

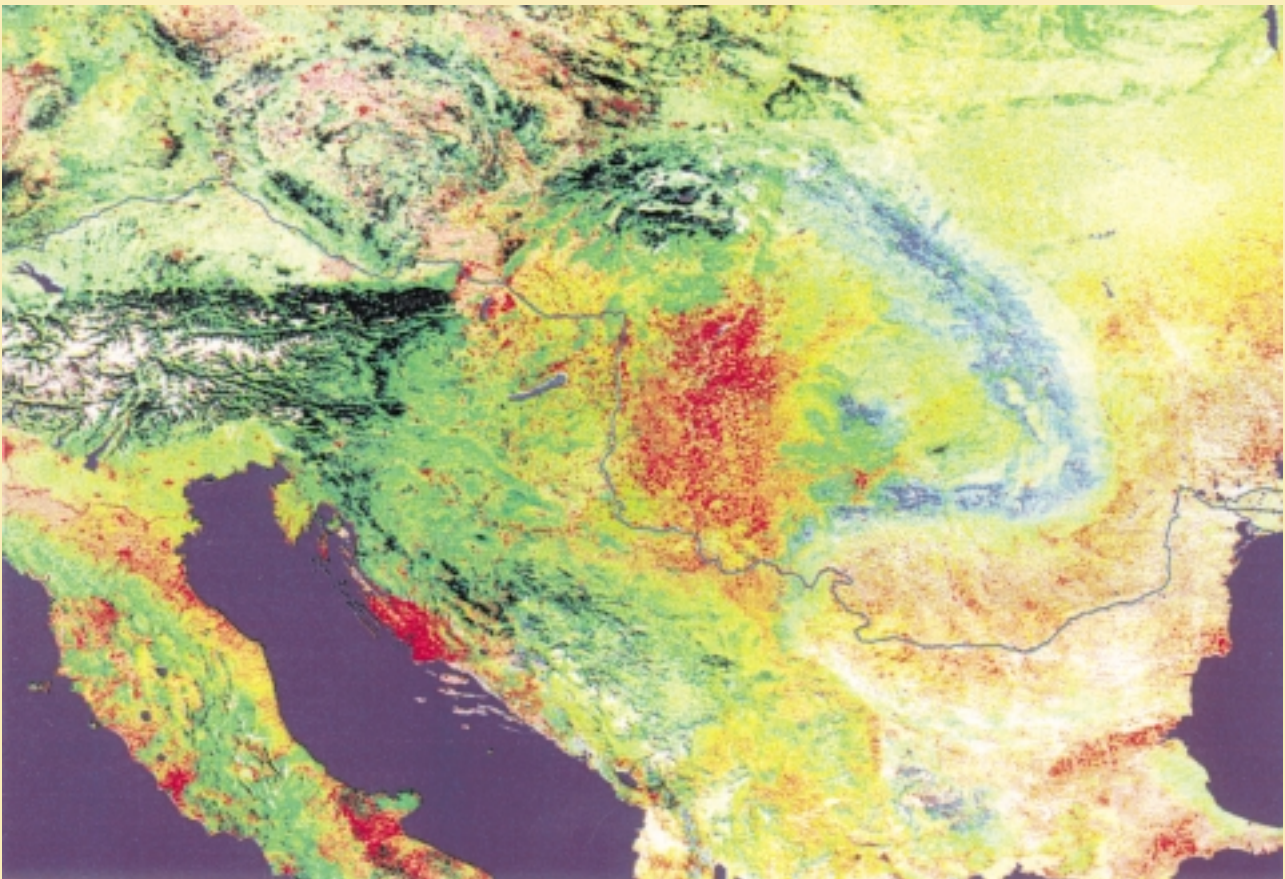
**DANUBE POLLUTION REDUCTION PROGRAMME**

**FINANCING POLLUTION REDUCTION**

**MEASURES IN THE DANUBE RIVER BASIN:**

**PRESENT SITUATION AND SUGGESTIONS**

**FOR NEW INSTRUMENTS**



**Programme Coordination Unit**  
**UNDP/GEF Assistance**



*prepared by*  
**KREDITANSTALT FÜR WIEDERAUFBAU, GERMANY**



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12 April 1999



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## PREFACE

This report was prepared within the framework of the Danube Pollution Reduction Programme (PRP). The original concept aimed at a Danube Environmental Fund to support the implementation of the environmental cooperation of the Danube countries and the forthcoming ICPDR action programmes. The assignment to work out such a study was given to Kreditanstalt für Wiederaufbau (KfW) in the spring of 1998; KfW designated **Mr. Jürgen H. Lottmann** and **Mr. Dieter Schulze-Vornhagen** as the main authors. In the course of the work it became clear that the present environmental and financial situation of the countries of the Danube Basin demanded a consideration of a variety of new instruments for the implementation of pollution reduction measures in the Danube River Basin. Therefore the report points out a variety of strategies and solutions and does not focus on the creation of one central facility.

The concept for this report was developed by missions to several Danube countries and to major financing institutions of relevance. A first concept was presented at the meeting of the Southeast-European Cooperative Initiative (SECI) in October 1998 in Vienna. A draft of the present report was presented and discussed at the "Danube Environmental Financing Facility Workshop" in Baden, Austria, on February 18 and 19, 1999. The conclusions of this workshop and the comments received were used for a revision and resulted in the final report presented herewith. The results of the workshop and the recommendations of this report will be considered by ICPDR in its decisions to set up mechanisms to facilitate financial arrangements for the implementation of investment programmes.

This report uses data from the National Reviews prepared in the Danube countries by expert teams analyzing financial and environmental data and defining projects for pollution reduction. Especially helpful was the work of the UNDP/GEF financial consultant, **Mr. Reinhard Wanninger**. The preparation of the assignment, the conceptual discussions with the authors and the organisational matters as well as the organization of activities were carried out by **Mr. Joachim Bendow**, UNDP/GEF Project Manager with the assistance of **Mr. Andy Garner**, UNDP/GEF Environmental Specialist.

KfW gratefully acknowledges the valuable inputs and support by the institutions of Danube cooperation, the Danube countries, the financing institutions and the many experts consulted.

The findings, interpretations and conclusions expressed in this publication are entirely those of the authors and should not be attributed in any manner to the UNDP/GEF and its affiliated organizations.



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## Executive Summary

1. The design of a multilateral fund to finance environmental investments in the Danube river basin was the task. There is no precedent for such a fund world wide. The idea to create such a fund is the logical consequence of donor financial efforts to assess the water environment of the Danube basin and of the lists of priority investment objects. Such a fund was conceived to promote project preparation to the status "bankable" and to furnish investment funds for their realization. Background of such a concept is of course the weakness of the transition countries of the Danube basin in investment planning and fund raising.
2. The investment objects are plentiful since in all countries of the basin many urgent environmental improvements are necessary, including those which aim at the improvement of the quality of waters of the Danube basin shared by 13 countries. The lion's share of the investment costs has to be borne by the countries, their citizens, as fee- and tax-payers and by their enterprises. Since the transition countries are more or less all in economic difficulties and their central and local governments have to face severe budgetary restraints, progress in environmental investments will be slow. The investment volumes will not be determined by offers of credit money but by the priorities the countries set in water pollution control and by the funds they allocate for investments and operation. It must be noted that most countries do not yet have an adequate pricing for water and satisfactory user fees for waste water systems.
3. Such a big Danube Environmental Fund was conceived by the consultants, but not judged feasible, because of the impossibility to raise fresh and additional money, but also because the need for a big Fund has been limited by the installation of the Project Management Task Force (PMTF). The reasons for not recommending a big Fund can be summarised as follows:
  - A compensation mechanism by which the wealthier countries pay in money and the less well off become recipients does not correspond to the constellation of interest: The gradient of economic power follows the gradient of the Danube; the upstream countries have no material interest to finance water pollution control beyond their borders.
  - International taxes or pollution charges would not be acceptable as sources of revenue in the wealthier and the poorer countries; besides pollution charges would prove inequitable. Finally most countries still lack the administrative structures for such systems.
  - Credit money from outside donors is available and cannot be augmented or subsidised by a Fund; help in project preparation is included.

- Sizeable amounts of concessional money have been given by the EU and this will continue with the new priorities of accession support and infrastructure investment. This money, however, would not be available for a multilateral Fund.
  - The brokerage function and the assistance in project preparation which such a Fund might have provided, will be assumed by the PMTF.
4. The generally accepted common problem are the nutrient loads of the Danube which contribute decisively to the eutrophication of the Black Sea. A limitation of nutrient inputs needs a reduction plan with targets for each country accepted by all states. The lead in finding a common solution must be taken by the countries which are members of both, the Black Sea and Danube Convention, because they contribute to, and suffer from, the nutrient input into the Black Sea. The consultants propose a mechanism for joint implementation by which the countries with high specific costs for nutrient control would finance corresponding measures in other countries and could count that as a partial fulfillment of their reduction obligation.
  5. The environmental efforts in several countries will be dominated by the need to conform with European standards, less by domestic priorities and not decisively by the agreements within the framework of the DRPC.
  6. There are smaller and complex investments needed, for which donor support is not easily available. There are also needs for outside expert advice not always available in the countries. To help in preparing such projects and to give technical assistance the possibilities of attracting grant money should be explored. Handling money needs a legally separate institution based on an amendment to the Convention. The consultants recommended that the Danube states create the legal frame for such a Danube Environmental Financing Facility (DEFF). The administrative costs should be borne by the participating countries. Possible sources of funds could be the GEF and bilateral donors. During the discussion of the Draft Study the DEFF proposal was rejected due to financial (country contribution) and administrative/legal (amendment to the Convention) problems. As an instrument to support investment planning and project preparation as well as to advise transition countries, a proposal for further UNDP/GEF assistance to the IC in the form of a "Project Implementation Facility" (PIF) was discussed. The consultants recommend to pursue this proposal.
  7. Further institutional improvements with regard to financing of Pollution Reduction are recommended by the consultants:
    - Establishment of a new expert group for evaluation and appraisal of such projects which donors do not want to take up. This 'Project Appraisal Group' should be elected by the IC. Projects with a positive approval could be presented for financing to IFIs and donors.

- Exploring the possibility of a facility for technical assistance according to the METAP model; here the PMTF should take the initiative.
  - Exploration of the possibility to extend the mandate of the EBRD-based PPC to contribute specially to the objectives of the Danube Convention.
  - Creation of a new article of the Convention which would set the basic rules for a joint implementation mechanism: Polluter pays; overcompensation; approval by the two governments concerned and by the IC.
8. The efforts to coordinate donor support via the PMTF are promising, but will not solve the basic problem of lacking domestic investment capital and, at least as important, lacking domestic funds for operation and maintenance of the necessary environmental investments. Help from outside can only be complementary. Investment support can never replace domestic efforts.

## **A. The Setting**

### **1. Background of the Idea of a Danube Environmental Fund**

#### **1.1 Efforts to Protect the Environment of the Danube River**

The Danube has become the object of increased environmental attention since the early 1990s. One reason is the modification of the river system for various purposes but more important is the pollution of the Danube and its tributaries which has effects within the states of origin and moreover transboundary effects. The Danube must also be viewed from its receiving waters, the Black Sea, which shows signs of degradation. The Danube River Protection Convention (DRPC) of 1994 and the Environmental Programme for the Danube River Basin (EPDRB) of 1992 have as a goal to improve the water quality of the Danube, of its tributary waters and the adjoining wetlands. The Convention and the Environmental Programme have in view the whole set of regulatory measures applicable for the management and improvement of the rivers and the river basin. The EPDRB has specifically promoted investigations leading to the identification of a set of highly relevant pollution sources, the hot spots, whose mitigation would need considerable investments. In its contribution UNDP/GEF is working towards a more precise determination of hot spots, pointing out necessities for investments; the ultimate goal is the elaboration of a Pollution Reduction Program for the International Commission for the Protection of the Danube River (IC), defining measures for pollution reduction in the Danube river basin and especially investive priority projects. In this context UNDP has asked Kreditanstalt für Wiederaufbau (KfW) to work out a concept for a Danube Environmental Fund to promote such investments, especially if they have a transboundary effect and relieve the Black Sea. In KfW a group of experts from the technical and finance departments worked on the feasibility of such a fund with an intermediate presentation and discussion at a meeting of the Southeast European Cooperation Initiative (SECI) in October 1998.

Although the tasks defined for the member states in the Convention will be costly for the authorities and for the polluter, the Convention does not deal with the topic of financing investments or other protection measures. Programs promoted by the EU and by UNDP/GEF clearly aim at investments, naming priority projects and presenting them in programs, but this has not yet led to a determination of the financial mechanism for pollution control measures and the procedures for the implementation of such investments.

Some investments in water pollution control in the Danube basin are, however, taking place in most of the Danube countries, including the economically disadvantaged countries in the lower basin of the Danube (s. also Annex 1), the funds coming from the state budgets, municipal budgets, public and private loans as well as loans and grants from international financing institutions. These investments demonstrate the possibilities, but are altogether insufficient to reach the goals of the Danube Convention – or of EU-accession. So the question was, whether a special financing mechanism and a financing institution is necessary and feasible and whether it is recommendable to set up a Danube Environmental Fund with the function to attract and channel investment money from sources outside or inside of the transition countries. In case this does not seem necessary or feasible, alternative supportive proposals for the promotion of investments to improve the Danube environment require consideration.

## **1.2 A Concept without Precedent**

There are many international rivers (about 200 are counted) and many more "shared waters" in the world. There are many agreements on the utilization and protection of international rivers, mostly concerning water abstraction, shipping and other uses. For many rivers exist also agreements on pollution control. The consultants, however, were not able to identify any fund for pollution control instituted and operated by riverine countries. The idea of such a fund had been discussed within the framework of the Convention on the Baltic Sea, but the concept was not realized. Apparently the constellation of interests was not favorable enough and the existing financing instruments were considered sufficient. The consultants are also not aware of any international pollution charge; such levies, e.g. the German Abwasserabgabe (waste water charge), have become state-of-the-art-instruments for water pollution control within the last decades, but were never realized for transboundary purposes.

The consultants consider two approaches to the question of the funding of common efforts to protect shared waters worthy of note for the IC and all participants in the programs:

### **a) The Feasibility Study for the Establishment of a Black Sea Environmental Fund (BSEF)**

The UNDP-supported, Black Sea Environmental Programme (BSEP) had commissioned a study for a Black Sea Environmental Fund, based on a resolution of a ministerial conference of the Ministers of Environment of the

Black Sea states, who condoned such a concept formally in October, 1996. The task given emphasized that not only investments, but also project preparation, technical assistance, and the work of the Istanbul Commission should be financed by the BSEF. As the main source of revenue "economic instruments" were envisioned, i.e. pollution charges, levies on economic activities, shipping fees etc.; donor money should be added to such revenue. The consultants presented a full draft of their report in December 1998 in Istanbul. The findings of the report are of great value also for the conception of the financial support for the common efforts to protect and utilize the waters of the Danube basin in a sustainable manner. We derive the following main findings from this report for our study:

- The use of economic instruments as sources of revenue is presently not feasible. National environmental charges are already beset by many administrative problems and the countries would hesitate to give part of the revenue to an international organization or to raise the revenues for such a fund.
- The lack of finance is not the core problem and only a secondary cause for the deficiencies in environmental protection of the Black Sea. The main problems are rather the deficiencies in environmental policy and enforcement; this holds for the member states individually and collectively. New financial instruments only make sense, if they can support and facilitate environmental action.
- The offers of loan money by international donors are sufficient and need not be increased and could not be subsidized by a fund.
- The constraining factors for financing by IFIs are: most need government guarantees; many projects are below the loan threshold; they only finance part of the investment costs; they have problems with multinational projects.
- If the governments of the Black Sea countries would take vigorous and well planned measures for the improvement of the environment, then a Black Sea Environmental Fund would make sense as a supporting institution giving grants for investments, technical assistance and project preparation.
- The basis would be a supplementary agreement to the Black Sea Convention. The BSEF should be a separate organ under the auspices of the Istanbul commission. It should have a contract with a commercial bank for handling the accounts. A special supervisory body would have to be set up.

- As a primary means of finance equal contributions by all member states are recommended. The fund should not be a lending institution, but rather give grants only.
- The administration of such a small fund could be done by 4 or 5 persons working alongside the other staff of the secretariat to the Istanbul Commission.
- Because of the sizeable share of the pollution input via the international rivers the consultants strongly recommended an extension of the field of activity of this fund to the whole Black Sea basin, but don't elaborate that aspect of their proposal.

#### **b) The Mediterranean Environmental Technical Assistance Program (METAP)**

16 Mediterranean States and the EC, under the auspices of the United Nations Environment Programme (UNEP), adopted the Mediterranean Action Plan (MAP) in Barcelona, Spain in 1975. Its legal framework comprises the Barcelona Convention adopted in 1976 and revised in 1995, and six Protocols covering specific aspects of environmental protection.

The Action Plan, coordinated by the Barcelona Convention Secretariat, has served as the basis for the development of a comprehensive, environment and development program in the region. MAP covers coastal zone management, pollution assessment and control, protection of ecosystems and preservation of biodiversity. In 1995, it was revised to become more action-oriented and an instrument for sustainable development in the region.

The activities of MAP are financed mainly through the Mediterranean Trust Fund (MTF), established in 1979, to which all Contracting Parties to the Barcelona Convention contribute according to a mutually agreed scale taking into account the UN scale of assessment.

Since its adoption, MAP has played a catalytic role serving as the basis for the development of a comprehensive environmental program in the region involving the Mediterranean States, specialized organizations of the United Nations system, inter-governmental and non-governmental organizations (IGOs and NGOs). It has been the general policy of MAP to strengthen cooperation with these organizations.

MAP also cooperates with the World Bank (WB) and the European Investment Bank (EIB). Hence, the Mediterranean Environmental Technical

Assistance Program (METAP) of the World Bank, the European Investment Bank, UNDP, and the European Commission was initiated in 1988 in order to advise on environmental policy, and to address the institutional development and investment needs of the Mediterranean region.

To fulfil this purpose, METAP pursues three main objectives by supporting:

- the development of a sound pipeline of investment projects,
- the formulation and improvement of environmental policies and regulations, and
- the strengthening of the required institutional framework.

In pursuing these objectives METAP finances pre-feasibility studies of projects to be financed, policy studies, and a regional institutional development program. METAP provides direct assistance in the form of grants, and is designed as a rolling three-year program, subject to an annual review of financing requirements.

METAP's third phase, begun in 1996, focuses on three areas: arresting and controlling pollution, integrated management of water and coastal resources, and capacity building. One of the cornerstones of METAP III is the newly established regional facility in Cairo, which includes the project preparation unit (for investment project preparation) and the capacity building unit (for national capacity building). Project implementation during the third phase will be managed directly from the field through the regional facility.

