Final Report

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Final Evaluation of the UNDP/GEF Project

RER/01/G32

Danube Regional Project: Strengthening the Implementation Capacities for Nutrient Reduction and Transboundary Cooperation in the Danube River Basin

PREFACE

This report sets out the final findings, lessons learned and recommendations for the UNDP/GEF Danube Regional Project. The report is delivered in compliance with the Terms of Reference developed by UNOPS, who are tasked with managing the DRP on behalf of UNDP. The evaluation is based upon collected reference materials from the project, as well as a series of interviews carried out during evaluation missions to the region, during March – May 2007. The conclusions and recommendations set out in the following pages are solely those of the evaluators and are not binding upon the project management & sponsors.

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EXECUTIVE SUMMARY

The full title of the evaluated UNDP-GEF funded and UNOPS executed project is the Danube Regional Project: Strengthening the Implementation Capacities for Nutrient Reduction and Transboundary Cooperation in the Danube River Basin. The project is known as the Danube Regional Project (DRP).

The overall objective of the DRP is to reduce nutrient emissions into the Danube River and its tributaries in order to improve water quality in the Danube and in the Black Sea. The DRP is designed to complement the activities of the International Commission for the Protection of the Danube River (ICPDR), an international commission established through the Danube River Protection Convention (DRPC), providing a regional approach to the development of national policies and legislation and the definition of priority actions for nutrient reduction and pollution control, with particular attention to achieving sustainable transboundary ecological effects within the Danube River Basin (DRB) and the Black Sea area.

This Terminal Evaluation Report (TE report) constitutes the combined outcome of a literature review and evaluation missions, including a series of interviews carried out in March – May 2007. The evaluation team interviewed selected stakeholders at the DRP PCU and the ICPDR Secretariat in Vienna. In addition, stakeholders from each of the 13 countries that are signatories to the Danube River Protection Convention (DRPC) were interviewed, with travels carried out to 12 of the 13 countries for meetings and site visits to project demonstration sites. Additional interviews in New York and Washington DC and by videoconference to Brussels rounded out a comprehensive project review.

The DRP can be considered in its wider context, as the culmination of 15 years of GEF assistance and a lynchpin of the Danube-Black Sea Strategic Partnership. It has been a highly successful project, and well-deserving in its characterisation as one of the flagship efforts under the GEF International Waters Focal Area. The adaptive strategy which saw an increasing focus on the WFD implementation was both reasonable and highly successful. The Danube 'Roof Report' is widely considered the best of the transboundary WFD river basin assessment reports to be developed in compliance with the WFD, and the ICPDR can thank the assistance of the DRP for helping achieve this success

At the conclusion of the DRP, additional regional large-scale support from GEF is not anticipated, especially with the EU increasingly prominent in both policy setting and funding support, and the riparian countries having set the ICPDR on a solid financial footing. There are, however continuing areas for the GEF to consider extending its support for example, for the continuation of the ongoing sub basin initiatives on the Sava and Tisza, and also to further recommendations on the use of innovative economic instruments for continuing water quality improvements and the reduction of nutrient loading.

In summary, the Danube Regional Project has been a highly successful and well-managed project, helping to set the ICPDR and the Danube countries on a firm foundation for sustainable efforts to protect and enhance the Danube River. The synopsis below considers the main features of the report under the topics of design, implementation, impact and the benefits that can be gleaned for other GEF projects.

Project Design

The DRP was well formulated and successfully built upon preceding regional agreements and activities, including the establishment of the ICPDR. Emphasis was placed on the most critical pollution issues for the Danube and Black Sea, namely eutrophication caused by excessive nutrient loading. The project concentrated on building the necessary governmental and civil society structures to ensure that attention was paid to reducing human impacts on Danube water quality. Phase 2 of the project was able to respond to recommendations made in the mid-term review, notably by preparing an Exit Strategy.

The DRP included consideration of public participation and access to information, that is, the implementation of the Aarhus convention. In particular, emphasis was placed on building public awareness and support for improving and protecting water resources in the region.

The project design satisfied over-riding GEF objectives by assisting groups of countries to understand better the environmental challenges of their international waters and work collaboratively to address them, building capacity of existing institutions, and implementing measures that address priority transboundary environmental concerns. The design of the DRP enabled it to play a leading role in regional preparations for WFD implementation.

Project Implementation

The DRP was implemented in a highly satisfactory manner. Looking across the breadth of the project experience, it is easy to discern a high level of accomplishment, a significant level of country interest and ownership, a successful working relationship between the Project and key stakeholders, especially the ICPDR, and a high degree of professionalism in how the Project Coordinating Unit carried out its duties. The DRP project team successfully adhered to work plans. Faced with a large and ambitious set of expected outcomes, and nearly 160 activities, the PCU did an admirable job in completing expected tasks.

A notable achievement of the DRP was its capacity to adapt to changing political and economic realities, notably regarding the eastward expansion of the EU and the political upheaval in the former Yugoslavia. There has been strong regional appreciation of and support for this adaptive management.

The financial aspects of the project were handled exceptionally well. Aiding significantly was the opportunity for the team to work using an imprest account with UNOPS for handling local expenditures and small contracts. The one case where budgeting was not closely monitored was in implementation of output 3.4, which was perceived to be an activity separate from the rest of the project with a preset budget for the project team. The DRP project managers had to respond to an effective (>20%) budget cut decline in the value of the US dollar versus the Euro. Some envisioned activities, for example agricultural pilot studies and some public communications efforts, were narrowed. Also, there was a gradual phase out of support for national participation at EG meetings. Interestingly, and somewhat paradoxically, the reduced DRP support for these activities spurred greater support from the riparian countries and other stakeholders, including industry.

The DRP progress was greatly facilitated by external factors, in particular the expansion of the European Union. Acceptance of the WFD as a legally binding mechanism for Danube water quality management has enabled the DRP to achieve considerable success in the harmonization of riparian government policies and monitoring programmes. Secondly, the economic downturn that many of the downstream Danube countries faced during the 1990's led, amongst other things, to reduced fertilizer use and a consequent reduction in farm pollution runoff. The DRP's success in meeting its targets for nitrogen and phosphate reduction is largely as a result of this decrease in farm emissions, coupled with continuing measures across the breadth of the Danube River Basin to improve wastewater treatment systems. A third set of factors that have facilitated progress relate to having a well-functioning project team, strong cooperation with the ICPDR Secretariat and a supportive project steering committee comprised of the Heads of Delegation of the ICPDR.

Project Impact

The DRP has had a major impact in the region, and even globally. It has enabled the ICPDR to begin implementation of the Water Framework Directive and is now the benchmark for European transboundary water bodies. The project has helped the ICPDR to take a holistic look at the pressures facing the river. Thanks to the DRP, evidence has been given on the significant eutrophication problems caused by agricultural inputs, the important flood buffering attributes of riverine wetlands, and the critical need to improve tariff and charge schemes for water and sanitation systems. Due to the DRP, there is a wide and expanding array of environmental NGOs who have increased their awareness and in-

volvement in the effort to clean up and protect the Danube and its tributaries. Through the DRP, many of the Danube countries have enhanced their policies and procedures for involving the public in water resource decision-making. The goal, to reduce nitrogen and phosphate emissions into the Danube River by>20% and >30%, respectively, was achieved and the western shelf of the Black Sea is clearly exhibiting signs of restoration.

While there is ample evidence that the DRP had positive policy and institutional impacts on the downstream (GEF eligible) countries, there is some question as to whether the DRP influenced the upstream Danube countries, in particular Germany and Austria, to strengthen their policies and enforcement measures to reduce nutrient discharges into the Danube. While much of the effort has necessarily been directed towards bringing the downstream country policies and protection measures into line with their upstream neighbours, henceforth, in the context of being equal partners within an EU-driven policy framework, the impetus will fall on all parties to take further steps to reduce their nutrient and other pollutant contributions to the River.

Benefits to other projects

The DRP has amply demonstrated the value of a GEF Project supporting a Convention Secretariat, in this case the ICPDR. The project was able to strengthen, rather than compete with, existing regional structures, notably the ICPDR Expert Groups. The Secretariat plays both a beneficiary role and a management role, while the PCU provides funding and technical support to the Secretariat, but also manages other outputs beyond the scope of Secretariat responsibilities.

The DRP achieved considerable success within the sphere of influence of the constituent members of the ICPDR delegations (e.g., water management, riverine monitoring, and WFD implementation). The project experienced the greatest difficulties in affecting policies that fall outside of the purview of the Ministry of Environment (or its equivalent in each country), like agriculture, industry, and transport, indicating that these resource-oriented ministries need to be engaged in a meaningful way with project development right from the concept stage.

There are many examples of best practices that can serve as models to other GEF projects. As noted above and in contrast to some other GEF projects, the rapport between the DRP PCU and the ICPDR Secretariat has been very positive and their actions mutually reinforcing. Adaptive management was essential in order to deal with the changing political and economic realities, particularly regarding EU accession and WFD implementation, as well as the effective budget cut resulting from an unfavourable dollar – euro exchange rate.

A universally expressed view in the region was that a major benefit of the project was the opportunity to establish networking of like-minded people, with communications having been established or improved, both nationally and internationally, between scientists in academia and government agencies or laboratories, between scientific communities, and with other regional stakeholders, notably environmental managers.

DRP support strengthened the Danube Environmental Forum (DEF) as an umbrella organization, thereby enhancing the ability of member NGOs to respond to transboundary pollution issues. Significant progress was made in fostering NGOs, and through them, public involvement, particularly in the downstream countries where NGO activities and the notion of public access to information have short histories. NGOs, working on door-to-door campaigns and hosting numerous meetings at the community level, provided the means by which the DRP could reach many of the stakeholders, especially farmers.

Finally, the DRP, in consultation with ICPDR and agreed to by the national HoDs, developed an Exit Strategy to set in motion a phase down of DRP support in preparation of the ICPDR operating as a self-financing Commission and Secretariat. In the wider sense, this process of formulating an exit strategy became a self-assessment mechanism for the

ICPDR and brought considerable attention to the assistance provided by and outcomes of DRP activities. The Exit Strategy required that countries and ICPDR examine the benefits accrued from the GEF project, agree on what to continue and decide on how the ongoing activities could be financed.

Recommendations

Recognising that the DRP is concluding, the following recommendations are set out for consideration, in the first case by the ICPDR, and then for UNDP and GEF consideration for future IW projects.

Recommendations for ICPDR

1. The DRP has generated a wide array of useful documents that should remain available to the interested public. The ICPDR is encouraged to add a DRP archive section to its database and web site.

2. The ICPDR has gathered resources for two Joint Danube Surveys. These trans-Danube research cruises are an important activity that should continue, and plans should be made for a 3rd JDS after the upcoming 2007 survey. The surveys are important to the continuing research effort for the Danube – not so much because of the groundbreaking research, as for the cross-boundary cooperation amongst researchers and especially as an educational and public awareness tool.

3. The DRP provided useful support to the ICPDR for the enhancement of the MONERIS nutrient model and to upgrade the Commission's geographic information system (GIS). The ICPDR is encouraged to continue the use and refinement of these tools

4. The ICPDR has been expanding its external funding support mechanism, and is increasingly looking to the private sector, based on their quite successful cooperation to date with Coca Cola and the Alcoa Foundation. This private sector initiative is seen as critical to enabling the ICPDR Secretariat to continue many of its public awareness activities in addition to its formal secretariat-country support role. Taking a cue from other successful international organisations, it will be useful for the ICPDR to broaden this initiative into a more robust membership programme – to include foundations, bilateral donors and the general public. Having a wide array of "Friends of the Danube" can build greater public awareness and support, while also shielding the ICPDR from possible criticism of its increasing reliance on industry sponsorship to promote environmental protection. The ICPDR may also want to consider drawing from the experience of sustainable development and 'green' mutual funds that have developed charters and strict criteria for companies that can be listed.

5. The ICPDR member countries are considering how to proceed with possible bans and voluntary agreements on phosphates in detergents. A recent determination from the European Commission states that the approaches being considered in the Danube region are "justified and proportionate". This provides a real opportunity for the Danube basin countries, especially those that are EU members, to champion this initiative. The work of the DRP and ICPDR Expert Groups has made clear that phasing out the use of phosphates in detergents provides the most cost-effective opportunity to make marked reductions in nutrient emissions into the Danube River.

6. The Danube region can expect to experience alterations in the water cycle as a result of climate change, with increasing risk of severe flood events and extended droughts. Water-related impacts of climate change should be targeted

as a focus area for the ICPDR. The Commission is encouraged to establish a task group within its Expert Group structure to investigate the issue.

7. The DRP provided a very useful mechanism to broaden civil society involvement in Danube River protection activities. In particular, GEF support has been instrumental in establishing the Danube Environmental Forum. The ICPDR is encouraged to continue and broaden this partnership with DEF. In addition to retaining its observer status, the DEF should be offered opportunities to participate in public awareness raising activities. Recognizing that the DEF's financial sustainability remains an issue, the ICPDR delegations are encouraged to assist in identifying potential funding support for the DEF.

8. The DRP provided a measure of support to the ICPDR with respect to industrial pollution and in particular risks from flood prone contaminated sites. Further investigations are needed – not only in terms of risk assessment but also with respect to mitigation strategies, and the ICPDR is encouraged to promote this effort

9. The ICPDR has worked from 2001 – 2006 under its Joint Action Programme (JAP) providing the road map for implementation of the Danube River Convention, and implementation of the Danube Strategic Action Plan. There has not been a renewal of the JAP, in part from the conviction that the ICPDR effort has shifted towards implementation of the WFD. The ICPDR, it's Secretariat and Expert Groups are now focused on developing the Danube River Basin Management Plan, by 2009. It should be recognised that the scope of the Danube Convention, and consequently the role of ICPDR, may be broader than what is contained in the WFD. For instance, the Scope of the Convention (Article 3) notes that the convention is applicable to issues of fisheries and inland navigation, and the operation of existing hydrotechnical constructions. Recognising its broader mandate, the ICPD is encouraged to develop a JAP for the period 2008-2012, which recognises the array of expected achievements in addition to WFD implementation.

10. The DRP undertook a review of the monitoring and reporting requirements within the ICPDR and compared these with those of the EEA and the EC taking account of the development of the WISE (Water Information System for Europe). The WISE is intended to minimise country's reporting of data while ensuring that data can be utilised by a wide number of end users. Countries will upload data to WISE (or provide links to where the data is) and then the various reporting requirements (e.g. WFD, UWWTD, SoE reports) can extract the required information. The DRP review recommended a greater use of available data sources rather than replicating databases within the ICPDR to reduce the burden on the countries and reduce the costs of collecting data for the ICPDR. Although not all the recommendations were adopted at the time (2005) by the ICPDR, the evolution of WISE and the increasing number of Danube countries in the EU will inevitably require that these issues are further assessed. The ICPDR should continue to evaluate their need to collect/archive data from the countries against utilising existing EU-wide data sources of national data.

Recommendations for UNDP & GEF

1. The GEF has a put a substantial investment into the Danube River over the past 15 years. GEF support is now ebbing, which is understandable given pressing environmental demands in other regions, the increasing capabilities of the Danube countries to manage their own water resource affairs, and particularly the expansion of the European Union across a majority of the Danube countries. There are, however, important reasons for the GEF to retain an International Waters presence in the Region. These include: a) to continue strengthening the capacities of countries in the basin that are not a part of the EU and are facing con-

siderable economic constraints; b) to 'protect' the investment by continuing to support transboundary agreements at the sub-basin level, for instance in the Tisza and Prut Rivers; and c) to continue to utilize the Danube as an incubator and demonstration site for the use of policies and techniques that can be replicated in other regions.

An example of further GEF activities could be to develop a GEF medium size project to demonstrate innovative economic instruments to counter the Danube-Black Sea problem of nutrient over-enrichment. This would include analysis of the feasibility of a nutrient trading scheme as well as other economic tools, such as the use of conservation easements for flood plain management, and promotion of low cost wastewater treatment technologies, including engineered wetlands and package treatment plants

2. The DRP/ICPDR Exit Strategy effort was well considered and generally well executed. Developing and implementing such strategies should be a standard feature of GEF IW projects, especially in cases where there have been long-term international investments and a corresponding need to start the process of supplanting international support with regional and local support. The key is to start the process early, at the mid-way point of the project, so there is sufficient time for the phase down process to take affect, the countries to budget for their increased responsibilities.

3. The DRP was able to utilise an IMPREST account with UNOPS, enabling the PCU to operate a more flexible budgeting and expenditure procedure, yet maintain project accountability. All large-scale multi-country GEF projects should be given this account opportunity, based on initial evidence of sound financial management.

4. The DRP/ICPDR experience with expert groups compares favourably with other projects and commissions that have utilised Regional Activity Centres. Expert Groups, with rotating chairs, allow for leadership on issues to pass across the involved countries, expanding country interest, participation and ownership.

5. The DRP/ICPDR agreement to phase out project support for country participation in Expert Groups was a double success: it helped to build country ownership and responsibility and also reduced DRP expenditures, enabling the project to meet its objectives despite inflationary pressures. Future GEF projects should consider including this phase out approach in ProDoc development.

6. The DRP was established as part of the Danube-Black Sea Strategic Partnership, which linked the DRP and BSERP capacity building projects with an investment facility (NRF). While coordination of these three projects could have been better, the concept is sound and should be replicated. By linking capacity building and investment support, the GEF can greatly increase the environmental benefits accrued for targeted international waters.

7. One of the strategic programmes in the International Waters Focal Area for GEF-4 concerns reducing nutrient over-enrichment and oxygen depletion from land-based pollution of coastal waters. This was a key objective for the DRP, recognising that nutrient over-enrichment of the Danube is having adverse impacts on the Black Sea. The DRP successfully implemented a few pilot projects to promote farm management and was involved at the policy level on implementation of the EU Nitrates Directive. Future projects addressing nutrient over-enrichment should seek to broaden these investigations of agricultural policy impacts on the environment, including farm commodity price support mechanisms. Efforts should be made by the UNDP to achieve greater participation of local agricultural interests, including local extension services, and also international partners, such as the FAO.

8. The experiences from the agricultural pilots in the DRP demonstrated that farmers are interested to implement best agricultural practices (BAPs). Yet the DRP experience also showed that few if any BAPs will get carried out without financial support – especially when small and marginal farming concerns are the focus. Future GEF projects that provide capacity building for BAPs need to tie directly to investment support - either through country support commitments or additional donor funding. This may be an area where micro-lending arrangements can be considered.

9. In the DRP an issue arose with respect to the Intellectual Property Rights for the use and enhancement of the MONERIS model. This raises a more general issue of how future GEF projects should utilise proprietary systems and software. Open architecture programmes and systems in the public domain are preferable – assuming they meet the project needs. Otherwise, contractual negotiations may be required to ensure that beneficiary countries receive license to utilise and enhance proprietary systems, or at the last resort, long term contracts are signed that enable the countries to continue receiving systems support after the GEF project has concluded. The risk in not taking one of these approaches is that significant GEF moneys will be used for developing effluent models or GIS mapping systems that are then discontinued once the GEF support ends.

10. The current joint APR/PIR reporting requirements for UNDP / GEF projects are an improvement over the previous situation where separate APRs and PIRs were required. However the format and procedures are still cumbersome for the project teams and too content-heavy for reviewers. Consideration should be given to new formats – for instance providing an annual 'exceptions' report, which highlights only those areas of the project implementation that have changed since the previous reporting period. Consideration should also be give to developing an online format.

11. The DRP's inclusion of a small grants programme (3.2) was highly successful in terms of increasing NGO participation, raising public awareness, and mobilising a large number of environmental protection activities at a fairly modest cost. Notwithstanding the existence of the GEF Small Grants Programme operating globally, it will be useful to consider including small grants programmes as a component of future GEF large-scale projects

GLOSSARY

APC/EG	Accident Prevention and Control Expert Group
APR	Annual Project/Programme Report
AQA	Analytical Quality Assurance
AQC	Analytical Quality Control
BAP	Best Agricultural Practices
BAT	Best Available Technology
BEP	Best Environmental Practices
BOD	Biological Oxygen Demand
BSERP	Black Sea Ecosystem Recovery Project
BSP	Black Sea Program
CAP	Common Agricultural Policy
COD	Chemical Oxygen Demand
DANUBIS	Information System of the ICPDR
DBAM	Danube Basin Alarm Model
DEF	Danube Environmental Forum
DPRP	Danube Pollution Reduction Program
DQA	Data Quality Assurance
DRB	Danube River Basin
DRP	Danube Regional Project
DRPC	Danube River Protection Convention
DWQM	Danube Water Quality Model
EC	European Commission
ECO/EG	Ecology Expert Group
EMIS/EG	Emission Expert Group
EPDRB	Environmental Programme for the Danube River Basin
EU	European Union
EUR	Euro
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIS	Geographical Information System
HELCOM	Baltic Marine Environment Protection Commission (Helsinki Commission)
HoD	Head of Delegation
ICPBS	International Commission for the Protection of the Black Sea
ICPDR	International Commission for the Protection of the Danube River
IFI	International Financing Institution
IGO	Inter-Governmental Organisation
IMCC	Inter-Ministerial Coordination Committee
IPPC	Integrated Pollution Prevention and Control Directive
IW	International Waters
JAP	Joint Action Program
LFA	Logical Framework Approach
M&E	Monitoring and Evaluation
MLIM/EG	Monitoring Laboratory and Information Management Expert Group
MOU	Memorandum of Understanding
MTE Report	Mid-Term Evaluation Report
NGOs	Non Government Organizations
NRF	World Bank Investment Fund for Nutrient Reduction
OP8	Operational Programme 8
PCU	Project Coordination Unit
PIR	Project Implementation Review
ProDoc	Project Document
PRP	Pollution Reduction Program
RBM	River Basin Management
RBM/EG	River Basin Management Expert Group
REC	Regional Environmental Centre

S/EG	Strategic Expert Group
SAP	Strategic Action Plan
SAPARD	Special Accession Programme for Agriculture and Rural Development
SGP	Small Grants Programme
TDA	Transboundary Diagnostic Analysis
TNMN	Trans National Monitoring Network
UNDP	United Nations Development Program
UNOPS	United Nations Office for Project Services
USD	United States Dollar
WFD	Water Framework Directive
WWF	Worldwide Fund for Nature

1 INTRODUCTION TO THE EVALUATION

1.1 Purpose of the Evaluation

The objective of the terminal evaluation is to enable GEF, UNDP, ICPDR, the Government bodies in the participating countries, and UNOPS to assess the relevance, efficiency, effectiveness, impact and sustainability of the Danube Regional Project. The evaluation will assess the achievements of the project against its objectives, including a re-examination of the relevance of the objectives and of the project design. It will also identify factors that have facilitated or impeded the achievement of the objectives. While a thorough review of the past is in itself very important, the in-depth evaluation is expected to lead to detailed overview and lessons learned for the future.

1.2 Evaluation Report Components

The Final evaluation addresses the following issues:

Project design

- Project Relevance of the project design within the framework of GEF guidelines and global concern regarding the Danube River basin.
- Appropriateness of the project's concept and design to the current economic, institutional and environmental situation in the target region.
- Contribution of the project to the overall development objective as declared in the Project Document.
- The likely sustainability of project interventions.

Implementation

- The general implementation and management of the UNDP/GEF project by the Project Management in terms of quality of inputs and activities, adherence to work plans and budgets, major factors which have facilitated or impeded the progress of project implementation.
- Adequacy of management arrangements, as well as monitoring and backstopping support given to the project by all parties concerned.
- Institutional set-up through the ICPDR and various Expert Groups and the degree to which it has encouraged full involvement of the countries.
- Inputs of the Governments of the thirteen countries at national and local levels.
- Responsiveness of project management to changes in the environment in which the project operates.
- UNOPS and ICPDR execution.
- Co-operation among project partners (UNDP/GEF, Project Team, ICPDR, National Governments and international and national organisations and NGOs, specifically with regard to the integration and support of ICPDR.

Project impact

- Achievements of the project against the original objectives, outputs and activities as detailed in the project document and the Project Implementation plan.
- Awareness of the participating countries regarding project outputs.
- Level of ownership of the project by the participating countries.
- Commitment of countries to support the ongoing project and ICPDR JAP and EU WFD implementation.
- Cost-effectiveness of the project.
- Public participation and stakeholder involvement in implementation of project activities.
- Likely degree of support from the Countries' Governments in integrating the project objectives and into their national development programmes and other re-

lated projects, and how well the project fits into their national development policy.
- Impacts on policy and strategy of countries.
- Project impact on improving the capacity to prepare and implement collaborative, targeted and effective efforts for the management of the Danube River Basin.
- Project impact on enhancing inter-agency and inter-ministerial co-operation in each country and on regional cooperation
- Cooperation among international organisations, NGOs and other stakeholders.
- Cooperation with sister projects in the GEF IW portfolio esp. Black Sea Ecosystem Recovery Project and IW-Learn.
- Sustainability of the project's impact.

Recommendations and lessons learned
- Key lessons learned, best practices and recommendations from the DRP that are relevant to the design and execution of future GEF/UNDP projects, and to the future activities of the ICPDR.

1.3 Methodology of the Evaluation

Per the Terms of Reference, the final evaluation has consisted of four activities:
- Document review
- Participation at the Danube Final Seminar (February 2007) and the DRP Final Wetlands Workshop (April 2007)
- Field visits
- Interviews with individuals who are either affiliated to the project in some way or who have or might be expected to be impacted by the project.

In Annexes 3-5 are the mission itinerary, persons interviewed and documents reviewed. The mission schedule included an opportunity to meet with Heads of Delegation, experts and NGOs in each of the 13 riparian countries of the Danube.

1.3.1 Ratings

Per the requirements set out in the TOR, the evaluators have utilised a five step rating system (highly satisfactory, satisfactory, marginally satisfactory and unsatisfactory) on the following criteria: a) outcomes/ achievement of objectives; b) implementation approach; c) Stakeholder participation / public involvement; d) Sustainability; and e) Monitoring & Evaluation.

1.4 Structure of the Evaluation

The evaluation has been structured in accordance with UNDP Guidelines for Evaluators. It covers the issues set out in the Terms of Reference for this evaluation, and takes into account the expectations of UNOPS.

The use of stakeholder interviews as the lead vehicle for evaluation has been done recognizing that the DRP is a capacity building and "influencing" project, designed to build stakeholder support for improved river basin management.

2 THE DRP AND IT'S DEVELOPMENT CONTEXT

2.1 Project Start and its Duration

Phase 1 of the Danube Regional Project was commenced as planned in December 2001 and the majority of activities were completed, according to the Project Document, by the end of October 2003. Phase 2 was designed to commence in December 2003 shortly after completion of Phase 1 and span a three-year period until 2006; the expected duration of the DRP thereby totalling 5 years. Due to unexpected delays in the final commenting and approval process of the Project Document for Phase 2, the actual start-up of Phase 2 occurred in September of 2004, with an initial project completion date of November, 2006, subsequently extended until June, 2007.

2.2 Problems that the Project Sought to Address

The Danube River is the second largest river in Europe (2 780 km) and drains an area of 817 000 km^2. It includes entirely or partly Austria, Germany, Hungary, Czech Republic, Slovakia, Slovenia, Croatia, Bosnia & Herzegovina, Serbia, Montenegro, Bulgaria, Romania, Moldova and Ukraine. The river discharges into the Black Sea through a delta, which is the second largest natural wetland in Europe. The Danube is also of high social, economic and environmental value and supports drinking water intake, waste emissions, agriculture, industry, fishing, tourism, power generation, navigation, tourism and other activities.

As indicated in the Project Summary (Phase 1 & 2), "the overall objective of the Danube Regional project is to complement the activities of the ICPDR required to provide a regional approach and global significance to the development of national policies and legislation and the definition of priority actions for nutrient reduction and pollution control with particular attention to achieving sustainable transboundary ecological effects with the DRB and the Black Sea area". Recognizing this overall objective, it can be seen that the problems the project seeks to address relate to pollution loading into the Danube from sources along the river and its tributaries.

The DRP seeks to address the human impacts on the Danube and its tributaries, from agricultural and urban activities. The project objectives have been developed recognizing that pollution remains a serious problem, with the amount of nutrients – mainly from agricultural fertilizers, household products and urban sewage - still too high. Toxic substances are also a key threat, especially from agricultural, industrial and mining operations. These pollution problems not only affect the ecology of the Danube, and put at risk the drinking water sources for millions of inhabitants. They also place the Black Sea at serious risk to eutrophication, algal blooms, and contamination. The long history of human settlement in the region has significantly altered the river's natural flow and filtering mechanisms. Some 80% of the Danube's wetlands and floodplains have been lost since the end of the 19th century, threatening bird and fish habitats and compounding the devastation from periodic floods.

Control and reduction of pollutants requires addressing specific "hot spots", as well as establishing an under girding of cooperation, commitment and capacity among key stakeholders at the government, industry and community levels. While the World Bank, the European Union and bilateral supporters have focused on the investment side, it has been the role of the DRP to consider these "softer", but no less crucial, aspects of pollution reduction.

2.3 Immediate and Development Objectives of the Project

Long Term Development Objective

The DRP is designed to contribute to sustainable human development in the Danube River Basin (DRB) through reinforcing the capacities of the participating countries in developing effective mechanisms for regional cooperation and coordination in order to ensure protection of international waters, sustainable management of natural resources and biodiversity.

Overall Objective

The DRP is to complement the activities of the ICPDR that are required to provide a regional approach and global significance to the development of national policies and legislation and the definition of priority actions for nutrient reduction and pollution control with particular attention to achieving sustainable transboundary ecological effects within the DRB and Black Sea area.

The ICPDR is the legally established institutional mechanism for regional environmental cooperation among the 13 riparian states and EC to manage water resources in the Danube River Basin. Among other activities, the DRP provides financial assistance in support of the ICPDR expert groups. Many of the DRP activities are de facto complementing, sustaining and building continuity to the regional environmental cooperation architecture established.

Specific Objectives of Phase 1 (December 2001 – August 2004)

The Project Document for Phase 1 included preparation and commencement of basin-wide capacity building activities, which were then to be consolidated and completed during Phase 2. Altogether 20 project components with 80 activities were to be carried out during Phase 1

The following four project components were designed to respond to the overall development objective:

a) Creation of sustainable ecological conditions for land use and water management;

b) Capacity building and reinforcement of transboundary cooperation for the improvement of water quality and environmental standards in the Danube River Basin;

c) Strengthening of public involvement in environmental decision making and reinforcement of community actions for pollution reduction and protection of ecosystems;

d) Reinforcement of monitoring, evaluation and information systems to control transboundary pollution, and to reduce nutrients and harmful substances.

Specific Objectives of Phase 2 (September 2004 – June 2007)

The key objectives during Phase 2 were to set up institutional and legal instruments at the national and regional level to assure nutrient reduction and sustainable management of water bodies and ecological resources. Related objectives included ensuring the involvement of key stakeholders and building up adequate monitoring and information systems. To reach these objectives and to secure the implementation and consolidation of basin-wide capacity-building activities, the Project built upon the achievements of Phase 1, with a continuation of the above indicated four project components. Altogether 20 project components and 79 activities were to be carried out during the 2nd Phase of the Project.

