural character;
> (b) the social and economic needs of the watercourse States concerned;
> (c) the effects of the use or uses of the watercourse in one watercourse State on other watercourse States;
> (d) existing and potential uses of the watercourse;
> (e) conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect;
> (f) the availability of alternatives, of corresponding value, to a particular planned or existing use.
>
> 2. In the application of article 5 or paragraph 1 of the present article, watercourse States concerned shall, when the need arises, enter into consultations in a spirit of co-operation."

The ILC pointed out in its commentary to Article 6 that the factors listed can only serve as guidance in the application of the rule contained in Article 5 and that the list of factors is non-exhaustive. The weight to be accorded to any factor and its relevance will differ in each individual case. Also Article V of the *Helsinki Rules* states that determination of what

is a reasonable and equitable share has to be done on a case-to-case basis. It furthermore stated in Article VI of the *Helsinki Rules* that

> "A use or category of uses is not entitled to any inherent preference over any other use or category of uses."

Thus, it cannot be said that the use for irrigation generally deserves preference over the use for hydro-electric power or vice versa. If uses are conflicting, a decision has to be sought on the basis of the circumstances of the individual case. The ILC has taken this position too.

There is, nevertheless, a difference between the approach of the ILA and the ILC. The *Helsinki Rules* are clearly utilization oriented. They only deal with an accommodation of the different uses and the question as to whether the use is equitable. They do not address the problem whether it is sustainable. The ILC Watercourses Draft reflects a somewhat different approach as it particularly mentions conservation and protection of the watercourse as relevant criteria (Article 6.1 (e)).

b) The Principle of Good Neighbourliness

The principle of good neighbourliness originates from the Roman law rule of *sic utere tuo ut alium non aledas*, meaning that one has to use one's own so as not to injure another. As a rule of international law it was first applied and elaborated in the *Trail Smelter* arbitration between the USA and Canada, a landmark case in international environmental law. The USA were seeking compensation from Canada for damages caused to US farmers by emissions from a zinc and lead smelter on Canadian territory close to the US border. The binational tribunal, established in 1937, held in its award of 1941 that:

> "... under the principles of international law as well as of the law of the United States, 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 on the territory of another country or to the properties or persons therein, when the case is of **serious consequences** and the injury is established by **clear and convincing evidence**" (emphasis added).

The I.C.J. referred to this principle in the *Corfu Channel* case and held that every state has the obligation "not to allow knowingly its territory to be used contrary to the rights of other states." Thus, the principle of good neighbourliness forbids a state to carry out or

allow activities on its territory which injure neighbouring states. In the environmental context activities are considered as injuring neighbouring states if they have a significant harmful impact, indicated by the unusualness of the effect.

The principle has developed into a rule of customary international law. It has not only been referred to in the abovementioned cases, but the principle itself and the *ratio decidendi* of the *Trail Smelter* award were subsequently confirmed in several other decisions of international tribunals with regard to transboundary air and water pollution. In addition, several international conventions (e.g. *1979 ECE Convention on Long-Range Transboundary Air Pollution*; *UN Convention in the Law of the Sea*) and declarations (*1974 UN Charter of Economic Rights and Duties of States* (Art. 30); *1982 UN World Charter for Nature* (principles 21 and 22); *UNEP Draft Principles* (principle 3.1)) have incorporated the good neighbourliness principle. Most importantly it is expressed in principle 21 of the famous *Stockholm Declaration* and recently in principle 2 of the *Rio Declaration*, the former one reading:

> "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 do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction."

Finally, the ILC has incorporated the principle as Article 7 in the *Watercourses Draft*, stipulating:

> "Watercourse States shall utilize an international watercourse system in such a way as not to cause appreciable harm to other watercourse States.

It can thus be concluded that the principle of good neighbourliness as a rule of customary international law limits the sovereignty of states over the use of their territories and natural resources. However, it does not restrict all activities having a potential harmful impact on the territory of a neighbouring state, but only those causing a **significant** harmful impact. Also Article 7 of the ILC *Watercourses Draft* speaks of **appreciable harm**, and the *UNEP Draft Principles* contain the following definition:

> "In the present text, the expression "significantly affect" refers to any appreciable effects on a shared natural resource and excludes "*de minimis*" effects."

However, none of the documents contains a provision setting out guidelines for the determination of what constitutes a significant or appreciable harm.

From an environmentalist's point of view the principle of good neighbourliness has one important shortcoming. It only forbids activities causing significant harm on **another** state's territory or on areas beyond national jurisdiction. The principle does not restrict in carrying out activities if the harmful effect occurs on its own territory (see also below C.II.1.).

c) Relationship between the Principle of Equitable Utilization and the Principle of Good Neighbourliness

There is a potential conflict for the two above-discussed principles. In certain cases a use might be considered as equitable but will cause appreciable or significant harm to other riparian States. The question therefore arises which of the two principles will prevail.

The position adopted by the ILA in its *Helsinki Rules* is that the principle of equitable utilization is the yardstick for determining whether the use of an international watercourse is in accordance with international law. The approach of the ILA was based on its assumption that "the optimum goal of international drainage basin development is to accommodate the multiple and diverse uses of the co-basin State" According to the ILA, the rule of equitable utilization is best suited to achieve such an accommodation.

The ILC took a counter position and stated that the rule providing that the use of an international watercourse may not cause significant or appreciable harm to other watercourse States should be the final yardstick. It stated in its commentary to Article 8 of the *Watercourses Draft*:

> "A watercourse State's right to utilize an international watercourse [system] in an equitable and reasonable manner has its limit in the duty of that State not to cause appreciable harm to other watercourse States. In other words - *prima facie*, at least utilization of an international watercourse [system] is not equitable if it causes other watercourse States appreciable harm...The Commission recognizes, however, that in some instances the attainment of equitable and reasonable utilization will depend upon a toleration by one or more watercourse States of a measure of harm. In these cases, the necessary accommodations would be arrived at through specific agreements. Thus a watercourse State may not justify a use that causes appreciable harm to another

> watercourse State on the ground that the use is "equitable", in the absence of agreement between the watercourse States concerned."

What makes the ILC position more compelling is that the approach taken by the ILA *Helsinki Rules* is ill-suited for environmental protection. According to the ILA approach, a State must accept significant harm to its environment, i.e. harm that is more than *de minimis*, if it is caused by an activity that is equitable with regard to the distribution of the uses or benefits of the international watercourse system. Even a significant and long lasting pollution might have to be accepted under this rule.

It should also be noted that the ILC approach does not give absolute preference to the no-harm rule. It only states that at least *prima facie* the fact that a use of an international watercourse causes appreciable harm indicates that that use is non-equitable and that in exceptional circumstances such use has to be accepted in order attain equitable and reasonable utilization. In such a case the concerned parties should try to reach specific agreements.

Also, the ILA itself has meanwhile revised its approach. Article I of its *Complementary Rules Applicable to International Waterresources* states:

> "A basin State shall refrain from and prevent acts of emissions within its territory that will cause substantial injury to any co-basin State, provided that the application of the principle of equitable utilization as set forth in Article IV of the Helsinki Rules does not justify an exception in a particular case."

It is interesting to note that the approach taken by the ILC has also been adopted by the World Bank. In its recent *Operational Directive of the World Bank concerning Projects of International Waterways*, it has included guidelines strongly resembling the ILC *Watercourses Draft*, and among others a provision according to which the bank staff must assess whether a proposed project will not cause appreciable harm to the other riparians.

Finally, the ILC approach has a practical advantage as it is easier to apply. Although the *Helsinki Rules* (Article V) as well as the ILC *Watercourses Draft* (Article 6) contain guidelines for the determination of equitable utilization, such a determination will generally be very difficult to make because numerous factors and interests have to be balanced. Compared with this, the determination whether a certain use causes appreciable harm will be rather simple to do.

It seems also correct to say that the approach taken by the ILC in its *Watercourses Draft* reflects the current customary international law. This seems to be particularly true as the ILC did not propose an absolute priority of the no-harm rule but left open the possibility that in exceptional circumstances the principle of equitable utilization might require a State to accept appreciable harm. Even though many of the international declarations show that States are very reluctant to commit themselves to a restriction of their sovereignty with regard to the exploitation of their national resources, these declarations, as well as other state practice, nevertheless reflect their attitude that only in exceptional circumstances national or international resources may be used in a way as to cause appreciable harm to other states. Generally, every effort must be undertaken to avoid this. An example is principle 3.3. of the *UNEP Draft Principles*:

> "Accordingly, it is necessary for each State to avoid the maximum extent possible and to reduce to the minimum extent possible the adverse environmental effects beyond its jurisdiction of the utilization of a shared natural resources so as to protect the environment, in particular when such utilization might:
> (a) cause damage to the environment which could have repercussions on the utilization of the resource by another sharing State;
> (b) threaten the conservation of a shared renewable resource;
> (c) endanger the health of the population of another State.
> **Without prejudice to the generality of the above principle, it should be interpreted, taking into account, where appropriate, the practical capabilities of States sharing the natural resource**." (emphasis added).

Furthermore, in none of the cases where tribunals found that a state caused significant harm the defence was raised that the state had to accept such harm because the use was equitable. It would go beyond the scope of this study to give a more detailed support for this conclusion. Reference therefore shall be made to the commentary of the ILC on Article 7 of the *Watercourses Draft*.

d) Does Variant C Violate the Principle of Good Neighbourliness and the Principle of Equitable Utilization

As the utilization of an international watercourse can be deemed *prima facie* inequitable if it causes appreciable harm to other watercourse States, it shall first be looked at whether Variant C causes appreciable harm to Hungary.

(1) Variant C under the Principle of Good Neighborliness

As stated above, guidelines for the determination of what constitutes an appreciable or significant harm do not exist, but it is clear that one has to look at the **effects of the activity** and not at the activity itself. The cases so far decided concern almost all questions of water or air pollution and contamination. Some indications of what constitutes an appreciable harm can first be found in the *Lac Lanoux* case, where the Tribunal stated:

> "In effect,... none of the guaranteed users will be injured in his enjoyment of the waters ... It could have been argued that the works would bring about a definitive pollution of the waters of the Carol or that the returned waters would have a chemical composition or temperature or some other characteristics which could injure Spanish interest. Spain could then have claimed that her rights had been impaired in violation of the Additional Act. Neither the dossier nor the debates of this case carry any trace of such an allegation."

The second reason why the Tribunal denied the presence of a serious injury was that the diverted water was directed back into the Carol river **before** the river went into Spain. Also the *Trail Smelter* Arbitration gives some indications as to what constitutes an appreciable harm. In that case the Tribunal concluded that the damage suffered by U.S. farmers as a result of the emissions of the Canadian smelter constitutes such an appreciable harm.

In the present case the diverted water would not be returned into the Danube before the Danube becomes a boundary river but some thirty kms downstream. This diversion will, first of all, most likely cause damage to an important drinking water reservoir on the Hungarian side. Furthermore, the diversion will lead to a lowering of the water table on the Hungarian side that will cause damage to Hungarian farmers through a loss of crops. It will also lead to the destruction of a unique ecosystem, i.e. the inundation zones at the banks of the Danube, which is at least partially on Hungarian territory.

The Variant C will also have a negative impact on the quality of the water. This is true for the water in the old Danube as well as for the water in the water reservoir and the canal which is later directed into the old river. The value of the river for Hungary will also be deminished because its use for navigation, yachting and tourism is significantly reduced.

Taking the consequences of Variant C into account and comparing them with the decisions rendered in the *Lac Lanoux* case and the *Trail Smelter* case, it seems safe to conclude that the effects caused by Variant C on Hungarian territory constitute a significant or

appreciable harm to Hungary. Therefore, Variant C constitutes a violation of the principle of good neighborliness.