The METAP III portfolio comprises more than seventy-five activities, of which about 25 percent are in Southern Europe and 75 percent are in the Middle East and North Africa. Activities include investment project preparation and national and regional capacity building.

METAP's first two phases mobilized more than \$25 million to fund nearly 100 technical assistance activities. METAP III has a considerably larger scope, with provisional costs of \$116 million (\$25 million of which has already been raised). In addition to the METAP partners, several countries - including Canada, Egypt, Finland, Japan, Luxembourg, Spain, and Switzerland - have provided funds or are considering supporting the program.

Official donors can contribute to METAP by funding individual activities (project preparation, capacity building, or professional environmental networks), providing in-kind contributions, or seconding technical field staff.



Financial contributions are generally made by trust funds or directly through the METAP countries.

### **Conclusions**

Five lessons can be drawn from the lack of precedents for a multinational water-related investment fund and the two examples of approaches to that goal:

- Multilateral agreements to protect waters do function already without a fund, e.g. on the Rhine, for the Baltic Sea, for Lake Constance.
- The will of the states to improve their environment is decisive; international cooperation is a derivative of corresponding actions.
- A fund cannot create new and additional money unless the member states contribute above and beyond their present level of spending for the environment or introduce new levies or charges.
- Coordinated financing does not necessarily lead to coordinated environmental action.
- METAP could serve as a model for what the PMTF could achieve, realizing that it serves as an instrument of preparing projects for the participating donors without having a marked role in the coordination of the environmental policy of the Mediterranean states.

## **2. A Diverging Constellation**

### **2.1 Lack of Common Interest**

The elaboration of a coordinated investment plan in the Danube basin and along the Danube river meets particular difficulties: The countries of the upper Danube, Germany and Austria, have done their investive homework and have achieved a high standard of emission reduction and water pollution control. Their remaining problems result largely from diffuse emissions especially from agricultural lands which are hard to control by investive means. The countries of the middle basin, particularly the Czech Republic, Hungary, Slovenia and Slovakia, are striving for accession to the EU and will thus work to fulfil the criteria, which means that also some benefit will result for water quality and Danube; but this is not a central point of their efforts. The absence of Yugoslavia from the DRPC is – ecologically speaking – a loss since it contributes significantly to the pollution of the river and since its participation in all measurement programs is essential - after all some of the largest tributaries join the Danube in Serbia; moreover,

Yugoslavia - together with Romania - controls highly relevant river works with the two dams in the Iron Gate. However, Yugoslavia is actually participating in, and contributing to, the Pollution Reduction Program.

The countries of the lower basin, Bulgaria, Moldova, Romania and Ukraine (the latter two also via tributaries leading to the middle basin) are sizeable polluters, with a lot of damage within each country, but economically in such a bad state that pollution control will not be on their priority list in the foreseeable future. The fact that the economic gradient of the river corresponds to its topographic gradient also means that the wealthier countries have no immediate interest in helping those countries. This constellation of interests is singularly disadvantageous for a common ecological effort. (Compare that with the other international waters in central and eastern Europe like the Rhine, the Elbe, or the Baltic Sea.)

## **2.2 The Role of the States**

The measures to be taken for the protection of the waters of the Danube basin will therefore be defined and carried out by the member states according to their own priorities and financial means. Their environmental priorities will be guided by the aim of maintaining and improving the quality of water for their drinking water supply, recreation, fisheries etc. For some countries these priorities will be modified by the requirements for accession to the EU; others may want to meet certain environmental standards in order to facilitate the access to the common market. An international funding mechanism should therefore aim at the identification of transboundary problems and their structuring so that a common effort for common problems becomes possible. The major transboundary problem identified today is the load of nutrients in the form of nitrates and phosphates carried by the Danube into the Black Sea. A solution by a concerted action of the countries of origin will only be possible, if the relative contribution via the Danube to the pollution of the Black Sea is formally defined and if there are generally accepted figures on the quantities contributed by each state along the Danube. The same holds for other dangerous substances such as the micro pollutants, like the heavy metals or persistent organic substances. A concerted effort will only be possible if and when the Commission fixes an uncontested bill of quantities and in addition defines rules for the reduction for each country. The Danube-Black Sea Joint Working Group is actually examining the situation and defining indicators and standards to control and monitor pollution charges to the Black Sea; these examinations show that

there is still much empirical evidence necessary and an equitable distribution of emissions rights is far from agreed.

In the Strategic Action Plan of 1994 the "hot spots" have not been selected according to clear criteria – neither within each country nor for the whole basin. Therefore their contribution to the water quality problems within each country and especially their transboundary effect remain elusive. The country reviews conducted by UNDP/GEF in 1998 and the application of the Danube Water Quality Model (DWQM) may lead to a better knowledge of the effects of hot spots and also of the costs for their defusing. A clear picture convincing to outside financing institutions will however only emerge if the Danube countries among themselves decide on priority criteria and projects. This will be very difficult, among other reasons because the poorer countries in the lower basin will be reluctant to publicly declare such urgent problems when they don't know how to finance remedial investments, much less the operating costs.

### **3. Tackled and Untackled Environmental Tasks**

#### **3.1 Objects in Need of Special Attention**

As already mentioned before some investments in water pollution control are taking place in most of the Danube countries, with national funds as well as such from international Financing Institutions. The actual investments concentrate on municipal waste water. There are nevertheless environmental problems and environmental protection investments which do not always find adequate attention by national authorities and IFI's, because there is no solid investor or because the investments promise no returns or at least a cost coverage. Moreover some solutions are complicated. We suggest special attention for the following types of projects:

- a) Industrial waste water reduction: prevention and treatment or pretreatment of effluents incl. sludges of viable industries having difficulties in financing additional and nonproductive investments; included should be support in planning and operation. The responsible operators may be public, private or somewhere in between.
- b) Safety measures against accidental release of water pollutants: these dangers are well known; spills of oils and chemicals are already a problem for some tributaries and may drastically impair the otherwise fair water quality of the main river. A special source of danger are pesticide storages. Financing of the necessary technical measures and the accompanying training is needed. An alarm system for such accidents

has been one of the first major tasks of Danube cooperation under the EPDRB.

- c) Clean up of contaminated sites, including the assessment of the risk potential. There are a lot of worrisome old dumps, old industrial sites, mining remnants, old pesticide dumps etc. whose actual dangers can only be determined by costly investigation. The exploration and later decontamination will require highly concessional means unless the reclaimed area is very valuable.
- d) Disposal of oils and other wastes from ships in harbors: the present state of disposal is unsatisfactory; a change of system is planned. The investments are not large and not many, but an interesting contribution to cleaning up the river. Here the Danube Shipping Commission is responsible for international cooperation and facilitating investments.
- e) Management of animal wastes: animal wastes are a major source of water pollution in the Danube basin, contributing also to the nutrient problem. Definition of affordable technical solutions for their management including utilization treatment and safe disposal should be a task for the IC and its working groups. Corresponding investments would be a specialized task, to be accompanied by advice in planning, design and operation from the IC and its supporting bodies as well as from IFIs. The solution of these problems depends, however, more on changes in agricultural policies, which will be determined by EU regulations in the case of the accession countries.
- f) Small and medium waste water treatment plants, serving smaller settlements and local industry. For selected areas these plants could be aggregated into financing packages. For settlements without sewer systems, the technical equipment for collection, transport and treatment of the fecal sludge needs finance.
- g) Monitoring and measurement equipment, laboratories: the more precise determination of pollution loads and the repartition of efforts among the countries and polluters will require continuous, long-term and intercalibrated measurements; also emission measurements of a sophisticated nature are often necessary to determine damage potentials. Such equipment needs finance by credits and in some countries also by concessional means.
- h) Restoration, maintenance and recultivation of wetlands and flood retention areas along the Danube and its tributaries: Although it will be difficult to establish priorities, assistance is needed in appraising such

measures and in appraising the effectiveness of wetlands as nutrient sinks; the financing of such measures should regularly include concessional components.

The list shows that there are many and varied investment necessities besides the medium to large waste water treatment plant. Transboundary effects can be achieved by the projects of the type a) to d) especially when the sources are big and on a transboundary tributary. Project types e) and f) will have a positive effect on the nutrient load of the river system.

These complicated and often small investments occur also among the hot spots and will be part of the investment programs to be determined. The first tasks for the IC and its supporting bodies is to organize, support for definition, preparation and appraisal of investment proposals including the technical assistance necessary, and finding financing for viable small projects.

## **3.2 The Nutrient Problem**

### **3.2.1 Introduction**

The nutrient content of waters in the Danube basin leads to three clearly recognized problems:

- The nitrogen content of the ground water used for drinking water supply often exceeds the commonly accepted limit value of 50 mg/l; many countries predominantly rely on ground water for drinking water. Cause and effect here are almost always within one country.
- In many stretches of the tributary waters nitrogen and phosphorus will occur in concentrations above the limits suitable for aquatic life, because the inputs from sewage systems will be insufficiently diluted. It is, for example, estimated that for more than half of the existing discharges of treated municipal waste water the dilution is less than 10:1. These problems lie mostly within one state, but often they are also of a transboundary nature affecting, however, only two or three countries.
- The total nutrient load discharged by the Danube into the Black Sea contributes significantly to the eutrophication of that sea.

The nutrient concentrations in the Danube river itself stay within all limits with only local exceptions which, however, never impair the use as drinking water. The high dilution provided by the steadily increasing water volume of

the Danube makes it possible that the Danube carries critical pollution loads into the Black Sea without excessive concentrations in the river itself.

Besides overfishing and certain shifts in the spectrum of species by newly introduced organisms eutrophication is accepted as the major environmental problem of the Black Sea. An official confirmation is the resolution no. 29 of the Ministerial Conference of the Black Sea Countries in 1996, calling for efforts at basinwide reduction until the quality goals are achieved. The Danube is the major source for the nutrient input into the Black Sea, contributing about 70% of nitrogen and phosphorus; if the inputs into the Sea of Asov are taken into account, this share is reduced. Since Ukraine, Bulgaria and especially Romania contribute large parts of the nutrient load of the Danube it can also be shown that the Black Sea Countries together cause also about 70% of the nutrient input into their sea. This points to the pivotal role of these countries who are parties to both the Black Sea Convention and the Danube Convention.

Over half of the nutrients (N and P) come from agriculture, partly from fertilizer inputs, partly from livestock. About  $\frac{1}{5}$  originates in households, around 10% in industry, there are other sources, as well. Because of the economic downturn in the transition countries, the emissions from agriculture and industry are presently much lower than ten years ago. With the recovery of economic activity they will increase again. The increases will be most drastic in the field of agriculture because the inputs per area are today much less than in socialist times. Also a comparison shows the specific inputs of the transition countries to be only a fraction of those of the member countries of the EU. All strategies at limiting or reducing nutrient inputs will therefore come into conflict with the economic aspirations of these countries. Special attention should be paid to measures which have a national benefit and effectuate an overall reduction of nutrients as a welcome side effect. Environmental strategies in this field therefore need a careful design: they have to be effective, affordable, efficient, and convincing.

### **3.2.2 Investments and Other Costly Measures**

Nutrient reduction is a difficult and expensive task, which is emphasized only recently in industrial countries, after the risks coming from pathogens, toxic substances, and oxygen demand, have been controlled. In Germany, for example, only the last decade has seen widespread measures aimed specifically at nutrient reduction. The investive and other measures to

control the nutrients consisting of compounds of nitrogen and phosphor are manifold:

- The replacement of phosphates in detergents is an administratively simple measure. On the investive side, it requires new production installations. This strategy is cost effective and has had clearly positive effects in all countries having done this substitution.
- The reduction of nutrient inputs from settlements can be effectuated by the general substitution of phosphates as detergents and moreover by specific waste water treatment measures. Nutrient elimination requires investments in basins for additional treatment based on biological processes. Phosphate elimination requires an additional chemical treatment requiring modest investment costs but high operating costs due to the need for chemicals and for the disposal of the resulting sludge. For small sources a biological nutrient removal by plants is an established and cheap method, provided the plants are harvested and utilized; the surfaces required are large. These tertiary treatments of municipal waste water would be undertaken only when urgent, for restoring the water quality of lakes and rivers of great value or because of international obligations. In the case of a positive effect on the overall pollution load reaching the Black Sea the incremental share of such investments could be eligible for a limited support by grants from the GEF.
- The elimination of nitrates and phosphates from industrial waste water would be typically part of a general improvement of waste water discharges by such industries. Depending on the type of production, in-house solutions or end-of-pipe-technologies will be appropriate. Viable industrial plants will generally be able to afford such measures, being able to pay the capital costs and to assure the orderly operation of the installations. More difficult are those discharges coming from ailing industries which cannot bear the additional burdens but cannot be shut down for economic and social reasons.
- The agricultural emissions come partly from soil fertilizers which reach the waters by run-off or seeping through the ground water; such diffuse contributions are large and can be controlled best by regular measures. The range of measures necessary can be seen in the Regulations on the Prevention of Pollution from Agriculture adopted in 1998 by the Helsinki Commission (see Annex III, Part II, to the Convention for the Baltic Sea). The costs here will be largely opportunity-costs, because ecological considerations will lower the fertilizer input below the economic optimum

and thus reduce yields and incomes. The other type of source in agriculture are livestock farms. It is estimated that in the Danube basin about  $\frac{1}{4}$  of the phosphates and about  $\frac{1}{6}$  of the nitrates originate from such sources. A full treatment of the slurry even from large livestock farms will be so expensive, as to render the production uneconomical. The most cost-effective solution is the distribution of slurry or pretreated slurry which will not exceed the nutrient demand of the soils. This, however, requires large surfaces and therefore long transports. The adoption of the size of such units to the absorptive capacity of the soils is probably the most effective strategy, requires however a decisive and monitored administrative intervention. In certain locations the partial treatment of slurry may help to eliminate some of the nitrogen while at the same time preparing the wastes for transport. The costs of these agricultural measures depend very much on the structure of agriculture which is anyway undergoing rapid changes.

It is necessary that each country obliged by international agreement or by internal problems to reduce nutrients will develop a least-cost-reduction-plan taking into account all alternatives for nutrient reduction. The mix of measures to be taken may be very different from country to country – and region to region as well. A general prescription of emission limits on point sources or of agricultural practices would not be appropriate. In the design of such plans the transition countries on the Danube could most likely use technical assistance for the design of nutrient limitations for livestock farms and for industry. Other measures like the regulation of agricultural practice, tertiary treatment of municipal waste water, or the replacement of phosphates in detergents are well known and need only a simple adaptation. The municipalities could receive outside support for investments in nutrient reduction, especially when those are justified by the reduction of the pollution load for the Black Sea. Most likely the countries will force such measures which have both a domestic and an international effect. Many water pollution control measures have anyway a certain positive effect on nutrients, however not in all cases; in extreme cases waste water treatment may even result in an increase of the discharge of nutrients. In view of the opportunity costs of nutrient limitations and of the high operating costs of many measures, the capital costs will not be the primary bottleneck for nutrient reduction programs. As instruments the emission standards for point sources will not be the most appropriate since they will lead to overinvestments and since they are difficult to police in the framework of an international agreement. More useful would be limitations set for the whole



catchment area – or in the case of the cooperation of the Danube countries – limitations by subbasin or for whole countries.

The International Commission would have to continue the work on the programs in order to eliminate or at least reduce the uncertainties as to the actual and factual emissions within the Danube basin reaching the Black Sea. The result would have to be the determination of the annual nutrient loads reaching the Black Sea from each of the Danube countries. Furthermore the relative importance of phosphorous and nutrient compounds for the eutrophication of the Black Sea would have to be determined. The work of the countries and the investigations of the consultants have produced a picture of the relative contributions which can now be formalized in a transboundary analysis and lead to the determination of the share of each country which can also be accepted by the states. The terms of reference for EMIS and MLIM contain mandates for the setting of quality targets, for the determination of recourses of nutrients, resulting in nutrient balances. They also have the mandate to set standards. The International Commission would then enter into a difficult discussion about the consequences to be drawn:

- first would have to come a common target for the maximum input of nutrients into the Black Sea;
- then the basis for the duties for limitation or reduction should be assigned to the member states. Two basic reference standards would be possible:
  - the limitation according to past emissions.
  - limitation per capita and/or per hectare of agricultural land.

The final result would have to be a national allowance over a time giving the state targets with which they must comply. The states then would have to pursue these targets guided by least-cost-reduction – plans. This is the price to be paid for a comprehensive Nutrient Reduction Program, which at the same time will have benefits for the drinking water quality.

When future National Nutrient Allowances (NNA) are discussed, the Danube countries might want to discuss a strategy which will view the Basin with its nutrient sources as an entity and sketch a rough transboundary least-cost-reduction-plan. The result will very likely be that the most cost-effective reduction measures will appear in the transition countries. In the economically more advanced countries, especially Germany and Austria, any further reduction will be comparatively expensive. For an overall reduction, financial mechanisms by which the countries or emitters with high

specific costs pay for measures with low specific costs would be the rational solution. Such a mechanism is called "Joint Implementation" in the Kyoto-Protokol to the Framework Convention on Climate Change, or "compensation solution" in German environmental law and practice. In the case of nutrient reduction within the area encompassed by DRPC the consultants recommend that the IC should develop, and the states should decide on, maximum allowable annual contributions of P and N each for every state. This should be determined by the difference of nutrients entering and leaving the country. These National Nutrient Allowances (NNA) must of course be determined for several years ahead, best for a decade in order to permit their transformation in national medium term reduction plans. As a basis for calculation of these NNA the limitation per area and/or per capita is suggested; the present suggestion of using past years' emissions as a reference would tend to extend the very different economic levels into the future. The compensation solutions would have to be negotiated between emitters with significantly different specific reduction costs.

#### **4. Sources of Funds Considered**

##### **4.1 No Levies, no Contributions**

As possible sources of funds for a Danube Environmental Fund we have explored the classical approaches of raising money for an environmental fund:

- contributions by the wealthy to help the less well off (IDA-model)
- a levy on certain products (Superfund-model) or activities,
- effluent charges (model: German Waste Water Charge).

These alternatives may be described briefly as follows:

- A fund established and replenished by the participating countries, if possible all Participating Countries of the DRPC, according to their financial potential. This kind of solution would correspond to the notion of equity in the sense that the well off countries help the less well endowed. However, we think that this is an unrealistic approach, since the envisaged net payers have no material interest in helping the net recipients because the primary potential net payers, Germany and Austria, are located in an upstream position and see themselves as already contributing nearly 30 % to the various financial supports from the CEC. The difficult negotiations about the contributions to the budget of the IC and its secretariat are no cause for optimism.