2.4 Main Stakeholders

There are numerous stakeholder groups that can be considered within the Danube River Basin, including:

- As the DRP's major objective is to support the ICPDR, the signatory member countries to the Danube River Protection Convention (DRPC) and their respective designated ministries participating in the ICPDR are key stakeholders.
- A second segment are the other ministries with direct relevance to ICPDR cooperation, such as ministries of agriculture and research units that are semi-active participants in the regional cooperation process through inter-ministerial cooperation mechanisms established by the participating countries.
- A third segment includes non-governmental organizations, which are actively incorporated into the DRP through such components as: institutional development of NGOs; support for the NGO umbrella organization Danube Environmental Forum (DEF), and the Small Grants Programme (SGP).
- A fourth segment includes the public at large, whom the DRP sought to influence through such public information and participation initiatives as the Danube Day, the magazine Danube Watch, the project web site, media contacts and project fact sheets.
- A fifth segment of stakeholders are the farmers, fishermen, mine operators, shippers, transportation planners, developers and others whose activities directly impact on the river basin and water quality. The ICPDR and DRP are working towards identifying means and mechanisms to work proactively with private sector entities. The agriculture sector as a whole and individual producers are one of the key stakeholder groups.

2.5 Expected Results

- The project document for Phase 2 sets out a series of objectives and expected outputs. These constitute the main project components. The components are build from and are consistent with the Phase 1 Project Document, with some minor variation, reflecting mid term adaptive management strategies, and especially the greater focus placed on assistance to the countries and the ICPDR on implementation of the WFD.

Objective	Output
1. The Creation of Sustainable Ecological Conditions for Land Use and Water Management	1.1 Development and implementation of policy guidelines for river basin and water resources management 1.2 & 1.3 Policies for the control of agricultural point and non-point sources of pollution and pilot projects on agricultural pollution reduction. 1.4 Policy development for wetlands rehabilitation under the aspect of appropriate land use 1.5 Industrial reform and development of policies and legislation for the application of BAT (best available techniques, including cleaner technologies) towards reduction of nutrients (N and P) and dangerous substances 1.6 & 1.7 Assessments and development of water and wastewater tariffs and effluent charges – focused on nutrient reduction and control of dangerous substances 1.8 Development of voluntary agreements to reduce phosphates in detergents
2. Capacity building and rein-	2.1 Setting up inter-ministerial coordinating mechanisms for the development, implementation and follow-up of national policies, legislation and projects for nutrient reduction and pollution control

Objective	Output
forcement of transboundary co-operation for the improvement of water quality and environmental standards in the DRB	2.2 Development of operational tools for monitoring, laboratory and information management with particular attention to nutrients and toxic substances 2.3 Improvement of procedures and tools for accidental emergency response with particular attention to transboundary emergency situations 2.4 Support for reinforcement of the ICPDR information system (DANUBIS) 2.5 Implementation of the Memorandum of Understanding between the ICPDR and the BSC relating to the discharge of nutrients and hazardous substances to the Black Sea 2.6 Training and consultation workshops for resource management and pollution control with attention to nutrient reduction and transboundary issues
3: Strengthening of public involvement in environmental decision making and reinforcement of community actions for pollution reduction and protection of ecosystems	3.1 Support for institutional development of NGOs and community involvement 3.2 Applied awareness raising through community-based Small Grants Program 3.3 Organization of public awareness-raising campaigns on nutrient reduction and control of toxic substances 3.4 Enhancing support of public participation in addressing priority sources of pollution (hot spots) through improved access to information in the frame of the EU WFD.
4: Reinforcement of monitoring, evaluation and information systems to control transboundary pollution, and to reduce nutrients and harmful substances	4.1 Development of indicators for project monitoring and impact evaluation 4.2 Analysis of sediments in the Iron Gates reservoir and impact assessment of heavy metals and other dangerous substances on the Danube and the Black Sea ecosystems. 4.3 Monitoring and assessment of nutrient removal capacities of riverine wetlands 4.4 Danube Basin study on pollution trading and corresponding economic instruments for nutrient reduction

2.5.1 Results Indicators

It was acknowledged from the beginning of the project that existing indicators to gauge the results of UNDP/GEF international waters projects were insufficient for accurately assessing project achievements, and that the DRP could provide a valuable service in developing indicators that could be utilized for this and future IW projects. During Phase 1 of the DRP, conceptual design recommendations were commissioned, and more precise output achievement indicators were recommended. The Phase 2 ProDoc includes enhanced indicators with numerical goals for the reduction of nutrients and phosphates.

- The verifiable indicator for the overall project objective is a reduction of nitrogen and phosphorus loading into the Black Sea by 21.1% and 32%, respectively.
- For Objective 1, (creating sustainable ecological conditions), the expectation is that all ICPDR countries will have developed and ratified policies and legal instruments for sustainable water management and nutrient reduction. In particular, the EU WFD is to be applied in the frame of RBM plans.

- Objective 2, (capacity building), is to be verified through fully operational institutional and organizational mechanisms in each ICPDR country, for transboundary cooperation, improved water quality monitoring, emission control, emergency warning, accident prevention and information management.
- Objective 3, (public involvement), is to be verified through the active engagement of civil society in national pollution reduction program, as indicated through an operational and self-sustained DEF secretariat and a fully implemented Small Grants Program, with 80% of all projects showing sustainable results.
- Objective 4, (monitoring, evaluation and information systems), is to be verified through a "considerable" increase in knowledge on sedimentation, transport and removal of nutrients and toxic substances, and acceptance at national and regional levels of economic instruments to encourage investment for nutrient reduction. Specific verification sources include projects and measures in place to reduce toxic substances in the Iron Gates reservoir, and endorsed wetlands management programs.

3 FINDINGS AND CONCLUSIONS

3.1 Project formulation

The DRP was well formulated and successfully built upon preceding regional agreements and activities, including establishment of the ICPDR. The DRP was logically focused on the continuing need to enhance regional cooperation and coordination, and to focus on the most critical pollution issues for the Danube and Black Sea, namely eutrophication caused by excessive nutrient loading.

As originally conceived, the project included a distinct set of outcomes focused on public participation and the Aarhus convention. This aspect of the project was designed to continue GEF support for a previous and separate medium size project (MSP) that focused on two pilot projects in Hungary and Slovenia. Phase 1 of the DRP showed little progress on this initiative, and there was concern amongst stakeholders that it represented a major financial outlay for the project, yet had seemingly little connection to the rest of the project activities. During the second phase the public participation component was successfully repackaged to focus on water quality issues – in particular with harmonization of the public participation requirements built into the WFD; (see component 3.4: Enhancing support of public participation in addressing priority sources of pollution (hot spots) through improved access to information in the frame of the EU WFD).

As noted in the DRP mid term evaluation, the decision to utilize a two tranche funding mechanism for the DRP created additional work without much benefit. This artificial division was established due to GEF financing requirements. It necessitated the development and approval of a second project document, and caused significant delays in project implementation during the summer of 2004 while the second ProDoc was moving through its approval process.

The second phase ProDoc included several very useful improvements over the first phase. For instance, there was a coupling of similar projects (for example, themes in agriculture and wetlands). The second phase also placed greater emphasis on working with agricultural ministries to address farm runoff pollution. Of particular note, the second phase focused special attention on the sustainability of the ICPDR, and included the joint development, with ICPDR, of an 'Exit Strategy' to set in motion a phase down of DRP support, in preparation of the ICPDR operating as a self-financing Commission and Secretariat.

3.1.1 Relevance of the project design within the framework of GEF guidelines and global concern regarding the Danube River basin.

GEF's overall objective in the international waters (IW) focal area is to contribute as a catalyst in the implementation of a more comprehensive, ecosystem based approach to managing international waters and their drainage basins as a means to achieve global (and regional) environmental benefits. According to the Water-Based Operational Programme 8 (OP8) the GEF funded activities are to meet the incremental costs of:

- Assisting groups of countries to better understand the environmental challenges of their international waters and work collaboratively to address them;
- Building capacity of existing institutions, and
- Implementing measures that address priority transboundary environmental concerns.

Both the Long-Term Development Objective and the Overall Objective of the DRP are fully in line with GEF guidelines. The project design enabled participating countries to receive timely assistance on implementation of the EU WFD (WFD), as well as hands on experience and knowledge sharing at a basin-wide scale. The public participation and public awareness issues have been given thorough consideration and support through several project components, and pilot projects have been developed to demonstrate best available practices. Most importantly, the DRP, through its technical and financial support, has enabled the countries of the region to implement the Danube River Protection Convention (DRPC), and to establish a well-functioning Commission and Secretariat.

3.1.2 Appropriateness of the project's concept and design to the current economic, institutional and environmental situation in the target region.

The project concept was appropriate, and builds upon previous GEF support for the Danube River Basin (DRB). While the DRP was being implemented, the economic, institutional and environmental situation across the region evolved, especially with respect to EU expansion. Hungary, Slovakia, Czech Republic, Slovenia, Romania and Bulgaria are now EU member states, and a future inclusion of Croatia is anticipated. This transition has made implementation of the EU WFD (WFD) a binding objective for most of the DRB countries. In fact a pivotal agreement by the ICPDR countries in 2000 was for the EU WFD to serve as the unifying policy and legal structure for basin management, including the ICPDR countries that were not part of the EU accession process (e.g. Moldova, Ukraine, Serbia, Montenegro, and Bosnia – Herzegovina). The design of the DRP has enabled it to play a leading role in regional preparations for WFD implementation.

The project's emphasis on nutrient reduction is appropriate considering the high nutrient emissions into the Danube, the lack of attention to best agricultural practices in some Danube countries, the limited quantity and quality of wastewater treatment facilities, and the resulting deterioration of water quality along the Danube and particularly in the Black Sea as a result.

3.1.3 Contribution of the project to the overall development objective

The overall development objective has been to improve the water quality of the Danube by reducing nutrient and other pollution discharges into the river and its tributaries, and by preserving and rehabilitating natural ecosystems in the river basin area. The project has focused on building the necessary governmental and civil society structures to ensure that attention is paid to reducing human impacts on Danube water quality.

The Phase 1 & 2 Project Documents set out expected outputs that positively contribute to meeting the overall development objective. In particular, emphasis was placed on building public awareness and support for improving and protecting water resources in the region.

3.1.4 The likely sustainability of project interventions

The question of sustainability is taken up in detail in section 3.3, where the focus is on project implementation and impacts. Here, the issue concerns the extent to which the project was formulated in a manner providing likelihood for sustainability of project interventions. For the DRP, this issue is complex, as it entails consideration of both the first and second Project Documents, and must take into account the fact that the project was carried out amidst dramatic political and economic changes in the region, in particular the rapid expansion of the European Union eastward.

Clearly the formulation of the second Project Document, with its emphasis on WFD implementation and ICPDR capacity building, provided a solid foundation for sustainability. The project team, and steering committee, recognised as they drafted the 2nd Phase ProDoc that there existed a great opportunity for regional policy co-operation and legislative change through harmonisation with the EU WFD.

Sustainability and project formulation are important to consider with respect to the support that the DRP provided to the Danube Regional Forum. The DEF had been created during the previous GEF intervention for the Danube (1997 – 99), and had ceased to function when GEF funding ceased. So the question of sustainability for the DEF the second time around is pertinent. The DRP set a helpful framework structure for the DEF – in particular by establishing a small grants vehicle. While the small grants programme within DRP was not restricted to applications from DEF members, it nevertheless featured them prominently and provided a much-needed financial push. Based on discussions with DEF National Focal Points in Austria, Bulgaria, Hungary and Romania, it is evident that the DEF members recognise the challenge now to keep the effort going, and have had a measure of success in accessing new funding.

3.2 Implementation

The DRP was implemented in a highly satisfactory manner. Looking across the breadth of the project experience, it is easy to discern a high level of accomplishment, a significant level of country interest and ownership, a successful working relationship between the Project and key stakeholders – especially the ICPDR, and a high degree of professionalism in how the Project Coordinating Unit carried out its duties.

A notable achievement of the DRP was its capacity to adapt to changing political and economic realities. Five examples are illustrative:

A. The project team over time increasingly focused on WFD implementation assistance to the ICPDR and riparian countries. A signature output (through the ICPDR) is the Danube Basin Roof Report, considered by several European Commission managers to be the pacesetter for international river basin assessments under the WFD.

B. Output 3.4. focused on public participation, began as a stand-alone effort focusing on the Aarhus convention and generally on environmental protection. During the DRP 2nd phase, this component was reconstituted to conform to the WFD focus of other outputs, providing assistance to Danube countries on how to implement the public participation aspects included in the WFD.

C. The project envisioned financial support to the (GEF eligible) countries throughout the project duration – for participation in the ICPDR expert groups. Instead, a decision was reached by the Project Steering Committee, and approved by the ICPDR to phase out this financial support over time, so that each country became responsible for funding its own ICPDR participation, in addition to paying annual dues. This decision and the successful follow through by the countries, created a strong country buy-in and an easier transition to self-sufficiency post-DRP.

D. The evolving situation in the former Yugoslavia provided a challenge and opportunity for the DRP / ICPDR. During the project 2nd phase, the project team were able to shift financial support in order to strengthen assistance to the newly formed Bosnia-Herzegovina, including the placement of a full time project support person within the Ministry of Foreign Trade and Economic Relations.

E. The project included two complementary outputs on water tariffs and charges that were logically combined. The effort took an additional adaptive turn when it was realised that many municipal utilities lacked the basic data and software tools

to determine optimal tariffs and charges based on operation and capital costs. So the consultants on this set of activities piloted use of the ASTEC model.

The DRP also envisioned a close cooperation between the DRP and associated projects in the region: the BSERP (UNDP implemented) and the NRF, (World Bank implemented). These three projects formed the three legs of a Strategic Partnership for the Danube/Black Sea region. The strategic partnership had difficulties through its early years, and cooperation with the World Bank did not achieve expectation. Nevertheless, cooperation between the UNDP Danube and Black Sea projects has expanded significantly in the final two years of both projects, in particular with the decision to have the DRP team leader take on an overall management role for both projects.

3.2.1 The general implementation and management of the UNDP/GEF project by the Project Management in terms of quality of inputs and activities, adherence to work plans and budgets, major factors which have facilitated or impeded the progress of project implementation

Annex 1 includes a breakdown of each of the expected project outputs, set against achievements. What follows are a summary set of comments on the general implementation and management of the project by the PCU.

Quality of inputs and activities

Inputs in the case of the DRP have been primarily technical consulting and training oriented. The PCU should be given high marks for the quality of international and local experts used across the project activities, particularly in relation to WFD implementation.

Adherence to work plans

The DRP project team successfully adhered to work plans. Faced with a large and ambitious set of expected outcomes, and nearly 160 activities, the PCU did an admirable job in completing expected tasks.

There has been strong regional appreciation of and support for the flexibility that was permitted during the implementation of the DRP. The team was also able to articulate, and receive steering committee approval, for adaptive strategies that sensibly deviated form the original ProDoc expectations. Adaptive strategies include:

- The DRP was able to accommodate changes resulting from the changing political landscape, notably regarding EU accession and WFD implementation
- The DRP received Steering Committee and ICPDR approval for the gradual reduction of support to countries for attendance at EG meetings
- DRP was able to respond in a timely manner to requests from ICPDR.
- Modification of the work plan saw the emphasis on dealing with water tariffs and charges (Outputs 1.6/1.7) being aimed at plant managers rather than at the national level.
- Appropriate tools were developed to help bring financial stability to a fledgling industry in the Middle and Lower Danube.

There were, nevertheless, some areas where deadlines were not met, and expectations not realised. For instance, the effort to get Danube countries to establish mandatory or voluntary bans on the use of phosphates in detergent (Output 1.8) only got moving during the project second phase and only began to demonstrate

results during the final months of the project. In addition, as noted above, the project envisioned greater and more rapid achievements in the development of indicators (Output 4.1). Finally, the project took a slow and overly cautious approach to meeting the expectations of Output 4.4, to elaborate opportunities for nutrient trading.

Budgets

The financial aspects of the project were handled exceptionally well. The DRP has received notable and justified praise from virtually all stakeholders for the professionalism in which it handled project financial aspects. Time and again, stakeholders and participants noted that daily subsistence allowances (DSA's) and consultancy payments were handled quickly and professionally. In addition, the negotiations that took place between the DRP and suppliers over contracts and costs were judged to be handled well. The team was well aware of average consultancy costs – within the region and internationally, and kept costs in line with expectations.

The one case where budgeting was not closely monitored was in implementation of output 3.4. In this case, budgets were largely managed by the consulting team tasked with carrying out the exercise, (senior lawyers at Resources for the Future, New York University, and the Regional Environmental Centre). The loose oversight of Output 3.4 is somewhat understandable given it was perceived to be an activity separate from the rest of the project, and its budget preset for the project team.

The PCU efficiently handled the procurement of local consultant assistance and the management of meetings and workshops. Aiding significantly was the opportunity for the team to work using an imprest account with UNOPS. This accounting practice enabled up to $60,000 during phase 1 and $100,000 during phase 2 to be held in a Project-managed account and regularly replenished. The use of imprest accounts can greatly increase procurement efficiency and project responsiveness in large multi-country transboundary projects where frequent workshops and travel create lots of procurement actions with last minute changes.

There was a planned step down in financial support for some of the public communications efforts – such as Danube Day and Danube Watch. In addition, and as noted above, there was a gradual phase out of funding for national participation at EG meetings. Interestingly, and somewhat paradoxically, the reduced DRP support for these activities spurred greater support from the riparian countries and other stakeholders, including industry. This suggests that the DRP successfully managed a phase-down approach that may be replicable elsewhere

A marked decline in the value of the US dollar versus the Euro during the project period posed a significant challenge for project management. The DRP project managers had to respond to an effective (20%) budget cut. As a result, some envisioned activities were narrowed, so for example agricultural pilot studies only took place in Serbia.

Major factors facilitating/impeding progress

The DRP progress was greatly facilitated by external factors, in particular the expansion of the European Union. When the GEF IW activities on the Danube commenced, two of the thirteen countries, (Germany and Austria) were members of the EU. At project conclusion, there are eight, now including also Slovakia, Hungary, Slovenia, Czech Republic, Bulgaria and Romania. Meanwhile, Croatia, Bosnia – Herzegovina and Serbia have expressed interest to join the Union. All of the Danube riparian countries, including Moldova and Ukraine, have approved through the ICPDR their intention to use the EU WFD as the guiding legal mechanism for regional coordination on Danube water quality. Acceptance of the WFD as a legally

binding mechanism for Danube water quality management has enabled the DRP to achieve considerable success in the harmonization of riparian government policies. The WFD has proven a significantly stronger motivation than the Danube River Protection Convention for achieving regional coordination and getting riparian countries to take measures to clean up and protect the Danube River.

A second substantial external factor has been the economic downturn that many of the downstream Danube countries faced during the 1990's as they adopted market economies and shed inefficient state run enterprises. While a noticeable economic recovery has been underway for the last 7 years, especially amongst the new EU members, the dramatic drop in agricultural production remains. Lower agricultural production and the closing of inefficient state run farms have caused considerable economic hardship in the rural areas of the downstream Danube countries. It has also led to reduced fertilizer use, and a reduction in farm pollution runoff. The extent of impact that agricultural economy woes have had on Danube and Black Sea water quality are difficult to measure. However it can be surmised that the DRP's success in meeting its targets for nitrogen and phosphate reduction are largely as a result of this reduction in farm inputs, coupled with continuing measures across the breadth of the basin to improve wastewater treatment systems.

A third 'set' of factors that have facilitated progress are internal to the project effort. These include a well-functioning project team, and strong cooperation with the ICPDR Secretariat. It is clear in contrast to some other GEF projects that the relationship between the DRP PCU and the ICPDR Secretariat has been very positive and their actions mutually reinforcing. The project has likewise benefited from an engaged and supportive project steering committee, which is wisely comprised of the Heads of Delegation of the ICPDR. Several of these HoDs have been involved in steering the project since its inception and have been instrumental in its success.

3.2.2 Adequacy of management arrangements as well as monitoring and backstopping support given to the project by all parties concerned

Management and monitoring relationships are of several types: (a) PCU management, including supervision of the experts and consultants hired to assist; (b) Support and supervision from the project steering committee and ICPDR, and (c) support and supervision from UNOPS, UNDP and GEF.

In the first instance, there has been a high degree of professionalism with respect to the relationships between the PCU, external project consultants, and project participants in the countries. Many interviewed during the evaluation mission expressed their strong satisfaction with the excellent manner in which the PCU responded to questions and issues, and handled the procedural aspects of the project. Capable experts were hired, and their outputs were of generally high calibre.

The management arrangements between the DRP PCU and the ICPDR functioned very well. It is useful to note that this can be a difficult relationship in GEF IW projects, yet in the Danube region they were able to forge a successful partnership. GEF IW project objectives typically include not only support for the creation and operations of transboundary water commissions, but also measures to achieve a variety of environmental objectives, including capacity building for NGOs, which may extend beyond the authority that commissions like ICPDR are given by the riparian countries. So the PCUs have a dual role – both to assist the commissions and also to achieve a set of separate objectives. Consequently, there is an inherent dynamic tension in each of these projects. Is the PCU an independent player? Or should it be primarily a support mechanism for the Commission Secretariat? The DRP management expertly juggled this dual role. ICPDR Secretariat and Expert Group members were directly supported, in particular to meet the WFD requirements, while other outputs, (see 1.5 – industrial reform and BAT, 1.6 & 1.7 - efflu-

ent tariffs and charges, 3.4 – public participation, 4.4 pollution trading) were achieved independently.

Concerning the management of UNOPS and UNDP, it is our view that the executing and implementing agencies provided appropriate backstopping to the DRP. The (correct) perception was that this was a well-functioning project team that did not need close and constant supervision.

UNDP management arrangements and execution

UNOPS provided project support as needed, and left the PCU to operate its day to day affairs independently. The use of an imprest account allowed the DRP PCU to handle its financial affairs well, and the mechanisms for replenishment through UNOPS worked fine. The imprest account flexibility provided to the PCU enabled more streamlined budgeting and expenditure procedures, and should be replicated in future GEF projects (dependant on PCU capabilities). The PCU noted the financial transfer and budgeting arrangements with UNOPS worked well – with the exception of a period in summer of 2004 – when the conversion to the Atlas financial software caused some delays at UNOPS. It was mentioned by the DEF that they had experienced some delays in payments from UNOPS, especially during the summer of 2004, and the payment delays during that period impacted upon implementation of the first tranche of small grants.

The high regard held by UNOPS and UNDP for DRP PCU management capabilities can be seen in the way that the DRP team was frequently asked to provide mentoring and project management assistance to other GEF IW projects.

ICPDR Management and Execution

The focus of this evaluation is the DRP, not the execution of the ICPDR, never the less, the symbiotic relationship between the ICPDR Secretariat and the DRP suggest a few comments are in order.

One of the critical aspects of ICPDR execution with respect to the DRP support mechanism has been development and implementation of an 'Exit Strategy' which sought to smooth the transfer of responsibility on various project initiatives during the final years of the DRP, to improve the chances for the ICPDR to function independently and increase the likelihood of long term sustainability. These final years bring to a close 15 years of GEF support for improved water quality for the Danube. The annual expenditure of $US 2-3 million is ending, and with it the ability to utilise an array of local and international experts to assist in capacity building for river basin management. The DRP and ICPDR agreed in 2004 to develop jointly the exit strategy – serving as a road map for placing the ICPDR and its secretariat in a firm position to manage their activities independent of the GEF after mid-2007. An Exit Strategy was developed, and agreed to by the ICPDR HoDs. It called for continuing and increasing the pace of reduction in DRP support for country participation in the EGs. The Strategy also sought to articulate opportunities for future funding opportunities. The strategy documented also mentioned the need for ICPDR to decide the breadth of Secretariat activities, and whether there was a project management role that the Secretariat should play (for example in relation to the GEF supported sub-basin initiatives for the Sava).

Future funding remains an issue for the ICPDR to resolve. The member states have indicated they will provide sufficient funding for basic Secretariat responsibilities. Extra funding for special projects such as the Danube River surveys, and for public relations / communications activities like the Danube Day, will require external funding sources. ICPDR is developing a private sector support mechanism, and is in partnership with Coca Cola and the Alcoa Foundation. The strategy for expanding and defining this private sector support base is in progress.

Developing and implementing an Exit Strategy should be considered as a standard feature of GEF IW projects, especially in cases where there have been long-term international investments, and a corresponding need to start early the process of supplanting international support with regional/local support.

ICPDR execution of WFD implementation has also been an important management issue. The development of the Danube 'Roof Report' has received strong praise from those who participated – and the European Commission on the receiving end.

A remaining question at project's end is the extent to which the ICPDR will take ownership of the written outputs of the DRP and continue to make reports available. For instance, it is unclear whether documents like the DRP produced *Wetlands Guidance Manual* will be made available. It would be useful to know that the ICPDR will establish a project archive where the DRP publications can be housed and accessed.

3.2.3 Institutional set-up through the ICPDR and various Expert groups and the degree to which it has encouraged full involvement of the countries.

GEF IW projects typically work through a sequence of activities that commence with TDA/SAP development, and ideally include formal agreements amongst basin countries to set up international waters commissions, whose purpose is to implement the SAP – as well as to develop a formal regional convention. Expert Groups, and some times 'Centres of Excellence' are also established, to provide technical support to Commission decision makers.

The ICPDR expert group format has been very successful. The ICPDR EG structure serves as a benchmark for how expert groups can and should function. The EGs for the ICPDR are comprised of national experts from the contracting parties and also representatives of observer organisations (NGOs for example). The purpose, financial basis and country ownership of the ICPDR EGs have continued to evolve and improve, in keeping with the increasing importance of WFD implementation across the basin and with the decision to phase out DRP financial support for EG member participation. Currently, the following 4 permanent and 3 ad hoc EG's are in place:

- Expert Group on River Basin management (RBM EG)
- Pressures and Measures Expert Group (PM EG)
- Monitoring and Assessment Expert Group (MA EG)
- Expert Group on Flood Protection (Flood EG)
- Information Management and GIS Expert Group (ad hoc IM+GIS EG)
- Public Participation Expert Group (ad hoc PP EG)
- Strategic Expert Group (ad hoc S EG)

Recognising the centrality of WFD implementation, the RBM EG, PM EG and MA EG have all been involved in the development of the Danube 'Roof Report'. There is also one task force established, the Danube – Black Sea Joint Technical Working Group – focused especially on nutrient impacts and reduction strategies for the Black Sea.

Expert Groups stand a strong chance of being successful when: (a) the countries are funding their own contributions and participation: (b) the persons participating in the EGs are indeed technical experts rather than senior managers; (c) there is low turnover of experts, allowing greater continuity and improving trust and communications across the participants. The ICPDR EGs have succeeded in all three of these areas. The EG arrangement for the ICPDR has also greatly benefited from the participation of representatives from organisations that have ICPDR observer status. The Danube Environmental Forum and the WWF are two that have been active participants in the EGs.

3.2.4 Inputs of the Governments of the thirteen countries at national and local levels.

National and local government inputs can be by way of financial contributions, through assigning experts to participate, and also by adopting strategies and policies stemming from project activities. In all three areas, there is evidence of considerable success for the DRP.

The participating countries and the DRP PCU have not set a monetary value for the country in-kind and direct contributions to the project. While unfortunate this is understandable, recognising the intricate mix of national, EU, ICPDR and project-related activities. It is easier for the countries to quantify their contributions to the ICPDR – based on annual dues, and the time and travel of HoDs and EG participants. Already this pushes the joint in-kind contributions to more than US$ 3 million per year. The agreement by all 13 Danube countries, plus the EU, to fund the ICPDR and its Secretariat at levels sufficient to continue and slightly expand operations bodes well for the future sustainability of this regional initiative.

While the level of interest and support for the ICPDR appears strong across all participating countries, there exists a quite normal variation in country involvement and the level of engagement of ICPDR HoDs and EG members. It is noteworthy that even among those countries not (yet) on track for EU membership, including some who have gone through considerable economic and political upheaval, support for and involvement in the ICPDR has been maintained.

3.2.5 Responsiveness of project management to changes in the environment in which the project operates

Responsiveness can be considered one of the key factors in the successes of the DRP, as the team responded very successfully to the priority shift of many Danube countries towards implementation of the EU WFD. Responsiveness was also apparent in the increased priority given to coordination with the BSERP (GEF-Black Sea) and World Bank under the Strategic Partnership toward the later project stages. A third successful adaptation of the project management was the increasing support given to Bosnia-Herzegovina during the last several project years. This support included the detailing of a full time resource person for the project. The B-H case was a special one, reflecting a unique need to fill the gap in authority over transboundary waters issues in B-H as a result of the split federal government structure. Moldova and Ukraine would have similarly welcomed a full time resource person, however this was not possible within the available budget and would not have enabled those two countries to achieve the degree of country ownership that they have achieved.

3.2.6 Co-operation among project partners (UNDP/GEF, Project Team, ICPDR, National Governments and international and national organisations and NGOs. specifically with regard to the integration and support of ICPDR.

Cooperation amongst the key project participants and major stakeholders was excellent. It is rare when a project can engender such an extent of support across a wide spectrum of participants as has been the case with the DRP. Some may attribute this high level of cooperation to be a fortunate alignment of the project focus with EU expansion. While external pressures were key determinants, the cooperation was also enabled through leadership – by DRP and ICPDR management, and Danube riparian governments. As with many GEF projects, the extent of national government involvement and support across the Danube countries has varied, and there have been limited contacts outside of the water and environment ministries. To their credit, the DRP management recognised this limitation early on – and included in the 2nd Phase ProDoc an output 2.1 that sought to encourage the Danube countries to develop inter-ministerial mechanisms to involve other perti-

nent ministries, which in particular meant reaching out to agricultural interests and flood control managers. The inter-ministerial effort has had some successes, such as a June 2006 workshop on hydromorphological alterations that included the participation of flood control managers, and the Final Wetlands Workshop – which brought together diverse groups and agencies (academics, IGOs, government, international and local NGOs).

3.3 Project impact

The DRP has had a major impact in the region, and even globally. It has enabled the ICPDR to begin implementation of the WFD and is now the benchmark for European transboundary water bodies. The project has helped the ICPDR to take a holistic look at the pressures facing the river. Thanks to the DRP, evidence has been given on the significant eutrophication problems caused by agricultural inputs, the important flood buffering attributes of riverine wetlands, and the critical need to improve tariff and charge schemes for water and sanitation systems. Due to the DRP, there is a wide and expanding array of environmental NGOs who have increased their awareness and involvement in the effort to clean up and protect the Danube and its tributaries. Through the DRP, many of the Danube countries have enhanced their policies and procedures for involving the public in water resource decision-making.