(2) Variant C under the Principle of Equitable Utilization

Having shown that Variant C causes appreciable harm to Hungary, it shall now be analyzed whether Variant C constitutes an equitable use of the Danube by Czechoslovakia respectively Slovakia. Whether this is the case shall be analized according to the factors listed in Article 6 of the ILC *Watercourses Draft*. However, because Variant C causes appreciable harm to Hungary, it constitutes, for the resaons stated above, prima facie not an equitable utilization of the river and could only be considered equitable under special circumstances.

Before dealing with those factors in detail, it should again be stressed that they are only a guidance and that it is important to take into account all relevant factors and circumstances. Furthermore, it must be reiterated that no category of use deserves generally preference over any other category. Thus, neither Hungary's present use of the Danube for irrigation and fishing nor Czechoslovakia's respectively Slovakia's intended use of the Danube for hydro-electricity can generally claim preference.

(a) geographic, hydrographic, hydrological, climatic and other factors of natural character

The geographical factors include, *inter alia*, the extent of the international watercourse in the territory of each watercourse state. In this regard it must be noted that the Danube is for some 10 kms a boundary river between Slovakia and Austria, and flows then for roughly 20 kms exclusively through Slovak territory. Afterwards it constitutes for some 160 kms the boundary between Slovakia and Hungary and from then on flows some 450 kms exclusively through Hungarian territory. Thus, Hungary has a much larger portion of the Danube, and in particular, it has a much larger portion of the Danube exclusively within its territory. Therefore, it does not seem *per se* to be an inequitable utilization if Slovakia diverts the Danube for some 30 kms away from the boundary into its territory for hydro-electric use and afterwards returns almost all of the diverted water back to the old river.

However, the part where the Danube is diverted is extremely important for the hydrology. The inundation zones on both sides of the river serve as an absorber in case of high water leading to a relatively stable flow of water below that area. Furthermore, they are extremely important for the self cleaning ability of the river. Finally, the diversion of the Danube in this particular area will cause the destruction of an important and rich ecosystem.

Thus, even considering the fact that Slovakia has only a small proportion of the Danube and that therefore the diversion of the river for some 30 kms cannot *per se* be regarded as inequitable, in the present case, because of the special factors of natural character in the area where the diversion will take place, this use cannot be considered as equitable. At least, these factors suggest serious doubts as regards the equitability.

(b) the social and economic needs of the watercourse States concerned

Utilization of the Danube is traditionally of significant importance for Slovakia and Hungary. Both countries have made extensive use of the Danube for irrigation, fishing, navigation but also recreation. Variant C will significantly impair the traditional uses of the Danube with the exception of navigation. In this regard it is contrary to the social and economic needs of both water States.

However, Slovakia is in need of energy and it could therefore be said that Variant C serves its economic needs. Slovakia could further argue that it also serves social needs as it should bring development to that area. But Variant C will only produce very little energy and its costs will by far outweigh its benefits, in particular as the project will result in significant follow-up costs. There are alternatives available, both with regard to the production of energy and with regard to developing the area (see below (f)).

It must therefore be said that taking into account Hungary's and Slovakia's social and economic needs, the Variant C does not constitute an equitable utilization.

(c) the effects of the use or uses of an international watercourse in one watercourse State on other watercourse States

As already shown above Variant C will cause appreciable harm to Hungary. Thus, taking this factor into account Variant C also has to be considered as inequitable.

(d) existing and potential uses of the international watercourse

With regard to existing uses, it has already been stated that the project will have severe negative impacts. Concerning potential uses, Slovakia could argue that Variant C will improve navigation on the Danube. However, navigation on the Danube is already possible at present and the targets set by the Commission for the Danube in 1988 (stating *inter alia* that the water in this area must be at least 2.5 meters deep) can be fulfilled without Variant C.

In addition, Variant C would also significantly impair tourism, which is one of the potential uses of the Danube in that area.

Thus, also with regard to existing and potential uses Variant C has to be regarded as inequitable.

(e) conservation, protection, development and economy of use of the water resources of the international watercourse and the costs of measures taken to that effect

It has already been shown that Variant C will cause significant harm to the ecosystem of the Danube, particularly in the area where the Danube will be diverted. But these negative effects are certainly not limited to that area, because Variant C will negatively affect the Danube's ecosystem for a larger part of the Danube. Thus, also according to these factors Variant C cannot be considered as an equitable and reasonable use of the Danube.

(f) the availability of alternatives, of corresponding value, to a particular planned or existing use

There are several alternatives available to Variant C allowing Slovakia to meet its demand for energy. Furthermore, if Slovakia would pursue these alternatives, it could produce energy much cheaper and without destroying important ecosystems on both sides of the border. Hungary has offered technical assistance in the construction of power stations in Slovakia. There are also alternatives available as regard development of the area, in particular through tourism but also through environmentally friendly industrialization. Finally, also with regard to navigation there are alternatives available. Evidence also suggests that the alternatives available to Variant C are not merely of corresponding but of superior value.

Concerning alternatives for existing uses, it has been shown that Variant C will heavily interfere with the existing, traditional uses of the Danube. Most importantly, it will have a severe negative impact on agriculture in that area, but also on fishing and other uses of the Danube. Although it would be possible to adapt to the new circumstances, this requires not only enormous financial efforts but also a change of traditional life patterns. Furthermore, Variant C will much likely have a destructive impact on the large drinking water reservoirs on Slovak and Hungarian territory. It would be difficult to find an alternative drinking water reservoir given the rising demand for drinking and industrial water in both countries and the difficulties to meet that demand already at present.

The conclusion must therefore be drawn that taking into account all factors in Article 6 of the ILC *Watercourses Draft*, Variant C cannot be regarded as an equitable and reasonable utilization of the Danube. Certainly, one can say that there are no special circumstances that would justify Hungary to accept the significant harm caused to it because of Slovakia's right of an equitable utilization of the Danube.

(3) Conclusion and Questions Regarding Evidence

Variant C violates the principle of good neighbourliness because it will cause significant or appreciable harm to Hungary. Variant C can also not be regarded as an equitable or reasonable use of the Danube. In particular, it cannot be said that special circumstances

require Hungary to accept the appreciable harm caused by Variant C because of Slovakia's right to an equitable utilization of the Danube.

The conclusions are based on the assessment of the environmental, economic and technical aspects of Variant C and possible alternatives as set out above (PART I, D). Czechoslovakia contests these findings. This leads to the question to what extent Hungary has to provide evidence that the alleged negativ environmental effects of Variant C will occur. The *Trail Smelter* case states that the serious consequences or the harmful effect must be established by "clear and convincing" evidence. This decision has been rendered more than 50 years ago, and it is questionable whether a court would impose today still the same requirement. But even if this is the case, the meaning of "clear and convincing" must be interpreted in a comtemporary prospective. It is save to say that it does not mean that the evidence must prove the occurance of a harmful effect beyond any doubt.

In this regard it is important to note that in the last decades many national legal systems have incorporated the so-called precautionary principle. This principle has also been employed in the international context. Prominent examples are the *Vienna Convention on the Protection of the Ozon Layer* and the *Montreal Protocol.* The contracting parties to these agreements accepted an obligation to reduce CFC emissions on the basis of scientific evidence that the CFCs are **most likely** the primary cause for the depletion of the ozon layer. Evidence proving beyond any doubt that this is the case was not required. Also the *ECE Convention on Long-Range Transboundary Air Pollution* is an example for such an approach. Many of the obligations laid down in the Convention are based on evidence saying that SO_2 and SO_x emissions might cause acid rain. Finally UNEP stated in a Decision of 1989 entitled *Precautionary Approach to Marine Pollution with Regard to Waste Dumping at Sea*:

> "Recognizing that waiting for scientific proof regarding the impact of pollutants discharged into the marine environment may result in irreversible damage to the marine environment and human suffering".

Some argue that the precautionary principle is meanwhile even established as a principle of customary international law. Whether this is the case is doubtful. However, the principle is certainly not without influence when assessing the meaning of "clear and convincing" evidence in the context of the application of the goodneighbourliness principle.

From this follows that on the basis of studies carried out until now, Czechoslovakia will most likely not be able to argue that Hungary did not present clear and convincing

evidence that Variant C causes significant harm to Hungary. In order to do so, Czechoslovakia would have to carry out further studies. Whether these studies would confirm Czechoslovakia's arguments must be awaited. However, it should be recalled that even the Canadian company Hydro Quebec Int. which itself engages in the construction of large hydro-electric plants, and which was commissioned by Czechoslovakia, issued a very critical report on Gabcikovo. In particular, it referred to the environmental impacts of the project and noted that the evaluation of these impacts was insufficient. It also recommended an extensive environmental impact assessment.

2. Procedural Rules: Duty to Co-Operate, Duty to Notify and Inform, and Duty to Consult and Negotiate

International customary law on the environment does not only contain rules stating which activities that have or might have a transboundary effect are in accordance with international law, but also contains rules on how states have to proceed and to co-operate with regard to the implementation of existing or potentially harmful activities. These procedural rules are namely the duty to co-operate, the duty to notify and inform, and the duty to consult and negotiate.

The duty to co-operate is the most general of these procedural rules. Article 8 of the ILC *Watercourses Draft* states:

> "Watercourse States shall co-operate on the basis of sovereign equality, territorial integrity and mutual benefit in order to attain optimum utilization and adequate protection of international watercourse."

The duty to notify and inform can be regarded as a specific elaboration of the duty to co-operate. It requests a state to notify a planned activity that may have an appreciable adverse effect on other States to the States possibly affected and to provide them with the necessary information. This principle is established as a general rule of customary international environmental law. It is incorporated in the *UNEP Draft Principles* (principle 6.1.a.) and the *1974 Shared Resources Resolution*. The ILC *Watercourses Draft* (Articles 12-16) elaborates on the principle in the context of the use of international watercourses. These articles also provide for a deadline for the notified State to raise its objections.

The duty to consult and negotiate goes beyond the duty to notify and inform. It finds its general basis in Article 33 of the *Charter of the United Nations* and the obligation to a

peaceful settlement of disputes. It has also been recognized by the I.C.J. in the *North Sea Continental Shelf* case and *Fisheries Jurisdiction* case (Merits). The duty to consult and negotiate requests the notified State to enter into negotiations on the notified project with the objective of reaching an amicable solution in case the notified State has raised objections against that project. Whereas it is not quite clear whether the duty to consult and negotiate is generally accepted as a rule of customary international environmental law, it is safe to say that with regard to the use of international watercourse such a rule of customary law is firmly established. It is contained in the *UNEP Draft Principles* (principles 6-8). The ILC *Watercourses Draft* elaborates on this principle in its Article 17, stipulating:

> "1. If a communication is made under paragraph 2 of article 15, the notifying State and the State making the communication shall enter into consultations and negotiations with a view to arriving at an equitable resolution of the situation.
> 2. The consultations and negotiations provided for in paragraph 1 shall be concluded on the basis that each State must in good faith pay reasonable regard to the right and legitimate interests of the other State.
> 3. During the course of the consultations and negotiations, the notifying State shall, if so requested by the notified State at the time of making the communication under paragraph 2 of article 15, refrain from implementing or permitting the implementation of the planned measures for a period not exceeding six months."

The duty to consult and negotiate therefore does not only mean that the States concerned must enter into negotiations but that they must do so with the intention of reaching an equitable solution and taking into account the interests of the other party. Furthermore, the State who has notified a planned activity must suspend the implementation of the planned measures for six months if the other State requested such a suspension. Furthermore, principle 8 of the *UNEP Draft Principles* states:

> "When it would be useful to clarify environmental problems relating to a shared natural resource, States should engage in joint scientific studies and assessments, with a view to facilitating the finding of appropriate and satisfactory solutions to such problems on the basis of agreed data."