- A reliable source of revenue could be a levy on certain products whose production and consumption has negative effects on the environment, especially on waters. This would be mineral oil products, basic chemicals, fertilizers etc. Such a levy is easy to administer and delivers considerable amounts at low rates. However, the levy might be considered inequitable because also the poorer countries would be taxed to a considerable extent. Moreover states with only a share of their territory belonging to the Danube basin would not want to institute such a charge in their whole country and would find it very difficult to raise it in only part of their country. All states are committed to budgetary discipline and would hesitate to introduce new taxes, especially if those were to be administered by multilateral organizations.
- A levy on tourism, be it as a charge on visitors or as a tax on establishments is used in some touristic regions of the world as a source of money for environmental improvements.

For the Danube and its tributaries one must keep in mind that tourism is not a significant source of water pollution, and according to the Polluter-Pays-Principle should not be especially charged. There is a relation between tourism and pollution of some inland waters, but these are not closely related to the Danube river system.

Water quality of the Black Sea affects tourism activities at the beaches of Bulgaria and Romania, but a special levy would definitely not foster tourism. A good reason for paying a tourism tax would be if the visitors would enjoy clean beaches and clear water but this is presently not the case. The tourists and the countries would certainly be reluctant to pay for environmental problems not of their doing; money which would be used by a multilateral institution and benefit all Danube countries. A tax on touristic activities could be therefore used locally for environmental improvements but not on a basin wide scale.

- An international environmental tax, levied as an effluent charge or a surcharge on existing effluent charges would be a way of filling a fund and at the same time setting financial incentives for investments in order to reduce such payments. The system is in operation in several European countries but the experiences in the EC-countries are not encouraging. Such systems do not seem practicable under present conditions since they would be seen equitable only if the better off countries would pay decidedly more than the poorer. Moreover not all countries have an administrative system effective enough for setting and collecting such charges. Finally such systems presuppose a rather

exact knowledge of discharges, which is often lacking. The consultants did not elaborate further on the idea of charging user fees to ships using the Danube for their transport services. The freedom of the ship traffic on the Danube is seen as a basic value which has been guaranteed by an international agreement for more than 150 years. The Danube Commission in Budapest was very helpful in explaining this positive status.

If the economic conditions in the downstream countries, the build up of administrative capacities and monitoring improve, the Contracting Parties and the International Commission might want to take up the idea of levies on discharges or on key substances for water quality some years from now. The Facility proposed by the consultants could handle the money thus collected.

#### **4.2 The Polluter Pays Principle**

Given these restrictions the consultants suggest to concentrate on the existing internal financing mechanisms and external supports for environmental projects. The most important aspect here is the "Polluter Pays Principle" which simply means that all necessary measures to protect the environment should be financed by the responsible polluter himself (see Box 1 below).

**Box 1: The Polluter Pays Principle**

The Polluter Pays Principle (PPP), endorsed by the OECD Council in 1972 and 1974, states that the polluter should bear the costs of pollution prevention and control measures. In practice this has meant that polluters in OECD countries are financially responsible for complying with the environmental requirements set by relevant authorities. Expenditures generally are met out of profits, raising equity or commercial loans. Since the PPP excludes financial assistance, it is also referred to as the no-subsidy principle. Application of the Principle has encouraged the development of full-cost recovery schemes for environmental services and the development of market financing mechanisms (e.g. revolving funds) in the traditional public infrastructure sector.

In its 1974 update of the PPP, the OECD noted exceptions under which subsidies could be given to polluters. Specifically, three conditions must be met:

- the subsidy does not introduce significant distortions in international trade and investment;
- without the subsidy, affected industries would suffer severe difficulties;
- the subsidy is limited to a well-defined transition period adapted to the specific socio-economic problems associated with the implementation of a country's environmental policy.

The PPP can be extended to the so-called "resource pricing principle", which argues that all natural resources, including the environment's natural absorption capacity, should be properly priced to reflect the social costs of using them. This is also referred to as the "user-pays-principle", although neither of these two principles have the international standing of the PPP. The user-pays-principle is a special application of the PPP in the case of waste water systems where a multitude of sources are connected, the water is collected and treated. In these cases users and polluters are the same. This principle should however not be extended to the beneficiaries, because those usually are not the polluters.

Full application of the PPP suggests that polluters should bear the full cost of their own measures and of public complementary activities to reduce pollution to the environment, while government expenditures should be restricted to public goods such as protecting natural areas and biodiversity, as well as environmental monitoring, research and education.

The application of the PPP is particularly difficult in agriculture, because this branch of the economy is commonly receiving overt and hidden subsidies in many forms. Moreover, the number of economic units is so large that the administrative effort in defining requirements for each individual operator and in enforcing and monitoring the performance is often considered prohibitive. Therefore, application of the PPP in agriculture must start by raising the prices of agricultural inputs to the level of market prices.

The PPP also implies that the polluter (i.e. the originator of any environmental deterioration) has the duty and the right to decide on the ways and means of achieving the environmental performance targets. In the case of transboundary effects the PPP is applied primarily to the states of origin of the deterioration. It is the duty of the states – and also their right – to determine the strategy for finding and implementing a remedy.

The PPP is confirmed by the DRPC and thus also applicable for the pollution reduction program pursuant to this convention. The PPP has also the important consequence that any deviations from market conditions in financing investments have to be justified as exceptions.

In 1994 the EC has published "Community guidelines on State aid for environmental protection" (document OJC 72, 10.03.1994). These guidelines state the respective principles of the EC which see the granting of State aid for environmental protection to firms mainly as a transitional phase until they would bear the full cost of pollution caused by their activities in accordance with the PPP. Furthermore, the paper refers to Article 92(1) of the EC Treaty which prohibits, subject to possible exceptions, government financial assistance to specific enterprises of industries that distorts competition or may effect the trade between Member states. State aid may be granted under the following topics:

- investment incentives, possibly associated regulation or voluntary agreements;
- aid for horizontal support measures (research, spreading information on technology etc.);
- operating aid in the form of grants, relief from environmental taxes or charges, and aid for the purchase of environmentally friendly products.

The exceptions according to said Art. 92(1) under which the granting of State aid for environmental protection may be eligible are explained. With the accession of some of the Danube states to the European Union all of these principles will also apply to them in future.

#### **4.3 National Environmental Funds**

It should be recognized that in the early stage of transition from centrally planned to market economies there are several factors that constrain of the application of the previously mentioned Polluter Pays Principle and the evolution of an effective environmental financing system, i.e.

- weaknesses in the environmental policy framework, including poor enforcement of environmental requirements;
- severe financial constraints of enterprises, which delay the replacement of outdated, polluting technology;
- changing fiscal systems, resulting in uncertain revenue raising capabilities at various government levels, and impeding, for example,

the development of municipal environmental services based on user charges;

- insufficiencies in the banking system, which may create credit shortages at least for small and medium sized enterprises;
- solutions resulting in inadequate decisions and investment priorities.

In this situation national environmental funds have been considered an efficient tool and means for overcoming the institutional and market shortcomings. Several of the Danubian countries installed national environmental funds during the early 1990s. Apart from that in a number of countries exist water (management) funds, specialized on financing infrastructure measures (water supply, waste water plants, sewerage systems). The funds can help channel much needed resources to environmental problems which impose real and significant costs on society (s. Box 2 / and Annex 4.3.1). The list below is composed from several information sources but may not claim completeness.

The amounts stated as revenues and expenditures of the listed funds (for 1997 or 1998) make clear that with few exceptions (like in the Czech Republic and in Hungary) only small budgets are available for the benefit of the environment.

Nevertheless, for the financing of measures in pursuing the targets of the Danube Convention the national environmental funds and other relevant funds may be very welcome financing partners for International Financing Institutions. A cooperation with the funds will be relevant throughout the whole project cycle, from project identification, preparation and financing to monitoring and final evaluation of benefits.

Box 2: National Environmental Funds			
Country	Name / Main Task	Revenues (mln. \$, year)	Expenditures (mln. \$, year)
Bulgaria	National Environmental Protection Fund (NEPF)	8.9 (1997)	4.1 (1997)
Bulgaria	National Trust Ecofund	5.3 (1997)	0.4 (1997)
Bulgaria	Municipality Funds for Environmental Protection (MFEP)	n.a.	0.4 (1994)
Czech Republic	State Environmental Fund (SEF)	167 (1997)	104 (1997)
Czech Republic	National Property Fund (NPF)	n.a.	n.a.
Hungary	Central Environmental Protection Fund (CEPF)	81 (1997) 120 (1998)	85 (1997) 114 (1998)
Hungary	Water Management Fund	26 (1998)	26 (1998)
Moldova	National Environmental Fund (NEF)	0.04 (1997)	0.04 (1997)
Slovak Republic	State Environmental Fund (SEF)	31 (1997)	29 (1997)
Slovak Republic	State Water Management Fund (SWMF)	n.a.	n.a.

Slovenia	Eco Fund	20 (1997)	18 (1997)
Romania	National Environmental Fund (NEF)	n.a.	n.a.
Romania	Water Fund	n.a.	n.a.
Yugoslavia	National Environmental Protection Fund (NEPF)	0.4 DM	n.a.
Yugoslavia	Special Environmental Protection and Improvement Funds	n.a.	n.a.
Ukraine	State Fund of Natural Environment Protection	4 (1998)	4 (1998)
Ukraine	Republican Environmental Fund	2 (1998)	2 (1998)

Without analyzing the situation further it is well known that some of the national environmental funds could benefit from technical assistance to optimize their organizational and operational layout. This task should also be considered as an issue for the work program of the proposed Danube Environmental Facility.

#### **4.4 Outside Sources of Funds**

##### **Introduction**

On the international level the most relevant sources of funds for environmental projects in the Danube Basin are the multilateral financing institutions (IFIs) and the European Union with its special programs for the countries in transition (PHARE, Obnova and TACIS) and, in future, with its large financing facilities for infrastructure and also environmental measures in the EU-applicant countries (LSIF). Below, we have outlined briefly the objectives, target groups and countries and the main financing instruments of the IFIs considered relevant for the financing of environmental projects in the Danube River Basin (s. Annex 4.1). Especially the EBRD and the EU-Commission have direct mandates to promote projects for the benefit of the environment in all of the Danube countries (except Yugoslavia). The World Bank Group, the European Investment Bank and the European Social Fund may play a more modest role as lenders of last resort. This is not because the latter institutions would not be interested in the environmental issues concerning the Danube but due to various reasons (terms and conditions of financing, target groups) these institutions will probably less often become a financing partner for the envisaged environmental projects.

Generally, it can be said that all IFIs and also the EU-Institutions will always approach the countries directly, and vice versa, to avoid the inclusion of a regional or multilateral body. Some reasons for this policy are:

- the need to receive an application for funding from a member state,
- necessary involvement of the national offices of the IFI during project identification,



- project preparation and appraisal procedures will as well be carried out by the respective national teams of the IFIs,
- decisions about projects will always need the consent of national governments represented by national contact points, program coordinators etc.,
- state guarantees for the credit lines are normally provided by national governments,
- decisions about the local or national co-financing of project costs are often made on the national level.

Of course this preference for direct dealing holds for the states as well. Considering these aspects a "Danube Environmental Fund" (DEF) would hardly be able to assume the role of a financial intermediary for most of the IFIs. Even those institutions (like the World Bank or EIB) who might benefit from local partners for the implementation of smaller projects that are normally not financed directly by them because of their size, would always prefer to cooperate with an established national promotional bank or other recognized partner institution (e.g. national environmental funds), instead of channeling the funds through another multilateral organization.

All IFIs therefore would be happy to find in the DEF another co-financier supporting and promoting environmental projects in the Danube countries but would hardly use them as financial intermediary for channeling their funds; this also holds for the CEC.

### **The European Bank for Reconstruction and Development (EBRD)**

The European Bank for Reconstruction and Development (EBRD) has as members 58 states (1997). Of those 26 are the client countries of the CEE and NIS groups. The Danube countries except Yugoslavia belong to the client countries.

EBRD is active in only those countries which follow the principles of democracy, pluralism and market economy. To coordinate their local activities EBRD has set up country- or regional offices in all client countries. EBRD closely cooperates with other multilateral institutions like World Bank, and European Investment Bank. In contrast to the World Bank EBRD's focus is support to the private sector; EBRD credit conditions are generally somewhat more favorable than those of the World Bank.

All projects are assessed along the criteria:

- Transitional impact: is the project able to support the country on its way to a market economy?
- Financial sustainability/affordability: is the project financially sustainable and can the users afford to pay the necessary fees?
- Additionality: does the project contribute to a qualitative or quantitative improvement of its setting?

General objective of EBRDs activities is fostering the transition in the countries in central and eastern Europe and the Commonwealth of Independent States towards market-oriented economies. An important aspect here is the protection of the environment, to which EBRD is obliged by its statutes. About 17% of the commitments in 1997 served to improve the environment, including municipal infrastructure.

The objectives of EBRD in detail are

- support to private investors for developing, modernization, or expansion of investments, focussing on small and medium scale enterprises;
- mobilization of national and international capital via co-financing and promotion of joint ventures;
- support to investments which contribute to increased productivity, improvement of occupational safety and living standards in target countries;
- providing technical assistance for preparation, planning and realization of suitable projects;
- support to establishment of finance and capital markets, and
- promotion of environmentally acceptable projects.

To fulfill these objectives EBRD provides loans, equity investments, guarantees and technical assistance to its target countries for their economic reforms. A guarantee by the member state is not necessary.

Germany contributes about 8.5% to the bank's capital; the share of the USA is about 10%, the target countries' share is 12% and the EU as a whole (all member countries plus EIB) contributes 57%. With regard to the relative voting power of the 13 Danube countries (plus EU), Germany alone covers nearly 50%. (See details in Annex 7.4).

At least 60% of EBRDs loans have to be for private projects or for projects of state-owned companies to be privatized; up to 40% of can be used for public investments, especially infrastructure. As a limit EBRD engages in

private projects up to 35%; the remaining amount has to be contributed by the project sponsor or other financing institutions. Projects in the state sector are not bound to this limit. EBRD finances greater projects directly and smaller ones through financial intermediaries like local banks or investment funds.

EBRD is active in the Danube region in about 90 communities in water management (water supply and waste water treatment). Weak economic, financial, and organizational planning are seen as major impediments for environmental investments in Danube countries. This is at present a major obstacle for EBRD to engage in smaller and medium projects or smaller cities, where the 'upfront bureaucracy' impedes project participation. A cooperation with a Danube institution easing such problems and facilitating loans for environmental projects is in the interest of EBRD.

### **Project Preparation Committee (PPC)**

Of special importance for environmental investments is a so-called 'Project Preparation Committee' (PPC), which has been established to facilitate the identification, preparation and implementation of environmental investment projects by improving coordination between donors, International Financing Institutions and the countries in transition. It originates from the second 'Environment for Europe' Ministerial Conference in Lucerne in 1993. PPC is thus a networking mechanism set up to co-ordinate between IFIs, donors, and Central and Eastern European countries in the field of environmental investments.

The donors have provided grant funds to finance the preparation and implementation of environmental investment projects that fit into the priorities of the National Environmental Action Program for Central and Eastern Europe agreed upon at the Lucerne conference. The PPC "matches" donor grant funds for project preparation with loans from IFIs.

The PPC Secretary is located at the EBRD, and there are PPC offices at the EBRD and the World Bank. Grants to run the PPC itself come from the EU-Phare program and from bilateral donors (Trust Funds). This PPC therefore has a clear relevance for facilitating financing of environmental investment along the Danube – both as a facilitator and a model.

## **Programs of the European Union (EU)**

### **PHARE (Poland and Hungary Action for Restructuring of the Economy)**

The Phare program started in 1989 and is designed to assist the central and eastern European countries in their economic and social reforms and development towards market economies. Phare has become the central financial instrument for the ten associated countries (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia), supporting them in their preparation for accession to the EU. In addition, for the non-associated countries in the region, Phare provides support in their transition to market economies. For the period of 1995 - 1999, the Phare budget is ECU 6.693 billion of project-related grants. Activities include support for the legislative framework and administrative structures, projects promoting democratization and civil society, and investment in infrastructure, including cross-border cooperation.

To strengthen support towards the preparation of candidate countries for accession, Phare's activities now concentrate on two main types, indicating a shift in program orientation from country priorities to accession priorities:

- help the administrations of the partner countries acquiring the capacity to implement the 'acquis communautaire'. Phare will thus help the national and regional administrations, as well as regulatory and supervisory bodies, in the candidate countries to familiarize themselves with Community objectives and procedures;
- help the candidate countries bring their industries and major infrastructure up to Community standards by mobilizing the investment required. This effort will be largely devoted to areas where Community norms are becoming increasingly demanding: environment, transport, industrial plants, quality standards in products, working conditions, etc.

Investment and investment preparation will cover 70% of the Phare budget, and 30% will be spent to support the adoption of the 'acquis communautaire'.

The non-associated Phare beneficiaries are not involved in this new orientation; Phare will continue support to facilitate their transition to democracy and market economy, especially through a special program 'Obnova', for the rehabilitation and reconstruction of Bosnia and Herzegovina, Croatia, the Federal Republic of Yugoslavia and the Former Yugoslav Republic of Macedonia.

As a tool for implementing Phare's objectives, the European Commission approved so-called Accession Partnerships (AP) for the ten applicant countries. These are a key part of the enhanced pre-accession strategy aiming at guiding the applicants towards EU membership.

Coordinating and supervising the Phare programs in a given country is the task of the National Coordinator, usually a Minister or State Secretary. The body implementing each program is the Project Management Unit (PMU). They are sector-specific, and thus there may be dozens in a country. The PMUs are responsible for preparing, implementing and monitoring Phare projects on the ground and are increasingly responsible for launching tenders and awarding contracts for supplies and services. In Brussels, Phare operations are managed in Brussels by the Directorate General 1A (DG1A), supported by the recently installed Directorate "Common Services for External Relations" (DG SCR). They are responsible for the overall management of the program and they propose policy and direction of the program to the European Commission. The European Commission's Delegations in each of the ten accession countries also play an important role in the programming and implementation of Phare projects.

In order to reach conformity with the 'acquis communautaire' the candidate countries will have to undertake massive investments also in environmental improvements, especially waste and waste water management and industrial environmental protection.

For the Danube countries EU-Phare funds (as grants or long-term loans from LSIF or ISPA) seem to be at disposal for projects proposed to the European Commission by these states; a Danube institution could be involved in project preparation, but not as financial intermediary.

### **TACIS (Technical assistance to the Community of Independent States)**

Of the Danube countries, Moldavia and Ukraine are supported by the TACIS-program. As the focus of the program is on technical assistance it will have only minor importance for the implementation of environmental investment projects in the Danube River Basin.