Even after 15 years of UNDP/GEF support, it is difficult to discern the extent to which the project has directly impacted water quality in the Danube. The goal was to reduce nitrogen and phosphate emissions into the Danube River by>20% and >30%, respectively. This goal was achieved, and the northwestern shelf of the Black Sea is clearly exhibiting signs of restoration. It is impossible to determine how much of this was as a result of the DRP, but it can be surmised that most of the benefit came from reduced agricultural production and improvements in wastewater treatment in the region. Nevertheless, the DRP has helped to set in motion a series of actions across the region whose long-term benefits in water quality improvement should not be in doubt.

While there is ample evidence that the DRP had positive policy and institutional impacts on the downstream (GEF eligible) countries, there is some question as to the extent that the DRP also pushed the upstream Danube countries, in particular Germany and Austria, to strengthen further their policies and enforcement measures to reduce nutrient discharges into the Danube. While much of the past decade or so of effort has correctly been directed towards bringing the downstream country policies and protection measures into line with their upstream neighbours, from now on, in the context of being equal partners within an EU-driven policy framework, the impetus will fall on all parties to take further actions to improve Danube water quality.

3.3.1 Achievements of the project against the original objectives, outputs and activities as detailed in the Project Document and the Project Implementation Plan.

An overview of the evaluation findings regarding achievements is set out in this section. Further information is provided below in the discussion on sustainability, and then in Annex 1, which sets in tabular form the outcomes and achievements for each of the project outputs.

To consider the achievements of the DRP it is useful to recall the overall objective of the DRP, as spelled out in the first phase ProDoc: "The long-term development objective of the proposed Regional Project is to contribute to sustainable human development in the DRB and the wider Black Sea area through reinforcing the ca-

pacities of the participating countries in developing effective mechanisms for regional cooperation and coordination in order to ensure protection of international waters, sustainable management of natural resources and biodiversity". The 1st Phase ProDoc was developed in June 2001. Six years later, there is evidence to suggest that capacities have indeed been expanded in the Danube countries and mechanisms for regional cooperation have been institutionalized.

Objective 1

- n overview of the e valuation findings at it could have a negative consequence of f d be made poierational n thw region.l r ofObjective 1 was widely praised as achieving sustainable ecological conditions, verified through all ICPDR countries having developed policies and legal instruments for sustainable water management and nutrient reduction. In particular, harmonisation with the WFD has become the driving force in the development of policies and legal instruments for improved water quality management on the Danube and its tributaries

- In general, while the project outputs and activities have been completed, achievement of the overall objective remains a work in progress, as the policies and legislation developed must now be implemented Many of the new EU countries achieved derogations and extensions in WFD implementation because of the high cost of meeting urban wastewater treatment requirements. Nevertheless, all of the Danube EU countries are establishing basin management plans and districts and have agreed to issue a joint set of plans for the Danube. In addition, the non-EU countries have all indicated their interest to harmonise with the WFD requirements and most have taken initial legislative steps in this direction.

- **Output 1.1** involved support for implementation of the WFD as well as assistance to develop sub-basin initiatives for the Tisza and Sava rivers, as well as support to the ICPDR on upgrading their geographic information system (GIS) tools, and capacity building and training on biological sampling and analysis. The highlight of this effort is surely the work done in support of the ICPDR and together with the 13 Danube countries to produce the Danube 'Roof Report', (entitled The Danube River Basin District, Part A – Basin wide overview, 18 March 2005). The Roof Report has been highly acclaimed as the best of the transboundary reports presented to the EC under the WFD, and is a fine accomplishment for all participants. All told, there were 58 project activities carried out to assist the ICPDR and countries in their implementation of the WFD for the Danube.

- The DRP can also be praised for its achievements on the sub-basin initiatives, including political approval by all of the Sava riparian countries for a Framework Agreement for the Sava River Basin and the Sava River Commission, and completion of the Tisza river basin analysis report as the precursor to the Tisza WFD river basin management plan. The DRP also met expectations with its assistance to the ICPDR for a Danube GIS Prototype.

- **Output 1.2 and 1.3** were grouped together to focus on the development and strengthening of environmental protection policies in the agricultural sector as well as the implementation of best agricultural practices Activities included assistance to partner countries on agriculture policy, in particular with respect to implementation of the EU Nitrates Directive, eight pilot studies of farm best management practices carried out in Serbia, a data collection and inventory effort designed to provide information for the WFD Roof Report and support to ICPDR for upgrading the nutrient loading model – MONERIS.

- During Phase I of the DRP, an analysis of point and non-point sources of pollution from agriculture was undertaken, information on the use of agrochemicals was produced and specific policy and legal measures were advanced to assist the participating coun-

tries in meeting their obligations to reduce agricultural point and non-point source pollution. Particular emphasis was placed on implementation of the Nitrates Directive (**EC 91/676/EC)**, with all of the Danube Basin EU countries adopting legislation to implement this directive.

- During the project second phase, eight pilot farms in Serbia received technical assistance on best agricultural practices. A visit to several of the farms by the evaluation team suggests that the DRP support was well received, especially the study tour to Denmark. Unfortunately, few of the on-farm improvements were carried out, due to a lack of available financing. As is usual in UNDP/GEF capacity building projects, there was no budget earmarked to support the introduction of BAPs, and no moneys were provided by the Serbian government. In a tight and highly competitive farming environment these small farmers were reluctant to put their own financing into BAPs that were not required by the government, especially when they had other priorities with direct economic gain, such as more cattle, a tractor, seeds and fertilisers, etc. In the absence of a compelling requirement and/or financial support, farmers will likely continue to avoid introducing BAPs unless they see a direct economic benefit.

- The Agriculture effort included awareness raising activities at more than 100 workshops with more than 2500 participants. There were also a series of reports and inventories developed on policy, legislation, pesticides, fertilisers, manure handling and best agricultural practices.

- MONERIS was upgraded, with improvements to the documentation, and to make the model WFD compliant. As with all models there are limitations to its use, for instance as an enforcement tool, however in the absence of precise nutrient loading data across the basin, MONERIS is becoming an effective tool to model Danube inputs and estimate nutrient fluxes. ICPDR should continue to use and refine the MONERIS model, making it more user-friendly, and translating the documentation into local languages.

- **Output 1.4** was focused on wetlands rehabilitation and appropriate land use. It included development of a methodology for land use assessment, and selection of three pilot sites – Zupanisjski canal, near Budakovac village, Drava sub-basin Croatia; Lower Elan valley, Prut sub-basin, Romania; and Olsavica valley, Tisza sub-basin, Slovakia - to test the methodology through implementation of specific site-based activities. The pilot studies had varying degrees of achievement. Results were achieved in Slovakia, whereby the pilot project was promoted as a success story to illustrate a mechanism for changing land use. They trained 300 participants at 10 workshops throughout the country, gaining national recognition eventually affecting national planning – i.e.. Rural development plan. In Croatia, the project involved re-flooding a wetlands area surrounding a Sava oxbow that had dried up due to the canal construction. In February 2007, after a wait of several years, the Ministry of Irrigation finally funded the site planning study and appears ready to allow excavations. Interestingly, there has been local farmer support for the wetlands restoration pilot, out of recognition that the loss of the wetlands has also affected the groundwater table and by extension their irrigation options.

- **Output 1.5** concerned industrial policies and reforms. An emissions inventory was created, and in the 11 (GEF eligible) Danube countries a review of industrial policies was carried out – detailing gaps between existing legislation and enforcement in the countries and the EU requirements for industrial pollution control. The team also commissioned a road map for implementation of best available technologies (BAT) in Serbia & Montenegro, Bosnia & Herzegovina, Moldova and Ukraine. The anticipated outcomes of this effort included enhanced industrial policies in the 11 Danube countries, taking into account WFD requirements and also the IPPC directive requirements. There were also five reviews of specific industrial complexes developed as case studies on the implementation of BAT.

- The inventory activities were well considered and can help the 11 countries consider additional steps necessary to better control industrial emissions and meet the requirements of the EU IPPC Directive. The road map effort for Serbia & Montenegro, Bosnia & Herzegovina, Moldova and Ukraine should help these countries to commence introducing IPPC, which is especially of interest to Serbia and Bosnia & Herzegovina, who aspire to EU membership. The scale of the industrial activities were limited and somewhat overshadowed – both by the DRP's focus on nutrients and to a great extent by the EU's own activities in developing BAT reference materials for implementation of the IPPC directive.

- One of the real challenges in the region will be how to manage IPPC and BAT requirements for polluting facilities that are not economically viable, yet whose closure would bring sever hardships to workers and their communities.

- **Outputs 1.6 & 1.7** provided technical assistance to the DRP countries in the area of tariffs and water pollution charges. Starting during Phase 1 with a review of current conditions for municipal water and wastewater utilities in eight of the Danube counties, the effort then evolved into a series of workshops coupled with municipal policy reform recommendations. The effort also included development and testing of the Accounts Simulation for Tariffs and Effluent Charges (ASTEC) model that provides a tariff adjustment tool for municipal water and waste utilities.

- A visit to the city of Karlovac in Croatia provided evidence that the ASTEC model can be put to good use. Karlovac is the first Croatian city to receive approval for water and wastewater treatment funding support under the EU Instrument for Structural Policies for Pre-Accession (ISPA). It has been working with the ASTEC model for several years and has appreciated the availability of this tool as they now engage in a major expansion and improvement of their water and wastewater systems, with a significant increase in debt to service. A translated model and instruction manual would greatly aid expanded use of the model in Karlovac, in Pitesti, Romania, site of another of the pilots, and throughout the region.

- The expected outcomes for **Output 1.8** were to achieve a basin-wide policy on P-reductions, and development and implementation of a Voluntary Agreement on the Phase-out of Phosphates in detergent, leading to a projected 24% reduction of P from point sources of pollution and 12% reduction in total P loads from the DRB to the Black Sea. Activities included a review of detergent use in the DRB and a stakeholder meeting.

- The goals for P-reduction in detergents have not yet been achieved. No basin–wide policy on P-free detergents has been reached, and the one voluntary approach instituted (Czech Republic) was deemed a failure so the Czechs are now planning to shift to a mandatory programme. Romania may also take steps to instigate P-free detergent regulations, but this has not yet been achieved. Romania has recognised that the strong push from ICPDR has been a key factor in the progress being made. Industry and governmental officials are planning to convene a working group and there are high expectations that the country will move towards P-free detergents. Of considerable interest is that about 20% of detergent production in Romania is already P-free, but it is bound for the export market. If Romania and the Czech Republic adopt mandatory restrictions on phosphate detergents, they will then be joining Germany and Austria as countries with such mandatory requirements. Although various actions were taken at national levels to raise public awareness of the issue, overall, the topic is considered still to have a low priority for general public in some countries (e.g. Bulgaria and Moldova).

- The EU Commission has prepared a white paper on phosphates in detergent. It is expected that any EU-wide measures for P-reduction will take years to become legislation. However, the EU has recognised the work carried out in the DRB and concurred

with the policy recommendation to countries to proceed with national legislation and/or further voluntary agreements. The EU has indicated that in the absence of EU legislation this is a justified and proportionate approach.

Objective 2

- Objective 2, focused on capacity building, and was to be verified through fully operational institutional and organizational mechanisms in each ICPDR country, for transboundary cooperation, improved water quality monitoring, emission control, emergency warning, accident prevention and information management.

- The evidence suggests that each of the participating countries has made progress in all areas mentioned above, however it is difficult to determine, and unlikely, that they have all achieved "fully operational" institutional and organizational mechanisms. Having laws and institutions in place is the first step. Having these laws then implemented and working effectively is another. Especially in the areas of emission controls and accident prevention, there is much yet to be done in most of the Danube countries.

- **Output 2.1** sets expectations for inter-ministerial coordination (IMCM) and also identifies a set of special actions to enable Bosnia-Herzegovina to fully participate in the ICPDR and its EGs and to participate fully in the process of Danube region WFD implementation.

- The BiH support was highly successful. Because of the federal / split system of governance in BiH, there was a real problem with ICPDR ands DRP coordination, which was effectively dealt with by the hiring of a country coordinator. Very much as a result of the support they received from the DRP, BiH was able to produce its first river analysis report and to contribute directly to the development of the Danube Roof Report,

- The IMCM effort was generally successful. Analyses were carried out for ten countries and recommendations for six countries were subsequently agreed. There are no committees established in Moldova and Ukraine, although work is still in progress in Moldova.

- The expected outcomes for **Output 2.2** focus on improved water quality monitoring. The effort included upgrades to the transboundary monitoring network (TNMN), a biological database and developing a monitoring roadmap for Bosnia - Herzegovina.

- This objective was achieved with beneficial consequences for the region, especially with regard to the implementation of the WFD. Several aspects of the TNMN were strengthened in order to comply with the WFD: defining sampling sites and frequency, biomonitoring, setting water quality objectives and establishing data reporting procedures. In some countries, TNMN methodologies are also being applied outside of the DRB.

- The implementation of the WFD introduces monitoring and indicators, notably with respect to riverine biology, that are new for much of Europe. Thus, project components, such as the intercomparison for macrozoobenthos as indicators for water quality, generate widespread benefits within the DRB. DRP involvement provided important opportunities at a technical level for networking. The River Quality Scheme, an output from the Slovakian Workshop, was applied in the Tisza River Basin. A database was designed to deal with biological indicators monitoring as part of the TNMN and Danube surveys.

- Nutrient standards in the DRB have been reviewed, but harmonised water quality standards have not yet been agreed.

- **Output 2.3** dealt with accident prevention and control (APC). There were three subsets of activities, dealing with emergency response and communications, special issues with regard to refineries, and the problem of contaminated sites in flood control areas.

- Achievements include standard forms and web-based communication solutions for emergency information exchange in each of the 13 country accident alert centres. Training programmes (2) were carried out for the checklist methodologies on refinery risk and contaminated sites. There was also an ARS inventory carried out for 261 contaminated sites, with 157 sites evaluated.

- Checklist methodologies for industrial sites and contaminated sites in flood-risk are generally viewed as valuable tools, but implementation in the region should be mandatory. There also remains a need to update the inventory of industrial sites because many countries still have insufficient data.

- **Output 2.4** concerns DANUBIS, the information database managed by the ICPDR. Expectations were that the DRP would help by providing recommendations on the restructuring of DANUBIS, help to develop standard operating procedures and guidelines, and help to ensure that each of the countries has staff that are proficient at using and imputing into the system.

- A significant upgrade of DANUBIS has been achieved, both with respect to hardware and site architecture. Notably, the facility has been made more user-friendly. At project end, training has taken place, recommendations for system upgrades have been provided, there are 630 registered users and web hits have increased five-fold from 2001 to 2005, with an average of 18,000 hits per month from September 2005 – September 2006. There is widespread support and appreciation of DANUBIS, which is considered a valuable tool by members of ICPDR EGs and NGOs.

- Implementation of the Danube – Black Sea MOU is included as **Output 2.5.** Expectations were that this effort would enable a joint policy-making framework to be established and functioning in the DRB and Black Sea region for reduction of discharges of nutrients and hazardous substances into the Black Sea.

- Achievements (jointly with the BSERP) include the re-establishment of the joint technical working group, which held four annual meetings since 2002. There was also a Danube – Black Sea Strategic Partnership Stocktaking meeting organized in 2004, with participation of 80 high level country representatives of the ICPDR, BSC, GEF, UNDP and other experts. Close association of the DRP and BSERP efforts was greatly enhanced at the end of 2004 with the decision to appoint the DRP CTA as overall manager of both projects.

- **Output 2.6** consists of activities focused on capacity building and training. In particular under this output, the project provided support for 11 of the Danube countries to participate at regular ICPDR EG meetings – with 80-100 persons supported per year. Additional workshops were held for capacity building of EG Chairs and the Secretariat, workshops on the implementation of the WFD, and a workshop to discuss the post-DRP future activities of the ICPDR.

- These activities were successfully completed and have enhanced regional collaboration, especially as regards WFD implementation. Apart from providing technical assistance to experts and officials responsible for implementation, they also served to inform the general public about WFD, an important consideration in the non-EU and non-accession countries.

- The Expert Group meetings, in contrast to Regional Activity Centres for example, provide an excellent mechanism for achieving regional collaboration along thematic lines.

Financial support from the DRP ensured that experts from every DRB country could attend ICPDR EG meetings. Thus, each country had the opportunity to contribute to discussions and planning about pollution and water management issues, as well as to learn from other experts in the region. For most countries, the funding decreased over time. However, country ownership in the process was deemed vital, and all but a few nations have maintained full participation at their own expense. Moreover, they have agreed to sustain ICPDR EG participation. The means to support financially the continued attendance of experts from a couple of countries is being explored.

Objective 3

- Objective 3 sought to raise significantly the public involvement, by actively engaging civil society. The verifiable indicators established were to have a self-sustaining Danube Environmental Forum and for 80% of all of the small grants projects run through the DRP to show sustainable results.

- **Output 3.1** focused on reinforcing the Danube Environmental Forum, a regional NGO network that had been developed during the previous GEF Danube project.

- The outcomes have generally been attained. The DEF was successfully re-activated during the DRP and played very useful roles as an ICPDR observer, a vehicle for public awareness raising and helping NGOs across the region participate in the small grants programme. The DEF has formulated a Water Policy Team, and members participated in both WFD implementation and ICPDR EGs.

- One role of DEF is to serve as a bridge between ICPDR and the public. This is achieved through their help with communications: leaflets, newsletters, and brochures in national languages (translations and revisions for the general public are based on DRP and ICPDR communications materials). DEF also played an active day in organising Danube Day in some countries.

- DEF had active participation at the national level in execution of Objective 3.4, serving as a member of the inter-sectoral working group charged with developing a national implementation strategy. DEF members were also deeply involved in the small grants effort under DRP, with some DEF members awarded SGP projects

- **Output 3.2** was designed to administer a small grants programme. Two calls for projects were held – in 2004 and 206. All told, 120 national small grant funded projects were launched, led by national environmental NGOs. There were also 12 regional small grant projects carried out, involving 35 NGOs working on transboundary problems. The DRP utilized the management services of the Regional Environmental Centre (Hungary) to administer the SGP.

- The SGP has been a very successful project component, and in many case cost-effective due to the enthusiasm of the NGOs concerned and their ability to raise co-funding. There was strong support amongst the participating NGOs and other stakeholders for the opportunity afforded by the small grants effort, and also for the manner in which it was managed by the DRP and the Regional Environmental Centre (REC).The DRP commissioned a review after the 2nd set of small grants projects, which assessed a subset of projects, and indicated a great many successful outcomes and the prevalence of public awareness raising activities over technical studies. The independent assessment of the small grants programme was not extensive enough to determine to what extent the DRP met its indicator of 80% of the projects showing sustainable results. At this stage it is still too early to see the full benefits as the small projects are like throwing a stone in a pond – the ripples spread out from the centre. Small projects in one village were noticed by surrounding communities, generally with the desire to replicate the effort. National attention was achieved for some projects.

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- The DRP achieved its objectives with respect to **Output 3.3** on communications and public awareness. The list of activities and achievements is impressive with over 100 articles in the regional and local media, more than 70 workshops organised – bringing together more than 1700 participants, and promotion of the annual Danube Day, which grows in stature and public interest across all 13 Danube countries. Although the direct impact of many DRP products (Danube Watch and Fact Sheets) has been limited, no-tably due to language issues, NGOs in the region make use of the material - translating and rewriting in a more simplified manner for public dissemination in various national languages. DRP is commended on the scope and variety of seminars and workshops that have been undertaken with considerable enthusiasm. The various sessions have been aimed at a range of experts, stakeholders and the public. Penetration into civil society has been successful when NGOs have been closely involved (e.g. small grants programme and component 3.4).

- The public participation effort (**Output 3.4**) involves enhancing public participation to address Priority Sources of Pollution ("hot spots") through improved access to informa-tion in the frame of the EU WFD. Expected deliverables by project end included a needs assessment report, national and operational teams for public participation established at respective national levels, improved structures for information provision, appropriate legal framework established, tools developed and capacities to provide access and/or to demand access, enhanced; and local demonstration projects implemented and pro-ject reports submitted.

- Five pilot projects were managed, with manuals and training workshops developed for each, two study tours were held (US and Netherlands), two basin-wide workshops were carried out – including 90 country representatives, and a final workshop was held.

- An implementation plan was the subject of some concern early on for the DRP and ICPDR because of its comparatively high cost and independent status. This component was an add-on to the DRP and the project implementation was not always smooth. Management devolved to REC International, with the advantage of having access to their NGO network, but with the disadvantage of high overhead costs. The agreement during the second phase to refocus towards implementation of the EU WFD (as well as Aarhus) brought this effort into alignment with the rest of the DRP.

- The overall impression in the region is that the Objective has been met. Although implementation would be an obligation under the Aarhus Convention, the DRP facilitated the process, notably in countries where there was no prior experience in this domain. In Bulgaria and Romania, the DRP managed to achieve successful collaborations between government and NGOs. Positive benefits have been the production of manuals for government use and brochures for NGOs and the general public on how to go about getting access to information and becoming involved in environmental decision-making. Much more information is accessible on the Internet in these countries, following assistance with Web Site development. Reactions from the beneficiaries to the manuals that were developed on public access, and to the pilot activities undertaken, have been very favourable. In particular, the work done in the pilot for Bosnia-Herzegovina has been highlighted as providing useful guidance to the government and improved access to the public.

Objective 4

- Objective 4, (monitoring, evaluation and information systems), was to be verified through a "considerable" increase in knowledge on sedimentation, transport and removal of nutrients and toxic substances, and acceptance at national and regional levels of economic instruments to encourage investment for nutrient reduction. Specific verification sources include projects and measures in place to reduce toxic substances in the Iron Gates reservoir, and endorsed wetlands management programs.

- The subject of **Output 4.1** was indicators. The objective was to develop a set of indicators for project monitoring and evaluation. Expected outcomes included: M & E System established and progress measured and analyzed; information on progress in implementation; progress monitoring system established and indicators applied; and manuals for M&E and application of indicators existing in national languages. In the end, a set of 35 indicators were developed and agreed with the ICPDR and 14 indicators were tested and evaluated.

- The indicators effort was problematic, in that the initial expectations were to have indicators developed early on in the project that could then be used to gauge project success. Unfortunately, the effort to identify indicators during the DRP first phase got bogged down in a somewhat academic comparison of UNDP and EU indicator requirements. During the second phase, the 35 indicators were then developed. The late date of development and sizeable number of indicators has left some should DRP country participants with the view that the indicators exercise did not achieve expectations and will be of limited future use.

- A final report was produced at the end of the project lifetime. An obvious comment about the report is the lack of information that was available for the indicators chosen. In many cases, the report provides a snapshot of the situation only in 2005. In this context, it is difficult to use the indicators to evaluate the success or failure of the project to achieve objectives. However, the recommendations therein (page 40-41) do illustrate what is needed in order to have and utilise an effective set of indicators to measure project effectiveness. For example a core list of indicators has to be agreed at the start of the project. Thereafter, suitable data and information has to be collected systematically from the beginning of the project. For process indicators and some stress reduction indicators, regular and structured consultations of stakeholders should be organized, possibly every 3 years using questionnaires. However, a mechanism has to be developed in order to receive enough responses to allow statistical analysis. Possibilities are: (1) to give an incentive to the respondents, (2) make returning of questionnaires conditional to the receipt of grants (for NGOs only), (3) distribute questionnaires during meetings or conferences and not through the web.

- **Output 4.2** sought to analyse the iron gates sediments. An assessment was carried out using regional expertise.

- This output can be considered a success in that it exemplifies effective collaboration amongst Romania, Hungary and Serbia. The project started with a data review focussing on the EU 33 priority substances, establishing that only limited data were available. The 3 countries conducted a survey, collecting surface sediments and 6 cores. Split analyses were undertaken, whereby measurements were made in all 3 countries. Many more data were obtained for a wide range of contaminants that had not previously been measured. However, some scientific questions remain, notably to characterise and quantify the apparent nutrient pump effect by which there is a seasonal release of nutrients from the sediments. Thus, the sediments act as a temporary reservoir rather than a sink (illustrating the difference between retention and removal of nutrients).

- There are expectations to re-sample the reservoir during the Joint Danube Cruise in the summer 2007. Future work will relate to determining deposition rates (presently estimated to be 3 cm/year) and measuring organic contaminants.

- Although scientific knowledge has improved, it is not clear how the newfound information is going to be translated into environmental management. The analysis has made all parties recognise the high environmental and financial cost of dredging or flushing the reservoir, so the overriding sentiment in the region seems to be to do nothing for the next decade or so until the situation becomes more critical.

- **Output 4.3** involves the monitoring of wetlands and especially to consider the nutrient removal capacities of wetlands.

- Pilot studies were carried out in Moldova, Ukraine, and Romania. In addition, a manual entitled *Technical guidance on the integration of the nutrient reduction in riverine wetland management* was produced in full (148 pages) and as a Summary document (19 pages). Taking a holistic view of wetlands, the study suggests that it is important step to integrate wetland and river basin management, and to consider the linkages between all ecosystem functions provided by wetlands.

- The investigations suggests that most riverine wetlands play a holding rather than removal role with respect to nutrients, and it is important to recognise that nutrient retention needs to be seen as an added benefit of wetlands management, beyond the well-accepted biodiversity, and flood control benefits.

- As noted under Objective 1.4, the Final Wetlands Workshop was a successful event that brought together a diverse mixture of 50 participants from IGOs, academia, government agencies and laboratories, as well as international and local NGOs. The presentations covered topics ranging from policy development and implementation to scientific investigations; methodological developments to wetland management. Participants included personnel from other IGO sponsored projects (WB, TACIS, WWF, Ramsar) thereby providing a broad cross-section of current wetland investigations and restoration efforts throughout the Danube region. A network of protected area managers was founded at this workshop.

- Overall, understanding about nutrient retention in the Danube River basin was improved and broadly disseminated. The workshop brought together relevant scientists and wetland managers from throughout the region. Future application of the information gained will depend upon its incorporation into the RBM Plan currently under development, bearing in mind the wider benefits of wetland retention and restoration (conservations values, biodiversity, flood control, etc.), as well as competing interests of the transport industry. It is not clear to what extent ICPDR will be able to influence wetland management in the DRB, given that some countries see this issue as nature conservancy rather then water management.

- The nutrient trading **output (4.4)** was established to conduct a study on pollution trading and to consider corresponding economic instruments for nutrient reduction. The expected outputs included an analysis and assessment report regarding existing concepts of pollution trading: policy and legal recommendations; an assessment of the readiness of the region, on a country basis; and the general viability of the "pollution trading" concept in the DRB. The effort also included a workshop.

- The activity was only undertaken during the project second phase, and the results did not fully achieve expectations. The effort proved to be a difficult concept for the Danube countries to embrace and the DRP was unable to make much progress. The study that was developed by external consultants was useful from a theoretical standpoint, and included lessons learned form other trading efforts. However it came up short with respect to assessing the viability of pollution trading in the DRB and it failed to provide recommendations on how a system could be made operational in the region. During the evaluation some country representatives were negative to the concept, especially how the payment process would operate and that it could have a negative consequence of delaying or curtailing local and national direct financial support towards reducing nutrient emissions.

3.3.2 Awareness of the participating countries regarding project outputs.

Awareness needs to be considered with respect to the audience – in this case primarily the general public and the project stakeholders. Surveys were not commissioned during the project so it is difficult to determine whether the project appreciably raised public awareness. The proxy tools available are very subjective and relate to DRP/ICPDR achievements such as the number of articles and interviews generated, the expanding number of hits on the project / commission web sites, and increasing numbers of persons participating in Danube day events. It is unlikely that interested members of the public would have made the distinction between the DRP and the ICPDR. It is also likely that awareness of the DRP outputs has been further blurred by the project focus on implementation of the EU WFD. The broad appeal of much of the DRP public relations material may have been limited by the small translation budget, and its content complexity.

In terms of the extent of stakeholder awareness, the evidence from the evaluation interviews suggests that members of the expert groups were narrowly aware of those DRP activities that directly supported the ICPDR, especially with respect to river basin management and monitoring and assessment. NGO's on the other hand, were familiar with the small grants and various pilot projects.

It is unlikely that project awareness within the ministries stretches much further than those agencies that have been directly involved – typically within Ministries of Environment and Water Resources. The inter-ministerial efforts were only partially successful, which should be expected. Government ministries and agency interest is driven by laws, budgets and responsibilities. There was interest and involvement from other ministries to the extent that any of these three were impacted. So, awareness was clearly raised with respect to the WFD implementation.

Heightened awareness over the last several years can be recognised from the countries that were aligning themselves with EU law in order to become EU members, so in this case first Romania and Bulgaria, and more recently Croatia, Bosnia-Herzegovina and Serbia.

3.3.3 Level of ownership of the project by the participating countries

The level of project ownership amongst the countries can be considered high, especially with regard to the project's role in assisting with implementation of the WFD. The lower Danube countries have been attracting substantial EU and WB funding

for water quality related investments, which also points to a high level of commitment to meeting EU requirements.

The ICPDR has been able to tap additional ad-hoc funding from the Danube countries for special projects and events, including especially the 2nd Joint Danube Survey. The level of commitment to continue sharing of data and harmonising monitoring systems also appears strong – in particular amongst the EU members and accession states

A good example of country ownership can be viewed with respect to Objective 3.4 in Romania and Bulgaria. Public participation was required under the WFD and Aarhus Convention, but the countries really did not know how to proceed. There seems to have been very good interactions between government and NGOs in this area in both countries, albeit with some difficulties in Romania.

There was a lack of ownership generally when topic fell outside sphere of influence of the Ministry of Environment (i.e. detergents, agriculture, industry, and even wetlands in Austria as this topic is considered a nature conservancy issue rather than water management) It is not at all clear that there are widespread changes in farming and other industry practices that impair Danube water quality, as a result of the project

3.3.4 Cost-effectiveness of the project

The total project budget for the DRP was UN$25.1 million. This includes a contribution of $12.2 million from GEF, an estimated $6.8 million in parallel financing from the Danube riparian governments (and others) and $6 million contributed by the ICPDR. This breakdown of funding was included in the Phase 2 ProDoc. The end of project outlays for the ICPDR and countries have not been tabulated; however, if the ProDoc figures are anywhere close to the final tally, then there has been a substantial financial outlay by the Danube countries, including a 2 times multiplier of the GEF contribution. Recognising that every dollar spent from other sources makes the GEF contribution that much more effective, it can be well-argued that the DRP was cost effective, especially since it involved 11 countries, was focused on one of the world's major river systems, and included a large array of expected outcomes and activities.

The project team had to cope with a significant strengthening of the EURO against the US dollar, posing serious project implications since much of the project operational costs were Euro denominated. The project team's ability to achieve most outputs despite the reduced 'purchasing power' can be considered a successful aspect of its cost-effectiveness.

Cost effectiveness can be considered in some of the adaptive management strategies carried out by the project team. The phase down of country support for ICPDR EG participation was not initially envisioned, but was then approved by the project steering committee and is now seen as a key measure of the chances for sustainability and long term ICPDR financial stability.

Cost effectiveness is typically considered with respect to the mix of international and local consultants that are utilised. The DRP utilised an effective mix of consultants, ensuring there was always a local partner to all international consulting teams, and making a significant effort to utilise expertise from the region where possible.