Regarding the present case, it is not clear whether Czechoslovakia has fulfilled its duty to notify and to inform when it announced to Hungary on 25 July, and further through a diplomatic note dated 18 August 1989, its intention to implement Variant C. Hungary claims that until now it did not receive complete and detailed information how exactly Variant C will be constructed and operated. Czechoslovakia, in contrast, states that it provided such information. At present it is, therefore, not possible to state whether Czechoslovakia has fulfilled its obligation to notify and inform.

Hungary has raised objections against Variant C on 4 October 1989, i.e. within the six months period provided for in Article 13 of the ILC *Watercourses Draft*. The parties also started negotiations although it seems that substantial negotiations on Variant C did not start before April 1991. Whether Czechoslovakia entered into these negotiations with the intention to seek an amicable solution and to take into account the interest of Hungary with the possible consequence that Variant C has to be substantially altered or even abandoned, cannot be stated on the basis of facts available. However, the fact that Czechoslovakia was generally willing to accept the findings of the envisaged trilateral committee as binding suggests that Czechoslovakia was generally willing to solve the dispute through negotiations.

With regard to Czechoslovakia's obligation to refrain from the implementation of Variant C for a period not exceeding six months once consultations and negotiations have started (Article 17 para. 3 *Watercourses Draft*), it is important to determine, first of all, the point in time when such consultations and negotiations started between the two parties. It seems to be that some negotiations still took place in 1989 but that substantial negotiations on Variant C did not start before April 1991. On the basis of these facts one can argue that the six months period provided for in Article 17 para. 3 of the ILC *Watercourses Draft* did not start before April 1991 meaning that Czechoslovakia was obliged to suspend the implementation of Variant C at least until October 1991 because Hungary specifically requested such suspension. Secondly, it is necessary to determine which constructions exactly had to be suspended. The project to which Hungary objected and continues to object does not only consist of the additional constructions necessary to implement Variant C. Hungary objected against the unilateral continuation of the project by Czechoslovakia as such. Thus, Czechoslovakia had to suspend work on the constructions in general. Czechoslovakia never suspended work on the constructions which were part of the original project. Thus, even considering that work on the additional constructions necessary to implement Variant C (prolongation of the canal, water-station at Cunuvo, new dikes for the water reservoir) did not start before October 1991, it must be concluded that Czechoslovakia has violated its obligation to consult and to negotiate.

II. Boundary Agreements

Having shown that Variant C violates several rules of customary law, it shall now be examined under the rules contained in relevant bilateral and multilateral agreements in

force between the two parties, with the exception of the 1977 Treaty. These agreements are in particular boundary agreements determining the frontier line and regulating the use of boundary waters.

1. Determination of the Boundary

Just a few hundred meters south of the new head-water station built by Czechoslovakia at Cunovo, the Danube becomes a boundary river. According to the provisions of the *Peace Treaty of Trianon* (Article 26 para. 4), the *Treaty of Peace with Hungary* signed in Paris on 10 February 1947 (Article 1 para. 4 (a); the "*Paris Peace Treaty*"), and the *Treaty between the Czechoslovak Republic and the Hungarian People's Republic concerning the Regime of State Frontiers* signed in Prague on 13 October 1956 (Article 2 para. 3; the "*1956 Boundary Treaty*"), and in accordance with the provisions of customary international law, the main navigable channel at the lowest navigable level (the "Talweg") constitutes the frontier line between the two states.

Once operation of Variant C has started, it is questionable whether the Danube will still constitute a navigable river between Cunovo where the water is diverted and the point where the water is redirected into the old river bed. But even if the Danube remains a navigable river in that part, the main navigable channel certainly will have changed and will run through the water reservoir and the canal. The question therefore arises whether the implementation of Variant C will change the frontier line between the two States and whether this would constitute a violation of international law, in particular the above cited boundary agreements.

Article 3 para. 1 of the *1956 Boundary Treaty* states:

> "On sectors where it runs over water, the frontier line shall vary with the **changes brought about by natural causes** in the median line of the bed of rivers, streams or canals or on the main navigable channels of navigable rivers. The frontier line shall not be affected by other changes in the flow of a frontier watercourse unless the Parties conclude a separate agreement to that effect." (emphasis added)

The second sentence of Art. 3 para. 1 suggests that if one party changes the navigation line through a unilateral interference with the flow of the river, the border line would not be changed unless the parties conclude a separate agreement. The *1956 Boundary Treaty* does not contain any provision on what happens if in such a case the parties fail to reach such

an agreement. The reason is that, as will be discussed below, the *1956 Boundary Treaty* (Article 14) as well as other agreements stipulate that the two parties shall not unilaterally change the flow of boundary waters. It follows from these provisions, as well as from the fact that neither the *1956 Boundary Treaty* nor the *Peace Treaty of Trianon* or the *Paris Peace Treaty* foresee the possibility of a unilateral change of the Talweg, that the change of the Talweg through the operation of Variant C is a violation of the boundary agreements.

One can argue that if Czechoslovakia violates its obligation not to unilaterally change the flow of a boundary river and the Talweg, it must accept the changes of the frontier line following a respective application of Article 3 para. 1 of the *1956 Boundary Treaty*. This conclusion seems to be supported by the fact that the change of the Talweg is caused by a **unilateral** interference and that therefore Czechoslovakia as the interfering State has the option to either refrain from interfering or to try to reach an agreement with Hungary on the determination of the frontier line. Thus, the unilateral change of the border would be interpreted as *de facto* abandoning the territory between the "new" and the "old" Talweg. The alternative solution is that the frontier line will be the Talweg in the river bed of the Danube at the moment when Czechoslovakia starts operating Variant C. This solution corresponds to the regulation contained in the 1977 Treaty.

Certainly, the question whether the change of the Talweg caused by Variant C will change the frontier line between Hungary and Czechoslovakia is a complex issue and open to controversial discussion. As far as known, there is not much precendent for this problem, and a detailed discussion would go beyond the scope of this study. It can, nevertheless, be concluded that the unilateral change of the Talweg is a violation of the various boundary agreements. Furthermore, if it will change the frontier line it will do so to the **disadvantage** of Slovakia. But even a change in the State frontier to the disadvantage of Czechoslovakia could constitute a violation of international law because the *Trianon Peace Treaty* and the *Paris Peace Treaty* are **multilateral** treaties that also grant rights to third parties which might claim a legitimate interrest in the observance of the principles laid down in these Treaties.

2. Management of Boundary Waters

As stated above, the *1956 Boundary Treaty* contains provisions on the management of boundary waters. Article 14 stipulates:

> "The natural flow of frontier waters in inundated areas may not be altered or obstructed by the erection of installations or structures in the water or on the banks, or by any other works, unless the Parties so agree".

Variant C is certainly in violation of that provision because it will alter the flow of the Danube in an inundated area.

Further provisions on the management of boundary waters are contained in a bilateral treaty regulating questions of water management of boundary rivers signed in 1976 (the "*1976 Water Management Treaty*"). This Treaty only exists in Slovak and Hungarian languages and was not available to the author of this study. However, according to the reasoning presented by Hungary for the termination of the 1977 Treaty, the Water Management Treaty also contains provisions requiring the parties "not to practice water management in such a manner, that would prejudiced the jointly established water relations unfavourable, (and) to maintain the water bed in their own territory in good condition and to utilize them in a way that they do not do damage to each other" (Article 3 para. I a) and b)). Furthermore, the *1976 Water Management Treaty* stipulates in Article 4 para. 3 that "in accordance with the laws and regulations of both Contracting Parties previous consent is needed to any water management activity that would result in changing the line or character of the State border" It seems therefore that Variant C is also in violation of the *1976 Water Management Treaty* although a definitive answer could only be given after analyzing the whole Treaty.

III. Conclusion: Variant C is in Violation of International Customary Law and Boundary Agreements

From the above reasoning follows that Czechoslovakia and Slovakia breach several of their obligations under international customary law through the construction and operation of Variant C. First, Variant C constitutes a violation of the principle of good neighbourliness because, on the basis of the studies available, the project will cause significant or appreciable harm to Hungary. Taking into account the criteria laid down in Article 6 of the ILC *Watercourses Draft*, construction and operation of Variant C cannot be regarded as an equitable utilization of the Danube, and are therefore in violation of the principle of equitable utilization. There is also strong evidence that Czechoslovakia and Slovakia have violated their duty to consult and negotiate because they did not suspend construction of Variant C for a period of six months after negotiations started. Whether they entered these

negotiations with the intention to reach an amicable solution cannot be stated but it seems that this was the case.

Construction and operation of Variant C also constitute a violation of the provisions on the management of boundary waters contained in the *1956 Boundary Treaty* and the *1976 Water Management Treaty*.

Whether operation of Variant C will have as a consequence a change of the frontier line to the main navigational channel in the water reservoir and the canal cannot be said with certainty. However, it will cause a change in the Talweg and therefore violate the *Peace Treaty of Trianon*, the *Paris Peace Treaty* and the *1956 Boundary Treaty*.

It must be stressed that all these findings are based on analysis that disregarded the implications of the 1977 Treaty. These implications shall now be looked at.

C. Status and Implications of the 1977 Treaty

I. Possible Implications - The Concept of an International Wrongful Act

It has been stated above that Czechoslovakia or Slovakia are in breach of several international obligations through the construction and operation of Variant C. Variant C, therefore, constitutes what international law calls an "internationally wrongful act". Such an act is defined by the ILC in Article 3 of its *Draft Articles on State Responsibility* (the "*Responsibility Draft*") as a:

> "(a) conduct consisting of an action attributed to the State under international law;
> (b) (if) that conduct constitutes a breach of an international obligation of the State"

Construction and operation of Variant C certainly fulfill the requirements of that definition.

However, according to well established principles of customary international law, the wrongfulness of an act violating international obligations of a State may be excluded in certain cases, two of which are of particular importance for the present analysis. The first is the consent of the State whose rights are violated. The second is that the act is justified

as a countermeasure in respect of an internationally wrongful act committed by the other State. The analysis of the 1977 Treaty will therefore focus on the question as to whether Czechoslovakia or Slovakia can rely on any of these two principles which would exclude the wrongfulness of the construction and operation of Variant C.

The analysis will first examine whether the conclusion of the 1977 Treaty was valid and whether subsequent and conflicting rules of international law derogated it. It will then analyse whether the 1977 Treaty can be regarded as a consent by Hungary to the construction and operation of Variant C. Subsequently, the analysis will address the question whether Variant C constitutes a lawful countermeasure in respect of an alleged violation of the 1977 Treaty by Hungary because of Hungary's decision to discontinue the project. Finally, it will be examined whether Hungary has terminated the 1977 Treaty through its Declaration of 19 May 1992.

The rules concerning international treaties are laid down in the *Vienna Convention on the Law of Treaties* (the "*Vienna Convention*"). Czechoslovakia acceded to the *Vienna Convention* only in 1987 so that it is not directly applicable to the 1977 Treaty (Art. 4 *Vienna Convention*). However, most of the articles constitute a restatement of customary rules of international law and the analysis can therefore be based for a large part on the *Vienna Convention*.

II. Validity of the 1977 Treaty

Before analyzing the implications of the 1977 Treaty, it shall be examined whether the conclusion of the 1977 Treaty was valid and whether the provisions of the Treaty were derogated by subsequent norms of international law.