Of some relevance in this respect may be a so called 'Joint Environmental Programme (JEP)', presently (1<sup>st</sup> half of 1999) being prepared by TACIS. The specific objectives of this programme will be to

- act as a catalyst to support environmental investments in the NICs, and to

- ensure that TACIS technical assistance resources are used to catalyse follow-up IFI investments lending.

Practically the Programme is a cooperation between TACIS and the IBRD. TACIS grant-funded technical assistance will be used to carry out a selected number of prefeasibility or feasibility studies for projects that are suitable for IFI (IBRD) lending. These projects must be bankable and have a strong environmental component, including water quality improvement, waste water treatment, energy conservation, pre-privatisation clean-up of major pollution sources, solid waste management, and industrial pollution reduction.

The Programme will be executed in a pilot phase of 18 months, with an extension in case of success.

Although there will be no specific allocations for target countries, first beneficiary countries would be those which have a well developed National Environmental Action Programme (as decided upon at a series of pan-European/New Independent Countries Environment Minister's conferences, most recently 1998 in Aarhus, Denmark) and a well-prepared project pipeline of investment projects. NEAP-preparation is at various stages in NICs, and experience in the preparation process suggests, that there is a need to strengthen NIC capacity in preparing environmental investment projects.

Should Moldavia and Ukraine be in an advanced stage of NEAP preparation, these countries could be among the first beneficiaries of JEP.

### **The European Investment Bank (EIB)**

The EIB is the financing institution of the European Union and was created by the Treaty of Rome. Shareholders are the member states of the European Union. EIB is the world's largest international borrower. Within the Bank, 70 engineers handle technical and environmental aspects of investment projects.

The mandate of the EIB is to foster the European integration and respectively the accession process of the new candidates. The investment financed focus on economic integration, both with the EU and within the region, and on support for the adoption of the EU's rules, regulations and standards (acquis communautaire), with particular emphasis on environmental protection.

EIB co-operates with those countries which have applied for accession to the EU (Hungary Poland, Slovak Republic, Czech Republic, Bulgaria, Romania, Estonia, Latvia, Lithuania, Slovenia and Cyprus) as well as with other countries in Central and Eastern Europe (Albania, FYROM). Apart from Moldova and Ukraine, all Danube countries are thus covered by the EIB mandate.

Of special interest for the Danube are EIBs investments in waste water treatment plants. EIB increases its financing of (environmental) investments under a new Pre-Accession lending Facility, being in force since 1998

Since 1990, the Bank has provided appr. ECU 5 billion in central and eastern Europe for investments in favor of transition to market economies. Focal areas were investments with a cross-border dimension like improving communication links (transport and telecommunication), energy and environmentally-related projects.

EIBs activities in central and eastern Europe are coordinated with the European Union's Phare grant program, EU member states' financing institutions and with the EBRD.

EIBs financing conditions are in the range of the lowest market level; concessional funds are not available from EIB, however loans may be combined with grants especially from Phare. Maximum financial contribution is 50% of the investment.

EIB will also in future finance large-scale investments (> EUR 25 million) itself. For investments below this threshold the EIB gives global loans to intermediaries which have to qualify as partner bank.

### **The European Social Fund (ESF)**

The European Social Fund, set up in 1956 by the Council of Europe and with most of the Danube states as members, is a multilateral development bank with a social purpose. It grants loans to its member states, to local or regional authorities, public institutions, banks and to financial institutions to finance social projects in precisely defined fields of action. The Fund does not receive annual contributions from its member states; its activities are based on its capital and accumulated reserves.

The primary objective of the Fund has been to respond to emergency situations to relieve the situation of refugees and migrants and to finance aid programs for regions hit by natural or man-made disasters.

In the course of time, the purpose of the Fund has extended to other social fields: job creation in small and medium-sized enterprises, social housing, health, education, protection of the environment, rural modernization, improvement of the quality of life in disadvantaged urban areas and rehabilitation of the historical heritage.

Since the second summit of the Council of Europe in 1997, action in favor of job creation and the development of social projects in central and eastern European countries have become priorities for the Fund.

The Fund contributes up to 50% (more for priority projects) of the total cost of the projected investment but does not finance operating costs. The Fund may finance projects already underway, if no more than 40% of the works has been completed as of the date of application. The loans must be adequately secured, for example by a member state, local authority or by a high quality financial institution.

Environmental protection is among the social fields of action of the Fund. Long-term loans are offered for projects like

- solid waste management,
- waste water treatment,
- clean-up of waterways,
- clearing pollution and the protection of soils and ground water,
- air pollution control in small and medium-sized firms and industry,
- production of renewable non-polluting energy.

Projects must be directed to clearly defined populations at a local or regional level. Typical project examples include the rehabilitation of an urban heating system, a solid waste incineration plant, a recyclable product sorting center or installing sewers and sewage water facilities.

Apart from this single-project approach the Fund also grants global disbursement loans to financial institutions or other intermediary bodies to finance programs which involve a large number of sub-projects. The volume of each individual project must be lower than EUR 20 million. Such programs may also pool several beneficiaries within the framework of the social objectives of the Fund. An example would be sewage processing with the beneficiaries being several communities.

From its environmental objective and target group the Fund would be prepared to refinance projects in the Danube region, but with individual



countries as loan applicants and not via a regional Fund. Prerequisite would be adequate assistance in project identification and guidance.

### **The World Bank**

As the leading development bank in the world, regarding the volume of payments to partner countries as well as regarding its role in development policy and protection of the environment the World Bank has put a strong priority on the financing of environmental projects in its work. The World Bank group is composed of

- IBRD - International Bank for Reconstruction and Development
- IDA - International Development Agency.

The latter is administered by IBRD and together with IBRD forms the core of the World Bank group. Mostly they are meant when speaking of the World Bank. Other members are the IFC - International Finance Corporation, with own funds and differing objectives, but closely related to the IBRD regarding technical and environmental aspects. Finally the Multilateral Investment Guarantee Agency - MIGA, a loan securing institution, is part of the World Bank group.

Central task of the World Bank is the economic and social development in appr. 140 developing countries through investments, mainly infrastructure investments with a special focus on poverty reduction.

One important objective of the World Bank is the protection of the global environment; this is the focus of the Global Environment Facility (GEF), a special trust fund administered by the World Bank, UNDP and UNEP.

180 countries are shareholders of the IBRD and 159 countries are participating of the IDA. Germany is the third-largest shareholder of IBRD and IDA (following USA and Japan) with 4,7% of voting-rights in IBRD and 6,7% in IDA. The voting-rights of all Danube countries add up to 8.4 %.

The major differences between IBRD and IDA are their financing conditions. IDA loans have maturities of 35 to 40 years with a ten-year grace period on repayment. IDA lends only money to those countries with a per capita income of less than US\$ 925 (1996), and loans are interest-free, but carry a small service charge. Countries with a higher per capita income can borrow from the IBRD (maturity 15 to 20 years, grace period 3 to 5 years). Though their credit terms are 'harder' than those of IDA, they are nevertheless softer than those in commercial lending. A typical World Bank involvement, secured by the member state as a prerequisite, covers about 30 - 40% of

total project costs. A further difference is the project focus: IBRD is predominantly involved in infrastructure projects, and IDA is more engaged in the social sector like health and education projects.

Almost half of the credits of the World Bank are co-financed by others; German institutions (esp. KfW and DEG) are the second-largest source of public co-financing.

All Danube states are members and the countries downwards of Austria are clients of the World Bank (again with the exception of Yugoslavia). The World Bank itself is interested in financing environmental projects in the region but has experienced little interest in these countries to place money at disposal for these purposes as they expect grant money from the donor community. A lot of studies have been prepared in the meanwhile for environmental investments which all are awaiting financing. This has led to the impression in these countries, that only studies would be prepared with no investments following.

Very few environmental projects are presented to the World Bank for financing; two principal reasons are supposed:

- the World Bank has become a lender of the last resort in these countries, as more attractive financing from other sources (EU funds, EIB, EBRD) are available;
- the national authorities have the final decision on submitting project proposals to the World Bank for financing, which must also fit into their so-called 'Country Partnership Program'. Without respective political pressure environmental projects do not have sufficient priority.

The World Bank does not have a special facility for project preparation especially for small investments (up to appr. US\$ 5 million). Thus, a possible cooperation with a regional facility for the special support of environmental projects in the Danube River Basin would surely be appreciated.

### **The Global Environment Facility (GEF)**

The Global Environment Facility (GEF) is a mechanism for international cooperation for the purpose of providing new, and additional, grant and concessional funding to promote the agreed measures. The GEF provides incremental cost financing to developing countries and those with economies in transition to protect and manage the global environment.

Participating countries are, among others, all countries of the Danube Basin except Bosnia & Herzegovina and Yugoslavia.

Financing is directed into four major areas of activity:

- biological diversity
- climate change
- international waters
- depletion of the ozone layer

Activities addressing land degradation are also found when they relate to one or more of the focal areas.

Three implementing agencies - the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), and the World Bank - work with project proposers to prepare the projects and activities. All project proposals must be submitted to the GEF through the implementing agencies.

#### Key operational principles

In carrying out its mission, the GEF will adhere to key operational principles based on the two Conventions (biodiversity, climate change), the GEF instrument, and decisions of the GEF Council. Essential principles are:

- The GEF will ensure the cost-effectiveness of its activities to maximize global environmental benefits and strive to ensure sustainability of these benefits.
- The GEF will fund projects that are country-driven and based on national priorities designed to support sustainable development, but the GEF is also open to regional initiatives.
- GEF projects will provide for consultation with, and participation as appropriate of, the beneficiaries and affected groups of people.
- In seeking to maximize global environmental benefits, the GEF will emphasize its catalytic role and leverage additional financing from other sources.
- The GEF will ensure that its programs and projects are monitored and evaluated on a regular basis.

### Sustainability of benefits

The issue of sustainability is recognized by support of national policies that contribute to the effective implementation of GEF operations, institutional arrangements that are supportive of global environmental protection, capacity building, human resource development, and skills that are necessary to achieve global environmental objectives, communication that promotes public understanding of the global environment and public participation and consultation with major groups, local communities, and other stakeholders.

### GEF Project Life Cycle

#### - Country „Operational Focal Points“

Each recipient country is to establish an operational focal point in collaboration with the implementing Agencies. This focal point is responsible for acting as the principle contact point for all GEF activities in the country, reviewing project ideas and concepts, facilitating project-related consultation, and providing feedback on GEF activities.

#### - Project Identification

Any individual or group may propose a project idea directly to the GEF implementing agencies if the host countries in which the activities are to occur are eligible for funding. Since all GEF projects should be country-driven, they should be backed by the support of national stakeholders. Therefore, the initial proposal should be consistent with national or regional development priorities. Also, the project proposals should address one or more of the GEF focal areas and should be consistent with the GEF Operational Strategy which is outlined above. Project ideas should be identified in full consultation with the country operational focal point to ensure the quality and feasibility of the proposals.

#### - Project Preparation

The careful preparation of project ideas is an essential prerequisite for the success of the proposal. Requests for financial and technical help with project preparation may be addressed to a variety of sources. Funding is available through the Project Preparation and Development Facility (PDF) which, when feasible, will complement other sources of finance, like World Bank loans, UNDP technical assistance grants, bilateral finance, and private funds. GEF project preparation resources should be allocated on an incremental cost basis; that is, in proportion to the likely level of project

preparation costs financed by the non-incremental financier. However, recourse to GEF project preparation funds will not always be necessary.

Before any PDF funds are committed by an implementing agency, the project idea will be discussed, reviewed and endorsed at the country level by the operational focal point. Also, the proposals for funding are forwarded to the GEF Operations Committee (GEFOP) which is composed of representatives of the three implementing agencies and several GEF secretariats. The GEFOP will review the submitted projects and make recommendations as to whether the funding should be approved by the implementing agencies.

#### - Review and Approval

The GEFOP also reviews the projects, taking into account the following considerations: country eligibility, the policy and program framework of the proposed project, technical issues, the social assessment of the project, financial information, the estimated incremental costs and the provision for monitoring and evaluation being proposed. On the basis of its review, the GEFOP recommends projects to be included in the work program to the Council, which, in turn, approves the work program.

In the next step, the implementing agency is responsible for preparing a final draft project document which contains the „agreed incremental costs“ of the project. This draft is circulated to the Council members and upon their approval endorsed by the CEO. The implementing agency and the recipient government also need to approve the final project document.

#### - Implementation

During the implementation process, the implementing agency is responsible for monitoring the status of implementation, the progress towards the objectives, compliance with GEF policies, modifications being made and potential problems which may occur.

#### - Completion

When the project is fully disbursed or substantially completed, a final evaluation report will be prepared by the implementing agency. This report addresses the performance of the project and assesses whether it has achieved its goals.

### Medium-sized projects

GEF projects average in financing costs of US-\$ 5.5 million and take several years to implement. As the GEF has gained experience in implementing projects, it has been recognized that medium-sized projects (which require

less than US-\$ 1 million in GEF financing) could benefit from expedited procedures. Therefore, the GEF Council approved procedures to simplify the processing of medium-sized projects.

More information about GEF and its operational program is available on the GEF home page (<http://www.worldbank.org/html/gef>). Information on the "Program for Measuring Incremental Costs" is also available on the web page .

#### Possible Projects for GEF-financing in the Danube River Basin

Projects in the Danube River Basin which have been identified in the framework of the IC and its working groups as well as by the supporting PCU in Vienna may fit into two of the four main operational programs of the GEF, i.e.

- the International Waters focal area and
- the Biodiversity Program.

The GEF's objective in the international waters focal area is to contribute primarily as a catalyst to the implementation of a more comprehensive, ecosystem-based approach in managing international waters and their drainage basins as a means to achieve global environmental benefits. Operational programs under this area will be a waterbody-based program, an integrated land and water program, and a contaminant-based program. Examples for projects in which GEF may participate with a modest cost share could be:

- a) supporting the establishment of an industrial toxics pretreatment program,
- b) cost funding for wetland restoration to provide habitats and to mitigate the effects of pollutants before they reach international waters,
- c) innovative approaches such as tradable pollution discharge permit systems or offset programs to cost-effectively improve water-quality in shared basins,
- d) cost-share best management practice installation for nonpoint source control of land-based pollution in degraded, priority watersheds, and
- e) building a human resources capability to strengthen institutions.

The Biodiversity Program focuses on the conservation and sustainable use of biodiversity in the coastal, wetland, mangrove, estuarine, marine, and freshwater ecosystems. Projects will involve integrated approaches to coastal area development and lakes and rivers management, and will

strengthen the network of conservation areas, including protected areas, to conserve coastal, marine and freshwater biodiversity. Several activities will be implemented in conjunction with the international waters focal area and will involve international cooperation at the regional level.

The identified priority projects in the Danube River Basin relating to wetland rehabilitation seem to fit into the outlined programs. Even more specific to the reduction of transboundary pollution, as supported by the GEF, may be projects addressing the reduction of nutrient emissions from point and non-point sources. The nutrient problem is clearly not limited to one single country but has its origin more or less in all of the Danubian countries and finally has a considerable negative environmental impact on the recipient waters of the Black Sea. Given that the highest priority of the work program of the DEF will be the nutrient problem there seems to be a good basis for an intensive further support of this program by the GEF.

#### **4.5 Conclusions from the Analysis of Sources of Funds**

One of the first conclusions to be drawn from the analysis of possibly available financing sources (s. Chapter 4 above) is that there is little or no need for an additional multilateral institution designed to channel funds to environmental projects in the Danube area. This has several reasons:

- Such fund could only function as a financial intermediary for loans extended by the larger IFIs or bilateral donors but would have the same problems in finding suitable projects (as these are to be identified only on the national and local level).
- Due to the setting up of a completely new organization the substantial extra costs would be too high compared to its little added value in respect of the existing mechanisms of financing by IFIs or other international sources of funds.
- All relevant financing institutions have their typical project identification and appraisal process which does normally not foresee intermediaries. Even if such intermediaries are welcome, like in the case of the EIB, this would not automatically lead to such a fund, mainly because of its hybrid status between IFIs and the national institutions. The fund would always be too far away from the project itself. Also, the fund would lack a full bank infrastructure.
- As far as the identification and preparation of smaller sized projects for IFIs is concerned, this may be a true task for such a fund - but it does

not require all the features of a full sized bank organization because the fund would normally not act as intermediary.

- Refinancing from the capital market always requires at least a good rating from one of the large rating agencies, the same would be the case for taking loans from IFIs for onlending to the project sponsors in the Danube countries. Alternatively, the good rating or standing at the capital market may be obtained by the full backing of a state or several states, as it is typical for the IFIs. Which Danube country would guarantee for a newly designed Danube Environmental Fund?

Considering all this, a new Fund assuming the role of a development bank channeling funds into the Danube River Basin does not seem necessary or feasible.

#### **4.6 PMTF – The Project Management Task Force**

The PMTF is a supporting body which assists the International Commission for the Protection of the Danube River (ICPDR) in its work, especially regarding project identification, financing and technical assistance to promote the implementation of the Convention through environmental investments. The preceding "Task Force" was the decision making body of the Danube Cooperation before the formal institution of the ICPDRD. Its members according to the Terms of Reference include representatives of the governments of the riparian countries (contracting and signatory parties), International Financing institutions, and multilateral and bilateral donors. Representatives of donor funded programs, staff members of the ICPDR Secretariat, and non-governmental organisations are participants of the PMTF. It has its own secretariat funded by the EU and is chaired by an elected representative of the Contracting Parties. Biannual meetings were held since its inception.

The PMTF can not increase the amount of money, be it grants or loans, available for environmental investments in the Danube countries. The IFIs with a mandate in the region are interested in financing environmental projects and are active in all countries. The EU as the major source of grant financing has its own web of internal procedures and external bilateral relations for Phare and Tacis. PMTF can thus only improve the access to funds in difficult cases. With at least three major donors as members PMTF can draw on their experience in financing environmental investments in the Danube countries and on the supporting services of the states represented in the PMTF. The donors have the respective staff and grant money for



technical assistance (e.g. trust funds) available to prepare their work for and with the PMTF. So, PMTF is in a position to

- take up arrangements of financing strategies
- arrange formal or informal consortial co-financing
- advise countries on the design of projects suitable for IFIs, Phare/Tacis, etc.
- take a role in the investment plans to be pursued on the basis of the DPRP.

A framework for donor cooperation for the PMTF could be the agreement between the CEC including the EIB, the EBRD, and the World Bank concerning cooperation in accession countries. This agreement of 1998 defines broadly the goals of cooperation, the principles of co-financing, and the minimum contribution from the recipient country. This agreement confirms that environmental protection measures shall be one of the particular concerns of financing by Phare.

From the point of view of the potential recipient countries the PMTF will be helpful, in facilitating access to investment money; however, experience shows that such groups also coordinate the demands of financiers and donors, thus enforcing a stricter conditionality. The consultants expect that the PMTF will take care of important tasks which formerly were thought to become an assignment of the DEF.