Overhead costs are an issue when considering cost-effectiveness, and in this case there were some concerns about the rather high overheads charged by third parties

in the completion of outputs 3.2 (Small Grants) and 3.4 (Public Access to Information), notwithstanding the generally high quality of these outputs. On the other side of the ledger, evidence of a positive contribution to cost effectiveness can be considered in relation to the SPG, as it made a big difference for the involvement of fledgling NGOs. The SGP tended to work via the ripples in pond effect – one little community project spread outward to neighbouring villages (albeit with cost constraints).

3.3.5 Public participation and stakeholder involvement in implementation of project activities.

Public participation and stakeholder involvement in project activities touched on most aspects of the DRP implementation. The DRP sponsored, directly or through the ICPDR, NGOs and the SGP, numerous events for raising public awareness or training stakeholders. DRP formulated a communications strategy and made a considerable amount of material available in printed and web-based formats. As noted below, some of this material has been translated into the national languages of the region. Danube Day has become established as a popular, annual event and a platform to raise awareness on water pollution issues in the 13 Danube countries. An estimated 1 million people have been actively participating in Danube Day activities throughout the region in the recent past. Considering events aimed specifically at stakeholders, there have been a wide series of workshops and seminars, with topics encompassing, for example, WFD familiarisation and implementation, BAPs for farmers and agricultural sector workers, financial management for water plant operators, the identification and assessment of various future land-use alternatives for wetlands. Other key actions comprised the support to DEF in particular and NGOs in general, the operation of the SGP, and Objective 3.4 dedicated to public participation and access to information. As a widely held view in the region, one benefit from the project has been that real progress has been made in fostering NGOs, and through them, public involvement, particularly with respect to WFD implementation and in the downstream countries where NGO activities and the notion of public access to information have short histories.

DRP support strengthened the Danube Environmental Forum (DEF) as an umbrella organization, thereby enhancing the ability of member NGOs to respond to transboundary pollution issues. The DRP helped to mobilise new members and funded the DEF secretariat, National Focal Points, networking activities, and some operational activities. Of note, DEF representatives were able to participate at ICPDR meetings, importantly including those of EGs. A prime role of DEF has been to facilitate information exchange between DRP/ICPDR and the public, notably assisting with communications via its web site, leaflets, newsletters, and brochures in national languages, whereby translations were funded by DRP. PR materials based on DRP outputs were written in a simplified way for public dissemination. DEF played an active day in organising Danube Day in some countries. The DEF networking model has been replicated at a national scale in some countries, bringing together many smaller NGOs. This approach has facilitated cooperation between NGOs and government agencies. The status of DEF affiliation, particularly for the spokespersons, provides higher visibility and so more leverage nationally.

The Small Grants Programme provided many opportunities for public participation, generally implemented at the community level through NGO activity. The programme reached a wide range of stakeholders, including farmers, municipal authorities, school children, and enterprises, through lobbying and awareness-raising. In the later case, activities for the public varied markedly: round table discussions at primary schools to communicate the value of environmental protection in simple terms, seminars promoting best agricultural practices for farmers and workers from the agriculture services sector. Typically, individual events welcomed up to 45-50 participants. Complementary actions encompassed launching or improving web sites, organising small-scale competitions (children's art, slogan writing, photogra-

phy, etc.), distribution of brochures and environmental information, and community-based riverbank clean-up and wetlands restoration projects. Such events, particularly when local dignitaries were in attendance, have received good media attention in the press, radio and television. The importance of this penetration to civil society comes through recognising that access to the Internet in rural communities can be problematic due to the limited availability of computers and lack of English language skills.

Public participation and access to information comprised DRP Objective 3.4. Although implementation would have been an obligation under the Aarhus Convention, the DRP facilitated the process, notably in countries where there was no prior experience in this domain. In both Bulgaria and Romania, the DRP managed to achieve successful collaborations between government and NGOs. Positive benefits have been the production of manuals for government use and brochures for NGOs and the general public on how to go about getting access to information and becoming involved in environmental decision-making. Moreover, much more information is accessible on the Internet in these countries, following assistance with Web Site development.

3.3.6 Likely degree of support from the Countries' Governments in integrating the project objectives and into their national development programmes and other related projects, and how well the project fits into their national development policy. Impacts on policy and strategy of countries.

Several components of the DRP were designed to influence countries in terms of developing national policies and strategies. This is especially true for WFD implementation in those areas that were new for Europe as a whole and not just the DRB, such as the riverine biomonitoring, setting water quality criteria, and transboundary ground water aquifers.

Apart from its success as a regional showpiece, the Roof Report provided national benefits. Firstly, countries within the DRB were able to use the document as a template for their own National Reports. Secondly, the Roof Report was useful for national implementation of WFD in several countries, i.e. river basin directorates have to use same approach and methodologies to give a nationally harmonised system for water management. Thus, approaches adopted on a country-wide basis included the upgraded TNMN strategy as a monitoring programme and the sub-basin characterisation of water sheds, albeit recognising that EU countries were required in any case to adopt such a river basin approach for water management. In the same vein, the DRP river typology tools and MONERIS have been utilised in various other river catchment areas.

WWF implemented a project to assist Danube countries to prepare new land use and wetland policies in line with existing and emerging legislation, particularly the EU WFD (Objective 1.4). They undertook pilot studies in Slovakia, Romania and Croatia, with varying degrees of achievement. However, this bottom-up approach achieved results in Slovakia, whereby the pilot project was promoted nationally as a success story to illustrate a mechanism for changing land use. They trained 300 participants at 10 workshops throughout the country, gaining national recognition that eventually affected national planning with respect to the rural development plan.

Objective 3.4 helped shape governmental policy and practice on how to deal with public participation in the environmental decision-making process and how to handle access to information. Notably, some countries produced a manual/guide for authorities to serve as a source book for the general public about the information process and public participation. Much more information is accessible on the Internet in these countries, following assistance with Web Site development.

3.3.7 Project impact on improving the capacity to prepare and implement collaborative, targeted and effective efforts for the management of the Danube River Basin

Touching on most aspects of the DRP implementation, the capacity to effect collaborative management of the DRB has improved markedly. Benefits of the DRP are discussed here under the categories of RBM tools, WFD implementation, investigations, human resources and networking. Several RBM tools have been improved or developed, usually with suitable training being organized for appropriate audiences / users. Perhaps of most benefit is the upgrade of DANUBIS that has been achieved. There is widespread support and appreciation of DANUBIS, which is considered a valuable tool by members of ICPDR EGs and NGOs. The facility has been made more user-friendly and web hits have increased five-fold from 2001 to 2005. MONERIS, a model for estimating diffuse sources of nutrients into fresh waters, has also been upgraded. The model has been successfully applied in the Roof Report and in some wetlands case studies, however, it must be stated that the model outputs are not universally accepted in the region. MONERIS will be a useful tool for the production of roof reports, RBMs and GEF projects in the Prut, Sava, and Tisza sub-basins. Finally, an interactive GIS has been developed. Maps are widely recognised as a useful tool for raising public awareness of environmental issues. The system was used to generate maps for the Roof Report, but has yet to become fully operational on the Internet.

Many DRP activities were aimed at WFD Implementation. The Roof Report represents the most visible achievement under this topic. Although there was clearly a requirement for EU and EU-accession countries in the DRB to produce such a report, the contributions made by the DRP cannot be under-estimated and led to a much better report than would otherwise have been generated. This assertion is rationalised on the basis that the DRP facilitated and funded many activities for the Roof Report (especially ICPDR EG participation by all countries), with the result that countries throughout the region asserted joint ownership in the efforts, significantly expressed by the regional agreement that all countries (EU, EU-accession and non-EU) would implement the WFD within the DRB. Moreover, the DRB Roof Report has been acknowledged by the EU as an outstanding contribution, and essentially a pace setter for Europe as a whole. The Roof Report marks an important step on the way to formulating a RBM Plan, required by 2009 for WFD implementation. Several aspects of the TNMN were strengthened in order to comply with the WFD: defining sampling sites and frequency, biomonitoring, setting water quality objectives and establishing data reporting procedures. The implementation of the WFD introduced monitoring and indicators, notably with respect to riverine biology, that were new for much of Europe. Thus, project components, such as the intercomparison for macrozoobenthos as indicators for water quality, generate widespread benefits within the DRB. A database was designed to deal with biological indicators monitoring as part of the TNMN and Danube surveys. Finally, the DRP sponsored several workshops in the region to familiarise the public and government agencies on aspect of WFD implementation.

Some key investigations in the region were supported by the DRP. Most notable were the studies of sediments in the Iron Gates reservoirs and some wetlands case studies / pilot projects. The Iron Gates component fostered collaboration amongst Romania, Hungary and Serbia. Many data were obtained for a wide range of contaminants that had not previously been measured. Collaborative efforts are expected to continue in that some scientific questions remain, together with the uncertainty of how the newfound information is going to be translated into environmental management.

Considering the human resources, training and workshops have had an influence at many levels within the region. At local communities, people have come together to accomplish small-scale projects (e.g., riverbank cleaning, wetlands restoration, manure management, etc.). Targeted groups have benefited from specialized train-

ing (e.g., BAPs for farmers, financial management for managers of water treatment plants). Scientific workshops brought together regional experts to agree on, for example, biomonitoring methodologies for sampling and analysis, as required for WFD implementation. Conferences, such as the Final Wetlands Workshop, brought together a diverse mixture of participants from IGOs, academia, government agencies and laboratories, as well as international and local NGOs. The presentations covered topics ranging from policy development and implementation to scientific investigations; methodological developments to wetland management. Some attendees represented other IGO sponsored projects (WB, TACIS, WWF, Ramsar) thereby reflecting a broad cross-section of current wetland investigations and restoration efforts throughout the Danube region. Finally, ISPDR staff have benefited from some training and through close collaboration with DRP colleagues.

The establishment of various networks has been an intangible benefit of the DRP. The extent to which this process has succeeded is difficult to judge because interactions now occur at the grassroots level, and thus without the knowledge of the DRP-PCU or ICPDR. Nevertheless, anecdotal information gleaned from interviews throughout the region consistently highlights the importance of this outcome. Thus, communications have been established or improved, both nationally and internationally, between scientists in academia and government agencies/laboratories, between scientific communities, and with other regional stakeholders, notably environmental managers. Networking has become better between NGOs at both national and international levels. Moreover, NGOs in some countries have improved working relationships with government bodies and civil society, the overall effect of which has been to initiate or enhance public participation in environmental decision-making process.

3.3.8 Project impact on enhancing inter-agency and inter-ministerial co-operation in each country and on regional cooperation.

The project impact on enhancing inter-agency and inter-ministerial co-operation varies markedly from one country to another. It is too soon to judge long-term benefits in some countries with volatile political situations where key ministerial appointments can change rapidly and personalities can radically affect collaboration. Some countries are still developing inter-ministerial coordination mechanisms, an ongoing task that the ICPDR will have to facilitate. Notably for the DRP, the least successful results stem from instances in which the involvement of ministries other than that responsible for the environment (e.g. agriculture, industry, and transport) did not fully engage in the process. Detrimental consequences relate to the water tariffs and charges, the use of P-free detergents, and promoting BAPs.

There are some success stories reflecting improved inter-agency cooperation in some countries. Regarding phosphorus-free detergents, some limited success can be claimed in Romania. Industry and governmental officials are planning to get together in a working group and there is a high expectation to move to increasingly to P-free detergents. One SGP project held roundtable discussions following the 2005 floods in Bulgaria, bringing together various ministries and governmental agencies. One key outcome was improved internal communications, particularly between the Ministry of State Policy for Disaster and Accidents and the National Institute of Space Research to make use of previously unappreciated / unknown capacity in remote sensing.

The DRP has encouraged much regional cooperation, with many likely longstanding benefits. Such relationships are best, but not exclusively, epitomized through the implementation of the WFD, notably including the production of the Roof Report. Non-EU countries have agreed to adhere to the WFD within the DRB. On the basis of regional consensus, the overall process has necessitated upgrading / developing and harmonizing various monitoring and RBM tools, comprising TNMN, GIS, MONERIS, river typology classification, water quality objectives, biomonitoring, bio-

logical database and DANUBIS. Scientific investigations, such as the Joint Danube Cruises and the Iron Gates sediment study, demonstrate sustained / sustainable cooperation. The celebration of Danube Day has promoted bilateral activities, such as joint cruises in the Prut River. The DRP supported work at the sub-basin level in the Prut, Sava and Tisza Rivers. A notable outcome is the establishment of a Sava River Commission in Zagreb. In all cases, ongoing cooperation is expected in order to develop small GEF projects.

The DRP has helped to highlight conflicting requirements of riverine transport, flood control and wetland conservation / restoration. Realization of these challenges must help improve communications between ICPDR and the Danube Navigation Commission.

Notwithstanding the successes noted above, the DRP failed to make significant progress on a regional ban of phosphate detergents. Similarly, checklist methodologies for risk assessment of industrial sites and contaminated sites at risk of flooding have been promulgated, but implementation in the region has not become mandatory. Consequently, there remains the need to update the inventory of industrial sites, given that there is still a lack of data in many countries.

3.3.9 Cooperation among international organisations, NGOs and other stakeholders.

The DRP has worked directly with a range of international organizations and NGOs, notably DEF, REC, and WWF. As discussed below, these collaborations have encouraged / fostered wider cooperation in the region. However, interactions with the Ramsar Secretariat and World Bank, especially with respect to the Regional Strategic Partnership, seem to have been less well developed.

The Danube Environmental Forum (DEF) has flourished as an umbrella organization, providing a mechanism for networking various NGOs regionally. At the same time, the DEF model has been replicated at a national scale in some countries. The DRP has helped to recruit new members to DEF. DEF affiliation facilitates international exposure for small NGOs and gives greater visibility at national and local levels. Notably in terms of cooperative efforts, DEF formed a Water Policy Team and DEF representatives have been able to play an active role at ICPDR EGs meetings.

The DRP has enjoyed a mutually beneficial relationship with REC International, and through them, various National REC Offices. REC provided management of the small grants programme and Objective 3.4 on public participation and access to information. The SGP supported regional and national projects. In the first case, partnerships between NGOs based in different countries were a requirement. This mechanism provided some small NGOs their first opportunity to establish international cooperation. The regional project in the Prut River has been selected by the Global Water Partnership as part of their toolbox, reflecting a successful case study. REC National Offices within some Danube countries were able to coordinate the NGOs running SGP projects, bringing them together to facilitate project implementation and explore other collaborative possibilities.

The DRP worked together with the WWF, which implemented a project to assist Danube countries to prepare new land use and wetland policies in line with existing and emerging legislation, particularly the EU WFD (Objective 1.4). The WWF is already applying the results in other projects situated in the lower Danube River basin. Also, they expect to use lessons learned from DRP collaboration in other regions, notably by developing a twinning arrangement with river basins in Africa and South America.

The Final Wetlands Workshop marked a culmination of cooperation among international organizations. This successful event brought together a diverse mixture of

participants from IGOs, academia, government agencies and laboratories, as well as international and local NGOs. The presentations covered topics ranging from policy development and implementation to scientific investigations; methodological developments to wetland management. Participants came from other IGO sponsored projects (WB, TACIS, WWF, Ramsar) thereby providing a broad cross-section of current wetland investigations and restoration efforts throughout the Danube region. One significant outcome of the meeting was the creation of a Danube Network of Protected Areas.

3.3.10 Cooperation with sister projects in the GEF IW portfolio esp. Black Sea Ecosystem Recovery Project.

Explicit linkages for the DRP are to the UNDP/GEF Black Sea Regional Project (BSERP) and the World Bank Investment Fund for Nutrient Reduction (NRF), in the frame of the GEF – World Bank Danube/Black Sea Partnership Program. The DRP and BSERP are similar in structure and content – as they focus on regional TDA/SAP development and capacity building. The NRF is a $75 million investment fund for projects to reduce nutrient loading.

DRP cooperation with the BSERP was formalised in the ProDoc for DRP, with output 2.5 designed to support implementation of the MOU signed between the Danube and Black Sea Commissions. In particular, a Joint Technical Working Group (JT WG) was established for implementation of the MOU and a work programme was devised. In all, there were four annual JT WG meetings organised from 2002 onwards.

Close collaboration was not seen as a high priority by the project teams during their formative years. During 2004, a Strategic Partnership Stock-taking meeting was held to include 80 high-level country representatives of the ICPDR, BSC, GEF, UNDP and other experts. Subsequently, a closer association was forged, especially between the DRP and BSERP.

The DRP and BSERP projects became very closely aligned at the end of 2004, when a decision was reached by UNDP/UNOPS to have the DRP CTA take on responsibility for both projects. This decision was precipitated by management issues at the BSERP. The decision was aided by a conviction that the DRP management team was sufficiently strong, and the project moving smoothly enough, to enable a sharing of the CTA's time.

Cooperation between the DRP and NRF remained infrequent throughout project implementation. It was originally hoped that the TDA/SAP procedures and then subsequent monitoring and capacity building efforts under the DRP and BSERP could help to define project priorities and pipelines for investments under the NRF. In practice, the timing of the NRF programme and WB requirements for investments proved to be impediments to this ideal relationship. In the end, the capacity building and investment projects have been implemented independently, with little in the way of shared information and coordinated priority setting.

The DRP has had very good collaboration with IW-LEARN, who has taken advantage of the expertise that has developed within the staff. The DRP participated in IW:LEARN's structured learning electronic discussion group on transboundary river basin management. The DRP hosted IW:LEARN's first operational phase stakeholder exchange, which united six GEF projects at a workshop to focus on the issue of strategic communications. The DRP's specific comparative advantage in that area, as well as collaboration with the SPREP project, provided invaluable information and real-life examples to inform the discussion. Moreover, the DRP expedited the production of a key output from the event, namely a strategic communications guide for IW projects, now available as a "living document" at europeandcis.undp.org/WaterWiki. The DRP was a key participant at roundtable

and capacity building workshops under the Athens-Petersburg II declaration process, which has at its core the establishment of transboundary cooperation on shared basins in southeastern Europe. DRP participation in the GEF international waters conferences has benefited the entire IW portfolio through presentations and informal exchange. In particular, DRP made a keynote presentation on public participation at the IWC3. Additionally, IW:LEARN has, on more that one occasion, supported the travel of DRP staff to make presentations at major conferences, most recently the GPA Intergovernmental Review. Finally, the DRP has produced two IW Experience Notes, a mechanism to transfer good practices and experiences in document form. The project produced one note on their small grants programme and one on the Danube NGO forum.

3.3.11 Sustainability of project impacts

A discussion on future sustainability of DRP impacts needs some clarification. Firstly, some tasks have been completed and the benefits will continue. Limited examples of this nature encompass training courses that have improved the human resources in ICPDR and the region, upgrading monitoring programmes (TNMN and biomonitoring), and wetlands that have been restored. Secondly, not all programmatic elements of the DRP fall within the purview of ICPDR. However, follow up activities may be implemented by various organisations, apart from ICPDR, both in and out of the DRB. The following table sets out each of the project outputs and activities with a brief note on issues of sustainability.

Objective	Activity	Sustainability
1.1	WFD support activities	Given that all DRB countries have agreed to implement the WFD, relevant activities *must* continue at national and regional levels. ICPDR is leading the development of the RBM Plan due for submission in 2009. The countries have agreed to continue (and find) active participation at ICPDR meetings, but it is understood that Moldova and Bosnia and Herzegovina will need financial assistance.
	Sava	Noting that the DRP financial contribution was limited compared to EU inputs, there is little doubt that cooperative efforts in the sub-basin will continue. A Sava River Commission was established in Zagreb and will continue to function.
	GIS	The GIS is considered to be a core activity of ICPDR, for which ICPDR has allocated a portion of future budgets towards annual maintenance. Future upgrades of hardware and development of software applications will not come from the ICPDR operating budget. Thus, long-term sustainability faces an uncertain future. ICPDR must find targeted financial support from Contracting Parties or the Business Friends of the Danube. There will be a need to modify GIS to interface seamlessly with WISE.
	Tisza	An expectation is that a GEF project will be proposed for this sub-basin.
	WFD workshops	This task was completed, with the provision that ICPDR and the DRB countries will have to respond to changing requirements of EU as regards WFD implementation.
	Biological method training	This task was completed, however, the development and harmonisation of biomonitoring techniques remains a necessity for regional implementation of the WFD.
1.2 / 1.3	Agriculture	Some policy and legal reforms stand a good chance of sustainability – especially relating to EU requirements for implementing the Nitrates Directive. The implementation of Best Agricultural Practices will require investment assistance, and /or limitations on farmer support mechanisms. The small BAP pilot projects conducted through the DRP have had marginal success and are likely not to continue unless additional support is provided from the various governments. Changes in the EU CAP hold out some hope for prodding farmers to improve nutrient

Objective	Activity	Sustainability
		management and the WB Nutrient Investment Facility has been effective on a number of larger scale agricultural. In general, more is needed with respect to working with farm extension services to get them better trained, better paid, and more environmentally supportive
	MONERIS	The fate of MONERIS as a tool for ICPDR and DRB countries is not clear. The DRP funded improvements to the model, but does not hold intellectual property rights. It has been indicated by the DRP that researchers in the region will have continued access to the model in its present form, however it is unclear whether there is sufficient support for the model that additional funds will be found to continue its modification, upgrade and translation.
1.4	Wetlands	The Danube River basin management plan – now under development and due to be completed by 2009 should include wetland site identification, including one of the DRP pilot sites. It is also anticipated that the Inventory of Protected Areas – covering 237 sites, should be of use not only for the Danube RBMP but also as a vehicle to help determine sites to include in EU Natura 2000. Methodologies for land-use assessments were tested in three pilot sites (Slovakia, Hungary and Romania). The Slovakia pilot gained national recognition affecting national planning with respect to the rural development plan. WWF has applied these lessons learned to other projects in the Lower Danube.
1.5	Industry	The work done through the DRP with respect to industrial emission and the imposition of integrated permitting and best available technologies (BAT) was small scale and directed especially towards researching existing Danube country practices, and then introducing the integrated permitting and BAT concepts. It is hoped that the road maps developed for Serbia & Montenegro, Bosnia-Herzegovina, Moldova and Ukraine will help these countries to plan their industrial emissions control programs, and the three training programmes for BiH, UA and MD experts have helped to spread interest and understanding of how to apply the BAT and integrated permitting concepts. It is not anticipated that the ICPDR will in the future put a great emphasis on providing technical assistance on industrial emissions. The major push in this area will be through the EU and implementation of the IPPC directive.
1.6 / 1.7	Tariffs & charges	Setting water tariffs and charges fall outside of the mandate of ICPDR and its constituent members - the various Ministries of the Environment. Although probably not initiated by the ICPDR, there are likely to be follow-up activities because WFD implementation will require full cost recovery for water plants. The DRP has produced useful tools for financial management and widely disseminated information directly to water plant managers. The EU has indicated that the products might be useful in some countries outside of the DRB.
1.8	P-free detergents	The DRP made only limited progress in this area, in part because it is not just an environmental issue, but also touches industry and trade. Industry and governmental officials in Romania are planning to get together in a working group and there is a high expectation to move to increasingly to P-free detergents. The Czech Government has indicated that it plans to make compulsory its current voluntary ban on phosphates in detergent The EU Commission has prepared a white paper on phosphates in detergent. It is expected that any EU-wide measures for P-reduction will take years to become legislation. However, the EU has recognised the work carried out in the DRB and concurred with the policy recommendation to countries to proceed with national legislation and/or further voluntary agreements. The EU has indicated that in the absence of EU legislation this is a justified and proportionate approach
2.1	BiH assistance	The DRP country manager for Bosnia-Herzegovina has now finished her assignment. BiH will continue to participate in ICPDR activities, with

Objective	Activity	Sustainability
		both parts of the Federation having established budgets to pay for the attendance of their representatives to the ICPR Expert Groups.
	IMCM	The sustainability of inter-ministerial coordination mechanisms will be country-specific and likely to depend on the measures each country puts in place to implement the WFD. The development of River Basin Management Plans and establishing Management Districts under the WFD are to include key stakeholders. A logical approach will be to establish and maintain the inter-ministerial committees set up through the DRP.
2.2	Monitoring	Future sustainability of these project components is assured in that they are mandatory under the WFD. The newly improved TNMN will continue in the Danube River. TNMN methodologies are also being applied outside of the DRB. The River Quality Scheme has been applied in the Tisza River Basin. The database established for biological indicators monitoring will be maintained and grow. More work will be done on nutrient standards in the DRB. They have been reviewed, but harmonised water quality standards have not yet been agreed.
2.3	AEWS	The DRP was able to achieve an upgrade of communications for AEWS and the Danube Basin Alarm Model. All 13 countries are now utilising the standard forms and web-based communications tools. The sustainability of this effort is expected to be high, as each of the countries is eager to avoid future spill incidents where governments are criticised for a lack of effective communication. This is also likely to remain a priority of the ICPDR.
	Refineries	The project activities included two training programs for two experts from each contracting party, and development of a checklist methodology. This effort has marginally increased the capacity of the countries to do risk assessments for refineries. It is a small-scale effort whose sustainability rests more with EU legal requirements than with continuing ICPDR activities to implement the Danube Convention. Implementation of the IPPC and Seveso II Directives will be the real drivers for sustainable change in the region.
	Contaminated sites in flood-risk areas	The checklist methodology for risk assessment that was developed and tested for the 261 identifies sites should prove useful. Sustainability depends on each of the countries, (and in some cases using external funding support) to remediate contaminated sites.
2.4	DANUBIS	As with the GIS, DANUBIS is considered to be a core activity of ICPDR, for which ICPDR has allocated a portion of future budgets towards annual maintenance. However, long-term sustainability is uncertain because there is no provision in the ICPDR operating budget for upgrades of hardware and further development of software applications.
2.5	JTWG	The MOU between the Black Sea Commission and the ICPDR will remain in place after the end of the DRP and BSERP projects, so there is an expectation that continued coordination on technical issues will occur. It is important that Romania, Bulgaria and Ukraine are on both Commissions, and now with the European Commission is a party to both. A key issue will be funding for future JTWG meetings.
	GEF D/BS Strategic Partnership Stocktaking Meeting	Only one stocktaking meeting occurred, in 2004, and now with the DRP and Black Sea projects phasing down, it is unlikely that there will be future meetings of this kind. However, the decision by Romania at the closing DRP meeting to invite Environmental Ministers from all of the Danube and Black Sea countries to attend sets an interesting and useful precedent. It may be that future cooperation beyond the technical level can be sustained through periodic regional ministerial meetings.
2.6	Training, meetings etc	This task was completed. ICPDR and the DRB countries will have to provide future training in response to change: monitoring programmes, software developments for GIS and DANUBIS, staff turnover.
3.1	DEF support	A network of NGOs has been successfully established, with active DEF participation at various ICPDR meetings and with implementing various

Objective	Activity	Sustainability
		DRP components, including Danube Day. Future sustainability is likely given their momentum and enthusiasm. DEF has formulated a draft fund raising strategy.
3.2	Small Grants programme	This task was completed and will not continue. Falling outside the mandate of ICPDR, they have neither the funds nor the personnel to continue a small grants programme.
3.3	Communications	The benefits of this component should live on in several guises. Many web sites dealing with water quality issues and the Danube River throughout the region have been improved and will be maintained. ICPDR has assumed responsibility for producing and publishing *Danube Watch*. They also acquire the rights to various DRP outputs (brochures, reports, technical guidance documents); however, their distribution may depend upon repackaging to ensure the ICPDR logo is present thereby ensuring a sense of ownership.
3.4	Access to Information / Aarhus Convention	Future sustainability of this project component is expected in the Danube countries since implementation is an obligation under the Aarhus Convention (to which most Danube countries are signatories), and under the WFD. Methodologies have been established to help government agencies handle requests for information from the public. Future access to information should be available in part though the web sites that have been developed with DRP assistance.
4.1	Indicators	Indicators were perceived as an unrealised expectation by countries. Several indicators had been proposed, but only a limited number were evaluated in a final report. Hampered by a lack of data, the report often only provides a snapshot of the situation in 2005. Nevertheless, some of the indicators may serve as a yardstick to measure future efforts within the DRB with respect to policy implementation and environmental quality. It is quite likely that the countries of the region will now dispense with the UNDP/GEF indicators effort and focus solely on the indicators that are to be established for assessment under the EU WFD.
4.2	Iron Gate Sediments	Investigations in the Iron Gates reservoirs will continue. The region will be sampled during the next Joint Danube Cruise. Some sites are part of the TNMN.
4.3	Wetlands – nutrients	Various project components have led to lasting accomplishments. Some wetlands, which have been restored though national and/or local actions, are expected to be maintained. Some wetlands have gained recognition under other programmes (Global Water Partnership, Natura 2000 designation). Although the DRP has demonstrated that wetlands can have only a minor role in reducing nutrient discharges to the Black Sea, wetland management must be integrated into the RBM Plan and conservation activities. A technical guidance manual was produced, but its future application is not clear.
4.4	Nutrient trading	Sustainability for this effort on trading is mixed. The DRP made little progress on establishing a workable concept for nutrient trading. In part, this reflects the continuing ambivalence of governments and environmental advocates in the region to the idea of trading as a mechanism for water quality improvement. The DRP steering committee and ICPDR responses to the assignment spanned from indifference to outright hostility. Despite the lack of success and support to date, there remains a strong interest from GEF to continue the discussion on alternative economic mechanisms for water quality management and improvement in the Danube Basin. Trading in air emissions was once viewed with even greater scepticism yet is now a key feature of the EU's greenhouse gas emissions abatement strategy.

3.4 Recommendations, best practices and lessons learned from the DRP that are relevant to the design and execution of future GEF/UNDP projects

3.4.1 Key lessons learned

1. The DRP has amply demonstrated the value of GEF Project support for transboundary river commissions. Critical to success is the relationship between the Project management and Commission Secretariat. These are not easy relationships to manage, since the Secretariat plays both a beneficiary role and a management role, while the PCU provides funding and technical support to the Secretariat, but also may pursue some outputs outside the scope of Secretariat responsibilities. If GEF project teams can get this relationship working well from the outset, as occurred with the DRP and ICPDR Secretariat, and can make a continuing effort throughout the project to maintain this relationship, such projects stand a real chance of achieving a high degree of success.

2. The DRP achieved considerable successes within the sphere of influence of the constituent members of the ICPDR delegations. Thus, accomplishments featured, for example, in the areas of water management, riverine monitoring, WFD implementation, *etc*. The project experienced the greatest difficulties in affecting policies that fall outside of the purview of the Ministry of Environment (or its equivalent in each country), like agriculture, industry, and transport. Such failures reflect the limited clout of environmental ministries in many countries, and the inadequacy of inter-ministerial structures in most countries. To have a greater impact on the policies and funding decisions of these resource-oriented ministries, they need to be brought into the effort early on – at the project concept stage

3.4.2 Best practices

Cooperation with ICPDR

The DRP was designed to complement the activities of the International Commission for the Protection of the Danube River (ICPDR). In contrast to some other GEF projects, the rapport between the DRP PCU and the ICPDR Secretariat has been very positive and their actions mutually reinforcing. Project achievement in this regard serves as a model for other GEF projects. Success can be attributed to having a well-functioning project team and strong leadership on the part of both DRP and the ICPDR. DRP benefited from making use of, and strengthening, the ICPDR structures, notably Expert Groups. The project steering committee was comprised of the Heads of Delegation of the ICPDR, many of whom had been involved with the project since its inception.