1. Valid Conclusion of the 1977 Treaty

There is no indication that the parties did not observe the formal requirements for the conclusion of the 1977 Treaty. The only reason why the conclusion of the Treaty might not be valid is that the Treaty could be in violation of a rule from which no deviation is possible. International law refers to such presumptory rules as *ius cogens*. The concept of *ius cogens* is one of the most hotly debated issues of international law but its existence is generally accepted.

The effect of a norm of *ius cogens* is that States may not deviate from that norm. A treaty in conflict with a norm of *ius cogens* is void (Article 53 of the *Vienna Convention*). A State may also not grant consent to the violation of norm of *ius cogens* by another State (see Article 29 para. 2 of the ILC *Responsibility Draft* which will be discussed below). As the I.C.J. held in the famous *Barcelona Traction* case, norms of international *ius cogens* constitute an obligation *erga omnes* because they are "by their very nature the concern of all States"

Whereas the concept of *ius cogens* is widely accepted, there is only little agreement on what kind of rules of international law constitute *ius cogens*. However, the ILC pointed out in its commentary to the later Article 53 of the *Vienna Convention* that "it is not the form of a general rule of international law but the particular nature of the subject matter with which it deals that may...give it the character of *ius cogens*" In this regard it is important to know the main purpose of the concept of *ius cogens*: it is to protect certain minimum standards of law necessary for the further functionning of the world that cannot be at the disposition of any individual state. As regards rules previously considered as *ius cogens* reference can be made to the *Barcelona Traction* case where the Court said that:

> "Such obligations derive, for example, in contemporary international law, from the outlawing of acts of aggression, and of a genocide, as also from the principles and rules concerning the basic rights of the human person, including protection from slavery and racial discrimination."

In the present case the only rule which could give way to the assumption of being a rule of *ius cogens* is the principle of good neighbourliness. Indeed, some writers have suggested that this rule shall be regarded as *ius cogens*. Such an assumption, however, seems to be highly questionable.

The principle of good neighbourliness restricts environmentally harmful activities **only** if the harmful effect occurs outside the territory of the state conducting the activity. It forbids States to carry out activities not because they cause environmentally harmful effects, but because such effects occur on the territory of other states. It must therefore be said that the primary purpose of the principle of good neighbourliness is not to protect the "global" environment as such, but to protect the territorial integrity of the neighbouring states. If, however, international law still allows a state more or less to destruct its own territory, it cannot forbid the states to agree to the destruction of its territory by another state. In particular, it cannot be said that international law forbids two states to agree on the

common exploitation of a shared national resource even if this causes harmful effects on the territory of both states, provided that they do not violate the principle of good neighbourliness with regard to third states. This assumption is supported by the fierce way in which states defend their sovereignty over the exploitation of their natural resources.

The case would be different if the principle of good neighbourliness would also forbid activities that cause harmful effects even if these effects only occur on the territory of the state carrying out the activity. Then it could be said that the purpose of the principle is not the protection of territorial integrity of neighbouring states but the protection of the environment as such. The rule would then also be comparable to rules outlawing racial discrimination or genocide.

Therefore, the conclusion must be drawn that the principle of good neighbourliness does not constitute a norm of *ius cogens*. Thus, it can be left open whether the rule laid down in Article 53 of the *Vienna Convention* would be applicable with regard to Czechoslovakia. This might be doubtful as many states have not signed the *Vienna Convention* for the sole reason that they did not want to subscribe to the concept of *ius cogens* as laid down in Article 53.

2. No Derogation of the 1977 Treaty

The 1977 Treaty might have been derogated by the coming into existence of a subsequent norm of international law conflicting with the 1977 Treaty. Such a norm could either be contained in a treaty or in rules of customary law in force between the two parties. Treaty law and customary law are generally regarded as being of equal rank.

The only conflict theoretically imaginable with rules of customary law is a conflict with the principles of equitable utilization and good neighbourliness. Both rules however existed already before the 1977 Treaty came into force in 1978. The 1977 Treaty is also not in conflict with these rules. With regards to the principle of good neighbourliness it has already been stated above that it does not forbid two states to conclude a treaty on the common exploitation of a shared resource. Also the principle of equitable utilization does not forbid such agreement. It even specifically calls for parties to achieve an agreement on the common utilization of an international watercourse. It should be added that the principles which are laid down in various international declarations or resolution of the

General Assembly (e.g. the *1982 UN World Charter to Nature*) do **not** constitute binding legal principles that could derogate the 1977 Treaty.

The only treaty that could possibly derogate the 1977 Treaty is the *1976 Water Management Treaty* because this treaty came into force shortly after the 1977 Treaty. A subsequent treaty between two parties only derogates a former treaty if it is concluded on the same subject matter **and** if the latter treaty specifically calls for the termination of the former treaty or if the provisions of the two treaties are incompatible (Article 30 and 59 *Vienna Convention*). Because the *Vienna Convention* requires that the two treaties must regulate the same subject matter, it left untouched the general rule of *lex specialis derogat legi generali*. The 1977 Treaty must be regarded as *lex specialis* to the *1976 Water Management Treaty* because it regulates the construction and operation of a specified project whereas the *1976 Water Management Treaty* only contains provisions on the general management of boundary rivers. It is also questionable whether the two treaties are in conflict because the *1976 Water Management Treaty* foresaw the possibility of pursuing water management activities if the other party agrees. Finally, it is clear that both parties never considered that the Water Management Treaty has derogated the 1977 Treaty because they continued the Gabcikovo-Nagymaros project and even modified the 1977 Treaty in 1983 and the Agreement in 1983 and 1989.

III. Does the 1977 Treaty constitute a Valid Consent to the Construction and Operation of Variant C ?

Hungary could have given its consent to the construction of Variant C through the conclusion of the 1977 Treaty. This would preclude the wrongfulness of the construction and operation of Variant C. The ILC laid down in Article 29 of its *Responsibility Draft* that a consent precludes the wrongfulness of an act. Article 29 reads:

> "1. the consent validly given by a State to the commission by another State of a specified act not in conformity with an obligation of the latter towards the former State precludes the wrongfulness of the act in relation to that State to the extent that the act remains within the limit of that consent."

Two requirements must therefore be fulfilled in the present case. First, the 1977 Treaty must constitute a consent by Hungary to the diversion of the Danube by Czechoslovakia in violation of the principles of equitable utilization and good neighbourliness. Secondly,

Variant C must be covered by that consent. Whether these two requirements are fulfilled must be found through an interpretation of the 1977 Treaty.

Both parties agreed in the 1977 Treaty to construct the Gabcikovo-Nagymaros system of locks. In this regard each party assumed the obligations to build certain works (Article 5.5). These obligations might be called active obligations of the two parties. In addition to these active obligations both parties also accepted obligations that can be characterized as passive obligations which are found implicitly in the Treaty. Each party agreed to a violation of their territorial integrity through certain effects and consequences of the project as laid down in the 1977 Treaty. One of the passive obligations accepted by Hungary was to allow that the Danube is diverted at the Dunakiliti into Czechoslovak territory and then redirected into the Danube some 30 kms downstream. Hungary also accepted the negative impacts that might result from the diversion of the Danube. Czechoslovakia, in contrast, accepted that certain premises which later should be owned jointly by the parties are built on its territory. Like Hungary it also accepted all negative effects possibly caused by the project.

According to the general rule of *pacta sunt servanda*, Czechoslovakia and Hungary had to fulfill their obligations arising from the 1977 Treaty in good faith (Article 26 *Vienna Convention*). Thus, Hungary was generally bound by its passive obligations to allow the diversion of the Danube as originally foreseen in the 1977 Treaty.

The 1977 Treaty therefore must be interpreted as constituting a binding consent of Hungary to the joint diversion of the Danube at its territory. It shall now be examined whether this consent covers the construction and operation of Variant C. This is doubtful for two reasons. First, Variant C deviates from the project as originally foreseen in the 1977 Treaty insofar as the water is not diverted into Czechoslovak territory at Dunakiliti but already a 11 kms upstream at Cunovo where the Danube is still totally on Czechoslovak territory. However, this deviation does not significantly change and worsen the negative environmental impacts the project causes to Hungary. It does therefore as such not allow the conclusion that Variant C is not covered by the consent granted in the 1977 Treaty.

More important is the second reason. Variant C is a unilateral project. Even though most of the constructions for Variant C have been constructed by both Hungary and Czechoslovakia, the operation of Variant C constitutes an unilateral act of Czechoslovakia (or Slovakia). This country alone will control the project. Hungary also has no longer the

capacity to act at the locks of the head-water station in case of emergency (e.g. flood, icing of the river) because the new Cunovo head-water station is exclusively on Slovak territory. In contrast, the project as originally foreseen in the 1977 Treaty was a joint project. This is emphasized in many provisions of the Treaty (see above PART ONE B), and also underlined by the preamble of the 1977 Treaty stating "that the joint utilization of the Hungarian/Czechoslovak section of the Danube will further strengthen the fraternal relation of the two States". The character of the 1977 Treaty is probably most significantly expressed in Article 8 of that treaty regulating the ownership of works carried out under the joint investment stipulating in paragraph one:

> "Among the works of the System of Locks carried out as joint investment, the following shall be jointly owned by the Contracting Parties in equal measure:
> (a) The Dunakiliti dam (article 1 paragraph 2 (b);
> (b) The by-pass canal (article 1 paragraph 2 (c));
> (c) The Gabcikovo series of locks (article 1 paragraph 2 (d));
> (d) The Nagymaros series of locks (article 1 paragraph 3 (b);"

It is important to note that not only those works which were to be constructed at the border (i.e. the Dunakiliti dam) but also the by-pass canal and the Gabcikovo series of locks which were exclusively on Czechoslovak territory as well as the Nagymaros series of locks on Hungarian territory, were to be owned jointly by the parties.

The parties, in fact, never foresaw the possibility that one of them could carry out the project or parts of the project unilaterally. The above described consent granted by both parties was, therefore, subject to the **joint** construction and operation of the project. It did not cover the case that one of the parties intended to go ahead with the project unilaterally. Because Variant C is a unilateral project of Czechoslovakia it is not covered by the consent to the diversion of the Danube which Hungary originally granted in the 1977 Treaty.

The fact that the consent to the diversion of the Danube granted by Hungary in the 1977 Treaty does not cover Variant C can be further illustrated by taking a simple example. Assume it was not Hungary who decided to discontinue the project but Czechoslovakia. Czechoslovakia, in the 1977 Treaty, has accepted the construction of certain works exclusively on its territory (i.e. the water reservoir, the by-pass canal, and the Gabcikovo dam). Certainly, Czechoslovakia would never accept the idea that, after it opted out of the project, Hungary may unilaterally construct and operate these premises on Czechoslovak territory on the basis of the consent granted in the 1977 Treaty. Why should Hungary now

be obliged to accept the violation of its territory through a unilateral act of Czechoslovakia on the basis of a consent given in respect to a joint project?

The conclusion must therefore be drawn that the wrongfulness of Variant C is not precluded because of a consent granted by Hungary. This is the case irrespective of whether Hungary's decision in 1989 to discontinue the project was a violation of the 1977 Treaty or not.

IV. Variant C as a Countermeasure to a Violation of International Law by Hungary

Through the conclusion of the 1977 Treaty Hungary entered into an obligation to construct and operate the Gabcikovo-Nagymaros system of locks as a joint project together with Czechoslovakia. The 1977 Treaty did not contain any termination provisions. Hungary was bound by the treaty and had to fulfil the obligations of that treaty in good faith.