## **5. The Big Fund: An Idea without a Chance**

### **5.1. The Main Features of a Danube Environmental Fund**

The purpose of a Danube Environmental Fund (DEF) would be to support investments by extending loans, grants and guarantees and, if necessary, provide technical assistance for project preparation. The use of grants would be recommended only for technical assistance measures and for certain investments, like wetland rehabilitation.

Furthermore, it would be useful to define some groups or classes of member countries which should benefit differently, possibly considering the different economic development of the Danube countries (s. Annex 1). Low income countries should be offered better financing terms and conditions than middle income countries, Germany and Austria should not be eligible to receive any financial assistance from the Fund at all. In general, the Fund

should be free to decide about the terms and conditions of its financial assistance.

#### The Tasks of the Danube Environmental Fund

The tasks of the DEF should cover all aspects of the project cycle from project identification to final evaluation of the project results.

As the Fund should specially support the aims of the Danube Convention, in particular the implementation of the PRP, it should concentrate its activities on the selection and further preparation of promising projects. A division of labor with the Project Management Task Force (PMTF) would be necessary as this recently created informal working group of Danube states and donors has the aforementioned tasks in its Terms of Reference.

Preparation of projects may often require further investigations or studies to be carried out by local or international consulting companies, technical institutions or other specialists. The DEF should thus be endowed with earmarked funds for this necessary technical assistance (e.g. bilateral trust funds). These funds should be at least partially untied so that they could always be employed for local consultants in the Danube countries.

#### Investment Financing

The DEF concept was designed to include the function of channeling funds from IFIs, other donors or even funds from the capital market to co-finance the relevant projects.

The term "financing" of environmental projects here initially refers to loan financing only. As the DEF would be endowed with an initial equity capital it could also use its equity as security for extending guarantees and, in the long run it could invest in the equity of selected projects. Investment financing requires long term maturities enabling the investor to calculate his future financial burden on a sound basis and thus secure the long term sustainability of the project.

Some projects may only be implemented if comparatively low interest rates or even grants are offered. As the DEF would not be able to spend its equity for these purposes grant financing would always be subject to the availability of concessional funds.

An advantage of the DEF would have been that it could function as financial intermediary for larger institutions serving a multitude of local project sponsors and banks by financing many smaller projects only determined by type (so-called "program financing"). The Facility would enable the larger institutions to finance small projects which are normally below their

threshold for lending. With this activity the Facility would also transfer a part of its financing know how to the involved local banks thus enhancing their capacity to assess and implement the financing of environmental projects.

The following options for the administration of the DEF were to be considered:

*Alternative 1* (minimum staff with managing contract)

The founders of the DEF should conclude a Management Contract with a public bank with activities in the Danube region and in the fields of operation of the DEF.

The DEF could then be managed by two Managing Directors working in the frame and on the premises of an existing public bank.

The administrative costs of the Fund (especially of the Managing Contract) should be covered by annual contributions from its members and possibly by own interest income.

*Alternative 2* (minimum staff without managing contract)

The Facility would need in this case at least a core staff of 10-12 persons including the two Managing Directors. Substantial costs would occur for office rent, staff, office equipment etc.

The seat and legal form of the DEF

Criteria for the selection of the seat country and city of the DEF should be:

- The location should be in an established banking place with stable legal environment.
- A suitable bank for the management of the DEF must be available.
- The DEF should not be located in a beneficiary country of the DEF in order to avoid any unreasonable discussions about the distribution of funds.
- Tax exemption for the Fund should be unconditionally granted by the host country (as a precondition for the decision about the seat).

The first decision in respect of the legal form would be to decide whether the DEF should be founded and governed by international public law. This would have the advantage of an internationally recognized and confirmed institution which would have a separate legal identity besides the Danube Commission. But this would involve the prior positive decision of about a dozen of governments and the ratification of the respective parliaments.

This would cause a delay of some years until such DEF could be set up and start its operations.

The alternative is to set up the DEF in accordance with the public law or private law of the seat country. Principal legal forms to be considered are a limited liability company, a joint stock company or a foundation. Obviously, this question is closely linked to the decision about the seat of the DEF. The selection of the legal form will then be guided by the laws of the host country and the important question of tax exemption for the DEF.

Essential questions concerning the statutes of the DEF are the following:

Which countries and institutions should be invited to become a DEF member?

- Parties to the Danube Convention (member countries of the Danube Convention and the EU)
- Qualified IFIs with a representation of Danube countries in their governing bodies.
- Private donor funds or Foundations.

What are the minimum contributions?

- A minimum equity contribution (giving the right to one vote) would enable the Fund to start its work and cover initial costs by the proceedings from the equity.
- An annual contribution covering the basic administrative expenses of the DEF (salaries, rents, utilities and costs of the staff and for Management Contract). The amount of this contribution could be governed by the repartition of contributions to the Danube Commission and its secretariat.

Administrative bodies of the DEF

A three level structure to govern the DEF should consist of the

- General Meeting,
- a Credit Committee, and the
- Managing Directors.

The General Meeting

All members are represented in the General Meeting and vote according to their paid in share of equity (up to the maximum voting right of 25%) which

implicitly means a minimum number of 4 parties to the Fund. General Meetings should take place, if possible, in conjunction with the meetings of the Danube Commission. The General Meeting should have full powers over the management, operation and administration of the DEF and might delegate its powers in whole or part to the Credit Committee and the Managing Directors. Within the framework of its powers (and among other tasks) the General Meeting shall approve the annual report of the DEF and elect the members of the Credit Committee.

#### The Credit Committee

The Credit Committee should consist of 1 delegate from each member country/institution. Each delegate should be assisted by an alternate who, in his absence, should act in his name. Voting power could be distributed in accordance with the voting power in the General Meeting. The Credit Committee could find its decision by written approvals. It might also meet as often as required by the interests of the DEF. The main tasks of the Credit Committee should be to decide on the individual operations of the DEF.

#### The Managing Directors

The management of the DEF should be entrusted to two Managing Directors appointed by the General Meeting for a renewable term of three years. Decisions of the Managing Directors should be taken unanimously. It would be an asset if both technical and economical know how would be represented by the two Managing Directors. The Managing Directors should conclude a Management Contract with a suitable bank for assistance in the administration of the DEF (at least for bookkeeping, electronic data processing, treasury etc.). The conclusion of this Management Contract should be subject to the confirmation of the General Meeting. Another alternative would be to consider the establishment of a separate institution for the DEF (possibly with substantially higher costs than with the a.m. alternative)

#### Conclusion

Finally, considering the refinancing prospects discussed in previous chapters and given that this fund would be successfully established it could possibly channel grants, replenished by generous donors, for subsidizing incremental costs of environmental priority investments and dispose of some trust funds from bilateral donors earmarked for technical assistance measures like project preparation or studies. But this would not require the establishment of a new, multilateral Danube Environmental Fund.

The consultants would recommend the projects sponsors directly to look for grants from the multilateral agencies, especially with the implementing agencies of the GEF (World Bank, UNDP, UNEP), and for trust funds to individual governments (tied aid) and other international donor organizations and private funds. Moreover, the Commission of the European Union could continue and diversify its financing of environmental measures in the Danube Basin by contributions from its PHARE, OBNOVA, and TACIS programs and other funds or budget lines.

## **5.2 Financial Regulations and Mechanisms in the Danube Convention**

Financial matters are hardly or only negatively mentioned in the Convention.

- The financing of the environmental measures indicated by the Convention and to be elaborated by the International Commission (IC) are not a topic or a task for the IC or its subsidiary bodies. In fact, the Convention clearly states, that the financing of all measures should be borne by states on whose territory they take place.
- Even the help to be given in emergencies must be later paid for by those countries who requested such help.
- The only matter that is regulated is the financing of the permanent secretariat to the IC. The Commission has the task of setting up budgets to cover the expenditures for meetings and for the secretariat and each party shall contribute the same amount, unless unanimously decided otherwise. Each party shall bear the cost for its participation in the work (Article 11).
- All decisions with financial implications require the consent of all parties. Since all substantive decisions in the environmental matters will cause costs, such decisions will require unanimity or they will be valid only for those parties expressly consenting.

This legal framework is not suitable for any financial mechanism operated by the International Commission or any of its organs like the secretariat, the Strategic Expert Group (SEG) etc. Therefore, the creation of any financial mechanism requires an amendment to the DRPC, giving a sound legal basis for its tasks, the basic rules and the supervision. Essential for the functioning of such financial mechanism or institution will be a majority vote, since the effective handling of money by the International Commission, its secretary or any other organ requiring always the full consent of all parties

does not seem feasible. Therefore, the consultants recommend majority votes with voting rights based on the contributions by the contracting parties for the decision making bodies of the envisaged new institution.

The legal organs of the Convention besides the Conference of the Parties are the Commission (IC), the President of the Commission and the Executive Secretary. Only these bodies or persons would be empowered to enter into the contractual relations necessary for gathering of funds and disbursing of financial supports. Since the Commission in financial matters is bound to the rules of unanimity and since decisions by the President and the Executive Secretary alone would contravene the principle of representation of the contracting parties, the consultants suggest that any financial mechanism beyond the setting up and execution of the normal budget of the secretariat will require a new institution, which must be based on an amendment to the Convention. According to Article 23 any amendment requires adoption by the conference of the contracting parties and the ratification by each contracting party; the simplified procedure according to Annex IV, Article 5 will not be applicable here. Given this legal situation it is sufficiently clear that the creation of an institution for financial tasks may only be realized by a formal amendment of the Convention.

## **B. The Proposals**

### **6. The New Direction: Feasible and Adapted solutions**

#### **6.1 Guiding Arguments**

Considering the feasibility of a full fledged Danube Environmental Fund the consultants, based on their own perception and supported in discussions with various multilateral donors, have come to the conclusion that such a Fund would not be able to contribute to the improvement of the quality of the Danube environment:

1. There is no possibility to generate new and additional money for environmental investments with such a fund.
  - a) If countries levy charges, they do it for national purposes – see Germany or Hungary. There is no interest in providing this money to other countries or getting it back via a Fund. This is also the case for 'Debt-for-Environment- Swaps'.
  - b) The wealthy countries have no material interest in transferring money to the poorer countries. Germany and Austria can argue that they contribute to the Funds of the European Union to approx. 30%.

- c) An inclusion of the riparian states of the Black Sea suffering apparently under nutrient input from the Danube would result in additional claims, but not in more money.
2. A Danube Environmental Fund can improve the flow of donor funds for environmental investments only in marginal areas, but will make it more expensive.
  - a) IFIs active in the Danube area like to finance environmental investments and offer credits at low market conditions; they additionally offer grants for identification and preparation of investment projects – but only from a minimum size onwards.
  - b) For projects below this minimum size donors like IBRD, EBRD and EIB give credits to local banks acting as financial intermediaries and providing credits from such credit lines. But these are established banks with activities only within one country. Also the CEC will not provide money for multi-country-programs in future. A Danube Environmental Fund with full bank quality will be difficult to establish and cannot compete with relevant IFIs due to a lack of local offices.
  - c) As concessional funds only the grants from the Phare- and Tacis-programs would be relevant; they are not provided to international organizations any more.
  - d) IDA-funds can only be given to the economically weakest Danube countries i.e. Bosnia-Herzegovina and Moldova and for special purposes only. They are not applicable for a Fund serving all Danube countries (except Austria and Germany).
  - e) For well defined purposes and with limited contributions GEF can provide grants for investments; these need not be distributed through national institutions. As GEF funds are to have a global, at least transnational impact, they are well suited for an intraregional facility. Regarding the transboundary transport of nutrients into the Black Sea an additional investment finance seems possible.
3. In general water quality of the Danube is satisfactory. Apart from the well recognized nutrient transport – with impacts in the Black Sea – there are no well recognized general transboundary pollution problems. No claims from downstream countries have come to our knowledge. Bilateral problems between upstream and downstream countries only exist at some tributaries.



- a) The key country for the nutrient problem is Romania, being economically weak and having –due to its size- a large input, while being directly impacted as a Black Sea riparian country.
  - b) Most activities for water quality improvement reduce nutrients as well.
  - c) Targeted investments include nutrient elimination in waste water treatment plants (3<sup>rd</sup> level) and disposal from large scale animal farms.
  - d) Most important are the diffuse impacts from agriculture which cannot be reduced by investments. They will increase with a recovery of the economy in the transitional countries.
  - e) If there are joint and country-specific operational objectives, investments can be derived. With regard to their transboundary reduction purpose they would be eligible for GEF-funding.
4. Those activities the consultants had previously defined as tasks of the DEF apart from the narrow aspect of distributing funds, are activities of the PMTF now. The consultants do not doubt that PMTF will execute these tasks:
- a) The PMTF is based on decisions of the relevant donors and the most important Danube countries. These are represented permanently.
  - b) Identification of projects, organization of preparation by the participating donors, environmental and financial assessment, are all tasks of the PMTF which it will be able to manage due to its participants structure. There is no room left for supporting activities of a fund.
  - c) Although technical and economical assessment of investment projects is not one of the general tasks of the PMTF, it is able to receive such results from its members, donors as well as Danube countries. The remaining question is the assessment of small projects, not favored by donors, but implementable from the point of view of the countries. Here the IC should become active with own means.

## **6.2. The New Direction**

What is left of the conception of a fully developed fund with the tasks of project preparation and project finance in view of the fact that project identification and preparation will be handled by the PMTF and that

competent and environmentally aware donors are offering sufficient capital at market conditions, combined with technical assistance?

If we define the tasks of the consultants to point out finance mechanisms which are both necessary and feasible, there seem to be four such mechanisms recommendable, which can complement all the other institutions in pursuit of environmental improvements in the Danube basin:

- a) A grant facility for the incremental costs of nutrient reduction financed by the World Bank out of GEF-money. Such a facility could be set up under the auspices of the IC with a secretariat attached to the secretariat of the IC, open to all parties to the convention.
- b) A grant facility for technical assistance, financed by the CEC, GEF, or trust funds from individual states. Such a facility could also be installed under the auspices of the IC with voting rights for the participating countries and the donors and the administration done by one or two persons attached to the secretariat of the IC.
- c) A project appraisal group (PAG) instituted by the IC as one of its expert groups, composed of experts for the technical or economical questions of water pollution control, nominated by the member countries and elected by the IC. The tasks of this group would include the technical and financial appraisal of investment projects proposed by a member state and considered worthy of an appraisal by the IC, but lacking donor support.
- d) A mechanism for the financing of nutrient input reduction by "Joint Implementation", i.e. that countries with high specific costs of nutrient reduction could finance measures to that effect in other countries and could credit the reduction to their account. Such a mechanism can only be installed when National Nutrient Allowances have been set by the competent bodies of the DRPC. Such compensation solutions could be handled by the parties and would not need a new institution. The consultants suggest, however, to give such a mechanism a legal base in the Convention, so it can be initiated if and when the time is ripe.

The two suggested grant facilities could be incorporated in a Danube Environmental Financing Facility (DEFF), which would be the legal envelope for hopefully forthcoming money (see ch. 7). The proposal for the PAG is elaborated in chapter 8.2.

A grant facility could also be set up by adapting a system comparable to the technical assistance in project preparation in the Mediterranean (METAP, see 9.1).

Attention should also be given to the Project Preparation Committee (PPC) (see 9.2) attached to and operated by the EBRD. The mandate of this facility covers also the environmental investments in the Danube Basin. The IC could ask the EBRD and the supporters of the PPC to give it a special assignment with regard to the preparation of investments according to the priority-plans to be set by the IC. The arguments for joint implementation can be found in 3.2, the conclusions are given in chapter 9.3

## **7. The Danube Environmental Financing Facility (DEFF)**

### **7.1 Tasks of the Financing Facility**

The proposed activities of the DEFF would concentrate on the ability to provide grant money for selected purposes and to selected recipients only. The DEFF would not act as intermediary for the larger IFIs. It would be restricted to the following functions:

- Providing technical assistance funds for project identification based on the priorities defined in the Pollution Reduction Program (PRP) of the Danube Convention. A division of labor with the Project Management Task Force (PMTF) will be necessary in this field of work. Preparation of projects may often require further investigations or studies to be carried out by local or international consulting companies, technical institutions or other specialists. The Facility should be endowed with earmarked funds for this necessary technical assistance (e.g. trust funds). These funds should be at least partially untied so that they can always be employed for local consultants from the Danube countries.
- Extending grants to investments. Investment financing to our understanding requires long term maturities enabling the investor to calculate his future financial burden on a sound basis and thus secure the long term sustainability of the project. Some projects may only be implemented if comparatively low interest rates or grants are offered. Subject to the availability of concessional funds the DEFF should extend grants to environmental projects in accordance with the aims of the Danube Convention and applying sound principles of funding (to the "project cycle" see details below).
- An advantage of the Facility will be that it may through its work enable larger institutions to finance small projects which are normally below

their threshold for lending. With the activity to "bundle" smaller projects to programs and thereby prepare them for financing by IFIs the Facility could transfer its financing know how to the involved local banks thus enhancing their capacity to assess and implement the financing of environmental projects.

#### Typical financing patterns

The DEFF should always finance only partial project costs and match its own funds with funds from other international and local sources. The following table shows the parameters of the possible differentiation of the financing conditions to be offered to project sponsors:

#### **A. Type of Recipient**

- A1. Private owned enterprises, private persons, NGOs
- A2. Public institutions; the central government, regional and local administration, state owned or public industries, schools, hospitals

#### **B. Type of Project**

- B1. Projects suitable for loan financing (e.g. from the industrial, transport or agricultural sectors)
- B2. Projects generating returns but not fully suitable for loan financing (e.g. small water treatment plants, clean-up of contaminated sites)
- B3. Projects requiring grants (e.g. wetland rehabilitation and technical assistance measures, like feasibility studies)

#### **C. Country**

- C1. Countries needing as much financial support as possible (e.g. low-income countries of the "Lower Danube Basin", like Moldova and Ukraine)
- C2. Countries needing less strong financial support (e.g. countries of the "Middle Basin" of the Danube, like Hungary and Slovakia)
- C3. Countries not eligible for support from the Facility (Austria and Germany)

All the different types of project sponsors may propose all kinds of projects located in eligible Danube countries. It is impossible to prescribe standard solutions to these possibilities.

We recommend to proceed as follows: If the DEFF has decided to promote an investment project the amount of co-financing provided should be governed by the estimated minimum amount which is necessary to motivate and enable the project sponsor to start with the project implementation, i.e. if the resulting debt service for the investment will be covered by the expected earnings from the project. With this more general rule we also like to recognize the restricted capability of people in many of the Danube countries to afford higher costs for the protection of the environment, especially for water and waste water treatment.