Adaptive Management

A notable achievement of the DRP, gaining strong regional appreciation and backing, was its capacity to adapt to changing political and economic realities, particularly regarding EU accession and WFD implementation. The team was able to articulate, and receive steering committee approval, for various adaptive strategies. For example, modification of the work plan saw the emphasis on dealing with water tariffs and charges (Obj 1.6/1.7) being aimed at plant managers rather than at the national level. DRP was able to respond in a timely manner to requests from ICPDR. There was some discretion with respect to funding, with the proviso that such flexibility could be a double-edged sword if not undertaken under strict controls. Of course, the DRP PCU had to accommodate a budget cut resulting from an unfavourable dollar – euro exchange rate.

Project Ownership

A significant level of regional pride, national interest, and joint ownership of the DRP was generated in all countries. This achievement seems to have been attained by ensuring the widest possible country and stakeholder participation in the planning and implementation of various project components. Thus, the DRP facilitated and funded many activities for the Roof Report, with the result that countries throughout the region asserted joint ownership in the efforts, significantly expressed by the regional agreement that all countries (EU, EU-accession and non-EU) would implement the WFD within the DRB. Similarly, the DRP financial support ensured that every nation was initially represented at the ICPDR Expert Group meetings. This mechanism enabled all countries to contribute to the regional effort, with the result that *all* countries, including perhaps unexpectedly the upstream nations, learned and benefited from each other. The benefits were self-evident, which encouraged country ownership and financial commitments thereby guarantying continued national participation, as well as the future sustainability and success of the ICPDR EGs.

Expert Groups

The ICPDR Expert Group format serves as a benchmark for how expert groups can and should function. Expert Groups stand a strong chance of being successful when: (a) the countries fund their own contributions and participation; (b) the persons participating in the EGs are indeed technical experts rather than senior managers; (c) there is low turnover of experts, allowing greater continuity and improving trust and communications across the participants. The ICPDR EGs are comprised of national experts from the contracting parties and also representatives of observer organisations, most notably NGOs. The purpose, financial basis and country ownership of the ICPDR EGs evolved and improved, in recognition of the increasing importance of WFD implementation across the basin and with the decision to phase out DRP financial support for EG member participation.

Networking

A universally expressed view in the region was that a major benefit of the project was the opportunity to establish networking of like-minded people. The extent to which this process has succeeded is difficult to judge because interactions now occur at the grassroots level, and thus without the knowledge of the DRP-PCU or ICPDR. Communications have been established or improved, both nationally and internationally, between scientists in academia and government agencies or laboratories, between scientific communities, and with other regional stakeholders, notably environmental managers. Networking has become better between NGOs at both national and international levels. Moreover, NGOs in some countries have improved working relationships with government bodies and civil society, the overall effect of which has been to initiate or enhance public participation in environmental decision-making process.

Strong support to DEF and NGOs

DRP support strengthened the Danube Environmental Forum (DEF) as an umbrella organization, thereby enhancing the ability of member NGOs to respond to transboundary pollution issues. The DEF played very useful roles as an observer at ICPDR meetings, facilitating cooperation between NGOs and government agencies, as a vehicle for public awareness raising and helping NGOs across the region participate in the small grants programme. Regarding communications, DEF translated and revised DRP outputs for public dissemination. Many NGOs played an active role in Danube Day in various countries. One widely recognised achievement of the project was to make significant progress in fostering NGOs, and through them, public involvement, particularly with respect to WFD implementation and in the down-

stream countries where NGO activities and the notion of public access to information have short histories. NGOs, working on door-to-door campaigns and hosting numerous meetings at the community level, provided the means by which the DRP could reach many of the stakeholders, especially farmers. The importance of this penetration to civil society comes through recognising that access to the Internet in rural communities can be problematic due to the limited availability of computers and lack of English language skills. The ICPDR want to see the DEF continue to play a coordinating role for NGO participation.

Exit Strategy

Following recommendations made in the mid-term review, the second phase focused special attention on the development of an 'Exit Strategy'. Formulated in consultation with ICPDR and agreed to by the national HoDs, the over-riding purpose of the exit strategy was to set in motion a phase down of DRP support in preparation of the ICPDR operating as a self-financing Commission and Secretariat. Three key components of the strategy were:

- to decide the breadth of the Secretariat's activities, including whether the Secretariat should play a project management role, for example in relation to the GEF supported sub-basin initiatives for the Sava.

- to facilitate the transfer of responsibility of various project initiatives, including the communications strategy

- to articulate opportunities for future funding opportunities.

In the wider sense, this process was a regional evaluation and brought consider able attention to the assistance provided by and outcomes of DRP activities. The Exit Strategy required that countries and ICPDR examine the benefits accrued from the GEF project, agree on what to continue and decide on how the ongoing activities could be financed.

3.4.3 Recommendations

Recognising that the DRP is concluding, the following recommendations are set out for consideration, in the first case by the ICPDR, and then for UNDP and GEF consideration for future IW projects.

Recommendations for ICPDR

1. The DRP has generated a wide array of useful documents that should remain available to the interested public. The ICPDR is encouraged to add a DRP archive section to its database and web site.

2. The ICPDR has gathered resources for two Joint Danube Surveys. These trans-Danube research cruises are an important activity that should continue, and plans should be made for a 3rd JDS after the upcoming 2007 survey. The surveys are important to the continuing research effort for the Danube – not so much because of the groundbreaking research, as for the cross-boundary cooperation amongst researchers and especially as an educational and public awareness tool.

3. The DRP provided useful support to the ICPDR for the enhancement of the MONERIS nutrient model and to upgrade the Commission's geographic information system (GIS). The ICPDR is encouraged to continue the use and refinement of these tools

4. The ICPDR has been expanding its external funding support mechanism, and is increasingly looking to the private sector, based on their quite successful cooperation to date with Coca Cola and the Alcoa Foundation. This private sector initiative is seen as critical to enabling the ICPDR Secretariat to continue many of its public awareness activities in addition to its formal secretariat-country support role. Taking a cue from other successful international organisations, it will be useful for the ICPDR to broaden this initiative into a more robust membership programme – to include foundations, bilateral donors and the general public. Having a wide array of "Friends of the Danube" can build greater public awareness and support, while also shielding the ICPDR from possible criticism of its increasing reliance on industry sponsorship to promote environmental protection. The ICPDR may also want to consider drawing from the experience of sustainable development and 'green' mutual funds that have developed charters and strict criteria for companies that can be listed.

5. The ICPDR member countries are considering how to proceed with possible bans and voluntary agreements on phosphates in detergents. A recent determination from the European Commission states that the approaches being considered in the Danube region are "justified and proportionate". This provides a real opportunity for the Danube basin countries, especially those that are EU members, to champion this initiative. The work of the DRP and ICPDR Expert Groups has made clear that phasing out the use of phosphates in detergents provides the most cost-effective opportunity to make marked reductions in nutrient emissions into the Danube River.

6. The Danube region can expect to experience alterations in the water cycle as a result of climate change, with increasing risk of severe flood events and extended droughts. Water-related impacts of climate change should be targeted as a focus area for the ICPDR. The Commission is encouraged to establish a task group within its Expert Group structure to investigate the issue.

7. The DRP provided a very useful mechanism to broaden civil society involvement in Danube River protection activities. In particular, GEF support has been instrumental in establishing the Danube Environmental Forum. The ICPDR is encouraged to continue and broaden this partnership with DEF. In addition to retaining its observer status, the DEF should be offered opportunities to participate in public awareness raising activities. Recognizing that the DEF's financial sustainability remains an issue, the ICPDR delegations are encouraged to assist in identifying potential funding support for the DEF.

8. The DRP provided a measure of support to the ICPDR with respect to industrial pollution and in particular risks from flood prone contaminated sites. Further investigations are needed – not only in terms of risk assessment but also with respect to mitigation strategies, and the ICPDR is encouraged to promote this effort

9. The ICPDR has worked from 2001 – 2006 under its Joint Action Programme (JAP) providing the road map for implementation of the Danube River Convention, and implementation of the Danube Strategic Action Plan. There has not been a renewal of the JAP, in part from the conviction that the ICPDR effort has shifted towards implementation of the WFD. The ICPDR, it's Secretariat and Expert Groups are now focused on developing the Danube River Basin Management Plan, by 2009. It should be recognised that the scope of the Danube Convention, and consequently the role of ICPDR, may be broader than what is contained in the WFD. For instance, the Scope of the Convention (Article 3) notes that the convention is applicable to issues of fisheries and inland navigation, and the operation of existing hydrotechnical constructions. Recognising its broader mandate, the ICPD is encouraged to develop a JAP for the period 2008-

2012, which recognises the array of expected achievements in addition to WFD implementation.

10. The DRP undertook a review of the monitoring and reporting requirements within the ICPDR and compared these with those of the EEA and the EC taking account of the development of the WISE (Water Information System for Europe). The WISE is intended to minimise country's reporting of data while ensuring that data can be utilised by a wide number of end users. Countries will upload data to WISE (or provide links to where the data is) and then the various reporting requirements (e.g. WFD, UWWTD, SoE reports) can extract the required information. The DRP review recommended a greater use of available data sources rather than replicating databases within the ICPDR to reduce the burden on the countries and reduce the costs of collecting data for the ICPDR. Although not all the recommendations were adopted at the time (2005) by the ICPDR, the evolution of WISE and the increasing number of Danube countries in the EU will inevitably require that these issues are further assessed. The ICPDR should continue to evaluate their need to collect/archive data from the countries against utilising existing EU-wide data sources of national data.

Recommendations for UNDP & GEF

1. The GEF has a put a substantial investment into the Danube River over the past 15 years. GEF support is now ebbing, which is understandable given pressing environmental demands in other regions, the increasing capabilities of the Danube countries to manage their own water resource affairs, and particularly the expansion of the European Union across a majority of the Danube countries. There are, however, important reasons for the GEF to retain an International Waters presence in the Region. These include: a) to continue strengthening the capacities of countries in the basin that are not a part of the EU and are facing considerable economic constraints; b) to 'protect' the investment by continuing to support transboundary agreements at the sub-basin level, for instance in the Tisza and Prut Rivers; and c) to continue to utilize the Danube as an incubator and demonstration site for the use of policies and techniques that can be replicated in other regions.

   An example of further GEF activities could be to develop a GEF medium size project to demonstrate innovative economic instruments to counter the Danube-Black Sea problem of nutrient over-enrichment. This would include analysis of the feasibility of a nutrient trading scheme as well as other economic tools, such as the use of conservation easements for flood plain management, and promotion of low cost wastewater treatment technologies, including engineered wetlands and package treatment plants

2. The DRP/ICPDR Exit Strategy effort was well considered and generally well executed. Developing and implementing such strategies should be a standard feature of GEF IW projects, especially in cases where there have been long-term international investments and a corresponding need to start the process of supplanting international support with regional and local support. The key is to start the process early, at the mid-way point of the project, so there is sufficient time for the phase down process to take affect, the countries to budget for their increased responsibilities.

3. The DRP was able to utilise an imprest account with UNOPS, enabling the PCU to operate a more flexible budgeting and expenditure procedure, yet maintain project accountability. All large-scale multi-country GEF projects should be given this account opportunity, based on initial evidence of sound financial management.

4. The DRP/ICPDR experience with expert groups compares favourably with other projects and commissions that have utilised Regional Activity Centres. Expert Groups, with rotating chairs, allow for leadership on issues to pass across the involved countries, expanding country interest, participation and ownership.

5. The DRP/ICPDR agreement to phase out project support for country participation in Expert Groups was a double success: it helped to build country ownership and responsibility and also reduced DRP expenditures, enabling the project to meet its objectives despite inflationary pressures. Future GEF projects should consider including this phase out approach in ProDoc development.

6. The DRP was established as part of the Danube-Black Sea Strategic Partnership, which linked the DRP and BSERP capacity building projects with an investment facility (NRF). While coordination of these three projects could have been better, the concept is sound and should be replicated. By linking capacity building and investment support, the GEF can greatly increase the environmental benefits accrued for targeted international waters.

7. One of the strategic programmes in the International Waters Focal Area for GEF-4 concerns reducing nutrient over-enrichment and oxygen depletion from land-based pollution of coastal waters. This was a key objective for the DRP, recognising that nutrient over-enrichment of the Danube is having adverse impacts on the Black Sea. The DRP successfully implemented a few pilot projects to promote farm management and was involved at the policy level on implementation of the EU Nitrates Directive. Future projects addressing nutrient over-enrichment should seek to broaden these investigations of agricultural policy impacts on the environment, including farm commodity price support mechanisms. Efforts should be made by the UNDP to achieve greater participation of local agricultural interests, including local extension services, and also international partners, such as the FAO.

8. The experiences from the agricultural pilots in the DRP demonstrated that farmers are interested to implement best agricultural practices (BAPs). Yet the DRP experience also showed that few if any BAPs will get carried out without financial support – especially when small and marginal farming concerns are the focus. Future GEF projects that provide capacity building for BAPs need to tie directly to investment support - either through country support commitments or additional donor funding. This may be an area where micro-lending arrangements can be considered.

9. In the DRP an issue arose with respect to the Intellectual Property Rights for the use and enhancement of the MONERIS model. This raises a more general issue of how future GEF projects should utilise proprietary systems and software. Open architecture programmes and systems in the public domain are preferable – assuming they meet the project needs. Otherwise, contractual negotiations may be required to ensure that beneficiary countries receive license to utilise and enhance proprietary systems, or at the last resort, long term contracts are signed that enable the countries to continue receiving systems support after the GEF project has concluded. The risk in not taking one of these approaches is that significant GEF moneys will be used for developing effluent models or GIS mapping systems that are then discontinued once the GEF support ends.

10. The current joint APR/PIR reporting requirements for UNDP / GEF projects are an improvement over the previous situation where separate APRs and PIRs were required. However the format and procedures are still cumbersome for the project teams and too content-heavy for reviewers. Consideration should be given to new formats – for instance providing an annual 'exceptions' report, which highlights only those areas of the project implementation that have

changed since the previous reporting period. Consideration should also be give to developing an on-line format.

11. The DRP's inclusion of a small grants programme (3.2) was highly successful in terms of increasing NGO participation, raising public awareness, and mobilising a large number of environmental protection activities at a fairly modest cost. Notwithstanding the existence of the GEF Small Grants Programme operating globally, it will be useful to consider including small grants programmes as a component of future GEF large-scale projects

3.4.4 Ratings

The evaluation team was requested under the TOR to rate various criteria from the project, based on a five-step system: highly satisfactory, satisfactory, marginally satisfactory and unsatisfactory. The ratings set out below are necessarily subjective, yet based on consideration of project achievements against challenges, and taking into consideration similar GEF/IW projects. In general, the Danube Regional Project has been a highly successful project and managed well. It has helped to set the ICPDR and the Danube countries on a firm foundation for continued efforts to protect and enhance the Danube River.

Criteria for Evaluation	Rating
a) Outcomes/ achievement of objectives	Highly Satisfactory
b) Implementation approach	Highly Satisfactory
c) Stakeholder Participation / public involvement	Highly Satisfactory
d) Sustainability	Highly Satisfactory
e) Monitoring & Evaluation	Satisfactory

ANNEXES

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ANNEX 1: ANALYSIS OF OUTCOMES

INTRODUCTION

This annex provides a review of project outcomes and outputs, based upon the DRP's Project Implementation Plan (PIP), developed in early 2005. The PIP has been matched against project outcomes, as identified by the DRP PCU, and against the project budget – through April 2007. The evaluation team provides a discussion of its findings for each outcome – based against a review of project deliverables and stakeholder interviews.

OBJECTIVE 1: CREATION OF SUSTAINABLE ECOLOGICAL CONDITIONS FOR LAND USE AND WATER MANAGEMENT

- IN GENERAL, WHILE THE PROJECT OUTPUTS AND ACTIVITIES HAVE BEEN COMPLETED, ACHIEVEMENT OF THE OVERALL OBJECTIVE REMAINS A WORK IN PROGRESS, AS THE POLICIES AND LEGISLATION DEVELOPED MUST NOW BE IMPLEMENTED MANY OF THE NEW EU COUNTRIES ACHIEVED DEROGATIONS AND EXTENSIONS IN WFD IMPLEMENTATION BECAUSE OF THE HIGH COST OF MEETING URBAN WASTEWATER TREATMENT REQUIREMENTS. NEVERTHELESS, ALL OF THE DANUBE EU COUNTRIES ARE ESTABLISHING BASIN MANAGEMENT PLANS AND DISTRICTS AND HAVE AGREED TO ISSUE A JOINT SET OF PLANS FOR THE DANUBE. IN ADDITION, THE NON-EU COUNTRIES HAVE ALL INDICATED THEIR INTEREST TO HARMONISE WITH THE WFD REQUIREMENTS AND MOST HAVE TAKEN INITIAL LEGISLATIVE STEPS IN THIS DIRECTION.

1.1: RIVER BASIN MANAGEMENT POLICIES AND TOOLS

Output 1.1: Development and implementation of policy guidelines for river basin and water resources management **Sub- Components**: • EU WFD Implementation • Danube GIS • Sava RBM plan	**Phase 1 Results:** • Criteria for significant hydromorphological pressures developed • Overview report on hydromorphological stress and impact analysis of Danube River developed • Synthesis and National Reports on availability / quality of economic data for water use, data gaps, and existing national capacities to carry out specific tasks of the economic analysis • Proposal (Study) for typology and reference conditions for the Danube River • Overview study on existing ecological status assessment and classification systems in the DRB • Needs Assessment and Conceptual Design for a DRB GIS • Concept for the development of the Sava RBM Plan

Budget Phase 1	**Budget Phase 2**	**Total Budget Phase 1 & 2:**
• $392,201	• Planned: $662,835 • Actual (April 2007): $720,871 • Pending: $27,760	• $ 1,139,991

Expected End of Project Results:

- EU WFD "Roof Report" for DRB
- Functioning DRB GIS producing maps as required by EU WFD and for key water management purposes e.g. typology of surface waters and their reference conditions etc.
- Outline Sava RBM Plan developed
- Study on basin- wide important measures addressing significant pressures with transboundary impacts

PCU completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
WFD support activities	> Over 58 project activities aimed at strengthening the ICPDR and CPs WFD implementation in the Danube River Basin.	> Successful submission by ICPDR (and CPs) of WFD Art. V report to European Commission – March 2005 > Completion of updated TDA for Danube River Basin based on WFD Analysis Report	> Analytical report on Pressures & impact analysis, typology; ecological classification; Economic Analysis; HMWB, Nutrients, etc. used by the ICPDR for Danube Analysis Report > EU WFD Danube Roof report completed and agreed by 13 countries > Danube Analysis Report prepared, with the summary translated into 7 languages and distributed basin-wide > 4 non-EU countries actively participate in process.
Sava	> Workshop and report presenting WFD RBMP outline and road-map	> Political approval by all countries and commitment to develop RBMP	> RBMP templates for Sava basin, including gap analysis are agreed with 4 participating countries > River Basin Management Road-Map and Plan outline delivered and approved
GIS	> Recommendations and design of GIS system for Danube and equipment	> Agreed GIS system to be developed meeting needs of ICPDR and CPs for WFD	> Danube GIS Prototype developed and ready for testing and further use - 1 test dataset for each shape-file template / table > Data for 8 countries available
Tisza	> Support for UA involvement in Tisza River Basin Management process	> Active engagement of UA in the Tisza river basin planning process enabling completion of Tisza river basin analysis report leading to WFD river basin management plan	> Data provided by UA > UA participate at Tisza Expert Group Meetings
WFD workshops	> Workshops completed in MD, UA, BiH and RS	> Full engagement of non-EU countries in the WFD process	> Workshops on Surface Waters, Ground Waters, Risk of Failure, HMWB, > 3 trainings on assessment of water bodies organized to

			strengthen expert capacities of the ICPDR for EU WFD implementation, >40 experts participated at each workshop.
Biological method training	> 3 training courses involving all GEF eligible countries on macro-zoobenthos sampling and analysis compliant with WFD	> Danube Countries have agreed common method to report biological quality element under WFD	> 3 training courses with participation of experts from all GEF eligible countries

Evaluation Findings:

- **Output 1.1** involved support for implementation of the WFD and assistance to develop sub-basin initiatives for the Tisza and Sava rivers, as well as support to the ICPDR on upgrading their geographic information system (GIS) tools, and capacity building and training on biological sampling and analysis. The highlight of this effort is surely the work done in support of the ICPDR and together with the 13 Danube countries to produce the Danube 'Roof Report', (entitled The Danube River Basin District, Part A – Basin wide overview, 18 March 2005). The Roof Report has been highly acclaimed as the best of the transboundary reports presented to the EC under the WFD, and is a fine accomplishment for all participants. All told, there were 58 project activities carried out to assist the ICPDR and countries in their implementation of the WFD for the Danube.
- The DRP can also be praised for its achievements on the sub-basin initiatives, including political approval by all of the Sava riparian countries for a Framework Agreement for the Sava River Basin and the Sava River Commission, and completion of the Tisza River basin analysis report as the precursor to the Tisza WFD river basin management plan. The DRP also met expectations with its assistance to the ICPDR for a Danube GIS Prototype.

1.2 & 1.3: AGRICULTURAL POLICIES AND PILOT PROJECT

Objective: Creation of sustainable ecological conditions for land use and water management

Output 1.2: Reduction of nutrients and other harmful substances from agricultural point and non-point sources through agricultural policy changes

Output 1.3: Development of pilot projects on reduction of nutrients and other harmful substances from agricultural point and non-point sources

The two outputs were executed as a single project component

Phase 1 Results:

- In Phase 1 of the DRP, an analysis of point and non-point sources of pollution from agriculture was undertaken. This took into account the findings and recommendations of the field-based demonstration programs conducted in Central and Eastern European countries with the support of the EU and GEF.
- The project updated the information on the use of agrochemicals and identified specific policy and legal measures to assist the participating countries in meeting their obligations to reduce agricultural point and non-point source pollution.
- In a workshop on "Developing Pilot Projects for the Promotion of BAP in the Danube River Basin", (January 2004), six pilot projects were identified, responding to specific pollution issues and allowing, in most of the cases, a transboundary approach.
- Preliminary work plans for potential pilots are available in the Final Report from Phase 1 of the DRP and are available on the web site.

Budget Phase 1	**Budget Phase 2**	**Total Budget Phase 1 & 2:**
• $480,968	• Planned: $735,000 • Actual: $729,657	• $1,210,625

Expected End of Project Results:

Outputs

- Analysis of current national legislation.
- Recommendations for implementation of best agricultural practices in the DRB countries
- Review of agrochemical inventories and Recommendations for reducing impact of agrochemicals
- Report on introduction of BAP in DRB countries and Preparation of dissemination material on BAP
- Agreement of Pilot Project(s)
- Detailed work programme for Pilot Project(s)
- Implementation of Pilot Project(s)
- Training and Dissemination Workshops on Pilot Project results

Outcomes (log-frame)

- The integration of water quality objectives related to agriculture nutrient pollution into agriculture policies increased in 11 Danube countries.
- New agricultural policies for controlling non-point sources of pollution from agriculture accepted by policy makers based on broadly disseminated nation-specific BAP concepts.
- BAP accepted by farmers in the field in DRB countries.
- Point and non-point source agricultural nutrient emissions reduced in 5 pilot sites.
- 100 farmers in lower DRB aware of and applying best agricultural practices.
- 1000 farmers made aware of best agricultural practices for reducing agricultural nutrient emissions.

PCU completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Agriculture	> Reports delivered on: ▪ Fertiliser and manure use and management ▪ Pesticide use and inventories ▪ Nutrient emissions ▪ Policies for reducing agriculture pollution ▪ -Best Agriculture Practices ▪ Training workshops ▪ Pilot farm evaluation of BAPs ▪ Estimation of nutrient emissions from pilot farms	> Implementation of BAPs on 8 pilot farms reduced N by 14 t/yr and P by 2 t/yr. > Data collected led to successful submission of WFD Danube Basin Analysis to EC. > BAP concept developed tested and broadly disseminated at basin-wide scale.	> Reports and inventories on policy, legislation, pesticides, fertiliser, manure handling, BAP etc., > Workshop: Agricultural policy and BAP concept – participation of > 30 experts > Workshop: Pilot projects development – participation of > 40 experts > Workshop: EU WFD and Agriculture – participation of >40 experts > Visit of a farm in Denmark – 40 participants from countries > Farmers aware of the BAP, through broadcastings on national TV and Radio of Serbia, interviews and articles in national newspapers and magazines specialized on agriculture > 8 pilot projects under implementation / lessons learned disseminated > Awareness raising with farmers (etc.) at >100 workshops with > 2500 participants. > Financial benefits evaluated in 8 pilot farms > Web-site operational: http://www.carlbrodrp.org.yu/

MONERIS	> Upgraded version of nutrient basin-wide model compatible with water bodies defined for the WFD	> All countries having a common tool to estimate nutrient fluxes in the Danube River Basin leading to improved management decision capacity.	> MONERIS model operational within ICPDR > ICPDR staff trained in its use

Evaluation Findings:

- **Output 1.2 and 1.3** were grouped together to focus on the development and strengthening of environmental protection policies in the agricultural sector as well as the implementation of best agricultural practices. Activities included upgrading a nutrient loading model (MONERIS), eight pilot studies of farm best management practices carried out in Serbia, and a data collection and inventory effort designed to provide information for the WFD Roof Report.
- During Phase I of the DRP, an analysis of point and non-point sources of pollution from agriculture was undertaken, information on the use of agrochemicals was produced and specific policy and legal measures were advanced to assist the participating countries in meeting their obligations to reduce agricultural point and non-point source pollution. Particular emphasis was placed on implementation of the Nitrates Directive (**EC 91/676/EC)**, with all of the Danube Basin EU countries adopting legislation to implement this directive.
- During the project second phase, eight pilot farms in Serbia received technical assistance on best agricultural practices. A visit to several of the farms by the evaluation team suggests that the DRP support was well received, especially the study tour to Denmark. Unfortunately, few of the on-farm improvements were carried out, due to a lack of available financing. As is usual in UNDP/GEF capacity building projects, there was no budget earmarked to support the introduction of BAPs, and no moneys were provided by the Serbian government. In a tight and highly competitive farming environment, these small farmers were reluctant to put their own financing into BAPs that were not required by the government, especially when they had other priorities with direct economic gain, such as more cattle, a tractor, seeds and fertilisers, etc. In the absence of a compelling requirement and/or financial support, farmers will likely continue to avoid introducing BAPs unless they see a direct economic benefit.
- The Agriculture effort included awareness raising activities at more than 100 workshops with more than 2500 participants. There were also a series of reports and inventories developed on policy, legislation, pesticides, fertilisers, manure handling and best agricultural practices.
- MONERIS was upgraded to provide a useful tool to model Danube inputs and estimate nutrient fluxes. Improvements were made to the documentation, and to make the model WFD compliant. As with all models there are pros and cons to its use, however in the absence of more precise data, models are essential to help determine nutrient emissions from multiple sources, especially from diffuse sources and thereby improve management decision capacity. Some feedback during the evaluation from users indicated it was not an especially user-friendly tool and needs to be translated so it can be used by non-English speakers.

1.4: WETLAND POLICIES AND PILOT PROJECTS		
Objective: Creation of sustainable ecological conditions for land use and water management **Output 1.4:** Policy development for wetlands rehabilitation under the aspect of appropriate land use **Sub- Components**: > Pilot Projects > Methodology	**Phase 1 Results:** • The Phase 1 activities, finalized in November 2003, were focused on the development of appropriate integrated land use concepts and policies for the protection of three selected sensitive wetland areas. Pilot activities were carried out in Slovakia Tisza basin), Croatia (Drava basin) and Romania (Prut basin) and provided following outputs: • A straightforward, yet rigorous, land-use assessment methodology that was tested and adapted as necessary for use across the region; • The selection of three pilot sites – Zupanisjski canal, near Budakovac village, Drava sub-basin Croatia; Lower Elan valley, Prut sub-basin, Romania; and Olsavica valley, Tisza sub-basin, Slovakia - to test the methodology through implementation of specific site-based activities including the holding of a workshop at each location to ensure stakeholder involvement and wider public participation in the identification and assessment of various future land-use alternatives; • Specific proposals for final land-use concepts at each pilot site, including recommendations for the actions and measures required to implement the concepts in practice, and	
Budget Phase 1 • $143,415	**Budget Phase 2** • Planned: $197,400 • Actual: $155,00 • Pending: $10,000	**Total Budget Phase 1 & 2:** • $308,415
Expected End of Project Results: Outputs • updated inventory and map • Implementation Plan including specific activities, • Final concepts and strategies for appropriate land use in selected wetland areas • Agreed concepts and strategies for the implementation of integrated river basin land use for selected wetland areas • Workshops implemented; participants from the DRB trained on how to assess, develop and implement appropriate land use in wetland areas in a consistent manner throughout the DRB • Implementation of technical measures and management agreements		

- Wetland conservation and restoration activities ("mainstreaming")
- Synthesis Report

Outcomes (log-frame)

- Appropriate Land-Use Concepts accepted by local stakeholders and being implemented in 3 pilot sites in 3 respective countries leading to wetland/floodplain protection and rehabilitation of approximately 7,000 hectars
- Capacities of key stakeholders (i.e. government, NGOs, private sector etc.) built in 11 DRB countries for implementing appropriate land-use policies to reduce pressures on wetland and floodplain areas in the DRB

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Wetlands	> Development of agreed land-use assessment methodology and results from testing and evaluation of methodology in three pilots	> Integration of one pilot site into the river basin management plan and submission of site to EC as a proposed Natura 2000 protected area. > Elevating wetland understanding within river basin management planning.	> Inventory of Protected Areas, covering 237 sites - database and map - input also for EU Natura 2000 > Methodology for Land-use Assessment tested at 3 pilot sites (SK, HR, RO) and 3 on-sites stakeholders workshops organized with participation of 90 experts at 3 workshops > Land-use concepts implemented in projects at 3 pilot sites under implementation (Slovakia, Romania and Croatia), total area 4,400 hectares > A manual for appropriate land-use was developed and presented at the basin-wide wetlands workshop in the Danube Delta > 1 preparatory workshop organized 20 participants > Basin-wide workshop for wetland managers from government, NGOs (linked with Component 4.3)

Evaluation Findings:

- **Output 1.4** was focused on wetlands rehabilitation and appropriate land use. It included development of a methodology for land use assessment, and selection of three pilot sites – Zupanisjski canal near Budakovac village, Drava sub-basin Croatia; Lower Elan valley, Prut sub-basin, Romania; and Olsavica Valley, Tisza sub-basin, Slovakia - to test the methodology through implementation of specific site-based activities. The pilot studies had varying degrees of accomplishment. Results were achieved in Slovakia, whereby the pilot project was promoted as a success story to illustrate a mechanism for changing land use. They trained 300 participants at 10 workshops throughout the country, gaining national recognition eventually affecting national planning – i.e. Rural development plan. In Croatia, the project involved re-flooding a wetlands area surrounding a Sava oxbow that had dried up due to the canal construction. In February 2007, after a wait of several years, the Ministry of Irrigation finally funded the site planning study and appears ready to allow excavations. Interestingly, there has been local farmer support for the wetlands restoration pilot, out of recognition that the loss of the wetlands has also affected the groundwater table and by extension their irrigation options.