In May 1989 the Hungarian government decided to suspend the construction at Nagymaros and later that year totally abandoned it. Hungary also suspended construction at Gabcikovo calling for further investigations into the ecological risks of the project but also stating that it would prefer a termination of the 1977 Treaty. Thus, in essence Hungary opted out of the project as laid down in the 1977 Treaty. This decision by Hungary to discontinue the project might have constituted a violation of the 1977 Treaty and could allow Czechoslovakia respectively Slovakia to construct and operate Variant C as a lawful countermeasure.

1. Does Hungary's Decision in 1989 to discontinue the Gabcikovo-Nagymaros System of Locks Constitute a Violation of the 1977 Treaty ?

a) Did Hungary Violate Obligations Resulting from the 1977 Treaty ?

Hungary's decision to discontinue all works at Nagymaros, and to suspend the works at Gabcikovo until the ecological risks of the project have been further investigated, stands in contrast to its respective obligations contained in the 1977 Treaty. Whether this also

constitutes a violation of the 1977 Treaty is questionable. Article 19 of the 1977 Treaty stipulates:

> "The Contracting Parties shall, through the means specified in the joint contractual plan, ensure compliance with the obligation for the protection of nature arising in connection with the construction and operation of the System of Locks."

Article 15 of the 1977 Treaty deals with the protection of water quality and stipulates:

> "1. The Contracting Parties shall ensure, by the means specified in the joint contractual plan, that the quality of the water in the Danube is not impaired as a result of the construction and operation of the system of locks..."

The above environmental provisions cannot be read isolated but must be interpreted in the context of the 1977 Treaty. The purpose of the 1977 Treaty was the construction of the system of locks, and not the protection of the environment. The purpose of the environmental provision seems to have been to ensure that the project causes as little harm to the environment as possible. Any party can nevertheless insist that these provisions are duly performed. However, it seems questionable whether one can argue that the whole project had to be abandoned on the basis of these provisions.

Evidence shows that investigations into the ecological risks and consequences of Variant C during the planning period were highly insufficient. It can therefore be said that Hungary's request to suspend construction and operation of the Gabcikovo constructions did not constitute a violation of the 1977 Treaty because Hungary only intended to ensure compliance with the above cited provisions of the 1977 Treaty.

Furthermore, the joint contractual plan called, *inter alia*, for the construction of water purification plants along those rivers which, in that region, flow into the Danube. The Hungarian side argues that the plants were either not built at all or that they would be ill-equipped because they would not allow chemical treatment of the water. This is said to be necessary in order to reduce the phosphate content of the water. The Slovak side contests these statements.

Thus, even if Article 15 para. 1 of the 1977 Treaty merely obliges the parties to construct and operate the project in a way that it does not interfere with the environment more than absolutely necessary, these provisions might serve as a justification for Hungary's demand to suspend construction and operation at Gabcikovo until further investigations into the

ecological risks were carried out. They also might have suggested solutions for a more environmentally friendly operation of the Gabcikovo system of locks. In addition, Hungary was entitled to insist on the duly fulfilment of the conditions laid down in the joint contractual plan. Whether they were fulfilled cannot be stated on the basis of facts available. However, it seems doubtful whether Hungary could rely on Article 15 para. 1 and Article 19 with regard to its decision to discontinue construction of the Nagymaros dam.

In addition to referring to the environmental provisions of the 1977 Treaty, Hungary has presented during the negotiation process, and also in its declaration on the termination of the 1977 Treaty, five reasons why it considers that its decision of 1989 to discontinue the project with regard to the Nagymaros dam and to demand further investigation into the ecological risks of the Gabcikovo dam did not constitute a violation of its obligations under the 1977 Treaty. First, it stated that the 1977 Treaty itself is in violation of international law, or that it has been derogated by other rules of international law. This reason has already been dealt with above. Secondly, Hungary has referred to the principle of fundamental change of circumstances (*clausula rebus sic stantibus*). Thirdly, it has invoked the principle of state of necessity, and fourthly the principle of moral impossibility. Finally, it has argued that Czechoslovakia had committed a material breach of the 1977 Treaty.

The alleged material breach of the 1977 Treaty by Czechoslovakia will be addressed later. In the following, Hungary's reference to the principle of fundamental change of circumstances, the principle of state of necessity and the principle of moral impossibility will be looked at. All three principles allow a State under certain circumstances to deviate from or terminate a treaty. Because of the fundamental importance of the rule of *pacta sunt servanda* for the functioning of international law, they must be interpreted narrowly.

b) Fundamental Change of Circumstances

The concept of fundamental change of circumstances (*clasula rebus sic stantibus*) is generally accepted as a rule of international law and states have repeatedly invoked it. It is expressed in Article 62 of the *Vienna Convention* reading as follows:

> "1. A fundamental change of circumstances which has occurred with regard to those existing at the time of the conclusion of a treaty, and which was not

> foreseen by the Parties, may not be invoked as a ground of terminating or withdrawing from the treaty unless:
> (a) The existence of those circumstances constituted an essential basis of the consent of the Parties to be bound by the treaty; and
> (b) The effect of the change is radically to transform the extent of obligations still to be performed under the treaty.."

The I.C.J. has stated in the *Fisheries Jurisdiction* case (Jurisdiction of the Court) that Article 62 of the *Vienna Convention* must be seen "in many respects ... as a codification of existing customary law on the subject of the termination of a treaty relationship on account of a change of circumstances".

As to the application of the rule in the present case, Hungary must show that a fundamental change of circumstances has occurred with regard to those existing at the time of the conclusion of the 1977 Treaty, and that the change was not foreseen by Czechoslovakia and Hungary. The circumstances that Hungary could argue to have fundamentally changed are the change of the political system in Hungary and Czechoslovakia, an increased environmental awareness in Hungary, the emergence of new evidence on ecological consequences of the project, and finally the dissolving of the COMECON.

However, this must constitute a **fundamental** change of circumstances. Generally, the change of a political opinion, like growing environmental awareness, is not considered as a fundamental change of circumstances. The same is true for most cases of a change of the political system in particular if it happens as smoothly as in Hungary.

It is also very questionable whether the emergence of new scientific evidence can constitute a fundamental change of circumstances. The *Fisheries Jurisdiction* case (Jurisdiction of the Court) seems to suggest that this is not the case. However, in February 1989 Hungary and Czechoslovakia modified the Agreement and changed the deadline for the operation of the Gabcikovo-Nagymaros system of locks from 1995 to 1994. Thus, only a few months before Hungary decided to discontinue the project it has, at least implicitly, confirmed once more its intention to participate in the project. At that time it already had knowledge of the new scientific evidence because on 7 October 1988 the Hungarian Parliament called for an investigation of the project which revealed insufficiencies of the ecological and technical assessment during the planning process. Furthermore, in 1983 the Hungarian Academy of Sciences has presented a very critical report on the project and called for its suspension. Its content must have been known to the Hungarian government when it confirmed its intention to continue the project in February 1989.

Also the dissolving of the COMECON which occurred after the modification of the Agreement in February 1989 cannot be regarded as a fundamental change of circumstances. This is true even if one considers that the preamble of the 1977 Treaty suggests that the project should also strengthen the relationship of the COMECON countries. Furthermore, when Hungary in February 1989 again confirmed its intention to be bound by the Treaty, the COMECON had already lost much of its importance.

The conclusion must therefore be drawn that in the present case no fundamental change of circumstances occurred. Furthermore, it is also doubtful whether the circumstances which Hungary claims to have changed did constitute an essential basis for the consent of the parties to be bound by the treaty. Hungary therefore cannot successfully invoke the *clausula rebus sic stantibus* as grounds for terminating the treaty.

c) State of Necessity and Moral Impossibility

The principles of state of necessity and moral impossibility will be treated together because they are closely linked. Simply said, they allow a state in special circumstances to not observe an international obligation in order to safeguard an essential interest.

The principle of state of necessity is well established in international law, and it is generally accepted that it can be invoked with regard to the fulfilment of treaty obligations. Even if states have objected in a given case to the application of the principle, they have never contested its existence but only the fulfilment of its conditions. The ILC elaborated on the notion of state of necessity in Article 33 of its *Responsibility Draft*:

> "A state of necessity may not be invoked by a State as a ground for precluding the wrongfulness of an act of that State not in conformity with an international obligation of the State unless:
> (a) The act was the only means of safeguarding an essential interest of the State against a grave and imminent peril; and
> (b) The act did not seriously impair an essential interest of the State towards which the obligation existed."

The concept of moral impossibility is also often referred to under the notion of *force majeure*. The idea behind the concept is that a state has, because of some external circumstance (i.e. *force majeure*), no choice but to deliberately violate an international obligation. The fulfilment of the obligation has, because of its severe consequences,

become morally impossible. The leading case cited in support for the concept is the *Russian Indemnity* case where the arbitration award of 1912 states:

> "L'exception de la force majeure ... est opposable en droit international public ... l'obligation pour un Etat d'exécuter les traités peut fléchir "si l'existence même de l'Etat vient à être en danger, si l'observation du devoir international est ... *self-destructive*" "

There is some debate in international law about the relationship of the principles of state of necessity and *force majeure*. This debate suggests that the concept of moral impossibility does not exist as a distinct concept. It also seems to be that in state practice often no clear distinction has been made. The ILC argued that *force majeure* would only comprise cases where the State has no choice at all, i.e. where it does not take a deliberate decision. If the State has a theoretical choice and takes a deliberate decision, this would constitute a case of state of necessity. Consequently, the ILC argues that also the *Russian Indemnity* dealt with this principle. Thus, according to this view the present case could not be a case of moral impossibility because Hungary deliberately decided to suspend the construction at Gabcikovo and to abandon Nagymaros. However, this debate is largely academic and does not affect the outcome of the present case. Thus, it will not be addressed in more detail.

Concerning the application of the notion of state of necessity and moral impossibility to the present case, it must be reiterated that, for reasons stated above, these rules must be interpreted narrowly. In order to successfully invoke the principle of moral impossibility, Hungary has to show that the implementation of the Gabcikovo-Nagymaros project as originally laid down in the 1977 Treaty would have endangered the very existence of Hungary because it is self-destructive. This, however, does not seem to be the case. The project certainly would have caused significant harmful effects on Hungarian territory, going even beyond those caused by Variant C. But these harmful effects could not be considered as endangering the very existence of Hungary.

The conditions that have to be met in order to successfully invoke the principle of state of necessity seem to be somewhat less strict. A "grave and imminent peril" does not necessarily mean that the very existence of the State is endangered. In fact, in most of the cases mentioned by the ILC in its comment to Article 33 of the Responsibility Draft, the very existence of the State invoking a state of necessity was not endangered. However, state practice also shows that the notion of grave and imminent peril is interpreted restrictive.

Whether the original project as laid down in the 1977 Treaty constitutes a grave and imminent peril endangering an essential interest of Hungary is difficult to say. Although the principle has often been invoked in state practice, international courts almost never had the opportunity to judge on the principle. However, the ILC observed in its comments to Article 33 that the state of necessity has been invoked with regard to conducts that had the purpose to

> "ensure the survival of fauna or vegetation of certain areas on land or at sea, to maintain the normal use of those areas or, more generally, to ensure the ecological balance of a region. It is primarily in the last two decades that safeguarding the ecological balance has to be considered as an "essential interest" of all states."

These observations where made in 1980, and since then environmental awareness has certainly grown further. A case where the principle of state of necessity has been invoked in an environmental context is the *Torrey Canyon* incident. The Libyan tanker Torrey Canyon went aground off the coast of Cornwall. All efforts to salvage the tanker failed. The crude oil still on board of the vessel threatened to cause disastrous effects to the British coast. The British government eventually bombed the tanker in order to burn the oil still on board. It justified its decision by referring to a state of necessity and the Libyan government did not raise objections.