From the above we conclude that the basic financing structure would be as follows:

International sources (IFIs, DEFF):	20 - 60 %
National funds, bank loans	up to 65 %
Project sponsor	balance of at least 15 %.

The limiting of the financing share of the international sources and the Facility will not only secure the additionality of the Facility's work by leveraging other sources of finance but is also important to prove the commitment ("ownership") of the recipient to the project. Again, each project needs its individual evaluation and financing structure.

(B2) Projects generating returns but not fully suitable for loan financing (e.g. small waste water treatment plants, clean-up of contaminated sites) may be financed up to 100 % from the Facility, always subject to the availability of grant money.

(B3) Projects without notable returns (e.g. nature protection) and project preparation (technical assistance) may be subsidized up to the full amount. In this case we could consider to extend 100% grants only to the low-income member countries.

Generally the Facility should be free to individually decide on its financial assistance after it has subjected the project to a full financial analysis. At the same time it seems to be helpful to define standard financing structures varying with the type of investment and with the economic and financial standing of the respective country. Such standard financing structures could improve the efficiency of the Facility's project preparation and decision making process. Applicants will also benefit from standard financing structures as they can more easily assess the share of the Facility's financial input to their project (considerations for the handling of funds s. Annex 7.2).

## **7.2 Prerequisites for Establishment**

Starting from a decision of the IC to set up a new institution to facilitate the financing of identified environmental projects in the Danube River Basin we have already discussed above - and waived for several reasons - the theoretical option of a "Danube Environmental Fund" working as a new environmental bank for the Danube River Basin.

The second option would be the establishment of a considerably smaller supporting body to the IC, without formal amendment to the Convention but still providing for a range of banking services. This new financing institution would be founded under the private law of its seat country (i.e. probably Austria) and its organization would be set up within the premises of a suitable, existing bank. It would require only a minimum staff number as most of its functions would be fulfilled by the host bank under a management contract. This type of institution would work quite independent from the IC. There are some clear advantages compared to the first option of a completely new bank in respect of time needed, costs and efficiency. Setting up such a Facility would still require a substantial and lasting input from all Signatory Countries and from participating IFIs or other bilateral donors. This support can only be expected, if the Facility

- has its own and unique justification to exist,
- is really additional in its work program and does not interfere with the work of other existing institutions, and
- has good development prospects (which may especially be secured by a growing number of shareholders, supporting countries and projects).

Recognizing that some of the tasks which would be typical for this Facility may already be fulfilled by the PMTF, especially the functions of identifying priorities of action and the preparation and evaluation of project proposals in view of a financing application with IFIs, this could be a reason for IFIs not to subscribe to another new multilateral institution for the Danube. As the support from donor's side may be doubtful it is questioned whether the beneficiaries of the Facility's work (nearly all Danube countries except Germany and Austria) would be ready to subscribe to this concept and come up for their share of administrative costs of the Facility.

Therefore, to avoid the shortcomings of an informal Facility we suggest to proceed in a two-step approach leading to the creation of a Facility as a special body to the DRPC:

(i) In a first step a preliminary institution would be set up based on the decision of the IC with the task to prepare and support the foundation of the envisaged Facility and to immediately assist the IC in its aim to support the financing of environmental projects in the Danube River Basin.

(ii) The second step would consist of the amendment of the DRPC (with ratification) in respect of the establishment of a "Danube Environmental Financing Facility" (DEFF) with the explicit task to accept and channel donor funds to measures pursuant to the goals of the DRPC.

One of the main features of the DEFF should be that it may accept and handle grant money for its purposes but not act as a bank and take or channel loans.

Obvious reason for the two steps is the unavoidable delay between the decision of the IC and the drafting and final ratification of the amendment to the DRPC by the Signatory Countries. The prospects of the ratification process are much better if during this time (of probably 2-3 years) the work of the DEFF has been taken up by a preceding or interim Facility. It would be the first task of the IC and its secretariat to find a sponsor among the interested IFIs or bilateral donors to finance the interim Facility during this initial phase. A preliminary calculation based on the assumption of a 2-3 person staff shows that already EUR 0.4 - 0.5 mln. per year would be enough to cover all costs of the interim facility (s. Annex 7.3).

#### Legal Basis for a Danube Environmental Financing Facility

The consultants suggest the installation of a Danube Environmental Financing Facility as a special body of the DRPC, able to handle and to attract projects finance which otherwise would not be available. Since the convention does not provide the power to install such a Facility, it would have to be created by an amendment to the convention. The amendment should have the following wording:

#### ***"Article 18 a***

*In order to give financial support to measures pursuant to the goals of this convention, especially the measures aiming at the reduction of transboundary pollution set forth in Article 5 and other measures requiring a collective effort of the Contracting Parties a Danube Environmental Financing Facility (DEFF) shall be established as a legally separate organ. This DEFF shall handle financial means destined to support investments and project preparation. The DEFF shall utilize such revenues as may be*

*gained by the efforts of the Contracting Parties and the International Commission and its Secretariat:*

- *Investment grants given by interested Donors and not offered directly.*
- *Trust Funds for technical assistance in project identification, feasibility studies, project evaluation, and project monitoring.*

*The DEFF shall furthermore utilize revenues which may be collected in the future by contributions from the CPs, if and when the Contracting Parties decide to raise contributions, fees or levies for the realization of their common objectives.*

*The DEFF may only handle grant money and may not give loans.*

*The Fund will be governed by a Board of Directors of five persons elected by the Conference of the Parties by majority vote. Voting rights will be enjoyed only by those parties joining the DEFF and in proportion to their contribution to the administrative costs of the DEFF. It may be considered to agree that no single party shall enjoy a voting right of more than 25 % to avoid an imbalance of power if any single party should subscribe e.g. to more than 50% of shares.*

*The costs for the administration of the DEFF will be determined by the IC according to the tasks and the volumes foreseen. The Contracting Parties shall contribute to the DEFF in proportion to their contribution to the IC and its secretariat.*

*The Executive Secretary of the IC should be the Executive Officer of the DEFF. The number of staff of the DEFF shall be determined by the IC according to the business to be handled and the budget available on the basis of the contributions.*

*The DEFF may accept financial means only by agreement with one or more donors, which are subject to approval by the Board of Directors. All commitments of grants by the DEFF have to be approved by the Board of Directors by majority vote and have to be endorsed by the head of delegation in the IC from the country benefiting.”*

The consultants see the possibility that such a Facility could receive grants from the CEC, the GEF (via World Bank or UNDP), the CPs being members of the EU, and states (CP or not) wishing to support environment protection in the Danube Basin.

In the attached table (Annex 7.1) we have outlined the essential legal, organizational and financial measures to set up the DEFF until the ratification of the respective Amendment to the Convention.



### **7.3 Project Cycle Management**

#### **7.3.1 Key Principles**

In order to reach its overall goal of allocating resources in the most cost effective and efficient manner possible, the DEFF would need to formulate and implement a coherent and systematic approach for the identification, preparation, appraisal, selection, implementation and subsequent evaluation of projects receiving its support. This series of steps is known as the "project cycle". Since the DEFF would be managing public money for the public good, its project cycle management should also ensure the Facility's resource allocation decision-making meets high standards of transparency, objectivity and accountability. These fundamental principles of the DEFF should also be explicitly expressed in its statutes.

All steps required and key decisions involved in the progression of a project application being considered by the DEFF should be fully elaborated and documented, with responsibilities clearly allocated. Furthermore, these procedures should be communicated clearly to potential applicants and made available to all parties. It is particularly important to clearly describe project eligibility, appraisal criteria and the final selection process to the applicants.

Such a systematic and transparent approach to resource allocation would bring the following benefits to the Facility: it could generate maximum environmental benefits per unit of expenditure; it could develop a strong basis upon which to justify its decisions in accepting or rejecting projects; it would relieve itself from pressure to allocate resources according to political rather than objective criteria; it could develop stable and predictable relationships with internal and external customers, and it could enhance its institutional credibility.

These fundamental principles should form the basis of any approach to project cycle management. It should be recognized, however, that different types of project may call for differentiated project cycle management procedures. Different sets of procedures will have to be developed and applied for different groups of projects, and the appraisal criteria will have to be tailored accordingly.

#### **7.3.2 Project Identification**

Project Identification should be guided by the priorities and basic eligibility criteria outlined in the Facility's strategic program and more precisely

defined in an annual operating plan. This plan should take care to strike the right level of specificity. Finding the right balance between being too vague and being too specific might be a matter of trial and error. But with the evolving experience of project management, this problem will grow to be less important. Wide dissemination of the annual operating plan and appraisal criteria will encourage potential applicants, such as national governments, municipalities, and private investors in the Danube countries, to identify projects and apply for funds.

### 7.3.3 Project Preparation and Design

The principal responsibility for this important stage of the project cycle is that of the project sponsor, not of DEFF. The Facility should be careful not to become too closely associated with any given proposal in order to maintain its status as an objective appraiser. Therefore, the role played by DEFF should be limited to informing applicants about its priorities and appraisal criteria and sometimes providing advice on the design of projects to increase their attractiveness for e.g. IFI funding. If the Facility should recognize the need to make special efforts to improve the project preparation and design capacity of its prospective clients, a targeted competition with clearly specified project design parameters might be the best way to adhere to the principals of acting in an explicit and systematic manner.

### 7.3.4 Project Appraisal and Selection

The fundamental function of this stage is to help decision-makers select "sound" projects (such projects that contribute to the overall goal and are consistent with the stated priorities of the DRPC and eligibility criteria of the DEFF). But it should also allow the assessment of a project's value vis-à-vis the value of other possible projects. In comparing the comparative value, a number of criteria, such as its cost effectiveness, might be applied. Whatever specific criteria are employed, the information requested from applicants should be sufficient to identify the most cost-effective solution from a range of options.

A successful method of project appraisal which reduces the costs of preparation and appraisal for both applicants and the Facility is a two-stage procedure. In the first stage, applicants are required to submit a brief pre-application form which contains the essential information on the project. The proposals are quickly screened against the Facility's pre-requisites. Inadequate proposals are rejected at this stage. Proposals which pass this stage then proceed to a more detailed second stage of appraisal, which

includes the assessment of technical, environmental, economic, and financial aspects. Here, the Facility could use a scoring system, based on weights attached to the specific criteria, which allows a ranking of the different proposals.

#### 7.3.5 Negotiation and Award

Once a project has successfully passed through the appraisal process and been approved, conditions for providing and using the support of DEFF would be negotiated with the applicant. A written agreement which specifies the obligations and rights of both parties should be prepared and entered into by the applicant and the Facility.

#### 7.3.6 Monitoring of Project Implementation and Operation

Projects which are under implementation need to be monitored to safeguard the Facility's resources, to ensure that the project developer continues to meet obligations, and to facilitate timely project implementation. This is a crucial part of the project cycle, since it covers the period in which the resources are disbursed but not yet yielding a benefit. Monitoring should continue into the operational phase, when the benefits begin to be realized.

#### 7.3.7 Evaluation

An evaluation of the project results should complete the project cycle. This evaluation should assess how the project progressed through the individual stages of the project cycle. Systematic evaluation is a critical learning device and a pre-requisite for building capacity and skills to improve the future management of project cycles. Reports should be prepared indicating important mistakes that have been made, analyzing the causes of success or failure of the project, and assessing the Facility's abilities to detect and prevent major problems or deficiencies. The report should contain recommendations for improving the management of the project cycle, including the process of project identification.

### **7.4 Administration of the Financing Facility**

The Facility should be included in the organizational setting of the IC and its Secretariat, including the common use of office space and other administrative support. Obviously, it must also be located in Vienna. As the DEFF will not act as a bank and only handle grants for the fulfillment of its tasks the administrative preconditions remain at a minimum.

It is suggested that the DEFF should content itself initially with a minimum of organizational bodies. We suggest to set up the DEFF only with two executive bodies, the

- Board of Directors and an
- Executive Officer.

The Board of Directors should consist of five persons elected by the Conference of the Parties to the DRPC by majority vote for a term of 3 or 5 years. The Executive Officer of the DEFF should be the Executive Secretary of the IC.

This arrangement has the advantage that the legal establishment of the DEFF not necessarily means the engagement of additional staff. Only subject to the decision of the Contracting Parties (CPs, i.e. the countries who ratified the respective amendment about the DEFF) to be prepared by the IC the Facility would be mandated to engage further staff. The administrative costs shall be covered by annual contributions from the CPs in proportion to their contribution to the costs of the IC and its Secretariat.

Details about the execution of the tasks of the Board of Directors and the Executive Officer shall be laid down in Statutes and Rules of Procedure. These documents should be elaborated by the members of the Interim Facility together with the Secretariat of the IC. Parallel to the ratification procedure these documents should be discussed and agreed by a decision of the CPs.

The Board of Directors shall have full powers over the management, operation and administration of the Financing Facility and may delegate its powers in whole or part to the Executive Officer. Within the framework of its powers (and among other tasks) the Board of Directors shall approve the annual report of the Financing Facility prepared by the Executive Officer and the respective auditor's report.

## **7.5 Auditing of the Financing Facility**

The Facility may not only handle contributions by the Contracting Parties but also money entrusted to it by other institutions or by bilateral donors, IFIs or private foundations. In order to satisfy the expectations of such donors as to the transparent and correct handling of their money an audit according to international standards and probably including the specific requirements of donors will be necessary. In order to simplify these procedures and to save the money for the normally costly audits conducted by commercial auditing

companies the consultants suggest that the International Commission requests the governments of the two member states which will not be recipient of any funds going to the DEFF, i. e. Austria or Germany, to have such audits conducted free of charge as a contribution in kind by its public service auditing institutions.

## **8. Instruments for Facilitating Investments**

### **8.1 The Project Implementation Facility (PIF)**

The DEFF was suggested by the consultants as a solution which seemed to be feasible under the present circumstances. However, in the workshop in Austria in February 1999 almost all countries indicated that it would be difficult to raise the contributions to the administrative costs, which are a constitutive part of the proposal. Moreover, the President of the IC and other persons with experience in the Danube cooperation were of the opinion, that the creation of the necessary legal base by an amendment to the convention ("Article 18 a") would take too long and that a general consent could not be expected. In view of this unwillingness to pay and of the administrative/legal difficulties to amend the convention it will not be possible to create a multilateral financial facility for environmental investments in the transition countries of the Danube River Basin – at least for the foreseeable future. In view of this an institution able to:

- hold money,
- contract with donors and recipients, and
- grant money for other purposes than its own operations

is not possible at present.

Having taken account of these restrictions the representatives of UNDP have made an ad hoc proposal for a continued donor financial support of the work of the IC and its organs in the field of investment planning, project preparation and advising the transition countries. The proposal was made with the view that technical assistance from the GEF can be expected for the financing of incremental investments according to the aims of the GEF. This proposal was termed "Project Implementation Facility" (PIF).

While finalizing this report a Steering Group Meeting of the IC (Varazdin, HR, March 8 to 10, 1999) has discussed the proposal of a PIF and obviously considered it as helpful. The next step to set up the PIF would be to give a mandate to the President of the ICPDR and possible one member from a contracting party in the middle or lower Danube Basin to approach

the GEF via UNDP with the view to submit an application for GEF support by a project of the character of the PIF.

Box 3: The "Project Implementation Facility" (PIF) - Basic Outline	
<b>1. Institutional approach</b>	<ul style="list-style-type: none"> <li>• Agreement between ICPDR and UNDP as agency of GEF</li> </ul>
<b>2. Staff</b>	<ul style="list-style-type: none"> <li>• Under Executive Secretary of ICPDR</li> <li>• Technical assistance staff in Secretariat financed with donor support (3 - 4 years)</li> </ul>
<b>3. Mandate</b>	<ul style="list-style-type: none"> <li>• Support work of ICPDR with regard to investment programs</li> <li>• Assisting member countries in preparation of projects for IFIs (Trust Fund Missions)</li> <li>• Preparing projects with incremental costs for GEF</li> <li>• Monitoring of results</li> </ul>
<b>4. Finances for the Project Implementation Facility</b>	<ul style="list-style-type: none"> <li>• Technical assistance for 3 to 4 years (2,5 mio US-\$)</li> </ul>
<b>5. Exit strategies:</b>	<ul style="list-style-type: none"> <li>• Installation of a DEFF</li> <li>• PPC – assignment</li> <li>• Additional PMTF – Tasks (METAP – Model)</li> </ul>

In the consultant's view the PIF could positively contribute to the work of the IC and its Secretariat although the essential features of a financing facility, i.e. to receive and handle grant money for the benefit of the Danube environment, cannot be met. The PIF, as it is proposed now, would basically be an extension of the donor support having been granted to the cooperation of the Danube countries in the field of the environment for now over 6 years.

## **8.2 The Project Appraisal Group (PAG)**

The Consultants suggest that the IC installs an expert group for project appraisals, in order to have the possibility to examine and endorse investment proposals from the member states which otherwise might not gain the attention of financing institutions.

As it was pointed out in the report, the greater part of environmental investment projects will gain the interest of the multilateral donors who are able to help in preparation and in appraisal of projects. This may leave out certain projects which are outside the scope of interest of the donors because they are too small, too complicated etc. - e.g. contaminated sites clean-up. The PMTF is by its mandate and composition concentrated on financing questions and must rely on the judgement of the investors, the individual states and the donors as to the quality of the technical and management planning.

A member state looking for financing should therefore have the possibility to present a priority project to the International Commission, which, after confirmation of the priority, will pass it on to a permanent group of experts selected by the IC for such tasks. The mandate of such a Project Appraisal Group would be to examine the conformity of the proposal with the relevant environmental performance standards, to check whether the technical design is state-of-the-art. Furthermore, it would have the task of examining, whether the cost calculations are complete and realistic. Last but not least it would have the task to check on the management plans for the installation including the provisions for raising fees and for operation and maintenance. If this expert group gives the project its „seal of approval“, the proposing state or the sponsor could then present the project to the PMTF or directly to financing institutions with the endorsement of this expert group of the IC.

The IC has the power to set up expert bodies according to Annex IV, Article 6 of the convention. The consultants suggest that the IC sets up a further expert group for the purposes of project appraisal. Since its work would not be the coordination among the contracting parties and also not the preparation of regulations to be adopted by the IC and to be executed by the member states, the general rules for expert bodies in No. 8 of the Rules of Procedure of the IC need not apply. The committee should consist of experts in the field of water pollution control with experience in the design, construction and operation of such installations. The CEC, Austria and Germany should nominate one member each to be confirmed by the IC. The other contracting parties would nominate members and the IC would choose four to be members of the committee. The chair of the committee would rest permanently with the expert from Austria or Germany. The reason for having the chair in one of these two countries are: A and G would not be recipients of donor money and thus take a disinterested position; moreover these two countries are presently the technologically leading Danube countries.