1.5: INDUSTRIAL POLICIES AND REFORMS

Objective: Creation of sustainable ecological conditions for land use and water management

Output 1.5: Industrial reform and development of policies and legislation for application of BAT (best available techniques including cleaner technologies) towards reduction of nutrients (N and P) and dangerous substances

Sub- Components:

Phase 1 Results:

The Phase 1 report related to this assignment provided the following relevant outputs:

> Review of policies and the identification of gaps between EU and existing and future legislation for industrial pollution control and enforcement mechanisms

> An examination of alternatives for the further support for the application of Best Available Techniques in the DRB;

> Undertaking of a number of reviews of industrial complexes as case studies on BAT.

> Providing details on the state of legislation, with respect to industrial pollution, throughout the basin with summarised alternatives for the application of Best Available Techniques (BAT).

Budget Phase 1	**Budget Phase 2**	**Total Budget Phase 1 & 2:**
• $180,000	• Planned: $273,338 • Actual: $240,000	• $420,000

Expected End of Project Results:

Outputs

- Review of Policy, Legislation and Enforcement
- Report on Implementation of BAT /IPPC in DRB
- Report on Implementation of BAT in non-accession countries
- Road Map for implementing BAT in Serbia & Montenegro, Bosnia & Herzegovina, Moldova and Ukraine
- Discussion Paper on impact of IPPC in DRB
- Workshops – programme of training and dissemination

Outcomes

- The integration of water quality objectives related to industrial pollution into industrial policy and regulatory framework according to EU Directive on Integrated Pollution and Prevention Control enhanced in 11 Danube countries.
- Priorities for pollution reduction revised, based on improved methodology for emissions inventories (reflecting the EU directives requirements on reporting) and on better understanding of cause and effect relationships

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Industry	> Emission inventory review and recommendations > Reports on policy/legislation on BAT > Road map on implementation of BAT in non-EU states	> Transformation of industrial regulations consistent with EU environmental requirements enabling better access to EU markets.	> Review of policies in 11 countries and the identification of gaps between EU and existing and future legislation for industrial pollution control and enforcement mechanisms > Report on Implementation of BAT /IPPC in 11 DRB countries > Report on Implementation of BAT in 4 non-accession countries > Road Map for implementing BAT in Serbia & Montenegro, Bosnia & Herzegovina, Moldova and Ukraine > 3 trainings on BAT & IPPC for experts from BiH, UA, MD > Undertaking of 5 reviews of industrial complexes as case studies on BAT.

Evaluation Findings:

- **Output 1.5** concerned industrial policies and reforms. An emissions inventory was created, and in the 11 (GEF eligible) Danube countries a review of industrial policies was carried out – detailing gaps between existing legislation and enforcement in the countries and the EU requirements for industrial pollution control. The team also commissioned a road map for implementation of best available technologies (BAT) in Serbia & Montenegro, Bosnia & Herzegovina, Moldova and Ukraine. The anticipated outcomes of this effort included enhanced industrial policies in the 11 Danube countries, taking into account WFD requirements and also the IPPC directive requirements. There were also five reviews of specific industrial complexes developed as case studies on the implementation of BAT.
- The inventory activities were well considered and can help the 11 countries reflect on additional steps necessary to control better industrial emissions and meet the requirements of the EU IPPC Directive. The road map effort for Serbia & Montenegro, Bosnia & Herzegovina, Moldova and Ukraine should help these countries to commence introducing IPPC, which is especially of interest to Serbia and Bosnia & Herzegovina, who aspire to EU membership. The scale of the industrial activities were limited and somewhat overshadowed – both by the DRP's focus on nutrients and to a great extent by the EU's own activities in developing BAT reference materials for implementation of the IPPC directive.
- One of the real challenges in the region will be how to manage IPPC and BAT requirements for polluting facilities that are not economically viable, yet whose closure would bring severe hardships to workers and their communities.

1.6 & 1.7: WATER TARIFFS AND EFFLUENT CHARGES

Objective: Creation of sustainable ecological conditions for land use and water management

Output 1.6 Policy reform and legislation measures for the development of cost-covering concepts for water and waste water tariffs, focusing on nutrient reduction and control of dangerous substances

Output 1.7: Implementation of effective systems of water pollution charges, fines and incentives, focusing on nutrients and dangerous substances

Sub- Components:

Phase 1 Results:

- Phase 1 activities principally involved an examination of the current conditions related to regional or Municipal Water and Wastewater Utilities (MWWUs) in eight countries of the region, identification of possible tariff and effluent charge reforms, and evaluation of these prospective reforms. MWWU case studies have been developed in each of the countries. Baseline physical and monetary accounts for the MWWU were constructed. Budgetary, tariff, service, and effluent consequences of various reforms were tested. The baseline conditions and simulations were undertaken within the framework of the Accounts Simulation for Tariffs and Effluent Charges (ASTEC) model and numerous individual reform proposals were identified and evaluated.
- Reports available:
  - Volume I - An Overview of Tariff and Effluent Charge Reform Issues and Proposals and
  - Volume II – Country Reports on Issues and Proposed Tariff and Charge Reforms.

Budget Phase 1	**Budget Phase 2**	**Total Budget Phase 1 & 2:**
• $212,077	• Planned: $357,565 • Actual: $324,468 • Pending: $20,000	• $556,545

Expected End of Project Results:

Phase 2 activities primarily aim to set the basis for implementation with national stakeholders. This will involve undertaking a series of information dissemination and assistance activities to encourage and expedite adoption of effective reform proposals by the countries and MWWUs of the middle and lower Danube River Basin. Emphasis will also be given to the development, implementation and monitoring of Reform Demonstration Projects in various countries and communities and to disseminate lessons learned

Outputs

- Catalogue of country specific reform potential and requirements
- Workshops implemented, appropriate workshop documentation broadly disseminated; increased cooperation of relevant stakeholders
- Country specific systems of charges, fines and incentives
- Guidelines for the introduction and implementation of the recommended systems of charges, fines and incentives

- Workshops implemented; appropriate workshop documentation broadly disseminated

Outcomes

- Awareness of policy options for improved collection of water and wastewater service tariffs and fees in all 11 Danube countries and in most municipalities enhanced.
- Policy reforms aimed at improved collection of water and wastewater service tariffs and fees considered at the municipal level in 40 municipalities and adopted at the municipal level in 20 municipalities.
- 60 municipal water systems actively consider tariff reforms aimed at improving sustainable financing; 20 municipalities adopt such reforms.
- 100 municipalities water and wastewater utilities understand the way in which computerized financial models can be used to assess the financial and service consequences of policy reforms, budget allocations, tariff changes, and development plans,40 municipalities actively use such a model to assess and support new tariff proposals, budget requests, or investment or grant applications.
- Ministries and affected agencies of 11 DRB countries are aware of the effects of the current effluent charges designs on revenues, water and wastewater tariffs, and pollution abatement investments.
- Ministries or affected agencies of 3 DRB countries and 6 selected demonstration municipalities have used financial modelling to test the consequences of possible reforms in the design of their effluent charges.
- Ministries or affected agencies of 3 DRB countries are actively considering changing their emission charges to encourage reduction in nutrients and toxics.

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Tariffs & charges	> Development of model (ASTEC), training, policy reform recommendations for utility / municipalities > National analysis of state of the art of water tariffs and charges and implementation of reforms > Policy reforms recommendations > Case studies at utility level	> Enabling utility managers to make management decisions through better tools leading to reduction of pollution through target investments.	> Two basin wide workshops organized to present the T&C reforms to the countries and increase awareness on T&C issues in 13 countries, 50 experts and high-level country representatives participated. > The current conditions related to regional or Municipal Water and Wastewater Utilities examined in 7 countries > Possible tariff and effluent charge reforms identified and evaluated for 7 countries and 7 municipalities as case studies were evaluated > 40 municipalities considered policy reforms aimed at improved water collection and waste water services, 20 municipalities applied such reforms > 60 municipalities considered tariffs reforms to improve sustainability of financing, up to 20 municipalities applied such reforms. > ASTEC model developed (Accounts Simulation for Tariffs and Effluent Charges), tested in 2 municipalities – Pitesti (Romania) and Karlovac (Croatia) > Training workshop for ASTEC > Regional meetings and dissemination workshops at national level – 470 experts and country representatives participated > Information sheets on T&C prepared also in national languages and distributed

Evaluation Findings:

- **Outputs 1.6 & 1.7** provided technical assistance to the DRP countries in the area of tariffs and water pollution charges. Starting during Phase 1 with a review of current conditions for municipal water and wastewater utilities in eight of the Danube counties, the effort then evolved into a series of workshops coupled with municipal policy reform recommendations. The work also included development and testing of the Accounts Simulation for Tariffs and Effluent Charges (ASTEC) model that provides a tariff adjustment tool for municipal water and waste utilities.
- A visit to the city of Karlovac in Croatia provided evidence that the ASTEC model can be put to good use. Karlovac is the first Croatian city to receive approval for water and wastewater treatment funding support under the EU Instrument for Structural Policies for Pre-Accession (ISPA). It has been working with the ASTEC model for several years and has appreciated the availability of this tool as they now engage in a major expansion and improvement of their water and wastewater systems, with a significant increase in debt to service. A translated model and instruction manual would greatly aid expanded use of the model in Croatia and elsewhere.

1.8: DETERGENTS		
Objective: Creation of sustainable ecological conditions for land use and water management **Output 1.8:** Recommendations for the reduction of phosphorus in detergents	**Phase 1 Results:** This project component is implemented only in the phase 2.	
Budget Phase 1 • $0	**Budget Phase 2** • Planned: $69,500 • Actual: $100,300	**Total Budget Phase 1 & 2:** • $100.300

Expected End of Project Results:

Outputs

- Report on the existing legislation, policies and voluntary agreements
- Report reviewing, summarizing and evaluating data received from detergents industry
- Develop proposals for accomplishing a voluntary agreement between ICPDR and the Detergent Industry including proposed time frame
- Workshop report, comprehensive documentation of workshop results
- Periodic monitoring and evaluation reports
- Analysis report on follow-up actions and effects on water quality and environment

Outcomes

- Voluntary Agreement on the Phase-out of Phosphates in detergent developed in cooperation with stakeholders that leads to implementation resulting in a projected 24% reduction of P from point sources of pollution and 12% reduction in Total P Loads from the DRB to the Black Sea

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
P-free detergents	> Assessment of P-free detergent use in basin and recommendations on means to encourage basin-wide P bans in laundry detergents	> Basin-wide ICPDR policy on P reductions > Enabling EU-wide discussion between regulators and industry > Romania taking first steps to instigate P-free detergent regulations	> 30 participants at Stakeholder Workshop on Detergents > Policy recommended for adoption by ICPDR about P reduction agreed by all countries

Evaluation Findings:

- The expected outcomes for **Output 1.8** were to achieve a basin-wide policy on P-reductions, and development and implementation of a Voluntary Agreement on the Phase-out of Phosphates in detergent, leading to a projected 24% reduction of P from point sources of pollution and 12% reduction in total P loads from the DRB to the Black Sea. Activities included a review of detergent use in the DRB and a stakeholder meeting.
- The goals for P-reduction in detergents have not yet been achieved. No basin–wide policy on P-free detergents has been reached, and the one voluntary approach instituted (Czech Republic) was deemed a failure so the Czechs are now planning to shift to a mandatory programme. Romania may also take steps to instigate P-free detergent regulations, but this has not yet been achieved. Romania has recognised that the strong push from ICPDR has been a key factor in the progress being made. Industry and governmental officials are planning to convene a working group and there are high expectations that the country will move towards P-free detergents. Of considerable interest is that about 20% of detergent production in Romania is already P-free, but it is bound for the export market. If Romania and the Czech Republic adopt mandatory restrictions on phosphate detergents, they will then be joining Germany and Austria as countries with such mandatory requirements. Although various actions were taken at national levels to raise public awareness of the issue, overall, the topic is considered still to have a low priority for general public in some countries (e.g. Bulgaria and Moldova).
- The EU Commission has prepared a white paper on phosphates in detergent. It is expected that any EU-wide measures for P-reduction will take years to become legislation. However, the EU has recognised the work carried out in the DRB and concurred with the policy recommendation to countries to proceed with national legislation and/or further voluntary agreements. The EU has indicated that in the absence of EU legislation this is a justified and proportionate approach.

Objective 2: Capacity building and reinforcement of transboundary cooperation for the improvement of water quality and environmental standards in the DRB

- OBJECTIVE 2, FOCUSED ON CAPACITY BUILDING, AND WAS TO BE VERIFIED THROUGH FULLY OPERATIONAL INSTITUTIONAL AND ORGANIZATIONAL MECHANISMS IN EACH ICPDR COUNTRY, FOR TRANSBOUNDARY COOPERATION, IMPROVED WATER QUALITY MONITORING, EMISSION CONTROL, EMERGENCY WARNING, ACCIDENT PREVENTION AND INFORMATION MANAGEMENT.
- THE EVIDENCE SUGGESTS THAT EACH OF THE PARTICIPATING COUNTRIES HAS MADE PROGRESS IN ALL AREAS MENTIONED ABOVE, HOWEVER IT IS DIFFICULT TO DETERMINE, AND UNLIKELY, THAT THEY HAVE ALL ACHIEVED "FULLY OPERATIONAL" INSTITUTIONAL AND ORGANIZATIONAL MECHANISMS. HAVING LAWS AND INSTITUTIONS IN PLACE IS THE FIRST STEP. HAVING THESE LAWS THEN IMPLEMENTED AND WORKING EFFECTIVELY IS ANOTHER. ESPECIALLY IN THE AREAS OF EMISSION CONTROLS AND ACCIDENT PREVENTION, THERE IS MUCH YET TO BE DONE IN MOST OF THE DANUBE COUNTRIES.

2.1: INTER-MINISTERIAL COORDINATION MECHANISMS

Output 2.1: Setting up of Inter-Ministerial Coordinating Mechanisms for the development, implementation and follow up of national policies, legislation and projects for nutrient reduction and pollution control	**Phase 1 Results:** Available reports: > Analysis report of existing inter-ministerial structures and mechanisms and of activities, competence and capacities of existing structures

Budget Phase 1	**Budget Phase 2**	**Total Budget Phase 1 & 2:**
• 70,567	• Planned: $40,000 • Actual: $114,530 • Pending: $19,800	• $203, 997

Expected End of Project Results:

Output

- Workshops and workshop documentations

Outcome

- Inter-Ministerial Coordinating Mechanisms functioning in 11 Danube countries in order to develop, implement and follow up national policies, legislation and projects for nutrient reduction and pollution control

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
BiH assistance	> National expert recruited to work in Ministry of Finance to assist with state and entity implementation of WFD	> Expert requested to be permanent staff. BiH submitted first river analysis report.	> BiH actively involved in WFD process
IMCM	> Country specific reports and recommendations > Country specific work plans endorsed by governments for implementation	> Strengthened capacity within countries to deal with cross-sector activities	> Analysis of IMCM was carried out in 10 countries, recommendations prepared > Needs of 6 countries to strengthen their IMC capacities agreed

Evaluation Findings:

- **Output 2.1** sets expectations for inter-ministerial coordination (IMCM) and also identifies a set of special actions to enable Bosnia-Herzegovina to participate fully in the ICPDR and its, as well as in the process of WFD implementation in the Danube region.
- The BiH support was highly successful. Because of the federal / split system of governance in BiH, there was a real problem with ICPDR ands DRP coordination, which was effectively dealt with by the hiring of a country coordinator. Very much as a result of the support they received from the DRP, BiH was able to produce its first river analysis report and to contribute directly to the development of the Danube Roof Report,
- The IMCM effort was generally successful. Analyses were carried out for ten countries and recommendations for six countries were subsequently agreed. There are no committees established in Moldova and Ukraine, although work is still in progress in Moldova.

2.2: OPERATIONAL TOOLS FOR WATER QUALITY MONITORING AND EMISSION ANALYSIS	
Objective 2: Capacity building and reinforcement of transboundary cooperation for the improvement of water quality and environmental standards in the DRB **Output 2.2:** Development of operational tools for monitoring, laboratory and information management with particular attention to nutrients and toxic substances Subcomponents: > Monitoring, Laboratory and Information Management Tools > Intercalibration	**Phase 1 Results:** > Report on Environmental quality objectives and standards for nutrients and other Danube specific priority substances developed > Preparation of sets of reference materials of water, nutrients, heavy metals and sediments > Methodological concept for stress and impact analysis computerized application developed = Concept paper for pressures and impacts > Report on Analysis of the results of the EMIS inventory and their comparison with TNMN and JDS results with particular attention to the EU Priority List of Pollutants > Report on proposals for TNMN upgrade and proposal for SOPs for new determinants > Report on Development of the Danube List of Priority Substances

Budget Phase 1	**Budget Phase 2**	**Total Budget Phase 1 & 2:**
• Actual: $86,112	• Planned: $235,000 • Actual: $148,424 • Pending: $2,550	• $237,086

Expected End of Project Results:

Outputs

- Revision of TNMN
- Biological Database
- Water quality standards for nutrients
- Manual on intercalibration
- Proposals for harmonization of intercalibration sites

Outcomes

- Enhanced capacity of countries to develop policy measures for nutrients and toxic substances reduction based on improved monitoring water quality for toxic substances and nutrients in line with EU WFD requirements, assessment of environmental stress – impact relationship, based on use of common harmonized classification system and standards

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Monitoring	> Upgrade of TNMN to meet WFD requirements > Biological database > BiH monitoring roadmap	> Successful submission of WFD Art VIII report to EC March 2007 based on DRP activity. > Countries operate functional biological database consistent with WFD > BiH strengthened to participate fully in monitoring in Danube River Basin	> TNMN harmonized with EU WFD requirement / annual reporting available, all 13 countries participate > Biological database available

Evaluation Findings:

- The expected outcomes for **Output 2.2** focus on improved water quality monitoring. The effort included upgrades to the transboundary monitoring network (TNMN), establishing a biological database and developing a monitoring roadmap for Bosnia - Herzegovina.
- This objective was achieved with beneficial consequences for the region, especially with regard to the implementation of the WFD. Several aspects of the TNMN were strengthened in order to comply with the WFD: defining sampling sites and frequency, biomonitoring, setting water quality objectives and establishing data reporting procedures. In some countries, TNMN methodologies are also being applied outside of the DRB.
- The implementation of the WFD introduces monitoring and indicators, notably with respect to riverine biology, that are new for much of Europe. Thus, project components, such as the intercomparison for macrozoobenthos as indicators for water quality, generate widespread benefits within the DRB. DRP involvement provided important opportunities at a technical level for networking. The River Quality Scheme, an output from the Slovakian Workshop, was applied in the Tisza River Basin. A database was designed to deal with biological indicators monitoring as part of the TNMN and Danube surveys.
- Nutrient standards in the DRB have been reviewed, but harmonised water quality standards have not yet been agreed.

2.3: ACCIDENT PREVENTION AND CONTROL (APC)		
Objective 2: Capacity building and reinforcement of transboundary cooperation for the improvement of water quality and environmental standards in the DRB **Output 2.3:** Improvement of procedures and tools for accidental emergency response with particular attention to transboundary emergency situations **Subcomponents:** > Pilot project for refineries ' > Check list methodology – M2 > DBAM support > Support for PIACs	**Phase 1 Results:** Status at the End of Phase 1 > Evaluation of needs and implementation schedule prepared > Standard forms and communication solution for information exchange in emergency cases PIACs / ICPDR (using ICPDR web site) developed > Discussion paper on ARS Inventory ranking system (methodology) > Discussion paper for development of basic guidelines and recommendations for old contaminated sites in potentially flooded areas in DRB > Concept paper for on-the-spot training (Case study) on application of check list methodologies at national level > Study (concept for calibration options and selection of pilot areas) developed > Draft Project Brief and TORs for DBAM calibration > Outline for the DBAM calibration manual > Recommendations for follow up activities to the ICPDR	
Budget Phase 1 • Actual: $81,975	**Budget Phase 2** • Planned: $200,000 • Actual: $141,820 • Pending: $13,322	**Total Budget Phase 1 & 2:** • $237,117

Expected End of Project Results:

Outputs

- Pilot Site – Refineries Identification and Approval
- Development and Approval of training Programme, Completion of training
- Review and Recommendations of checklist methodology
- Dissemination of results
- Development of M2 methodology and revised ranking of contaminated sites using M2
- Revised checklist for site investigation
- DBAM updated up to Danubis standard software tools
- Operational PIACs in Bosnia i Herzegovina and Serbia and Montenegro and BiH
- Upgraded AEWS international manual

Outcomes

- Swifter and better coordinated response to accidents increased in all 13 Danube countries through reinforcement of PIACs (accident alert centres) and geographical extension in Bosnia i Herzegovina and Serbia and Montenegro
- Reduction of risk of accidents through implementation of check-list methodology used in 50 industrial locations / companies, identified as sites with highest risk potential

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
AEWS	> Upgrade of communications for AEWS and Danube Basin Alarm Model	> Improved preparedness to alert countries to accidents	> Standard forms and web-based communication solution for information exchange in emergency cases used by all 13 countries PIACs
Refineries	> Check-list methodology developed and tested on refinery risks	> Increased capacity of countries on risk assessment > Assessment techniques improved leading to reduction of risks	> 2 training programmes given for 2 experts from each Contracting Party on check-list assessment of refineries

Contaminated sites in flood-risk areas	> Check-list methodology developed and tested for identifying and assessing risks from contaminated sites in flood-risk areas	> Increased capacity of countries on risk assessment > Assessment techniques improved leading to reduction of risks	> ARS Inventory carried out – 261 sites identified 157 sites evaluated > Training and evaluation of check-list methodology provided on contaminated site

Evaluation Findings:

- **Output 2.3** dealt with accident prevention and control (APC). There were three subsets of activities, dealing with emergency response and communications, special issues with regard to refineries, and the problem of contaminated sites in flood control areas.
- Achievements include standard forms and web-based communication solutions for emergency information exchange in each of the 13 country accident alert centres. Training programmes (2) were carried out for the checklist methodologies on refinery risk and flood-prone contaminated sites. There was also an ARS inventory carried out for 261 contaminated sites, with 157 sites evaluated.
- Checklist methodologies for industrial sites and contaminated sites in flood-risk are generally viewed as valuable tools, but implementation in the region should be mandatory. There also remains a need to update the inventory of industrial sites because many countries still have insufficient data.

2.4: SUPPORT FOR THE ICPDR INFO SYSTEM – DANUBIS		
Objective 2: Capacity building and reinforcement of transboundary cooperation for the improvement of water quality and environmental standards in the DRB **Output 2.4:** Support for reinforcement of ICPDR Information System (DANUBIS	**Phase 1 Results:** > Information System at the central and national level upgraded > new AEWS software implemented, tested and operational, > Report on assessment of needs in terms of equipment and human capacities at national level prepared, including recommendations and detailed specifications for equipment > 1st phase training carried out and appropriate manuals (training materials) available	
Budget Phase 1 • $236,791	**Budget Phase 2** • Planned: $189,800 • Actual: $47,300 • Pending: $8,536	**Total Budget Phase 1 & 2:** • $292,627
Expected End of Project Results: Outputs (pms) • Recommendation on the Restructuring of the ICPDR information System • Selection and implementation of appropriate solution for the Danubis management • Guidelines and SOPs for Danubis available, experts trained in Danubis use • Fully developed operational national units; improved knowledge in the use of the tools made available by the system Outcomes: • Management of information for the ICPDR on work to manage the DRB enhanced for 130 experts involved in the ICPDR (Secretariat, national experts working on ICPDR expert groups etc.) by the improvement of the DANUBIS information system as evidenced by an expansion of the information available as well as the use of the system (from 1500 hits per month in 2002 to 8,000 hits per month in 2006) • Increased public awareness of DRB problems, issues and solutions (including initiatives of the ICPDR, NGOs etc.) due to an improved, more user-friendly ICPDR and project web sites respectively as evidenced by an increase in hits to the web pages from 1000 hits per month in 2002 to 8,000 hits per month in 2006.		

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Danubis	> Upgrade, training, hardware/software for ICPDR data management system	> Improved information management and improved access to technical information by countries	> Training on the Danubis users provided at central level 25 persons and at national level – 11 countries – 12 experts trained in each. > 630 registered users > 18,000 hits / month average in (Sept 05-Sept06) > Upgrade of the Danubis at the central level – 1 new server; Change of the platform for the System; open-source system implemented and national level – 36 PC sets provided to countries. > Concept for Restructuring of the internal area of the ICPDR Info system prepared.

Evaluation Findings:

- **Output 2.4** concerns DANUBIS, the information database managed by the ICPDR. Expectations were that the DRP would assist by providing recommendations on the restructuring of DANUBIS, help to develop standard operating procedures and guidelines, and help to ensure that each of the countries has staff that are proficient at using and imputing into the system.
- A significant upgrade of DANUBIS has been achieved, both with respect to hardware and site architecture. Notably, the facility has been made more user-friendly. At project end, training has taken place, recommendations for system upgrades have been provided, there are 630 registered users and web hits have increased five-fold from 2001 to 2005, with an average of 18,000 hits per month from September 2005 – September2006. There is widespread support and appreciation of DANUBIS, which is considered a valuable tool by members of ICPDR EGs and NGOs.

2.5: DANUBE – BLACK SEA MOU IMPLEMENTATION		
Objective 2: Capacity building and reinforcement of transboundary cooperation for the improvement of water quality and environmental standards in the DRB **Output 2.5:** Implementation of the "Memorandum of Understanding" between the ICPDR and the ICPBS relating to discharges of nutrients and hazardous substances to the Black Sea	**Phase 1 Results:** > TOR of the Joint Working Group and a Work Program for the implementation of MOU developed and agreed; > Status indicators to monitor nutrient and hazardous substances transport from the Danube and change of ecosystem in the Black Sea defined and agreed upon > Reporting procedure defined and agreed upon > The work of Joint Technical WG re-established and regular meeting held	
Budget Phase 1 • $12,558	**Budget Phase 2** • Planned: $131,700 • Actual: $88,416	**Total Budget Phase 1 & 2:** • $100,974
Expected End of Project Results: Outputs • Working Programme applied • Final indicators defined and agreed upon • Reports in line with procedure available in time • Joint actions discussed and approved • Analytical Report on achievements and synergies of the Strategic Partnership • Meeting report and recommendations Outcomes: • Joint policy-making framework established and functioning in DRB and Black Sea region for reduction of discharges of nutrients and hazardous substances into the Black Sea.		

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
JTWG	> Re-establishment of JTWG > List of indicators agreed > First report on impact of Danube on Black Sea released	> Improved co-operation between Danube and Black Sea Commissions > Better understanding of impact of Danube on Black Sea > Improved implementation of MoU	> 4 Annual JTWG meetings organized since 2002
GEF D/BS Strategic Partnership Stocktaking Meeting	> Stocktaking Meeting (STM) > STM recommendations to the DRP, BSERP and WB NRIF to assure meeting Partnership objectives	> Mid-course correcting measures to streamline the implementation of the Strategic Partnership; > Development of the Progress Report to the GEF Council on the D/BS Strategic Partnership.	> D-BS Strategic Partnership Stocktaking meeting organized in 2004, with participation of 80 high level country representatives of the ICPDR, BSC, GEF, UNDP and other experts

Evaluation Findings:

- Implementation of the Danube – Black Sea MOU is included as **Output 2.5.** Expectations were that this effort would enable a joint policy-making framework to be established and functioning in the DRB and Black Sea region for reduction of discharges of nutrients and hazardous substances into the Black Sea.
- Achievements (jointly with the BSERP) include the re-establishment of the joint technical working group, which held four annual meetings since 2002. There was also a Danube – Black Sea Strategic Partnership Stocktaking meeting organized in 2004, with participation of 80 high-level country representatives of the ICPDR, BSC, GEF, UNDP and other experts. Close association of the DRP and BSERP efforts was greatly enhanced at the end of 2004 with the decision to appoint the DRP CTA as overall manager of both projects.

<table>
<tr><td colspan="3">2.6: CAPACITY BUILDING AND TRAINING</td></tr>
<tr><td colspan="2">Objective 2: Capacity building and reinforcement of transboundary cooperation for the improvement of water quality and environmental standards in the DRB
Output 2.6: Training and consultation workshops for resource management and pollution control with particular attention to nutrient reduction and transboundary issues</td><td>Phase 1 Results:
> Capacity building training for the ICPDR EG Chairs and Secretariat on Facilitation Skills
> Training Needs Assessment
> Workshops on EU WFD Implementation at national level for expert, policy makers/ senior ministry officials in Moldova, Serbia and Montenegro</td></tr>
<tr><td>Budget Phase 1
• $367,061</td><td>Budget Phase 2
• Planned: $291,067
• Actual: $427,070
• Pending: $9,013</td><td>Total Budget Phase 1 & 2:
• $803,144</td></tr>
<tr><td colspan="3">Expected End of Project Results:
Outputs
> Workshops on EU WFD Implementation
> Training Programmes at national level and ICPDR level designed, implemented and results reported
> Harmonisation and streamlining the ICPDR Reporting and Information collection needs in line with EU directives and national obligations
> Exit strategy prepared and implemented
Outcomes:
> Key Danube institutions (e.g. ICPDR) that are managing the DRB enhanced via the building of capacities of 130 experts involved in ICPDR expert groups, ICPDR Secretariat etc.
> Essential Danube stakeholder groups strengthened in their abilities to reduce pollution due to increased capacities of 300 stakeholder representatives (e.g. environmental NGOs, wetland managers, municipal authorities, agricultural extension service reps., industrial operators etc.)
> ICPDR and its structures are strengthened and the results of the project are sustainable</td></tr>
<tr><td colspan="3"></td></tr>
</table>

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Training, meetings etc	> Wide range of capacity building workshops and Danube Basin management meetings supported	> Strengthened capacity of all ICPDR working structure > Increased understanding and co-operation between CPs > Streamlining / restructuring of ICPDR PS, EGs, work plans etc. completed	> Capacities of the ICPDR EG Chairs and Secretariat strengthened through a Training on Facilitation Skills, 35 persons participated > Workshop on Further future of the ICPDR supported the development process of the Commission, 65 country representatives participated > Workshops on EU WFD Implementation at national level have strengthened capacities of experts in 4 countries - policy makers/ senior ministry officials in MD, SM and BiH, RO, in total 80 experts participated > Support for 11 countries to participate at the regular ICPDR EG meeting provided, 80-100 persons supported per year

Evaluation Findings:

- **Output 2.6** consists of activities focused on capacity building and training. In particular under this output, the project provided support for 11 of the Danube countries to participate at regular ICPDR EG meetings – with 80-100 persons supported per year. Additional workshops were held for capacity building of EG Chairs and the Secretariat, workshops on the implementation of the WFD, and a workshop to discuss the post-DRP future activities of the ICPDR.
- These activities were successfully completed and have enhanced regional collaboration, especially as regards WFD implementation. Apart from providing technical assistance to experts and officials responsible for implementation, they also served to inform the general public about WFD, an important consideration in the non-EU and non-accession countries.
- The Expert Group meetings, in contrast to Regional Activity Centres for example, provide an excellent mechanism for achieving regional collaboration along thematic lines. Financial support from the DRP ensured that experts from every DRB country could attend ICPDR EG meetings. Thus, each country had the opportunity to contribute to discussions and planning about pollution and water management issues, as well as to learn from other experts in the region. For most countries, the funding decreased over time. However, country ownership in the process was deemed vital, and all but a few nations have maintained full participation at their own expense. Moreover, they have agreed to sustain ICPDR EG participation. The means to support financially the continued attendance of experts from a couple of countries is being explored.