On the basis of the observations of the ILC and the *Torrey Canyon* incident one could conclude that the Gabcikovo-Nagymaros project as laid down in the 1977 Treaty constitutes a grave and imminent peril endangering essential interests of Hungary. The main arguments supporting this conclusion are, first, the negative impact of the project on the drinking water reservoir which is of enormous importance to Hungary, and secondly its effects on the environment and the ecology in general.

However, it is also possible to come to a different conclusion based on a more restrictive view of the concept. Other than in the *Torrey Canyon* incident the concept is invoked in the present case with regard to a treaty obligation. Furthermore, Hungary invoked a state of necessity not only as a justification of a suspension of the treaty, i.e. that it did not fulfil its obligations for a limited time, but also as a ground to definitively terminate the Treaty as regards the construction at Nagymaros and later also as regards Gabcikovo. In this aspect the case is distinct from other cases where the state of necessity has been invoked with regard to treaty obligations.

Which decision a court or an arbitration tribunal would render cannot be predicted. However, if the original project constituted a grave and imminent peril endangering essential interests of Hungary, then the decision to discontinue the project was the only means available to safeguard that interest.

Hungary can only successfully invoke the notion of state of necessity provided that a further condition is met. Its decision to discontinue the original project may not seriously impair an essential interest of Czechoslovakia. The interests of Czechoslovakia in the continuation of the project which it could claim to be essential are its demand for energy and the necessity of urgent flood protection for its citizens. These legitimate interests can be met through the implementation of alternative solutions. Therefore, they would not have to be considered as essential. In this regard it is important to point out that even if Hungary could successfully invoke the state of necessity, it would not be relieved from its obligation to pay compensation to Czechoslovakia for its decision to discontinue the project. Such compensation could, of course, include financial or other assistance to Czechoslovakia concerning the implementation of such alternatives. Thus, Czechoslovakia could not argue that alternative solutions are not available because a lack of finance.

d) Conclusion

Whether Hungary's decision in 1989 to discontinue the Gabcikovo-Ngaymaros project constitutes a violation of the 1977 Treaty is open to some debate. With regard to its demand to suspend the construction at Gabcikovo until the ecological risks of the project have been further investigated, Hungary could invoke the environmental provisions of the 1977 Treaty. However, it is doubtful whether they can also justify the decision to definitely abandon Nagymaros. Furthermore, Hungary can neither invoke a fundamental change of circumstances nor that the fulfilment of its obligations was morally impossible. It might nevertheless be able to successfully argue a state of necessity.

2. Could Variant C Constitute a Lawful Reaction to an Alleged Violation of the 1977 Treaty by Hungary ?

For the purpose of argumentation it shall be assumed that Hungary has violated the 1977 Treaty through its decision of 1989 to discontinue the original Gabcikovo-Nagymaros

project. The question that shall now be looked at is whether Variant C could then constitute a lawful reaction to the alleged violation of the 1977 Treaty by Hungary.

The *Vienna Convention* deals in Article 60 with two responses of a state to a violation of a treaty by another state. These are termination or suspension of the treaty. Czechoslovakia always claimed that Variant C is a provisional solution until Hungary continues the original project. This suggests that Czechoslovakia suspended the 1977 Treaty. The legal consequence of a suspension of a treaty is that the party who suspends the treaty is temporarily free to not fulfill its obligations arising from the treaty. However, it may not violate other rules of international law. Thus, even if Czechoslovakia could suspend the 1977 Treaty as a reaction to an alleged violation of the Treaty by Hungary, the suspension as such could not justify Variant C because it constitutes a violation of other rules of international law.

In addition to these two responses to a treaty violation laid down in the *Vienna Convention*, customary law knows two unilateral reactions of a state which is injured by a violation of international law, including an international treaty, by another state: retortion and reprisal. A retortion is an act that is in accordance with international law but which is considered as an unfriendly act towards the injuring state. As Variant C is not in accordance with international law it is not a retortion.

The second is a repression or reprisal as an act of self-help. The classic decision on the notion of reprisal was rendered in the 1928 arbitrational award in the *Naulilaa* case. The Tribunal stated:

> "Reprisals are an act of self-help (Selbsthilfehandlung) on the part of the injured State, responding - after an unsatisfied demand - to an act contrary to international law on the part of the offending State. They have the effect of suspending momentarily in the relation of the two States the observance of this or that rule of international law. They are limited by the experience of humanity and the role of good faith, applicable in the relations of State with State. They would be illegal if a previous act contrary to international law had not furnished the reason for them. They aim to impose on the offending State reparation for the offence or the return to legality in avoidance of new offences."

The Tribunal also stated that those acts must be proportional:

> "Even the one admitted that international law does not require that the reprisal be approximately measured by the offence, one should certainly consider as excessive, and thus illegal, reprisals out of all proportions with the act motivated by them."

Following this award the main elements of a reprisal have generally been stated in international law as follows:

> A reprisal is an act violating a rule of international law (either customary international law or treaty law),
>
> the aim of a reprisal must be to obtain compensation or to force the other State to discontinue the violation of international law,
>
> the reprisal must be proportional to the violation of international law by the other State.

Variant C fulfills the first prerequisite because it constitutes a violation of several of Czechoslovakia's respectively Slovakia's obligations under international law.

With regard to the second prerequisite it must be stressed that a reprisal is only allowed after an unsatisfied demand for reparation or continuation of the fulfilment of obligations. It also has to be terminated as soon as the injuring state meets or is willing to meet its obligations respectively to pay reparation. Czechoslovakia requested Hungary to continue the project before it decided to construct and operate Variant C. But Hungary subsequently made clear that under no circumstances it was willing to continue the project at Nagymaros, and also most likely at Gabcikovo. However, it generally offered to pay compensation for the financial damages incurred. Therefore the question arises whether a state may continue a reprisal if the other state has made it absolutely clear that it is not willing to fulfill its obligations but is offering to pay damages. As the purpose of a reprisal is not to punish a state for a violation of international law but to force the state to fulfill its obligations, the answer must be in the negative. Construction and operation of Variant C does not fulfill the second prerequisite for a reprisal.

With regard to the third prerequisite it has to be asked whether the damage caused by Variant C to Hungary is out of proportion of the interest Czechoslovakia, respectively Slovakia, can claim in the continuation of the project as originally laid down in the 1977 Treaty. This interest is a financial and economic interest. In contrast, construction and operation of Variant C will cause damages to Hungary that might be irreversible. Variant C must therefore be considered as an act which is out of proportion.

Thus, Variant C is not justified as a reprisal to an alleged violation of the 1977 Treaty by Hungary. It should be added that Czechoslovakia respectively Slovakia can also not claim to fulfill their obligation to mitigate damages through the implementation of a Variant C.

Leaving aside the question whether international law knows an obligation to mitigate damages, there is certainly no right to do so through an act that violates international obligations towards the State that caused the damage, in particular if that state objects against the "method" of mitigation and is willing to pay the full damages.

3. Conclusion

Variant C does not constitute a legitimate response of Czechoslovakia respectively Slovakia towards an alleged violation of Hungary of its obligations arising out of the 1977 Treaty because of its decision in 1989 to discontinue the Gabcikovo-Nagymaros project.

V. Termination of the 1977 Treaty by Hungary through the Declaration of 19 May 1992

As the 1977 Treaty does not contain termination provisions the question as to whether Hungary has terminated the 1977 Treaty through the declaration of 19 May 1992 must be decided according to customary international law, in particular as codified in the *Vienna Convention*. Hungary must be able to invoke a ground for the termination and must have declare the termination in due form.

1. Grounds for Termination

As stated above, Hungary can neither invoke a fundamental change of circumstances nor a moral impossibility nor an incompatibility of the 1977 Treaty with other rules of international law as grounds for terminating the 1977 Treaty. Whether it can terminate the Treaty on the basis of state of necessity is debatable. However, it might be able to invoke a breach of the 1977 Treaty by Czechoslovakia through the construction and intended operation of Variant C. Article 60 of the *Vienna Convention* deals with the termination of a treaty as response to a breach of the treaty by the other party. It stipulates:

> "1. A material breach of a bilateral treaty by one of the Parties entitles the other to invoke the breach as a ground for terminating the treaty or suspending its operation in whole or in part.
> ...
> 3. A material breach of a treaty, for the purposes of this article, consists in:...

(b) The violation of a provision essential for the accomplishment of the object or purpose of the treaty..."

According to Article 60 not every breach of a treaty obligation but only a **material breach** allows the other party to terminate the treaty. This is a restatement of customary law. If a breach of a treaty cannot be classified as material breach the party whose rights are violated can only suspend the treaty.

Construction and operation of Variant C can be considered a material breach of the 1977 Treaty because of its unilateral character. As already stressed above the 1977 Treaty emphasizes in almost all provisions that the Gabcikovo-Nagymaros system of locks should be a joint project. In fact, this was the very basis for the Treaty. The Treaty never foresaw that any of the parties should construct and operate the project in whole or in part unilaterally.

Czechoslovakia can also not argue that Variant C does not constitute a violation of the 1977 Treaty because it is a provisional solution, only implemented after Hungary decided to discontinue the project. The Treaty did not foresee that one of the parties could take unilateral action in case of a dispute between the two parties but that the parties should settle their dispute through a committee of government delegates, or if this does not lead to a solution, through negotiations of the governments (Article 27). Czechoslovakia did not follow this procedure. It was informed by Hungary during a meeting of the prime ministers on 20 July 1989 that Hungary intends to suspend construction at Nagymaros and Dunakiliti until 31 October 1989. Only five days later Czechoslovakia announced the possibility of implementing Variant C as a unilateral, provisional solution.

Thus, because of its unilateral character Variant C violates the very basis of the 1977 Treaty which is that the Gabcikovo-Nagymaros system of locks should be a joint project. Variant C therefore constitutes a material breach of the 1977 Treaty and can be invoked by Hungary as ground for terminating the Treaty.

2. Procedure for the Termination

The *Vienna Convention* calls for the observance of a certain procedure if a party wants to terminate a treaty on the ground of a material breach of the treaty by the other party. Article 65 states that a party has to notify to the other party its intention to terminate the treaty and the grounds for this measure. This notification has to be done in written form

(Article 67 para. 1). If the notified party does not raise objection within a period that shall, with the exception of extremely urgent cases, not be less than three months, the notifying party may declare the termination of the treaty. If the notified party objects to the termination, both parties have to seek a peaceful solution of the dispute through the means specified in Article 33 of the *Charter of the United Nations*.

The procedural provisions laid down in the *Vienna Convention* on the termination of a treaty on the grounds of a material breach are, for the reasons stated above, not directly applicable. They also go beyond of what is required by customary international law. This follows from the advisory opinion of the I.C.J. in the *Namibia* case. Customary law, however, requires that determination is expressly declared. This requirement is presently fulfiled because Hungary submitted to Czechoslovakia on 19 May 1992 an official declaration on termination of the 1977 Treaty which was even accompanied by a verbal note. In this declaration it also stated extensively the reasons for its decision to terminate the Treaty. Thus, Hungary has terminated the Treaty.

3. Conclusion

Variant C constitutes a material breach of the 1977 Treaty by Czechoslovakia. It can be invoked by Hungary as grounds for terminating the 1977 Treaty. Hungary's declaration of 19 May 1992 terminated the 1977 Treaty.

D. Possibilities for a Peaceful Settlement of the Dispute between Hungary on the One Side and Czechoslovakia and Slovakia on the Other Side

The principle of peaceful settlement of disputes which finds its expression in Article 2 para. 3 and 4 and Article 33 of the *Charter of the United Nations* is one of the most important principles of contemporary international law. It excludes the use of force by individual States as a means of settling disputes and obliges States to find peaceful dispute settlement methods. It leaves open to the States which method they choose and does also not impose upon them an obligation to settle their dispute. International law knows several dispute settlement procedures which shall be discussed now.