The Project Appraisal Group would take up projects at the request of president of the IC or the chairman of the PMTF. Once it has established its working procedures and evaluated the first investment proposals, it could reduce the number of meetings and also use written procedure. In analogy to the procedures of the IC, the opinions about reports of the PAG shall be adopted in consensus and if this is not possible by majority of at least five members.

In case the PAG cannot approve a project as technically and financially sound, it must indicate to the proponent the deficiencies and make suggestions for improvement. The PAG should answer requests for appraisal within 8 weeks.

The contracting parties nominating members for this group shall do so with the understanding that the members use the expertise in their respective institutions at no charge. There should however be financial support available to the PAG, e.g. covering travel costs for participants from countries in need of support. These funds could come from the IC budget or from the GEF-assistance which should be applied for. As a preliminary estimate of this stage of travel cost we would suggest 10-20.000 EUR per year.

## **9. Further Measures to be Considered**

### **9.1 Adapting the METAP-Model**

As already mentioned in the text, the Mediterranean Environmental Technical Assistance Program is a donor-funded program, with the World Bank, the European Investment Bank, the United Nations Development Program, the European Commission and bilateral donors as partners. Apart from capacity development, METAP's objective is to support the development of a sound pipeline of investment projects, being financed by the partners and with other donors invited to (co)finance. From the operational point of view, METAP has a regional office with a project preparation unit, the staff being seconded from IFIs or funded by multilateral or bilateral donors.

There are various common aspects with the Danube setting. Both have a common object of interest, riparian countries with different economic possibilities, and certain forms of organisation among countries and donors. The common problem is the insufficient preparation of investment objects for donor lending. In the case of METAP, the donors have addressed this



problem themselves, spending and collecting grant funds to prepare their own lending business.

A similar approach for the Danube Basin could be initiated by the Project Management Task Force (PMTF), comprising of member countries, and important multilateral donors, like EC, EIB, UNDP/GEF, World Bank.

The PMTF should explore the possibility to create a facility similar to METAP for technical assistance in investment preparation (feasibility studies, investment plans, capacity development in the transition countries).

Participating in the PMTF is also the Project Preparation Committee (PPC), which has the overall objective to facilitate environmental investment financing in the Central and Eastern European States and in the former Soviet Union. To involve the PPC in the pollution reduction activities in the Danube basin would also present an option worth to consider.

## **9.2 A Special Assignment for the Project Preparation Committee (PPC)**

The PPC with its secretariat at EBRD and officers at EBRD and World Bank serves investment lending. It supports identification and preparation of relevant projects and brings countries in transition, donors, and international financing institutions together. It has been set up to assist the implementation of the Environmental Action Programme for the transition countries which was agreed upon at a European environmental Ministerial conference in 1993. PPCs activities are grant-financed by the EC Phare programme and by trust funds from bilateral donors.

Members of the PPC are

- countries: Austria, Belgium, Denmark, Finland, France, Germany, Luxembourg, Netherlands, Norway, Sweden, Switzerland, United Kingdom, United States of America.
- European Commission (Phare and Tacis programmes)
- Global Environmental Facility (GEF)
- IFIs: European Bank for Reconstruction and Development (EBRD)  
European Investment Bank (EIB)  
International Finance Corporation (IFC)  
Nordic Environmental Finance Corporation (NEFCO)  
Nordic Investment Bank (NIB)  
World Bank (IBRD and IDA)
- observers: Italy, Japan, EAP Task Force, United Nations Development Programme (UNDP)

PPC donor country members contribute to PPC project identification and preparation in various ways:

- they provide assistance to the transition countries in preparing projects before they are submitted to IFIs for consideration;
- they give support for strengthening environmental authorities and development of environmental policies, which is a prerequisite for the implementation of environmental investments;
- they support the preparation of projects on which IFIs are working (e.g. through bilateral assistance or trust funds);
- they co-finance environmental investment projects.

The Danube countries (except Germany and Austria) fit into the regional scope of PPCs activities. The principle which the PPC follows is the funding of environmental investments that meet the broad criteria of the Environmental Action Programme. PPC itself has no specific criteria for defining 'environmental investments'; efforts are made to undertake projects which generally will bring about significant environmental benefits, and to ensure flexibility in responding to emerging needs. A PPC project is defined as follows:

*"An environmentally oriented investment project in the countries of central and eastern Europe and the former Soviet Union is defined a PPC project if the identification, preparation and/or implementation of the project is/are jointly financed by IFIs and/or donors, and has/have been arranged through the PPC mechanism. Purely bilateral projects are excluded."*

PPC members include those who are already in the Danube basin and to whom the respective environmental problems and the investment setting are well-known. Necessary projects in the Danube basin fit into the scope of PPCs activities.

There is no obvious reason why the PPC could not make projects pursuant to the DRPC a special task. So the IC should take up this idea, especially when the other instruments for project preparation prove not effective enough. The consultants suggest that in such a case the IC asks two members, perhaps Germany (as a major shareholder of EBRD) and one transition country, to explore such a solution.

### **9.3 Addressing the Nutrient Problem**

1. The IC should ask the Global Environmental Facility to make available grants to cover the incremental costs of nutrient removal, if such measures are added to investments for water pollution control. Applications should be screened and endorsed by the IC with the help of its competent expert groups and the DEFF, and should be passed on to the appropriate implementing agency of the GEF.

2. Bilateral donors, e.g. Austria, Denmark, Germany, or the Netherlands should be asked to finance and help in the design of systems for the management of animal wastes (pre-treatment, transport, and storage) with special emphasis on low cost and easy maintenance on the one hand and the high yields of gas and fertilizer on the other. These would be pilot schemes demonstrating the effectiveness of management of wastes from large animal farms at affordable costs. The named countries all have the requisite experience for a technology transfer in this field.

3. The IC will have to work out a program for limiting and reducing the input of nutrients into the basin and the Black Sea. The conceptual leadership for nutrient reduction programs should be taken by Romania, since it is the biggest emitter, while at the same time suffering particularly from the effects of nitrates in its ground waters and of nitrates and phosphates in the Black Sea. The first step has to be a nutrient balance defining the contribution by all countries suitable for acceptance by the contracting parties; this will probably take two more years of monitoring. Parallel to that effort the IC should develop the principles for determining the total acceptable output and for fixing National Nutrient Allowances. If and when such a program is accepted by the CPs (consensus will be necessary) they have to develop programs to achieve their limits. The option of joint implementation, i.e. that certain countries achieve their reduction goals by paying for appropriately selected measures to such effect in another country, should be opened.

In order to achieve such an optimized allocation of funds in the case of reduction programs giving quantified and binding reduction targets for all member countries, a compensation mechanism similar to the envisioned joint implementation foreseen in the climate convention should be included in the DRPC. Such compensation solutions may also help the economically weaker countries in achieving the targets of nutrient control. In order to create the requisite legal basis, the following amendment to the Convention is proposed:

**"Article 8 a**

*In the case of pollution reduction programs specifying binding and quantifying limitations of emissions of certain substances into the Danube or its territories the contracting parties may agree that the obliged countries or individual emitters may fulfil their reduction duties by a sustainable reduction of emissions from sources in other member states which are also subject to reduction duties by the same agreement. 80 % of a sustainable reduction thus achieved will be credited to the regionally obliged emitter or country. The financial means for the requisite investment must come from the obligated party. The correct and permanent operation of such installation or measure must be proved by the necessary provisions for operation, maintenance and financing operating costs. The financier of such measures and the executing institution must present a compensation solution in the legally binding agreement approved by their respective government. The proposal including the contract must be submitted for a full technical and financial review and approval to the IC.*

Such a financial mechanism would be helpful in fulfilling especially the nutrient control program mandated by the Convention (Art. 5 and 8) and under preparation by the IC and its organs.

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  - Annex 7.2: Considerations for the Handling of Funds by the DEFF
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The Danube Countries:  
GDP per Capita in US\$ (1997)







## Annex 4.1

## Basic Information on Countries in the Danube Basin: Eligibility for Funding By IFIs and Donors

	Country	EBRD	EU-PHARE +Obnova	EU- TACIS	IBRD	IDA	GEF	IFC	EIB	ESF
1	Germany	-	-	-	-	-	-	-	yes	yes
2	Austria	-	-	--	-	-	-	-	yes	-
3	Czech Republic	yes	yes	-	yes	-	yes	yes	yes	yes
4	Slovak Republic	yes	yes	-	yes	-	yes	yes	yes	yes
5	Slovenia	yes	yes	-	yes	-	yes	yes	yes	yes
6	Hungary	yes	yes	-	yes	-	yes	yes	yes	yes
7	Croatia	yes	yes	-	yes	-	yes	yes	-	yes
8	Bosnia and Herzegovina	yes	yes	-	yes	Yes	yes	yes	-	yes
9	Yugoslavia	-	-	-	-	-	-	-	-	-
10	Romania	yes	yes	-	yes	-	yes	yes	yes	yes
11	Bulgaria	yes	yes	-	yes	-	yes	yes	yes	yes
12	Moldova	yes	-	yes	yes	Yes	yes	yes	-	-
13	Ukraine	yes	-	yes	yes	-	yes	yes	-	-

**Basic Information on Countries in the Danube Basin:**

## Selected Environmental Funds in Central and Eastern Europe

**Bulgaria:** The main public funding sources are the National Environmental Protection Fund (NEPF) and the Municipality Funds for Environmental Protection (MFEP). Their main spending areas are water pollution control and a general pollution reduction program in a national or local context.

The NEPF is financed by 60% of the collected pollution charges and 70% of the collected pollution fines; import duties on old automobiles; fees and duties on the production and import of liquid fuels; some cash flows from privatization; funds from the municipalities' budgets, donations from national or international organizations and persons; indemnification to the State on environmental issues under court rulings, interest repayments on loans provided by the fund, etc. The expenditures of the NEPF amounted to a total of USD 4.1 million in 1997; the total revenues were USD 8.9 million.

The MFEP's are financed by 40% of the collected pollution charges and 30% of the collected pollution fines, fines from breaches of Municipalities' Regulations on environmental pollution, some cash flows from the privatization; funds from the Municipalities' budgets; grants, interest-free loans and soft loans from the NEPF; donations; indemnifications under Court rulings; and interest. Fund expenditures of the MFEP's are comparatively small. In 1994 the total amount granted by them was USD 443,262.

**Czech Republic:** Relevant public funding sources in this country are the State Environmental Fund (SEF) and the National Property Fund (NPF). The SEF primarily supports investment projects for water pollution control and air pollution control through direct allocations and soft loans to municipalities and small and medium-sized companies. The revenues collected for the SEF are primarily based on the use of charges (e.g. charges for discharge of waste waters into surface waters, release of harmful substances into the air, waste disposal, and withdrawal of groundwater). SEF expenditures in the water sector in 1997 amounted to USD 54.1 million, total incomes were USD 167 million.

The NPF assists in addressing problems associated with previously damaged sites in connection with the privatization process. No details about the NPF funds and expenditures were available.

**Hungary:** Relevant public funding sources are the Central Environmental Protection Fund (CEPF) and the Water Management Fund (WMF). The CEPF's general objectives are, among others, to stimulate the forming of an environmentally friendly economic structure, to prevent environmental hazard, and to reduce environmental damages. Its activities focus upon the fields of air pollution control, water pollution control, and solid waste management.

The revenues collected for the CEPF are mainly based on fines charged for protection of environment and nature (air, water pollution, noise, dangerous substances, etc.), fees for

environmental protection on products (tires, accumulators, cooling equipment, oil, etc), fines charged for the protection of architectural values, and revenues from sale of state-owned architectural assets. Total revenues of the CEPF in 1998 were USD 120 million, total expenditures were USD 114 million.

The WMF is designed to support and finance the water management tasks of public interest, such as promotion of the economical use of water resources of drinking water quality, protection of water resources and protection against the harm of waters. It focusses on investments for sewage treatment, industrial water management, and protection of drinking water sources. The revenues collected for the WMF in 1998 amounted to USD 26.5 million and were mainly based on the user charges on water abstraction. Expenditures also were USD 26.5 million.

**Slovak Republic:** Relevant public funding sources in this country are the State Environmental Fund (SEF), the State Water Management Fund (SWMF), the State Subsidising Fund of Agriculture and Food Processing (SSFA), and the State Fund of Conservation and Reclamation of Agricultural Land (SFCR).

The purpose of the SEF is to concentrate financial sources and spend them on the environment. The economic mission is to mobilize the capital of individual investors to solve ecological problems and facilitate the implementation of ecological investments. The revenues in the protection of water-area stem from charges for waste water discharges into surface waters, penalties imposed by the state administration bodies in the water management and contributions from the State budget. The revenues collected in 1997 were SK 1,094,820,000; expenses amounted to SK 945,073,000.

The SWMF is used to cover concrete developmental water management constructions, hydro-geological research, removal of accidents in water structures, and the development of science and technology in this area. Also, the Fund provides non-investment subsidies for settling activities of water management enterprises which have a public-benefit nature. The revenues stem from charges for ground water consumption, subsidies from the state budget, loans from banks, interests from the Fund's sources and gifts and contributions.

The SSFA was established to enhance renewal and development of technical and technological conditions of entrepreneurs within the branch of agriculture. This is realized by granting loans and warrants for activities in forest and water management.

The SFCR was created as the fund on protection of agricultural land. The revenues are mainly used for new construction, completion of structures, reconstruction and updating of hydromelioration facilities as well as the operation, maintenance and repair of state facilities maintaining the water regime.

**Yugoslavia:** The relevant public funding sources are the National Environmental Protection Fund (NEPF) and special environmental protection and improvement funds.

The NEPF was established for the purpose of securing financial and other conditions for the incitement of the application of measures for prevention and rehabilitation in the scope of

environmental protection. The Fund is managed by the State and has never been a legal entity with an appropriate organizational structure. The sources stem from charges for the pollution of natural resources; budget funds collected from the sales tax on pesticides, detergents, plastic packaging and cigarettes at the rate of 5% and from the sales tax on coal, crude oil, oil products and motor vehicles at the rate of 1%; interest on the credits extended; and fines collected. In addition, 5% of the market price of the price of the protected species collected and put on the market form a revenue for the Fund. In 1997, the REPF was awarded a budget of DEM 424,242 by the Ministry of Environmental Protection.

On a regional basis, special environmental protection and improvement funds have been established. They are supposed to provide funds for programs and projects of environmental protection. Their revenues are raised from charges for the use and development of housing construction land, charges for the use of communal goods, parts of municipal and local tax revenues, donations, and contributions.

The Republic Fund for Water was abolished in 1997 and the Program for Construction, Reconstruction and Maintenance of Water Management Facilities was founded in its place. Now, funds for investment programs for improving the water quality and water management are channeled by several ministries.

**Romania:** The government is currently involved in the process of installing the National Environmental Fund (NEF). Its purpose is to promote public investment for environmental protection by, for example, granting loans or subsidies to activities in this area; to enhance education and training; to support research activities; and to achieve the implementation of the objectives defined by the National Environmental Protection Strategy. The sources of this Fund are taxes and tariffs for activities using environmental resources, the issuing of interest bearing and tax-free bonds, the state budget, donations and financial assistance granted by legal and physical persons, and other revenues approved by the Central Authority for Environmental Protection. So far, no data about the actual revenues and expenditures of the Fund have been publicized.

Also, the government has established the so-called "Water Fund" which is to promote water preservation, recycling and water quality protection. The revenues for this fund are to be raised through pollution taxes and penalties.

**Moldova:** The relevant public funding source in this country is the National Environmental Fund (NEF). Its purpose is the accumulation of additional financial resources for the protection of the environment and for the recovery of the ecological systems. The revenues of the fund are raised from charges for environmental polluting (air pollution, sewage, wastes), taxes on the use of land and mineral resources, penalties for air pollution, use of water, sewage discharges, etc. as well as charges and taxes on import goods. The expenditures were used in the areas of air pollution, water pollution, waste disposal, land and soil protection, monitoring and education.

In 1997, the NEF received MDL 167,000 and spent MDL 164,000 in the fields of ecological information and training, laboratory equipment, international cooperation, and research and development.

**Ukraine:** The relevant public funding source is the State Fund of Natural Environment Protection (SFNEP). It is created as an ear-marked fund in the state budget of Ukraine. The purpose of its creation is to ensure, on the basis of stable sources of revenues, the financing of environmental programs from projects and measures of general state and regional importance. The revenues of the Fund are transferred from the sources and in the amounts specified by the legislation. The Fund is envisaged to finance the costs related to the following: development and implementation of state and regional environmental programs, education and research, implementation of measures aimed at the reduction in environmental pollution, monitoring, development of environmental norms and standards, etc. The financing of water protection activities is raised from charges for pollution of water objects, payments for special use of water resources, fees for water legislation violations, and budget funds. The budget of 1998 was approximately USD 4 million, the estimate for 1999 is about USD 6 million.

**Slovenia:** The relevant public funding source in this country is Ecofund, a non-profit oriented financial organization (organized as a company limited by shares) which provides loans for environmental protection investments at a favorable interest rate. The capital of Ecofund at the end of 1997 was approximately DEM 74 million and consisted of the founding capital, claims to borrowers of ecological loans, capital provided by some state Acts, capital gained from the concessions granted for the Republic waste management public services, and capital assured by the National Budget.

The Ecofund assets shall be used for providing loans to national or local environmental protection services, equipment and technology for environmental protection, the implementation of rehabilitation programs, and the implementation of the national environmental protection program. Main water-related projects of the Ecofund in 1997 were municipal infrastructure (sewage, waste water treatment systems, solid waste disposal, city busses, drinking water) with a tender in the amount of DEM 13 million and industry (reduction of pollution and new and environmentally friendly technologies and products) with a tender in the amount of DEM 16 million.