Objective 3: STRENGTHENING OF PUBLIC INVOLVEMENT IN ENVIRONMENTAL DECISION MAKING AND REINFORCEMENT OF COMMUNITY ACTIONS FOR POLLUTION REDUCTION AND PROTECTION OF ECOSYSTEMS

- OBJECTIVE 3 SOUGHT TO RAISE SIGNIFICANTLY THE PUBLIC INVOLVEMENT, BY ACTIVELY ENGAGING CIVIL SOCIETY. THE VERIFIABLE INDICATORS ESTABLISHED WERE TO HAVE A SELF-SUSTAINING DANUBE ENVIRONMENTAL FORUM AND FOR 80% OF ALL OF THE SMALL GRANTS PROJECTS RUN THROUGH THE DRP TO SHOW SUSTAINABLE RESULTS.

3.1: NGO NETWORK REINFORCEMENT - DEF

Output 3.1: Support for institutional development of NGOs and community involvement	**Phase 1 Results:** > DEF Secretariat established and fully operational > Strategy for DEF Development and Final Work-plan completed > DEF Media and Communication Strategy prepared > Directory of DEF NGO members developed > DEF newsletter established and then published bi-annually > DEF Board Meetings (bi-annually)and General Assembly (annually) held > DEF Public Participation strategy established > DEF email exchange network established > DEF Web-page expanded and translated into different national languages > Training materials on Wetland Rehabilitation and Nutrient Reduction finalized in English and in 9 national languages > National Training Workshops held in 11 countries > DEF brochure prepared in English and in 11 national languages > Preparations for the Publication on DRB Environmental Issues > Training Materials prepared > Training of Trainers workshop implemented

Budget Phase 1	**Budget Phase 2**	**Total Budget Phase 1 & 2:**
• $288,802	• Planned: $413,480 • Actual: $405,031 • Pending: $20,000	• $713,833

Expected End of Project Results:

Outputs

- > The DEF Secretariat is fully operational and able to support the national NGOs in administrative and organizational matters
- > Financially sustainable DEF network able to fully operate effectively
- > Training workshops conducted; appropriate documentation of results broadly disseminated
- > Appropriate publications published and disseminated to key stakeholders
- > Training courses conducted; and cooperation between NGOs is strengthened

Outcomes:

- > Community involvement increased through an expanded and strengthened network (from 30 NGO organizations as members in 2002 to over 200 NGO organizations as members in 2006) to undertake awareness raising and pollution reduction activities in 11 DRB countries;
- > Sustainable operation of the DEF Secretariat achieved , leading the further expansion and effectiveness of the network;
- > Active involvement of DEF members in policy development and pollution reduction activities assured through partnerships with DRB governments (e.g. activities to involve the public in DRB Management Planning process in the frame of the EU Water Framework Directive etc.)

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
DEF support	> Capacity building and practical assistance on 'identity' provided to DEF	> Improved structure of DEF > Participation of the DEF in the WFD implementation process > Extended membership > Increased capabilities to undertake outreach and awareness raising activities > Increased capabilities to respond to environmental issues in the Danube river basin	> Water policy teams created, to participate in EU WFD Implementation also at national leve > DEF members participated regularly in ICPDR expert group meetings > Training material on 'Wetlands and Nutrient reduction' prepared, training provided in 11 countries with participation of 15 experts per country > Wetlands book produced > Training manual available in 5 languages Network strengthened – 175 NGOs > National focal points in 11 countries active > 2 DEF bulletins regularly published per year also in other Danube languages > DEF press releases regularly printed in National media > New branding and designed communication tools and DEF web-site

Evaluation Findings:

- **Output 3.1** focused on reinforcing the Danube Environmental Forum, a regional NGO network that had been developed during the previous GEF Danube project.
- The outcomes have generally been attained. The DEF was successfully re-activated during the DRP and played very useful roles as an ICPDR observer, a vehicle for public awareness raising and helping NGOs across the region to participate in the small grants programme. The DEF has formulated a Water Policy Team, and members participated in both WFD implementation and ICPDR EGs.
- One role of DEF is to serve as a bridge between ICPDR and the public. This is achieved through their help with communications: leaflets, newsletters, and brochures in national languages (translations and revisions for the general public are based on DRP and ICPDR communications materials). DEF also played an active role in promoting and organising Danube Day in some countries.
- DEF had active participation at the national level in execution of Objective 3.4, serving as a member of the inter-sectoral working group charged with developing a national implementation strategy. DEF members were also deeply involved in the small grants effort under DRP, with some DEF members being awarded SGP projects

3.2: SMALL GRANTS PROGRAMME

Objective 3: Strengthening of public involvement in environmental decision making and reinforcement of community actions for pollution reduction and protection of ecosystems

Output 3.2: Applied awareness raising through community based "Small Grant Program"

Phase 1 Results:

> Inception Report / Work Plan submitted, stakeholder platform established
> Structure of the grant programme designed
> Regional Grant (1st call) Announcement Prepared and Announced
> Regional Grants Concepts submitted, assessed and selected for proposal phase
> Report on Evaluation of Regional Grants Proposals submitted including Projects selected in First Call
> National Grant (1st call) Announcement Prepared and Announced
> National Grants Concepts submitted, assessed and selected for proposal phase
> Report on Evaluation of National Grants Proposals submitted including Projects selected in First Call

Budget Phase 1	**Budget Phase 2**	**Total Budget Phase 1 & 2:**
• $121,920	• Planned: $1,996,350 • Actual: $1,828,732 • Pending $-212,032	• $1,738, 620

Expected End of Project Results:

Outputs

> Completed regional small grant demonstration projects
> Report on results of 1st call including recommendations
> Follow-up programme implemented
> Dissemination activities implemented
> Completed national small grant demonstration projects
> Report on results of 1st call including recommendations
> Follow-up programme implemented
> Dissemination activities implemented

Outcomes:

> Awareness of nutrient pollution and toxic substance problems in the DRB and involvement of DRB communities in 11 DRB countries enhanced via 120 national small grant funded projects led by national environmental NGOs and 12 regional small grant projects

involving 35 NGOs working on transboundary problems;

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Small Grants programme	> 130 small grants successfully implemented and completed with clear deliverables	> Capacity of NGOs to prepare proposals and to undertake project enhanced. > Significant increased awareness within stakeholders and broader public on environmental issues	> 6 regional and 58 national projects implemented within the 1st call, 25 project monitored > 6 regional and 56 national within the 2nd call.

Evaluation Findings:

- In **Output 3.2**, two calls for projects were held, in 2004 and 2006. All told, 120 national small grant funded projects were launched, led by national environmental NGOs. There were also 12 regional small grant projects carried out involving 35 NGOs working on transboundary problems. The DRP utilized the management services of the Regional Environmental Centre (Hungary) to administer the SGP.
- The SGP has been a very successful project component, and in many case cost-effective due to the enthusiasm of the NGOs concerned and their ability to raise co-funding. There was strong support amongst the participating NGOs and other stakeholders for the opportunity afforded by the small grants effort, and also for the manner in which it was managed by the DRP and the Regional Environmental Centre (REC). The DRP commissioned a review after the second set of small grants projects that assessed a subset of projects, and indicated a great many successful outcomes and the prevalence of public awareness raising activities over technical studies. The independent assessment of the small grants programme was not extensive enough to determine to what extent the DRP met its indicator of 80% of the projects showing sustainable results. At this stage it is still too early to see the full benefits as the small projects are like throwing a stone in a pond – the ripples spread out from the centre. Small projects in one village were noticed by surrounding communities, generally with the desire to replicate the effort. National attention was achieved for some projects.

3.3: COMMUNICATION AND PUBLIC AWARENESS

Objective 3: Strengthening of public involvement in environmental decision making and reinforcement of community actions for pollution reduction and protection of ecosystems **Output 3.3:** Organization of public awareness raising campaigns on nutrient reduction and control of toxic substances	**Phase 1 Results:** > DRB Communication Strategy developed; > Branding of DRP and new Web-page developed; > Preparations for a campaign on EU Water Framework Directive implementation in the DRB made; > Brochure on the DRP produced; > Several editions of Danube Watch produced; > Report: Communication Strategy > Report: Assessment of the Danube Watch

Budget Phase 1	**Budget Phase 2**	**Total Budget Phase 1 & 2:**
• $116,587	• Planned: $938,533 • Actual:$1,021,273 • Pending: $33,920	• $1,190,708

Expected End of Project Results:

Outputs

> Public Awareness Raising Plan and Media Action Plan implemented;
> Trainers and facilitators trained for organizing awareness raising campaigns;
> Public awareness is increased through conduct of national workshops (special attention to key DRB issues e.g. accidental pollution and prevention);
> Public Awareness materials produced, public awareness raised;
> Publications in public press and mass media (journals, posters, leaflets, articles in mass media, www- info, TV);
> Assessment of effectiveness of materials produced;
> Articles in regular journals or special issues to disseminate information in the DRB and to the international public in English and /or national languages;
> Media and communication network established;
> Training courses on communication and media held and capacities enhanced;

Outcomes

> Awareness of public in overall DRB on the importance of pollution reduction and environmental challenges has been enhanced through targeted communication activities and campaigns (farmers, municipalities, wetland mangers, environmental NGOs, etc.);
> Increase involvement of DRB Stakeholders in water management and pollution reduction activities;
> Increased capacities of Stakeholders to use communication and media to raise public awareness on importance of water management and pollution reduction;
> Danube Day has been established as an annual event and a platform to raise awareness on pollution control in 13 Danube countries. An estimated 1 million people have been actively participating in Danube Day activities throughout the region during the last years.
> ICPDR has become a public oriented institution through enhanced quality of communication and by using awareness raising tools and sustainable means of communication as the Danube Watch Magazine and the web-page.

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Communications	> Danube watch support > Public Participation Strategy > Campaigns on wetlands, detergents, BAP > Branding of ICPDR / DRP > Communication strategy > Media training	> Improved understanding of public outreach within ICPDR and NGOs > Improved public outreach by ICPDR > Broadened public participation > Increased awareness on nutrients and pollutions by all stakeholders > Improved capacity of ICPDR PS on media	> 10 issues of the Danube Watch published with DRP support > 4 campaigns on Wetlands, detergents, BAP (SLO, CRO, SK > Danube Day Events in 2005, 2006 in 13 countries > 100 articles in regional and international media > DRP fact sheets on 5 main themes > 40 Fact Sheets > Over 70 workshops organised by DRP with over 1700 participants (plus events organised by contractors on components) > 2 DRP/ICPDR Posters and roll-ups and 2 Brochures on Public participation and Danube Analysis > Delivery of ’15 years of Managing the Danube River Basin 1991- 2006

Evaluation Findings:

- The DRP achieved its objectives with respect to **Output 3.3** on communications and public awareness. The list of activities and achievements is impressive, with over 100 articles in the regional and local media, more than 70 workshops organised – bringing together more than 1700 participants, and promotion of the annual Danube Day, which grows in stature and public interest across all 13 Danube countries. Although the direct impact of many DRP products (Danube Watch and Fact Sheets) has been limited, notably due to language issues, NGOs in the region make use of the material - translating and rewriting in a more simplified manner for public dissemination in various national languages. DRP is commended on the scope and variety of seminars and workshops that have been undertaken with considerable enthusiasm. The various sessions have been aimed at a range of experts, stakeholders and the public. Penetration into civil society has been successful when NGOs have been closely involved (e.g. small grants programme and component 3.4).

3.4: PUBLIC ACCESS TO INFORMATION		
Objective 3: Strengthening of public involvement in environmental decision making and reinforcement of community actions for pollution reduction and protection of ecosystems **Output 3.4:** Enhancing Support of Public Participation in Addressing Priority Sources of Pollution ("hot spots") through Improved Access to Information in the Frame of the EU Water Framework Directive		**Phase 1 Results:** No activities indicated for Phase 1
Budget Phase 1 • $247,430	**Budget Phase 2** • Planned: $1,987,942 • Actual: $1,707,037 • Pending: $259,327	**Total Budget Phase 1 & 2:** • $2,213,794

Expected End of Project Results:

Outputs

> Needs Assessment Report

Project Component 3.4 Implementation Plan

> National and operational Teams for Public Participation established at respective national levels

> Improved structures for information provision, appropriate legal framework established, tools developed and capacities to provide access and/or to demand access, enhanced

> Local demonstration project implemented and project reports submitted;

> Clarified linkages to or help to establish a, national level public participation strategy

> Mechanism for disseminating information established

> Regional level workshops held

> Information material produced

Outcomes:

> Access to Information on DRB hot spots improved in 5 DRB countries through increased capacities of 100 governmental officials and 100 key stakeholders (environmental NGOs etc.) as well as through the appropriate legal frameworks and tools for providing information that were developed;

> Pollution reduction processes initiated at 5 hot spots via the conducting of 5 pilot projects that were agreed with the respective key stakeholders for each site based on improved access to information.

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Access to Information / Aarhus Convention	> 5 pilot projects with manuals and training workshops on access to environmental information	> Strengthened capacity of countries to implement Aarhus convention > Enabling countries to better provide environmental information to stakeholders improving public participation	> Five Pilot projects with country specific outputs > Participation of 20 governmental and 10 NGO representatives at two study tours (USA & NL) > Two basin-wide workshops with participation of 90 country representatives > Final workshop with 60 participants from all Danube countries

Evaluation Findings:

- The public participation effort (**Output 3.4**) involves enhancing public participation to address Priority Sources of Pollution ("hot spots") through improved access to information in the frame of the EU WFD. Expected deliverables by project end included a needs assessment report, national and operational teams for public participation established at respective national levels, improved structures for information provision, appropriate legal framework established, tools developed and capacities to provide access and/or to demand access, enhanced; and local demonstration projects implemented and project reports submitted.
- Five pilot projects were managed, with manuals and training workshops developed for each, two study tours were held (US and Netherlands), two basin-wide workshops were carried out – including 90 country representatives, and a final workshop was held An implementation plan was the subject of some concern early on for the DRP and ICPDR because of its comparatively high cost and independent status. This component was an add-on to the DRP and the project implementation was not always smooth. Management devolved to REC International, with the advantage of having access to their NGO network, but with the disadvantage of high overhead costs. The agreement during the second phase to refocus towards implementation of the EU WFD (as well as the Aarhus Convention) brought this effort into alignment with the rest of the DRP
- The overall impression in the region is that the Objective has been met. Although implementation would be an obligation under the Aarhus Convention, the DRP facilitated the process, notably in countries where there was no prior experience in this domain. In Bulgaria and Romania, the DRP managed to achieve successful collaborations between government and NGOs. Positive benefits have been the production of manuals for government use and brochures for NGOs and the general public on how to go about getting access to information and becoming involved in environmental decision-making. Much more information is accessible on the Internet in these countries, following assistance with Web Site development. Reactions from the beneficiaries to the manuals that were developed on public access, and to the pilot activities undertaken, have been very favourable. In particular, the work done in the pilot for Bosnia-Herzegovina has been highlighted as providing useful guidance to the government and improved access to the public.

Objective 4: REINFORCEMENT OF MONITORING, EVALUATION AND INFORMATION SYSTEMS TO CONTROL TRANSBOUNDARY POLLUTION, AND TO REDUCE NUTRIENTS AND HARMFUL SUBSTANCES

- OBJECTIVE 4 WAS TO BE VERIFIED THROUGH A "CONSIDERABLE" INCREASE IN KNOWLEDGE ON SEDIMENTATION, TRANSPORT AND REMOVAL OF NUTRIENTS AND TOXIC SUBSTANCES, AND ACCEPTANCE AT NATIONAL AND REGIONAL LEVELS OF ECONOMIC INSTRUMENTS TO ENCOURAGE INVESTMENT FOR NUTRIENT REDUCTION. SPECIFIC VERIFICATION SOURCES INCLUDE PROJECTS AND MEASURES IN PLACE TO REDUCE TOXIC SUBSTANCES IN THE IRON GATES RESERVOIR, AND ENDORSED WETLANDS MANAGEMENT PROGRAMS.

4.1: INDICATORS

Output 4.1: Development of indicators for project monitoring and impact evaluation	**Phase 1 Results:** > Scoping Paper outlining all elements to be considered in developing the DRB M and E system > Framework for a general system of indicators including GEF system of: Process, stress reduction, environmental status as well as other relevant indicator systems (WFD, DPSIR etc.) > Framework for impact indicators (process, stress reduction, environmental status) to evaluate environmental effects of policy and programme implementation

Budget Phase 1	**Budget Phase 2**	**Total Budget Phase 1 & 2:**
• 38,874	• Planned: $99,000 • Actual: 47,411 • Pending:	• $86,285

Expected End of Project Results:

Outputs

> M & E System established and progress measured and analyzed
> Information on progress in implementation
> Progress monitoring system established and indicators applied
> Manuals for M&E and application of indicators existing in national languages

Outcomes:

> Status of DRB environment as well as progress and impacts of interventions (especially the UNDP/GEF DRP) monitored by comprehensive, tested and functioning system of indicators for monitoring and evaluation at project level and policy compliance in the 13 DRB countries.

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Indicators	> Agreed and adopted list of indicators (P, SR and E) by DRP and ICPDR – tested and evaluated	> Indicators available to ICPDR to evaluate progress on core activities in accordance with DRPC	> Set of 35 indicators developed and agreed with ICPDR > 14 indicators tested and evaluated

Evaluation Findings:

- The objective in **Output 4.1** was to develop a set of indicators for project monitoring and evaluation. Expected outcomes included: M & E System established and progress measured and analyzed; information on progress in implementation; progress monitoring system established and indicators applied; and manuals for M&E and application of indicators existing in national languages. In the end, a set of 35 indicators were developed and agreed with the ICPDR and 14 indicators were tested and evaluated.
- The indicators effort was problematic, in that the initial expectations were to have indicators developed early on in the project that could then be used to gauge project success. Unfortunately, the effort to identify indicators during the DRP first phase got bogged down in a somewhat academic comparison of UNDP and EU indicator requirements. During the second phase, a set of 35 indicators was developed. The late date of development and sizeable number of indicators has left some DRP country participants with the view that the indicators exercise did not achieve expectations and will be of limited future use.
- A final report was produced at the end of the project lifetime. An obvious comment about the report is the lack of information that was available for the indicators chosen. In many cases, the report provides a snapshot of the situation only in 2005. In this context, it is difficult to use the indicators to evaluate the success or failure of the project to achieve objectives. However, the recommendations therein (page 40-41) do illustrate what is needed in order to have and utilise an effective set of indicators to measure project effectiveness. For example, a core list of indicators has to be agreed at the start of the project. Importantly, suitable data and information has to be collected systematically from the beginning of the project. For process indicators and some stress reduction indicators, regular and structured consultations of stakeholders should be organized, possibly every three years using questionnaires. However, a mechanism has to be developed in order to receive enough responses to allow statistical analysis. Possibilities are: (1) to give an incentive to the respondents, (2) make returning of questionnaires conditional to the receipt of grants (for NGOs only), (3) distribute questionnaires during meetings or conferences and not through the web.

4.2: ANALYSIS OF IRON GATES SEDIMENTS

Objective 4: Reinforcement of monitoring, evaluation and information systems to control transboundary pollution, and to reduce nutrients and harmful substances **Output 4.2:** Analysis of sediments in the Iron Gate reservoir and impact assessment of heavy metals and other dangerous substances on the Danube and the Black Sea ecosystems	**Phase 1 Results:** > No actions taken during Phase 1

Budget Phase 1	**Budget Phase 2**	**Total Budget:**
• $0	• Planned: $120,000 • Actual: $103,575 • Pending: $2,510	• $106,085

Expected End of Project Results:

Outputs

> Report on the contents of heavy metals, nutrients, silicates and the dangerous substances
> List and assessed quantities of dangerous substances
> Report on the environmental impacts on the Danube and the Black Sea
> Draft forecast
> List of recommendations containing adequate measures
> List of recommended measures for the JAP
> Specific monitoring programme

Outcomes:

> The understanding of the impacts on Danube River and Black Sea ecosystem and potential risks of hazardous substances, nutrients and silicates in Iron Gate reservoir sediments increased and programmes developed.

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Iron Gate Sediments	> Agreed assessment (RO, RS) on quality of Iron Gate Sediments	> Improved knowledge and co-operation between RO and RS to address the future challenge of the Iron Gate reservoir	> Assessment of the quality of Iron Gate Sediment

Evaluation Findings:

- **Output 4.2** sought to analyse the iron gates sediments. An assessment was carried out using regional expertise.
- This output can be considered a success in that it exemplifies effective collaboration amongst Romania, Hungary and Serbia. The project started with a data review focussing on the EU 33 priority substances, establishing that only limited data were available. The three countries conducted a survey, collecting surface sediments and six cores. Split analyses were undertaken, whereby measurements were made in all three countries. Many more data were obtained for a wide range of contaminants that had not previously been measured. However, some scientific questions remain, notably to characterise and quantify the apparent nutrient pump effect by which there is a seasonal release of nutrients from the sediments. Thus, the sediments act as a temporary reservoir rather than a sink (illustrating the difference between retention and removal of nutrients).
- There are expectations to re-sample the reservoir during the Joint Danube Cruise in the summer 2007. Future work will relate to determining deposition rates (presently estimated to be 3 cm/year) and measuring organic contaminants.
- Although scientific knowledge has improved, it is not clear how the newfound information is going to be translated into environmental management. The analysis has made all parties recognise the high environmental and financial cost of dredging or flushing the reservoir, so the overriding sentiment in the region seems to be to do nothing for the next decade or so until the situation becomes more critical.

4.3: MONITORING OF WETLANDS		
Objective 4: Reinforcement of monitoring, evaluation and information systems to control transboundary pollution, and to reduce nutrients and harmful substances **Output 4.3:** Monitoring and assessment of nutrient removal capacities of riverine wetlands	**Phase 1 Results:** > Review of Existing Wetland Projects/Programmes and Respective Monitoring Strategies completed > General Guidelines on Methodology for Monitoring Nutrient Removal prepared > Pre-selection of Pilot Sites made > Workshop on Monitoring of Nutrient Removal in Wetlands held > Recommendations for Monitoring in Pilot Areas including Pilot Site Monitoring Programme and mechanism for knowledge exchange > ICPDR expert groups ECO, MLIM, EMIS; WWF, Ramsar Convention, NGOs (DEF); linkages to other similar projects producing useful data, linkage to the 5th EU action program	
Budget Phase 1 • $72,745	**Budget Phase 2** • Planned: $182,313 • Actual: $123,565 • Pending: $38,897	**Total Budget:** • $235,207
Expected End of Project Results: Outputs > Review of Phase 1 Outputs > Training / Expert Consultation Workshop > Report on the implementation of monitoring guidance > Assistance to other Wetlands > Dissemination > Draft Action Plan for implementing monitoring guidance across DRB > Final Workshop		

Outcomes:

> Monitoring approaches for assessing nutrient removal in wetlands and floodplains accepted by DRB wetland managers as well as DRB policy makers and being used;
> Nutrient removal and storage functions of wetlands and floodplains enhanced through agreement on a DRB wetland management plan.

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Wetlands – nutrients	> Completion of pilot projects > Preparation of guidance document on best practices for nutrient retention by wetlands > International workshop to share experiences	> Improved understanding of wetland retention of nutrients and incorporation of wetlands in WFD River Basin Management Plan through the Programme of Measures	> Three pilot projects implemented – Case studies on Nutrient removal capacities of wetlands (Moldova, Ukraine, Romania) > 40 participants from Danube countries participated at the workshop (joint with Component 1.4)

Evaluation Findings:

- **Output 4.3** involves the monitoring of wetlands and especially to consider the nutrient removal capacities of wetlands.
- Pilot studies were carried out in Moldova, Ukraine, and Romania. In addition, a manual entitled *Technical guidance on the integration of the nutrient reduction in riverine wetland management* was produced in full (148 pages) and as a Summary document (19 pages). Taking a holistic view of wetlands, the study suggests that it is important step to integrate wetland and river basin management, and to consider the linkages between all ecosystem functions provided by wetlands.
- The investigations suggests that most riverine wetlands play a holding rather than removal role with respect to nutrients, and it is important to recognise that nutrient retention needs to be seen as an added benefit of wetlands management, beyond the well-accepted biodiversity and flood control benefits.

- As noted under Output 1.4, the Final Wetlands Workshop was a successful event that brought together a diverse mixture of 50 participants from IGOs, academia, government agencies and laboratories, as well as international and local NGOs. The presentations covered topics ranging from policy development and implementation to scientific investigations; methodological developments to wetland management. Participants included personnel from other IGO sponsored projects (WB, TACIS, WWF, Ramsar) thereby providing a broad cross-section of current wetland investigations and restoration efforts throughout the Danube region. A network of protected area managers was founded at this workshop.
- Overall, understanding about nutrient retention in the Danube River basin was improved and broadly disseminated. The workshop brought together relevant scientists and wetland managers from throughout the region. Future application of the information gained will depend upon its incorporation into the RBM Plan currently under development, bearing in mind the wider benefits of wetland retention and restoration (conservations values, biodiversity, flood control, etc.), as well as competing interests of the transport industry. It is not clear to what extent ICPDR will be able to influence wetland management in the DRB, given that some countries see this issue as nature conservancy rather then water management.

4.4: NUTRIENT TRADING

Objective 4: Reinforcement of monitoring, evaluation and information systems to control transboundary pollution, and to reduce nutrients and harmful substances **Output 4.4:** Danube Basin study on pollution trading and corresponding economic instruments for nutrient reduction	**Phase 1 Results:** The project did not have results on this effort during the first phase.

Budget Phase 1	**Budget Phase 2**	**Total Budget:**
• $0	• Planned: $164,429 • Actual: 192,132 • Pending: $11,197	• $203,329

Expected End of Project Results:

Outputs

> Analysis and assessment report regarding existing concepts of pollution trading or corresponding economic instruments
> Report on general possibilities for establishing appropriate economic instruments for nutrient reduction in the DRB
> Recommendation for policy creation and for legal framework adjustment
> Proposals for legal and policy changes required
> Report on pollution trading potential and readiness on a country basis
> Principles for definition of discharge quotas on a country basis
> Assessment of general viability of the "pollution trading" concept in the DRB and recommendations to the ICPDR
> Review of economic instruments
> Workshop and workshop report

Outcomes:

> Understanding by policy makers, regulators, polluters and investors of potential of innovative market-based nutrient pollution control instruments to reduce the nutrient pollution in DRB enhanced.

PCU Completion report:

Activity	Outputs	Outcomes	Quantitative Indicators
Nutrient trading	> Reports and workshop on trading options > Cost-effect nutrient management options > Reports on nutrient status within Danube River Basin and impact on NW shelf of the Black Sea	> Increased awareness of alternative means and barriers for nutrient management by trading > Recognition of need for long-term programme to evaluate options sharing the nutrient burden between countries in a cost-effective way	> Final workshop on nutrient trading >

Evaluation Findings:

- The nutrient trading (**Output 4.4)** was established to conduct a study on pollution trading and to consider corresponding economic instruments for nutrient reduction. The expected outputs included an analysis and assessment report regarding existing concepts of pollution trading: policy and legal recommendations; an assessment of the readiness of the region, on a country basis; and the general viability of the "pollution trading" concept in the DRB. The effort also included a workshop.
- The activity was only undertaken during the project second phase and the results did not fully achieve expectations. The effort proved to be a difficult concept for the Danube countries to embrace and the DRP was unable to make much progress. The study that was developed by external consultants was useful from a theoretical standpoint, and included lessons learned form other trading efforts. However, it came up short with respect to assessing the viability of pollution trading in the DRB and it failed to provide recommendations on how a system could be made operational in the region. During the evaluation some country representatives were negative to the concept, especially on how the payment process would operate and thinking that it could have a negative consequence of delaying or curtailing local and national direct financial support towards reducing nutrient emissions.

ANNEX 2 TERMS OF REFERENCE

For the independent Final Evaluation of the:

Danube Regional Project

Strengthening the Implementation Capacities for Nutrient Reduction and Transboundary Cooperation in the Danube River Basin, Danube Phase II 00036337

Introduction & Background

The long-term development objective of this GEF International Waters Project is to contribute to sustainable human development in the DRB and the wider Black Sea area through reinforcing the capacities of the participating countries in developing effective mechanisms for regional cooperation and coordination in order to ensure protection of international waters, sustainable management of natural resources and biodiversity.

In this context, the GEF Danube Regional Project, as part of the Danube- Black Sea Strategic Partnership has been addressing water quality issues in the Danube and Black Sea during the last 6 years.

The overall objective of the Danube Regional Project is to complement the activities of the ICPDR required to provide a regional approach and global significance to the development of national policies and legislation and the definition of priority actions for nutrient reduction and pollution control with particular attention to achieving sustainable transboundary ecological effects within the DRB and the Black Sea area.

The Danube Regional Project has been facilitating the implementation of the Danube River Protection Convention and providing a framework for coordination, dissemination and replication of successful demonstration that are being developed further through investment projects (World Bank-GEF Partnership Investment Facility for Nutrient Reduction, EBRD, EU programmes for accession countries etc.).

The specific objective of Phase 1 December 2001 – December 2003, was to prepare and initiate basin-wide capacity-building activities, which was then consolidated in the second phase of the Project. The second Phase has been implemented from April 2004 to May 2007, building up on the results archived in the first Phase. During the Danube project, altogether 20 project components with 80 activities have been carried out.

Objectives and scope of the Final evaluation

The objective of the final evaluation is to enable GEF, UNDP, ICPDR, the Government bodies in the participating countries, and UNOPS to assess the relevance, efficiency,

effectiveness, impact and sustainability of the Danube Regional Project. The evaluation will assess the achievements of the project against its objectives, including a re-examination of the relevance of the objectives and of the project design. It will also identify factors that have facilitated or impeded the achievement of the objectives. While a thorough review of the past is in itself very important, the in-depth evaluation is expected to lead to detailed overview and lessons learned for the future.