First, the parties can try to settle their dispute through negotiations or consultations. In the present case, this method does not seem to be very helpful as the long lasting negotiations

between Hungary on the one side and Czechoslovakia and Slovakia on the other side did not produce any results.

The second possibility is that the parties start negotiations but ask a third party to participate in the negotiations and serve as a mediator.

Thirdly, the parties can refer the matter to a fact-finding committee (see also the above-cited principle 8 of the *UNEP Draft Principles)*. The task of this committee can be limited to an enquiry into the matter but the parties can also ask such a committee to propose solutions for the settlement of the dispute. As in the present case there is much disagreement between the parties on the facts, in particular on the ecological consequences of Variant C and the availability of alternatives, the establishment of such a committee could be an effective way to settle their dispute. Of course, the selection of the members of the committee is crucial for its success. The majority of the members of the committee should be independent experts on the topics that have to be addressed. It is also advisable that such a committee does not only consist of members of the two parties concerned but also of experts from third countries. Whether representatives of the two governments should be members of the committe is debatable. An advantage would be that a good contact between the committee and the governments of the parties involved is guaranteed. The committee would be sure to address all questions that are of particular concern to the parties. This would then enhance the chance that the parties implement the committee's recommendation.

Fourthly, the parties could refer their dispute to arbitration. They could either ask a permanent tribunal like the I.C.J. or the *Permanent Court of Arbitration* to decide on the dispute, or agree on the creation of an *ad hoc* arbitration tribunal. Such *ad hoc* arbitration tribunals often, but not necessarily, consist of members named by the parties who than elect further members of the tribunal without the influence of the parties involved. The findings of an arbitration tribunal are binding upon the parties.

Concerning the I.C.J., it has jurisdiction over cases between States, provided that the States have agreed to refer the matter to the Court. This follows from Article 36 of the *Statute of the I.C.J.*. Some States have committed themselves to the jurisdiction of the Court for any case that is brought against them, sometimes with the restriction that the other party did so, too (Article 36 para. 2 of the *Statute*). However, if Hungary refers the present case to the Court, it would certainly create enormeous diplomatic pressure on Czechoslovakia and Slovakia that would make it almost impossible for them not to accept

the Court's jurisdiction. According to Article 41 of the *Statute*, the Court can also adopt interim measures. It has done so in the past but in most cases State did not comply with the orders.

Of the various dispute settlement methods available, the establishment of an expert committee and arbitration seem to be the most promising. Which of the two is more likely to be successful is difficult to say. Probably, the best would be to combine the two methods. The parties could agree on the establishment of a committee that investigates the rather complex facts of the present case and proposes a solution. Even if the parties do not want to agree that the solution is binding, they should at least agree that the facts as established by the committee are binding. The matter could then be referred to an arbitrational Tribunal that can, on the basis of the facts established by the committee, decide on the legal issues.

PART THREE: SUMMARY OF RESULTS AND CONCLUDING REMARKS

A. Summary of Results

1. The purpose of the present study is to examine whether construction and operation of the so-called Variant C is in accordance with international law. The study is based on the facts as set out in PART ONE. With regard to the ecological, and technical assessment of Variant C and possible alternatives, the present study relies on the results of former studies. Their correctness has not been evaluated in the present study. The study also took into account arguments presented by Slovakia on these issues. The legal analysis looked first at Variant C under rules of customary international law and agreements in force between the two parties with the exception of the 1977 Treaty, and showed that Variant C is in violation of those rules. It then looked at the status and the implications of the 1977 Treaty and whether Czechoslovakia and Slovakia can invoke that Treaty as a "justification" for the construction and operation of Variant C.

2. Concerning customary international law two principles are of particular interest to the present study: the principle of equitable utilization and the principle of good neighbourliness. They were developed in the law on the non-navigational use of international watercourses as well as in international environmental law. Both are firmly established in international customary law.

3. The principle of equitable utilization establishes the equality of rights and interests of riparian States and stipulates that they shall use an international watercourse in an equitable and reasonable manner. It has been employed in international law for the first time in the *River Oder* case of the P.I.C.J., and subsequently in the famous *Lac Lanoux* arbitration. It is reaffirmed through numerous international declarations and conventions. The ILA has incorporated the principle as Article IV of its well-known *Helsinki Rules*. Recently, the ILC reaffirmed the principle in Article 5 of its *Watercourses Draft*. Whether a given use is equitable and reasonable has to be decided by taking into account all relevant factors of the particular case. No category of uses deserves general preference over any other category of uses. Both the ILA *Helsinki Rules* as well as the ILC *Watercourses Draft* mention guidelines for the determination whether a given use is equitable and reasonable but also state that the factors listed therein are non-exhaustive.

4. The principle of good neighbourliness stipulates that a State may not carry out or allow activities within its jurisdiction that have a significant harmful effect on the territory

of other States or areas beyond the limits of national jurisdiction. In international law the principle has first been employed in the *Trail Smelter* arbitration and subsequently by the I.C.J. in the *Corfu Channel* case as well as by several other tribunals. The principle is incorporated in many international declarations and conventions on the environment, most importantly as principle 21 of the famous *Stockholm Declaration*. The ILC included the principle of good neighbourliness as Article 7 in its *Watercourses Draft*.

5. The relationship of the two principles is subject to debate. The position of the ILA in its *Helsinki Rules* was that the principle of equitable utilization has preference. Thus, it stated that if a certain use is considered as equitable but will cause appreciable or significant harm to other riparian States, the use is in accordance with international law. The ILC took a counter position and stated that the rule that the utilization of an international watercourse may not cause significant or appreciable harm to other riparian States must be the final yardstick. If the utilization is not in accordance with this rule it must *prima facie* be considered as inequitable, and can only be justified in special circumstances. The two positions reflect a change in the general attitude towards the utilization of the environment. The ILA *Helsinki Rules* were based on the assumption that the optimum goal should be to achieve a maximum utilization of the watercourse, thus leaving aside almost completely environmental interests. The ILC *Watercourses Draft* reflects, at least to some extent, the notion of sustainable development of the watercourse, because a utilization is only considered equitable if it does not cause environmental damage to other States. The study has shown that there is strong evidence that the ILC approach reflects the current standing of international environmental law. In particular, it is supported by the *UNEP Draft Principles* (principle 3.3.). Also the ILA has meanwhile adopted a position very similar to the one of the ILC in its complementary rules applicable to international watercourses.

6. Variant C is in violation of the principle of good neighbourliness because it will cause significant or appreciable harm to Hungary. First of all, it will endanger a huge drinking water reservoir that is extremely important for Hungary and Slovakia. It will also destroy an extremely important ecosystem (the inundation zones that are on both sides of the border). Furthermore, it will lead to a lowering of the water table that will result in damage to the agriculture in Hungary through a loss of crops. Finally, it will have negative impacts on the quality of the water that remains in the old river bed as well as on the water that is redirected to the Danube through the canal. A comparison of these consequences of Variant C with previously decided cases supports the conclusion that Variant C violates the principle of good neighbourliness. Concerning the examination of

Variant C under the principle of equitable utilization, particular account has to be taken of the factors listed in Article 6 of the ILC *Watercourses Draft*. Variant C cannot be regarded as an equitable utilization, mainly because the negative effects of Variant C far outweigh its benefits and the legitimate interests of Czechoslovakia and Slovakia in carrying out the project. There is no doubt that Czechoslovakia and Slovakia can claim to be entitled to a utilization of the Danube and can invoke that they are in need of energy. It can even be said that a diversion of the Danube into Slovak territory for some 30 kms and a redirection of all water into the old river bed does not *per se* constitute an inequitable and unreasonable utilization. However, this diversion will have extremely negative impacts on the environment and on the traditional uses of the Danube so that it must be regarded as inequitable. In addition, there are many alternatives available that will allow Czechoslovakia or Slovakia to meet their demand for energy and to bring economic development to the area.

7. These conclusions are based on evidence that is to some extent contested by Czechoslovakia. This leads to the questions to what extent the alleged negative environmental impacts of Variant C have to be proved by Hungary. 50 years ago the *Trail Smelter* award stated that "clear and convincing" evidence is needed. Taking into account the developments since then, and in particular the emergence of the precautionary principle, this rule cannot be interpreted today as meaning that Hungary has to submit evidence that proves the alleged environmental consequences beyond any doubt. Even the Slovak company constructing Gabcikovo admitted that it cannot guarantee that the project does not have negative environmental effects. Furthermore, a Canadian engineering company (Hydro Quebec Int.) which itself carries out large hydro-electric projects was commissioned by Slovakia to investigate Variant C. It issued a very critical report and recommended further extensive investigations, and in particular an environmental assessment. Thus, it must be assumed that Hungary can provide the evidence required.

8. International law on the environment and on the use of international watercourse does also contain certain procedural rules: the duty to co-operate, the duty to notify and inform, and the duty to consult and negotiate. On the basis of facts available, it is not clear whether Czechoslovakia has complied with the duty to notify and inform when it announced to Hungary its intention to carry out the project. But, as Hungary was involved in the planning for the original project, it also had access to information on certain parts of Variant C. Because Hungary raised objections against Variant C, Czechoslovakia and Slovakia were obliged to enter into negotiations on the project with the objective of reaching an amicable solution. Thus, they must have been generally willing to alter or

abandon the project. Negotiations between the two parties took place, but it cannot be said whether or not Czechoslovakia and Slovakia were generally willing to alter, suspend or terminate the project when they entered into the negotiations. The ILC *Watercourses Draft* also calls for a State to suspend a project for a period not exceeding six months if another riparian State objects against the project and asks for negotiations. It is questionable whether Czechoslovakia and Slovakia complied with this requirement because substantial negotiations on Variant C did not start before April 1991, and Czechoslovakia and Slovakia then refused to suspend the project.

9. There are several boundary agreements in force between the two parties, both multilateral (*Peace Treaty of Trianon*, *Paris Peace Treaty*) and bilateral (*1956 Boundary Treaty*). They determine the frontier line in the area as the main navigation line ("Talweg") of the Danube. The *1956 Boundary Treaty* stipulates that in case a change in the Talweg is brought about by other causes than natural causes, the frontier line shall not be affected unless the parties agree so. However, it does not contain any provisions on what happens if the parties fail to agree. The reason is that the Treaty particularly forbids such unilateral interference with the flow of the boundary river. Once operation of Variant C has started, the Talweg of the Danube will certainly be changed to the main navigation line in the water reservoir and the canal. One could therefore argue that this will also lead to a change in the border between Hungary and Czechoslovakia or Slovakia. This complex question, however, goes beyond the scope of the present study and, therefore, has not been investigated in more detail. Nevertheless, the unilateral change of the Talweg is a violation of the above-mentioned boundary agreements, and if Variant C will change the border between Hungary and Czechoslovakia or Slovakia, it would be a change to the disadvantage of Czechoslovakia or Slovakia. Furthermore, Variant C is also in violation of provisions on the management of boundary waters contained in the *1956 Boundary Treaty*. It also seems that it is in violation of provisions contained in a treaty of 1976 regulating questions of water management of boundary rivers. This cannot be said with certainty because the treaty only exists in Hungarian and Slovak languages and was not available to the author of the present study.

10. Because Variant C violates several rules of customary law as well as bilateral treaties, it could only be in accordance with international law if it finds a "justification" in the 1977 Treaty. There are two theoretical possibilities for such a justification. First, the 1977 Treaty could contain a consent by Hungary to the construction and operation of Variant C. Secondly, Variant C could be a lawful response to an alleged violation of the 1977 Treaty by Hungary.