**Croatia:** There are no Environmental Funds in this country.

**Bosnia and Herzegovina:** There are no Environmental Funds in this country.

## Essential steps to establish the Danube Environmental Financing Facility (DEFF)

Month	Legal Establishment	Organisational Measures	Costs and Financing
1	Decision of an International Workshop recommending the establishment of the DEF in the framework of the Danube River Protection Convention and the ICPDR	Appointment of a working group to prepare the DEF establishment based on the Permanent Secretariat or the Expert Group on Strategic and Legal Issues (SEG)	Financing of the Working Group should be secured by the Danube PCU (i.e. by EU- and UNDP/ GEF-funds)
2	Drafting an amendment to the Danube River Protection Convention (e.g. to Art. 18, Tasks of the ICPDR) and to the Statutes of the ICPDR	Preparation of Statutes and Rules of Procedure (Operating Rules) for the DEFF	Set up preliminary Budget Plan for the DEFF (initial 2 years)
3	Prepare decision of the ICPDR about the legal establishment of the DEF	Distribute Operating Rules and Budget Plan to the members of the IC for review and comment	Negotiations with potential donors to finance the start-up phase of the DEFF.
4		Further Discussions and final drafting of Organisational and Operational Framework	
5		Decide about organisational and operational framework of the DEFF, appoint core staff (2 Executive Managers plus back office support) and preparation of a detailed operating plan	Conclude an Agreement with donors to finance the start-up phase of the DEFF
6	After Decision of the ICPDR about the DEFF prepare for signing procedure and later ratification of the amended Convention		
7	Ratification phase (of at least 18 months)	Operational work (start-up phase)	
8			
9			
10			
11			
12		Review and evaluation of tasks and operational work (report to the ICPDR)	
13			
14			
15			
16			
17			
18		Review and evaluation of tasks and operational work (report to the ICPDR)	
19			
20			
21			
22			
23			
24	Legal establishment of the DEFF after enough contracting parties have ratified the amendment to the Convention	Review and evaluation of tasks and operational work (report to the ICPDR)	

## **Financial Framework for a Danube Environmental Financing Facility**

The concept of a financing facility or fund for the purpose of a multilateral agreement had been elaborated already by the consultants presenting the Feasibility Study for the Establishment of a Black Sea Environmental Fund.

### **1 Basic Financing Principles and Requirements**

The basic financing principles of a DEFF should reflect the fundamental character of the Facility, including its strategic objectives, its legal basis, level and sources of revenues and disbursement modalities.

#### **1.1 Initial Sources and Level of Revenue**

Since the establishment of a DEFF should be executed in a two-step approach as described in chapter 7.1, the set-up of a preliminary institution would have to be financed by initial sources of revenues. Due to the fact that the DEFF is not supposed to receive fixed amounts of resources by the countries in the Danube River Basin, funds would have to be supplied by a generous donor. Funds in the amount of EUR 460,000 to 480,000 would be needed in the first two to three years to pay the salaries of two fund managers who establish a basic operations framework.

In the second step, the DEFF would be established as an institution with the task of accepting and channelling funds to measures pursuant to the goals of the DRPC. Even in this stage, the Facility would need to depend on donations to maintain its organizational structure and pay salaries to its employees. Since after the start of operations more managers need to be employed to handle the grants and fulfil tasks of the project management cycle, the budget would need to be higher in the following years, presumably within the amounts of EUR 495,000 and 525,000.

It is conceivable that organizations with special funds available to environmental projects, such as the GEF, would be contributing donations to support the start-up and further support of DEFF.

Since there is no fixed contribution to be paid by the countries in the Danube River Basin, the level of revenues available for grants handled by the DEFF would entirely depend on the voluntary contributions made by governments and individuals. This, of course, could lead to fluctuations in the Facility's sources which might have a negative impact on the DEFF's long-term ability to finance projects.

#### **1.2 Implications of Grant-Giving**

As already described earlier, the DEFF should limit its financing activities to the provision of targeted grants and not become engaged in lending activities. This would result in certain advantages for the Facility: it could work on a simple administrative level and therefore work very efficiently; there would be no need to assess the creditworthiness of applicants or retain the experts required to undertake such assessments; this would leave greater resources to

concentrate on the critical capacities in the areas of environmental, technical, and economic expertise.

### 1.3 Additionality, Leveraging, and Co-Financing

The advantages mentioned above could be further enhanced through the adoption of the fundamental financing principles of “additionality” and “leveraging”. These principles are closely related and could help to maximize the Facility’s environmental impact for each unit of financial support provided. Additionality would imply that the DEFF should limit or withhold its support for projects which can be financed from other sources. A DEFF financing should be additional to other available sources of financing, not a replacement.

The DEFF should also actively leverage its resources by keeping its financial commitment in any given project to the minimum necessary to ensure project implementation. This assumes that the DEFF would function largely as a co-financier of projects and will work diligently to engage the financial support of other sources.

The extent to which these principles can be applied depends on a number of variables: the size and availability of other financing sources; the types of projects and environmental issues pursued; and the expertise of the staff and the credibility of the institution.

If a project considered to be a high priority arises and there are no or only very limited alternative sources of finance, the DEFF should require that the applicant invests a minimum level of own resources into the project to ensure the applicant’s commitment to the successful and efficient implementation of the project.

## 2 Financial Planning and Budgeting

Keeping in mind that the DEFF would be an independent institution, its planning and budgeting should be conducted independently from the individual donating countries. The financial calculations should be conducted in EURO, since this is the currency which will be commonly used in the Danube countries. Efficient planning and budgeting requires the following data:

- the subsidy rate
- the expected revenues
- the planned expenditures.

### (i) Subsidy Rate

The subsidy rate mainly depends on basic strategic decisions. Since the size and the kind of project to be subsidized have a major impact on the liquidity of the Facility, these factors need to be carefully considered. At the same time, the overall sum of funds available has to be taken into account when fixing the subsidy rate.

In accordance with the co-financing principle, it is suggested that the DEFF does never provide more than 60% of total project costs, a much lower percentage seems to be recommendable.



However, a differentiated setting of subsidy rates for different types of projects should be developed.

Considering the different economic development of the Danube countries (and referring to the three major groups proposed above) it is proposed that grants to subsidize investments may be extended only to the Group II (Transition countries of the Danube River Basin) and Group III (Danube/Black Sea countries). Technical assistance measures to facilitate project preparation should be financed by grants only for countries in Group III.

#### (ii) Revenues

Depending on the kind of source, the planning and budgeting has to reflect the availability and maturity of the following revenues: earmarked revenues from economic instruments and contributions from the governments or private investors in the Danube Basin countries. The flow of revenues from these sources is hard to predict; nevertheless, for a realistic calculation it is necessary to cautiously estimate rough figures.

#### (iii) Expenditures

The proposed organizational and operational framework implies to keep the administrative costs as low as possible. The DEFF should try to out-source all tasks which are not regularly required and which do not belong to the main fields of activities.

The internal management should be carried out by a staff composed of experts. In order to ensure high quality of the staff, the salaries should be in line with those offered by similar international institutions at the location of the DEFF. Additionally, the tax exemptions and other benefits from the special status of employees of the DEFF as a multinational institution will have to be considered. A preliminary budget calculation which contains assumptions concerning the salaries of the staff is presented in annex ( XX).

An individual technical appraisal of the projects is absolutely necessary in order to make sure that the projects comply with the requirements and regulations of the DEFF. This technical appraisal could be performed by the DEFF's own staff with additional input from external experts.

As to the concept of the DEFF as a grant disbursing institution, the financial calculation can be kept as a relatively simple income-expenditure calculation. The total budget available for grants therefore can be calculated as follows: Total Revenues minus Total Expenditures for personnel, operating costs and other equals Total DEFF Grant Budget.

### 3. Financial Management, Controlling and Reporting

#### 3.1 Cash Flow Management

The primary task of the cash flow management is to ensure an optimized balance between revenues and expenditures. The tool assisting this task of the management of the DEFF has to consider all relevant figures including the dates for payments to be done and those to be

received. The cash flow management tool should be part of the IT system used for accounting. Special attention should be paid to the following positions:

Income:	Earmarked revenues from economic instruments
	Contributions from national governments
	Grant contributions from donors
	Trust funds from donors
	Interests from deposits of liquid funds
Expenditures:	Grants to support investments
	Grants for technical assistance
	Personnel Costs
	Operating and other expenditures

### 3.2 Banking Requirements

As the DEFF would act as a Grant Fund, it will be necessary to rely on services offered by commercial banks. The main services will be:

- Deposit of liquid funds
- Short term credit for ensuring short term liquidity needs
- Money transfer
- Foreign exchange

Depending on the procedure and timing of grant disbursement, it may be possible to deposit the remaining liquid sources. Especially when tendering for projects in specified fields with a fixed volume, one has to ensure that the needed sources are at one's disposal. Another reason for depositing sources may be that there is a delay in the drawing-up of grants already allocated. Depending on the results of the liquidity management, the DEFF should invest as much free funds as possible in long-term deposits. In order to avoid losses caused by the variability of interest rates, the DEFF should exclusively invest in state issued bonds.

Considering the potential business volume of the DEFF as well as the necessity to co-operate with the most appropriate bank, it is advisable to select the bank in a tender process.

### 3.3 Currency Management

As mentioned above, the DEFF as multinational fund should try to base all its obligations and rights on EUR (or USD). As most of the expenses, especially the grants and, at least in the starting phase, most of the revenues will be in EUR (USD), there will be no need for currency management in the first stage. It would be up to the donors as well as the beneficiaries to take the necessary measures and precautions to avoid losses from exchange rate risks.

### 3.4 Accounting and Controlling

There are two potential solutions for the selection of the accounting and controlling procedures that will have to be applied by the DEFF:

- depending on the location of the DEFF, the national accounting system based on the national Commercial Code would be applied.
- the accounting should be established in accordance with the International Accounting Standards (IAS).

Considering the multinational character of the Facility, the application of the IAS would be suggested. But this only makes sense if the application of the IAS exempts the DEFF from accounting according to national laws.

The main objectives of the IAS accounting standards are information on:

- the financial position
- the performance and
- changes in the financial position

with the central criterion of their usefulness to potential investors.

The main principles of this accounting system are:

- the accrual basis and
- the going concern.

The main qualitative characteristics according to IAS are highly relevant to the DEFF:

- comprehensibility
- relevance
- reliability
- comparability
- restrictions (timeliness, cost-benefit balances, balance between qualitative characteristics) and
- the accrual basis.

The accounting elements comprise assets, liabilities, equity, income, expenses and performance.

The annual financial statements comprise Balance Sheet, Income Statement, Cash Flow Statement, Statement of Changes in Equity, and the Accounting Policies and Explanatory Notes.

### 3.5 Routine Audit

It is advisable to establish a yearly audit to be carried out by an international auditor in accordance with international standards. This should cover at least the following topics: Legal

Relationships, Administration (allocation of grants, accounting and controlling), Economic Status and Development (organizational scheme and staff, capitalisation and deposit), Annual Statement of Accounts (assets and liabilities, profit and loss) as well as an Assessment of the Appropriate Allocation of Grants.

### 3.6 Financial Reporting

In order to keep the involved persons well informed about the development of the Facility, a scheme of regular financial reports should be established which will have to take into consideration the different need of information of the different recipients of the report. They will be based on the accounting standards applied and comprise the key data considered to be of importance.

### 3.7 Tax Issues

In case the DEFF is considered to be a multinational institution, the organization and its employees typically enjoy certain immunities and privileges. From the financial point of view, the exemption from customs and taxes for its official activities will be most important. This exemption should cover all present and future, direct and indirect taxation and duties. The exemption should especially include the following taxes and duties, be it of local or governmental nature: Value Added Tax, Income Tax, Import and Export Taxes, Withholding Taxes, and Stamp Duties. These tax exemptions will have to be agreed upon in a specific contract with the government of the state the DEFF will be located in.

**Preliminary Budget Calculation for the Danube Environmental Financing Facility**

(in EURO)

<b>Cost Item \ Year</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
<b>Salaries</b>	<b>240,000</b>	<b>249,600</b>	<b>259,584</b>	<b>269,967</b>	<b>280,766</b>	<b>291,997</b>
<b>Office support</b>	<b>100,000</b>	<b>102,000</b>	<b>104,040</b>	<b>106,121</b>	<b>108,243</b>	<b>110,408</b>
<b>Travel cost</b>	<b>48,000</b>	<b>48,960</b>	<b>49,939</b>	<b>50,938</b>	<b>51,957</b>	<b>52,996</b>
<b>External staff</b>	<b>30,000</b>	<b>30,600</b>	<b>31,212</b>	<b>31,836</b>	<b>32,473</b>	<b>33,122</b>
<b>Other cost</b>	<b>22,000</b>	<b>22,440</b>	<b>22,889</b>	<b>23,347</b>	<b>23,814</b>	<b>24,290</b>
<b>Office equipment</b>	<b>10,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>
<b>Total</b>	<b>450,000</b>	<b>455,600</b>	<b>469,664</b>	<b>484,209</b>	<b>499,252</b>	<b>514,813</b>
Annual cost increase		1.24%	3.09%	3.10%	3.11%	3.12%

<u>Assumptions</u>	general cost increase in % p.a.	2%	Euro	
Fund management (staff number): 2	annual salary cost increase in%	4%	Annual Cost	Budget in %
Gross salary/allowances/social security p.person/p. year		120,000	240,000	54.5%
Annual cost of office support (secretarial services, data processing, fax + phone)			60,000	13.6%
(translations, interpreter)			10,000	2.3%
(bookkeeping, audit)			20,000	4.5%
(printing of leaflets, manuals etc. )			10,000	2.3%
Travel cost (up to 20 visits to member countries and donors p.person/year; up to 80 nights abroad)				
Hotel cost and travel allowances (lump sum) 80 nights, av.cost: 125		10,000	20,000	4.5%
Flight cost 20 flights, av.cost: 700		14,000	28,000	6.4%
Other cost for personnel (external experts for the Fund's own purpose)			30,000	6.8%
		Subtotal	418,000	95.0%
Contingencies/ other cost not yet identified			22,000	5.0%
<b>Total cost</b>			<b>440,000</b>	<b>100.0%</b>
Initial cost of office equipment (furniture, phone, computer, copier, fax etc.) - 1st year only, then only replacement cost 20			10,000	

### Cost Sharing and Voting Power of Danube Countries in different International Organisations

No.	Organisation Member	World Bank		IFC		EBRD		Danube Convention ICPDR cost sharing		Provisional key 2001-02	Proposal for DEFF voting rights and cost sharing	
		Votes	in %	Votes	in %	Votes	in %	Budget 1999 (in 1000 Euro)	in %	in %	voting right in % *)	Contribution** (in 1000 Euro)
1	Austria	11313	8.7%	19991	10.2%	45600	12.2%	115,295	16.2%	16.5%	15.4%	69,300
2	Bosnia-Herzegovina	799	0.6%	870	0.4%	1239	0.3%	0			2.6%	11,550
3	Bulgaria	5465	4.2%	2039	1.0%	15800	4.2%	0			2.6%	11,550
4	Croatia	2543	2.0%	3132	1.6%	7292	2.0%	61,765	8.7%	9.3%	7.7%	34,650
5	Czech Republic	6558	5.1%	9163	4.7%	17066	4.6%	61,765	8.7%	12.2%	10.3%	46,200
6	Germany	72649	56.0%	129158	66.2%	170350	45.6%	115,295	16.2%	16.5%	15.4%	69,300
7	Hungary	8300	6.4%	11182	5.7%	15800	4.2%	94,706	13.3%	12.2%	10.3%	46,200
8	Moldova	1618	1.2%	994	0.5%	1933	0.5%	0			2.6%	11,550
9	Romania	4261	3.3%	2911	1.5%	9600	2.6%	86,572	12.2%	9.3%	7.7%	34,650
10	Slovak Republic	3466	2.7%	4707	2.4%	8534	2.3%	94,706	13.3%	9.3%	7.7%	34,650
11	Slovenia	1511	1.2%	1835	0.9%	4196	1.1%	61,765	8.7%	12.2%	10.3%	46,200
12	Ukraine	11158	8.6%	9157	4.7%	16000	4.3%	0			2.6%	11,550
13	Yugoslavia	0		0		0		0			2.6%	11,550
14	EC	0		0		60000	16.1%	17,740	2.5%	2.5%	2.5%	11,250
	<b>Total</b>	129641	100.0%	195139	100.0%	373410	100.0%	709,610	100.0%	100.0%	100.0%	450,000

\*) The proposal is based on the ICPDR solution but includes all potential member countries:  
A and D pay 15.40% , the others pay 1/6 or 3/6 or 4/6 of this share, the EC remains at 2,5% as agreed.  
If any country or several countries do not subscribe to the activities of the DEF a solution  
the share of all remaining members shall rise to equal percentages until 100% is covered.

\*\*)Indication only: Annual budget of the DUF will be decided by its members upon  
presentation of a sound budget plan for the respective year.

## Abbreviations and Institutional Names

AP	Accession Partnership (European Union)
BSEF	Black Sea Environmental Fund
BSEP	Black Sea Environmental Programme
CEC	Commission of the European Communities
CEPF	Central Environmental Protection Fund
CEO	Chief Executive Officer
CP	Contracting Parties
DEF	Danube Environmental Fund
DEFF	Danube Environmental Financing Facility
DEG	Deutsche Investitions- und Entwicklungsgesellschaft mbH
DG 1A	Directorate General 1A (of the Commission of the European Communities)
DG SCR	Directorate General „Common Services for External Relations“
DRPC	Danube River Protection Convention
DRPRP	Danube River Pollution Reduction Program
DWQM	Danube Water Quality Management
EBRD	European Bank for Reconstruction and Development
EC	European Community
ECU/EUR	European Currency Unit/Euro
EIB	European Investment Bank
EMIS	Emission Issues / Expert Group
EPDRB	Environmental Programme for the Danube River Basin
ESF	European Social Fund
EU	European Union
GEF	Global Environment Facility
GEFOP	GEF Operations Committee
IAS	International Accounting Standards
IBRD	International Bank for Reconstruction and Development
IC or ICPDR	International Commission for the Protection of the Danube River
IDA	International Development Agency
IFC	International Finance Corporation
IFI	International Financing Institution
IGO	Intergovernmental Organization
IKSD	Internationale Kommission zum Schutz der Donau
ISPA	Instrument for Structural Policies for Pre-Accession
KfW	Kreditanstalt für Wiederaufbau
LSIF	Large Scale Infrastructure Facility
MAP	Mediterranean Action Plan
METAP	Mediterranean Environmental Technical Assistance Program
MFEP	Municipality Funds for Environmental Protection
MIGA	Multilateral Investment Guarantee Agency
MLIM	Monitoring, Laboratories and Information Management / Expert Group
MTF	Mediterranean Trust Fund
N	Nitrogen
NEF	National Environmental Fund
NEPF	National Environment Protection Fund
NGO	Non-governmental Organization
NIC	Newly Industrializing Countries
NNA	National Nutrient Allowance
NPF	National Property Fund
OBNOVA	Program for the Reconstruction of Ex-Yugoslavia
OECD	Organization for Economic Cooperation and Development
P	Phosphorus
PAG	Project Appraisal Group
PCU	Project Coordinating Unit
PDF	Project Preparation and Development Facility
PHARE	Poland and Hungary Action for the Restructuring of the Economy
PMTF	Project Management Task Force
PMU	Project Management Unit
PPC	Project Preparation Committee
PPP	Polluter-Pays-Principle
PRP	Pollution Reduction Program
SECI	Southeast European Cooperative Initiative
SEF	State Environmental Fund
SEG	Strategic Expert Group
SWMF	State Water Management Fund
TACIS	Technical Assistance to the Community of Independent States
UN	United Nations Organization
UNDP	United Nations Development Program
UNEP	United Nations Environment Program

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