11. Before looking at these two questions it must be asked whether the conclusion of the 1977 Treaty was valid This is questionable because the 1977 Treaty could violate a norm of *ius cogens*. These are norms from which no deviation is possible and any treaty in violation of such a norm is void (Article 53 of the *Vienna Convention*). The only norm applicable in the present case that could be considered a rule of *ius cogens* is the principle of good neighbourliness. Some writers have suggested that this rule shall be regarded as *ius cogens*. Whether a norm is considered as *ius cogens* has to be assessed by looking at the contents of the norm and its purpose. Generally spoken, the purpose of *ius cogens* is to protect certain minimum standards of law necessary for the further functioning of the world that cannot be at the disposition of any individual State. The principle of good neighbourliness as presently understood does not serve this purpose. It only forbids activities if they have a harmful effect outside the territory of the State carrying out the activity, but not if their harmful effect only occurs within that State's territory. Thus, the purpose of the principle of good neighbourliness is not to protect the environment as such or to establish certain minimal standards, but to protect the territorial integrity of neighbouring States. It can therefore not be regarded as a norm of *ius cogens*. This conclusion is also supported by the fact that States generally fiercely defend their right to a sovereign exploitation of their natural resources. Certainly, there is no agreement between States that international law forbids two States to conclude a treaty on the exploitation of a common resource as long as they do not interfere with the rights of third States. Therefore, the conclusion of the 1977 Treaty was valid. The Treaty has also not been derogated by the subsequent emergence of a conflicting rule of customary law or treaty law.

12. According to well established principles of customary international law, the "international wrongfullness" of an act is precluded if the State who's rights are violated has given its consent and the act is covered by that consent. The 1977 Treaty could constitute a valid consent by Hungary to the construction and operation of Variant C. In the 1977 Treaty both parties assumed the obligation to built certain works (Article 5.5). These obligations can be called active obligations. In addition to this the parties also assumed passive obligations because they agreed to a violation of their territorial integrity. The passive obligations assumed by Czechoslovakia were to allow the construction of certain premises that later should be owned jointly on its territory. Hungary, in contrast, accepted that the Danube is diverted at Dunakiliti into Czechoslovak territory and then later redirected into the Danube. Both parties also accepted as a passive obligation the violation of their territorial integrity through the negative environmental impacts of the

joint project. Hungary therefore gave consent to the diversion of the Danube on Czechoslovak territory in the 1977 Treaty. It is bound by this consent because of the governing rule of *pacta sunt servanda*. However, Variant C must be covered by the consent given in the 1977 Treaty. The 1977 Treaty clearly envisaged the project as a joint project. This is expressed in almost every provision of the Treaty. The parties never foresaw the possibility that one of them could go ahead unilaterally in the construction and operation of the project. However, this is precisely what Czechoslovakia or Slovakia does with the construction and operation of Variant C. Because Variant C is a unilateral project it is not covered by Hungary's consent to the diversion of the Danube in the 1977 Treaty as this consent is limited to a joint project.

13. Variant C could be considered as a legitimate response of Czechoslovakia or Slovakia to an alleged violation of the 1977 Treaty by Hungary. According to the rule of *pacta sunt servanda* Hungary was bound by the 1977 Treaty and had to fulfill its obligations of that Treaty. Hungary's decision in 1989 to abandon the construction of the Nagymaros dam and suspend the construction at Gabcikovo stood in contrast to its obligations as laid down in the 1977 Treaty. As regards the suspension at Gabcikovo, Hungary might be able to rely on the environmental provisions contained in the 1977 Treaty. However, this seems not possible as regards the definite stop of the constructions as Nagymaros.

14. Hungary claimed that its decision was justified under the principle of fundamental change of circumstances (*clausula rebus sic stantibus*) as well as under the principles of state of necessity and moral impossibility. These principles constitute an exception to the rule of *pacta sunt servanda*, and allow a State to deviate from otherwise binding treaty obligations. Because of the fundamental importance of the *pacta sunt servanda* principle, they generally have to be interpreted restrictive. In the present case, Hungary cannot rely on the rule of fundamental change of circumstance, first of all, because no fundamental change of circumstances occurred. Neither the change of political systems in Hungary and Czechoslovakia nor the growing environmental awareness in Hungary on the emergence of new scientific evidence can be considered a fundamental change of circumstances in the sense of that rule. Furthermore, Hungary may not invoke the rule because in February 1989 it has once again modified the Agreement supplementing the 1977 Treaty, and thus reaffirmed its intention to be bound by the 1977 Treaty. Hungary can also not rely on the principle of moral impossiblity. According to this principle a State may violate its treaty obligations if, because of external circumstance (*force majeure*), the fulfilment of these obligations would be self-destructive and endanger the very existence of that State. The

project as originally laid down in the 1977 Treaty cannot be considered as self-destructive despite the negative impacts it would have certainly caused to Hungary. Whether Hungary could successfully invoke a state of necessity as a justification for its decision to discontinue the project is debatable. Hungary would have to show that this decision was the only means to safeguard an essential interest against a grave and imminent peril. The rule has been invoked by States in the environmental context (e.g. in the *Torrey Canyon* incident), but until now international courts almost never had the opportunity to decide on the application of the principle.

15. The actions a State may take if another State violates a contractual obligation are, first of all, termination or suspension of the treaty. Czechoslovakia always stated that Variant C is only a provisional solution until Hungary fulfills its treaty obligations. Thus, it suspended the Treaty. This freed Czechoslovakia from its obligations under the Treaty but did not permit it to violate other obligations of international law. However, Variant C could constitute a so-called reprisal. A reprisal is an act violating a rule of international law (either customary international law or treaty law) that aims to force another State to discontinue the violation of international law or to pay compensation. A reprisal can only be considered lawful if it is proportional to the violation of international law by the other State. Variant C fulfills the first prerequisite for a reprisal because it constitutes a violation of several of Czechoslovakia's or Slovakia's obligations under international law towards Hungary. However, it does not fulfill the second prerequisite. Any reprisal must be terminated immediately if the other State is willing to meet its obligations under international law or to pay reparation. Because the purpose of a reprisal is not to punish a State for a violation of international law, but to force the State to fulfill its obligations, a reprisal must also be terminated if a State has made it absolutely clear that under no circumstances it will fulfil a given obligation but, in contrast, is generally willing to pay reparation. Therefore, Czechoslovakia or Slovakia had to terminate Variant C as a reprisal as soon as Hungary made it clear that it was not willing to fulfil its obligations resulting from the 1977 Treaty but offered pay damages. In addition, Variant C is also a response that is out of proportion to the violation of the 1977 Treaty by Hungary because it will cause irreversible damages to Hungary. Therefore, Variant C does not constitute a legitimate response of Czechoslovakia or Slovakia to an alleged violation of the 1977 Treaty by Hungary.

16. Hungary could have terminated the 1977 Treaty through its declaration of 19 May 1992. It can invoke Variant C as a material breach of the Treaty as ground for terminating the Treaty (Article 65 *Vienna Convention*). Variant C must be considered a material breach

of the 1977 Treaty because it is a unilateral project that is in violation of the underlying obligation of the 1977 Treaty to carry out the project as a joint project. Hungary also fulfiled the formal requirements for the termination of the 1977 Treaty. The procedural rules as laid down in the *Vienna Convention* are not directly applicable in the present case and go beyond of what is required by customary international law. Thus, the Hungarian declaration of 19 May 1992 terminated the 1977 Treaty.

17. There are various possibilities for a peaceful settlement of the dispute between the parties. The most promising possibility would be to refer the matter to a fact-finding committee that could propose a non-binding solution for the settlement of the dispute to the parties. Of course, the parties can also agree that the solution proposed shall be binding, or they can refer the matter to arbitration for a binding settlement. It could even be agreed that only the facts as found by the fact-finding committee shall be binding and then negotiate on the legal implications or refer the legal questions to arbitration. Hungary could also take the case to the I.C.J. in The Hague. The Court can decide on the matter if both parties agree so, but the fact that Hungary takes the matter to the I.C.J. would certainly create diplomatic pressure on Czechoslovakia and Slovakia, and it would be almost impossible for them to refuse jurisdiction of the Court.

B. Concluding Remarks

It is clear that, on the basis of previous studies on the ecological, economic and technical aspects of the case, Variant C is in violation of well established and fundamental principles of customary international law on the environment and the use of international rivers: the principle of good neighborliness and the principle of equitable utilization. In addition, construction and operation of Variant C is contradicting the spirit of many legally non-binding international declarations on the environment which were supported by Czechoslovakia.

Czechoslovakia and Slovakia can only try to invoke one justification for the construction and operation of Variant C: the 1977 Treaty and the consent Hungary gave to the diversion of the Danube in that Treaty. The 1977 Treaty was in accordance with international law, despite the negative consequences the implementation of the project as originally envisaged would have caused to the environment of Czechoslovakia and Hungary. This is the case because international law still gives preference to the sovereign right of States to exploit their national resources over the protection of the environment. It is only in legally non-

binding documents that States have accepted moral obligations to refrain from the implementation of projects like the Gabcikovo-Nagymaros project.

The evaluation of the implications of the 1977 Treaty came to conclusions that probably seem contradictory. On the one hand it was found that Hungary's decision in 1989 to discontinue the project might have been a violation of the 1977 Treaty. Hungary was bound by its obligations to participate in the construction of the project, to allow the diversion of the Danube on Czechoslovak territory, and to accept the consequences of the project. Because of the fundamental importance the principle of *pacta sunt servanda* has in international law, Hungary could neither invoke a fundamental change of circumstances nor a moral impossibility (*force majeure*). Whether it could rely on the notion of state of necessity, or on the environmental provisions of the 1977 Treaty, is debatable. On the other hand, it was found that, even if Hungary's decision of 1989 constitutes a violation of the 1977 Treaty, Czechoslovakia and Slovakia may not construct and operate Variant C as a unilateral project despite the fact that Variant C and its consequences are almost identical to the project as laid down in the 1977 Treaty.

This apparent contradiction finds its explanation in the fact that international law allows States to take recourse to unilateral actions that violate international obligations only in a very few and exceptional cases. Thus, Hungary could not simply declare unilaterally the 1977 Treaty terminated after it found that the construction and operation of the project as laid down in the Treaty is against its interest. Czechoslovakia and Slovakia were not allowed to implement Variant C as a unilateral action after Hungary decided not to fulfil its obligations of the 1977 Treaty. Instead, both parties have to seek a peaceful settlement of their dispute through negotiations and refrain from unilateral actions.

It must therefore be the foremost objective for all parties involved in the present case to find a way for a peaceful settlement of their dispute. It is questionable whether this should be done by refering the matter to the I.C.J. or an arbitration tribunal so that the case would be decided purely on legal grounds. The case is of enormous importance for both countries and involves a number of complicated factual questions. It also constitutes a question of national self-esteem for both sides. It seems therefore more appropriate to refer the matter, first, to a fact-finding committee of international experts of both parties and third countries that should undertake a thorough evaluation. This committee should also address possible alternatives to Variant C and propose a solution that would allow Slovakia to pursue a policy of economic development in the area and to meet its demand for energy. It is obvious that any solution that calls for a termination of Variant C has to include

elements of compensation for Slovakia. Slovakia has spent enormous resources on the construction of a project that, and this is important, was once considered by **both** parties as an important element of the development in that region. Third countries as well as international institutions like the World Band or the EBRD could also contribute to a solution of the dispute in offering financial assistance to Slovakia as regards alternative projects.

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V. Other Sources

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