The Final evaluation will address the following issues:

Project design

- relevance of project design within the framework of GEF guidelines and global concern regarding the Danube river basin;
- appropriateness of the project's concept and design to the current economic, institutional and environmental situation in the target region;
- contribution of the project to the overall development objective as declared in the Project Document; and
- the likely sustainability of project interventions;

Project implementation

- general implementation and management of the UNDP/GEF project by the Project Management in terms of quality of inputs and activities, adherence to workplans and budgets, major factors which have facilitated or impeded the progress of project implementation
- adequacy of management arrangements as well as monitoring and backstopping support given to the project by all parties concerned;
- institutional set-up through the ICPDR and various Expert groups and the degree to which it has encouraged full involvement of the countries;
- inputs of the Governments of the Thirteen countries at national and local levels;
- responsiveness of project management to changes in the environment in which the project operates;
- UNOPS and ICPDR execution;
- co-operation among project partners (UNDP/GEF, Project Team, ICPDR, National Governments and international and national organisations and NGOs. specifically with regard to the integration and support of ICPDR

Project impact

- achievements of the project against the original objectives, outputs and activities as detailed in the project document and the Project Implementation plan;
- awareness of the participating countries regarding project outputs;
- level of ownership of the project by the participating countries;
- commitment of countries to support the ongoing project and ICPDR JAP and EU WFD implementation;
- cost-effectiveness of project;
- public participation and stakeholder involvement in implementation of project activities;
- likely degree of support from the Countries' Governments in integrating the project objectives and into their national development programmes and other related projects, and how well the project fits into their national development policy;
- impacts on policy and strategy of countries;
- project impact on improving the capacity to prepare and implement collaborative, targeted and effective efforts for the management of the Danube River Basin

- project impact on enhancing inter-agency and inter-ministerial co-operation in each country and on regional cooperation;
- cooperation among international organisations, NGOs and other stakeholders;
- cooperation with sister projects in the GEF IW portfolio esp. Black Sea Ecosystem Recovery Project.
- sustainability of the project's impact.

Recommendation and lessons learned

- Provide key lessons learned and identify best practices as well as recommendations, based on the experience of this project, for the design and execution of future GEF/UNDP projects;

Methodology

The evaluation will consist of four activities:

- document review
- participation at the Danube Final Seminar (February 2007)
- field visits and
- interviews with individuals who are either affiliated to the project in some way or who have or might be expected to be impacted by the project.

Document Review

The evaluator(s) shall familiarise themselves with the project through a review of relevant documents prior to the field visits. These documents include inter alia:

- Project Document, PIP Phase 1 and 2 including log frame
- Specific project reports related to key activities;
- GEF Project Implementation Review (PIR)(APR) from 2002-2006
- Minutes of meetings of Steering Committee and Standing Working Group 2002-2006 (Ordinary Meetings)
- Mid-term evaluation report
- UNDP Handbook for Programme Managers: Results-Oriented Monitoring and Evaluation
- DRP Exit Strategy
- Information can also be found at the project web site: www.icpdr.org/undp-drp

Hard copies of selected documents, which are not available through the internet, shall be sent by courier to the evaluator(s) in advance of the mission.

Participation in Danube Final Seminar

The evaluator(s) shall participate in the Danube Final Seminar to be organised in Bucharest, Romania 21st and 22nd of February 2007. At this meeting all key stakeholders will be represented and information and feed-back on implemented project activities will be given.

Field visits
The evaluator(s) will visit the participating countries and stakeholders of all Danube countries. Timetable and meetings to be organised and decided.

Interviews
The evaluator(s) will carry out interviews with:

- Project Staff
- Experts from ICPDR PS
- Selected members of the ICPDR Steering Committee and Standing Working Groups
- Selected members of the ICPDR Expert Groups
- Representatives of the relevant NGOs, DEF, REC, etc.
- Other constituencies and stakeholders not directly involved in the project who may have experienced, or may be expected to experience, its impacts.

Although the independent evaluators should feel free to discuss with the authorities concerned all matters relevant to their assignment, they are not authorised to make any commitment on behalf of UNOPS, UNDP or GEF.

Ratings
The terminal Evaluation will include ratings on the following criteria: a) outcomes/ achievement of objectives (the extent to which the project's environmental objectives were achieved; b) implementation approach, c) stakeholder Participation / public involvement; d) Sustainability and e) Monitoring & Evaluation.

The ratings will be:

Highly satisfactory

Satisfactory

Marginally Satisfactory

Unsatisfactory and

N/A

Duration and timing of the Evaluation
The evaluation will involve a level of effort of 65 working days, to commence in February 2007 and to be fully completed by May 2007.

Conclusions and Recommendations
Based on the above objectives and methodology, the final evaluation should provide conclusions and recommendations, including:

- As assessment of the design, implementation and execution of the Danube Regional Project;
- An assessment of sustainability of outcomes;

- A summary of lessons and recommendations, that are supported by the evidence presented;
- The actual project costs (total and per activity) and actual co-financing used as well as cost-effectiveness;
- Provide stakeholders with and objective view of how wisely and effectively GEF's funding for this project was spent;
- Provide key lessons learned and best practices as well as recommendations, based on the experience of this project, for the design and execution of future GEF/UNDP projects;

Mission Report

The evaluation mission will complete the Project Evaluation Information Sheet (PEIS) according to the existing format and produce a report according to the structure outlined in the UNDP Guideline for Evaluators. In addition, the final report should contain at least the following annexes:

- Terms of Reference for final evaluation
- Itinerary
- List of meetings attended
- List of persons interviewed
- Summary of field visits
- List of documents reviewed
- Any other relevant material

As the report is the product of an independent evaluation, it is up to the evaluator(s) to make use of the information provided during the mission. However, the evaluator is responsible for reflecting any factual corrections brought to his/her attention prior to the finalisation of the report. Therefore, in order to ensure that the report considers the view of all parties concerned, is properly understood, and is factually accurate, it is necessary for the evaluator to submit draft reports to the project, UNDP/GEF and UNOPS. UNOPS will revert promptly with collective feedback from project partners in order that the evaluator may finalise the report.

The final version of the evaluation mission report should be submitted in electronic format (MS Word) and hard copy to UNOPS no later than June 30th.

Composition of the Final evaluation mission

The evaluation will be performed by a team of internationally recruited consultants. The consultants will have considerable knowledge and experience regarding GEF IW operational programme, including water legislation, policy, and EU WFD. An excellent knowledge of river basin management issues and relevant scientific understanding and in-depth experience of project evaluation techniques, particularly of those projects which are funded by GEF.

The consultants shall not have been directly involved in the design or implementation of the project.

Contact information

Contact information for DRP, UNOPS and UNDP/GEF:

DRP:

Ivan Zavadsky
Regional Coordinator
UNDP/GEF Danube and Black Sea
Vienna International Centre
D0418, P.O Box 500
A-1400 Vienna, Austria
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Fax: +431260605837
Ivan.Zavadsky@unvienna.org

UNOPS

Andrew Menz, Ph.D
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Division for Environmental Programmes
UNOPS
Midtermolen 3
2100 Copenhagen, Denmark
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Fax. +45 3546 7501
Andrewm@unops.org

UNDP-GEF

Mr. Andrew HUDSON
Principal Technical Advisor – International Waters UNDP-GEF
Global Environment Facility
United Nations Development Programme
Room FF-1076
One United Nations Plaza
304E 45th Street
New York, NY 10017, USA
Telephone: +1 212 906 6228
Fax: +1 212 906 6998
E-mail: andrew.hudson@undp.org

ANNEX 3: MISSION ITINERARY

Evaluators:

AF: Mr. Alan Fox

SdM: Dr. Stephan de Mora

DATE	Eval.	Location
26 March	AF & SdM	**Vienna, Austria:** DRP ▪ Mr. Ivan Zavadsky, Project Manager ▪ Mr. Peter Whalley, Environmental Specialist ▪ Ms. Kari Eik, Information Management ▪ Ms. Marcella Fabianova ▪ Ms. Sylvia Koch ▪ Mr. Paul Csagoly ▪ Ms. Viennelyn Baba
27 March	AF & SdM	**Vienna Austria:** ICPDR ▪ Mr. Igor Liska ▪ Ms. Mihaela Popovici ▪ Ms. Jasmine Bachmann ▪ Mr. Alex Höbart ▪ Ms. Diana Heilmann ▪ Ms. Birgit Vogel ▪ Mr. Philip Weller
28 March	AF & SdM	**Bratislava, Slovakia:** Slovak Hydrometeorological Institute: ▪ Mr. Peter Rončák, ▪ Mr. Boris Minarik, RBM EG ▪ Ms. Jana Poorova, RBM EG ▪ Mr. Eugen Kullman, MA EG Ekopen ▪ Mr. Tom Owen ▪ Ms. Nora Bartkova Slovak Water Research Institute ▪ Ms. Emilia Kunikova, PM EG ▪ Ms. Jarmila Markovinská Slovak Ministry of Environment: ▪ Marián Supek, HoD Slovakia, Director General Ministry of Environment ▪ Ms. Zdena Kelnarova, Chairperson EMIS EG, Ministry of Environment UNDP Regional Office ▪ Mr. Vladimir Mamaev, UNDP ▪ Mr. Juerg Staudenmann, UNDP ▪ Mr. Mish Hamid, IW-Learn
29 March	AF &	**Vienna, Austria:** ▪ Wofgang Stalzer, former AT – HoD

	SdM	▪ Dr. Fritz Holzwarth, HoD Germany, former ICPDR President (2003)
29 March	SdM	**Vienna, Austria:** Ministry of Agriculture ▪ Mr. Helmut Fleckseder, EG RBM, Federal Ministry of Agriculture, Forestry, Environment and Water Management ▪ Ms. Veronika Koller-Kreimel, EG MA, Federal Ministry of Agriculture, Forestry, Environment and Water Management
30 March	AF	**Brno, Czech Republic** Czech Water Research Institute ▪ Mrs. Eva Sovjakova, Chair, GIS EG ▪ Mrs. Ilja Bernardova, MA EG ▪ Mrs. Darina Remenarova, MA EG ▪ Mr. Stanislav Juran, member of PM EG ▪ Mrs. Milena Forejtnikova ▪ Ms. Doubravka Nedvedova DRPC coordinator for CZ ▪ Mr. ( ) Union of Morava NGOs
2 April	SdM	**Sofia, Bulgaria:** Ministry of Environment and Water ▪ Ms. Violeta Roiatchka, Ministry of Environment and Water ▪ Ms. Kremena Plamenova, Ministry of Environment and Water ▪ Ms. Denitsa Petrova, Ministry of Environment and Water ▪ Mr. Ivan Kalamerov, Danube River Basin Directorate ▪ Mr. Krasimir Gorchev, Ministry of Environment and Water, EG PM ▪ Mr. Hristo Kasadzhikov, EG MA, Danube River Basin Directorate ▪ Ms. Krasimira Bramcheva, EG FP, Danube River Basin Directorate ▪ Mr. Mihail Mollov, Executive Environment Agency ▪ Ms. Mina Asenova, Executive Environment Agency ▪ Mr. Nikolai Kouyumdzhiev, former HoD Bulgaria, Sofiyskas Voda
, 3 April	SdM	**Sofia, Bulgaria** REC Bulgaria ▪ Ms. Maria Velikova, NGO Bulgaria in Europe ▪ Ms. Miglena Todorova, REC Bulgaria ▪ Ms. Desislava Stefanova, Rec Bulgaria ▪ Ms. Navena Pramatarova, Bulgarian National Radio ▪ Ms. Miglena Todorova, Director - REC Bulgaria ▪ Mr. Daniel Popov, Centre for Environmental Information and Education ▪ Ms. Nelly Miteva, Ecomission 21 Century ▪ Mr. Petko Tsvetkov, More space for rivers and safety for people

11 April	SdM	**Chinisau, Moldova** ▪ Mr. Constantin Mihailescu, Minister of Ecology and Natural Resources, ICPDR President 2006 ▪ Mr. Dimitru Drumea, HoD, Institute of Ecology and Geography ▪ Mr. Phil Weller, ICPDR ▪ Mr. Peter Whalley (DRP) ▪ Ms. Tatiana Belous (EG PM) State Hydrometeorological Service: ▪ Mr. Gavril Gîlcă, Ms. Ludmila Cunican (EG MA) ▪ Ms. Svetlana Stirbu (EG MA)
12 April	SdM	**Kiev, Ukraine** ▪ Mr. Alexei Iarochevitch, EG RBM, Consultant ▪ Ms. Oksana Manturova, EG MA, Institute of Hydrobiology
13 April	SdM	**Kiev, Ukraine** ▪ Mr. Stepan Lyzan, HoD, Deputy Minister of the Environment ▪ Mr. Alexei Iarochevitch, EG RBM ▪ Mr. Iurii, EG MA, Institute of Hydrobiology ▪ Ms. Anna Tsvetkova, EG PP, MAMA-86
16 April	SdM	**Bucharest, Romania** Ministry of Environment and Sustainable Development: ▪ Ms. Ana Drapa ▪ Mr. Valentin Brustur ▪ Mr. Gheroghe Constantin, HoD ▪ Ms. Jula Graziella, ▪ Mr. Teodor Lucian Constantinescu ▪ Mr. Aurel Varduca, EG APC ▪ Mr. Liviu Popescu, EG MA ▪ Mr. Gabriel Cluriac ▪ Ms. Carweu Hawclievici ▪ Ms. Carmen Toader
17 April	SdM	**Bucharest, Romania** REC Romania ▪ Mr. Lucian Ionescu, Director, REC Romania ▪ Ms. Eliza Teodorescu, Asociatia ALMA-RO ▪ Mr. Emilian Burdusel, Clubul ecologic UNESCO Pro Natura ▪ Ms. Mirela Leonte, Eco Councelling Center Galati, DEF representative ▪ Ms. Camelia Zamfir, Earth Friends - Galati
18, April	SdM	**Tulcea, Romania** Wetlands Workshop ▪ Ms. Christina Bratrich, Consultant, WWF-DCP ▪ Mr. Thomas Hein, Consultant, BOKU ▪ Mr. Alexander Zinke, Consultant, Zinke Environment Consulting
19 April	SdM	**Tulcea, Romania** Wetlands Workshop ▪ Ms. Petruta Moisi, DEF Focal Point for Romania, DEF Speaker for the Lower Danube
19 April	AF	**New York, USA**

		▪ Ms. Jane Stewart, New York University – Law Faculty, consultant: 3.4 ▪ Mr. Ernestine Meijer, environmental lawyer (Holland), (Conference call)
20 April	AF	**Washington DC, USA** ▪ Ms. Ruth Greenspan Bell, Resources for the Future ▪ Mr. Al Duda, GEF
23 April	AF & SdM	**Vienna, Austria** ▪ Mr. Helmut Blöch (EC HoD) via Video conference
24 April	AF	**Budapest, Hungary** Ministry of Environment and Water ▪ Ms. Mária Galambos, Ministry of Environment and Water ▪ Ms. Zsuzsa Steindl, EMIS EG, Ministry of Environment and Water ▪ Mr. Peter Kovacs, RBM EG, Ministry of Environment and Water ▪ Ms. Zsuzsa Buzás, Department of River Basin management. Ministry of Environment and Water ▪ Dr. Ferenc László, Director of Institute for Water Pollution Control, Water Resources Research Centre Plc. (VITUKI Plc)
25 April	AF	**Karlavac, Croatia** ▪ Ms. Tanja, Stepinac, Karlavac ViK
26 April	AF	**Zagreb, Croatia** Ministry of Agriculture Forestry and Water Ministry, ▪ Karmen Cerar, International Projects, former RBM-EG Virovitica, Croatia: ▪ Mr. Darko Grlica, WWF wetlands pilot manager
27 April	AF	**Szentendere, Hungary** Regional Environmental Centre: ▪ Ms. Entela Pinguli, SGP Manager, Regional Environmental Centre (REC) ▪ Ms. Magdolna Toth Nagy, REC public outreach mgr. ▪ Ms. Jovanka Ignjatovic, REC water expert
2-May	AF	**Vojvodina, Serbia** Vojvodina, Agriculture Pilot Projects ▪ Mr. Goran Pastrovic, consultant to Carl Bro (1.2-3 agriculture) ▪ (farmers)
3 May	AF	**Belgrade, Serbia** Ministry of Agriculture, Forestry and Water Management – Directorate of Water ▪ Mr. Miodrag Milovanovic, Deputy Director, Jaroslav Cerni Institute ▪ Ms. Milica Djuric, international projects, Directorate of Water
4 May	AF	**Bosnia - Herzegovina** Ministry for Foreign Trade and Economic Relations ▪ Aleksandra Pločo, DRP B-H country programme manager ▪ Ms. Sabaheta Hafizović, PM-EG member ▪ Ms. Amra Ibrahimpašić, PM EG member

- Hazima Hadžovićfocal point and RBM EG member
- Anisa Čičič, MA EG member
- Naida Andelić, Deputy HoD, RBM EG member

B-H Regional Environmental Centre

- Inka Persic, REC B&H Grant/Information Manager
- Dorde Stefanovic, Deputy Director, REC B&H

ANNEX 4: LIST OF PERSONS INTERVIEWED

Secretariat to the International Commission for the Protection of the Danube River (ICPDR)	
	▪ Mr. Igor Liska ▪ Ms. Mihaela Popovici ▪ Ms. Jasmine Bachmann ▪ Mr. Alex Höbart ▪ Ms. Diana Heilmann ▪ Ms. Birgit Vogel ▪ Mr. Philip Weller
UNDP-GEF Danube Regional Project (DRP)	
	▪ Mr. Ivan Zavadsky, Project Manager ▪ Mr. Peter Whalley, Environmental Specialist ▪ Ms. Kari Eik, Information Management ▪ Ms. Marcella Fabianova ▪ Ms. Sylvia Koch ▪ Mr. Paul Csagoly ▪ Ms. Viennelyn Baba ▪ Ms. Kari Eik
Consultants to the DRP	
	▪ Mr. Glenn Morris, USA, consultant, 1.6 and 1.7 Tariffs & charges ▪ Mr. Andras Kiss, Hungary, Consultant, 1.6 and 1.7 Tariffs & charges
	▪ Mr. Tom Owen, EKOPEN, International Consultant for 1.5 Industrial / BAT ▪ Ms. Nora Bartkova, EKOPEN
	▪ Mr. Goran Pavlovic, Carl Bro - Serbia – 1.2 Agriculture pilots
	▪ Ms. Jane Stewart, New York University School of Law, Outcome 3.5 expert
	▪ Ms. Ruth Greenspan Bell, Resources for the Future, Outcome 3.5 expert
	▪ Ms. Christina Bratrich (Consultant, WWF-DCP)
	▪ Ms. Ernestine Meijer, environmental lawyer (Holland), (Conference call)
	▪ Mr. Thomas Hein (Consultant, BOKU)
	▪ Mr. Alexander Zinke (Consultant, Zinke Environment Consulting
Regional Environmental Centre	
	HQ - Hungary ▪ Ms. Entela Pinguli, SGP Manager, Regional Environmental Centre (REC) ▪ Ms. Magdolna Toth Nagy, REC public outreach mgr. ▪ Ms. Jovanka Ignjatovic, REC water expert
	Bosnia-Herzegovina ▪ Inka Persic, Grant/Information Manager, REC B&H ▪ Dorde Stefanovic, Deputy Director, REC B&H
	Bulgaria

	▪ Ms. Miglena Todorova, REC Bulgaria ▪ Ms. Desislava Stefanova, Rec Bulgaria
	Romania ▪ Mr. Lucian Ionescu, Director, REC Romania ▪ Ms. Eliza Teodorescu, Asociatia ALMA-RO ▪ Mr. Emilian Burdusel, Clubul ecologic UNESCO Pro Natura ▪ Ms. Mirela Leonte, Eco Councelling Center Galati, DEF representative ▪ Ms. Camelia Zamfir, Earth Friends - Galati
Danube Environment Forum (DEF)	
	▪ Mr. Johannes Wolf, DEF Speaker ▪ Ms. Monika Kovacova, DEF Speaker ▪ Ms. Petruta Moisi, DEF Focal Point for Romania, DEF Speaker for the Lower Danube ▪ Mr. Daniel Popov, National Focal Point for Bulgaria
United Nations Office for Project Services (UNOPS)	
	▪ Mr. Andrew Menz, Principal Portfolio Manager
UNDP-GEF IW	
	▪ Mr. Al Duda, GEF ▪ Mr. Andrew Hudson, Principal Adviser, UNDP-GEF ▪ Mr. Vladimir Mamaev, UNDP Regional Technical Advisor ▪ Mr. Juerg Staudenmann, UNDP ▪ Mr. Mish Hamid, IW-Learn
European Commission	
	▪ Mr. Helmut Bloch, DG Env
Austria	▪ Mr. Wolfgang Stalzer, former ICPDR president, former Austria HoD ▪ Mr. Helmut Fleckseder, EG RBM, Federal Ministry of Agriculture, Forestry, Environment and Water Management ▪ Ms. Veronika Koller-Kreimel, EG MA, Federal Ministry of Agriculture, Forestry, Environment and Water Management
Bosnia & Herzegovina	Ministry for Foreign Trade and Economic Relations ▪ Ms. Aleksandra Pločo, DRP B-H country programme manager ▪ Ms. Sabaheta Hafizović, PM-EG member ▪ Ms. Amra Ibrahimpašić, PM EG member ▪ Ms. Hazima Hadžovićfocal point and RBM EG member ▪ Ms. Anisa Čičič, MA EG member ▪ Ms. Naida Andelić, Deputy HoD, RBM EG member
Bulgaria	▪ Ms. Violeta Roiatchka, Ministry of Environment and Water ▪ Ms. Kremena Plamenova, Ministry of Environment and Water ▪ Ms. Denitsa Petrova, Ministry of Environment and Water ▪ Mr. Ivan Kalamerov, Danube River Basin Directorate ▪ Mr. Krasimir Gorchev, Ministry of Environment and Water, EG PM ▪ Mr. Hristo Kasadzhikov, EG MA, Danube River Basin Directorate ▪ Ms. Krasimira Bramcheva, EG FP, Danube River Basin Directorate ▪ Mr. Mihail Mollov, Executive Environment Agency ▪ Ms. Mina Asenova, Executive Environment Agency ▪ Mr. Nikolai Kouyumdzhiev (former HoD Bulgaria, Sofiyskas Voda)

	▪ Ms. Maria Velikova, NGO Bulgaria in Europe ▪ Ms. Miglena Todorova, REC Bulgaria ▪ Ms. Desislava Stefanova, Rec Bulgaria ▪ Ms. Navena Pramatarova, Bulgarian National Radio ▪ Mr. Daniel Popov, Centre for Environmental Information and Education ▪ Ms. Nelly Miteva, Ecomission 21 Century ▪ Mr. Petko Tsvetkov, More space for rivers and safety for people
Croatia	▪ Ms. Karmen Cerar, International Projects, former RBM-EG, Ministry of Agriculture Forestry and Water Ministry,
	▪ Ms. Tanja, Stepinac, Karlavac ViK ▪ Mr. Darko Grlica, WWF wetlands pilot manager, Virovitica
Czech Republic	▪ Eva Sovjakova, Chair of the GIS EG, Water Research Institute - Brno ▪ Mrs. Ilja Bernardova, member of MA EG ▪ Mrs. Darina Remenarova, member of MA EG ▪ Mr. Stanislav Juran, member of PM EG ▪ Mrs. Milena Forejtnikova ▪ Ms. Doubravka Nedvedova DRPC coordinator for CZ.
Germany	▪ Mr. Fritz Holzwarth, HoD, Former ICPDR President
Hungary	▪ Ms. Mária Galambos, Ministry of Environment and Water ▪ Ms. Zsuzsa Steindl, EMIS EG, Ministry of Environment and Water ▪ Mr. Peter Kovacs, RBM EG, Ministry of Environment and Water
	▪ Dr. Ferenc László, Director of Institute for Water Pollution Control, Water Resources Research Centre Plc. (VITUKI Plc)
Moldova	▪ Mr. Constantin Mihailescu, Minister of Ecology and Natural Resources, ICPDR President 2006 ▪ Mr. Dimitru Drumea, HoD, Institute of Ecology and Geography ▪ Ms. Tatiana Belous (EG PM)
	▪ Mr. Gavril Gîlcă, State Hydrometeorological Service ▪ Ms. Ludmila Cunican (EG MA) State Hydrometeorological Service ▪ Ms. Svetlana Stirbu (EG MA) State Hydrometeorological Service
Romania	Ministry of Environment and Sustainable Development: ▪ Ms. Ana Drapa ▪ Mr. Valentin Brustur ▪ Mr. Gheroghe Constantin, HoD ▪ Ms. Jula Graziella, ▪ Mr. Teodor Lucian Constantinescu, ▪ Mr. Aurel Varduca, EG APC ▪ Mr. Liviu Popescu, (EG MA ▪ Mr. Gabriel Cluriac ▪ Ms. Carweu Hawclievici ▪ Ms. Carmen Toader
Slovakia	▪ Mr. Peter Ronč̆ák, Slovak Hydrometeorological Institute ▪ Mr. Boris Minarik, Slovak Hydrometeorological Institute (RBM EG ▪ Mr. Eugen Kullman, Slovak Hydrometeorological Institute (MA EG) ▪ Ms. Jana Poorova, Slovak Hydrometeorological Institute (RBM EG)
	▪ Ms. Emilia Kunikova, Water Research Institute (PM EG) ▪ Ms. Jarmila Markovinska, Water Research Institute
	▪ Mr. Marián Supek, HoD Slovakia, Director General Ministry of Environment ▪ Ms. Zdena Kelnarova, Chairperson, EMIS EG, Ministry of Environment

Serbia	
	▪ Mr. Goran Pastrovic, consultant to Carl Bro (1.2-3 agriculture)
	▪ Mr. Miodrag Milovanovic, Deputy Director, Jaroslav Cerni Institute
	▪ Ms. Milica Djuric, international projects, Ministry of Agriculture, Forestry and Water Management – Directorate of Water
Ukraine	
	▪ Mr. Alexei Iarochevitch, EG RBM, Consultant ▪ Ms. Oksana Manturova, EG MA, Institute of Hydrobiology
	▪ Mr. Stepan Lyzan, HoD, Deputy Minister of the Environment ▪ Mr. Alexei Iarochevitch, EG RBM ▪ Mr. Iurii, EG MA, Institute of Hydrobiology ▪ Ms. Anna Tsvetkova, EG PP, MAMA-86

ANNEX 5: LIST OF DOCUMENTS REVIEWED

Web Sites

International Commission for the Protection of the Danube River (ICPDR)
http://www.icpdr.org/pls/danubis/danubis_db.dyn_navigator.show

UNDP/GEF Danube Regional Project
http://www.icpdr.org/undp-drp/

Danube Environmental Forum (DEF)
http://www.de-forum.org

The Regional Environmental Center (REC)
http://www.rec.org/

Teras Natural Food Association (NGO) - Serbia and Montenegro
http://www.terras.org.yu

Danube Watch, The Magazine of the Danube River,

Evaluation and Monitoring Guidelines and Manuals

Handbook on Monitoring and Evaluating for Results, United Nations Development Programme (UNDP), Evaluation Office, June 2002;

Monitoring and Evaluation Policies and Procedures, Global Environment Facility (GEF), January 2002;

Monitoring and Evaluation Indicators for GEF International Waters Projects, Monitoring and Evaluation Working Paper 10, Global Environment Facility (GEF), November 2002;

Integrating Capacity Development into Project Design and Evaluation – Approach and Frameworks, Monitoring and Evaluation Working Paper 5, Global Environment Facility (GEF), December 2000;

Incremental Costs, GEF/C.7/Inf.5, 29 February 1996;

DPR Related Documents:

1. RIVER BASIN MANAGEMENT

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
1.1-5 Danube GIS: Developing GIS for the Danube River Basin	**GIS Needs Assessment and Conceptual Design*** (KTH Royal Institute of Technology; Fredrik Hannerz and Sindre Langaas; 80 pages; 2003) **Final Report on System Definition & Design** (Umweltbundesamt; Ingrid Roder, Doris Riedl, Cordula Goke, Kerstin Placer, and Michael Hadrbolec; 153 pages; 2005) **Final Report on Prototyping** (Umweltbundesamt; Ingrid Roder, Doris Riedl, Cordula Goke, Kerstin Placer, and Michael Hadrbolec; 252 pages; 2006)
1.1 RBM: Analysis for River Basin Management Planning	Stress/ pressure and impact analysis, typology of surface waters and ecological classification > **Ecological Status*** (UNDP/GEF Danube Regional Project; Mario Sommerhauser, Sabina Robert, Sebastian Birk, Daniel Hering, Otto Moog, Ilse Stubauer, Thomas Ofenbock; 60 pages; 2003) > **Stress and Impact Analysis*** (UNDP/GEF Danube Regional Project; Otto Moog and Ilse Stubauer; 79 pages, 2003) > **Typology and ecological classification*** (UNDP/GEF Danube Regional Project; Mario Sommerhauser, Sabina Robert, Sebastian Birk, Daniel Hering, Otto Moog, Ilse Stubauer, Thomas Ofenbock;97 pages; 2003) > **Economic analysis*** (ECO Logic; Eduard Interwies, Britta Pielen, Pierre Strosser; 78 pages, 2003)
1.1 Roof Report: Development of the Roof Report 2004 (DRB District MP)	**Roof Report – final version for approval** (ICPDR; 191 pages, 2005) **Roof Report – final version for printing** (ICPDR, Ursula Schmedtje and ICPDR; 191 pages, 2005) Contribution of the DRP to the following chapters of the Roof Report: Hydromorphological Pressures and Impacts / Nutrient Loads and Eutrophication / Heavily Modified Water Bodies and Artificial Water Bodies / Significant Point and Diffuse Source of Pollution / Ground Waters / Identification and Characterization of Water Bodies / Thematic Maps

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
1.1 RBM – Workshops and Trainings	Workshops and Trainings reports: > **Assessment of the risk of failure to reach the environmental objectives of the WFD in the Danube River Basin District (3rd Surface Water Workshop, June 2004)*** (IFOK, 16 pages, 2004) > **2nd Groundwater Workshop on the Implementation of WFD in the Danube River Basin (2nd GW Workshop, May 2003)*** (Unweltbundesamt; Johanner Grath, Helga Lidninger, Andreas Scheindleder; 222 pages, 2003) > **"Workshop on "Nutrients as a Transboundary Pressure in the DRB," (Jan 2004)*** (DaNUbs; Helmut Kroiss, Christoph Lampert, and Matthias Zessner; 60 pages; 2004) > **Workshop on Identification and Designation of Heavily Modified Water Bodies in the DRB (Feb 2004)*** (ECO Logic; Wenke Hansen, Eleftheria Kampa; 24 pages; 2004) > **Training courses on River Assessment** (Schulung Fliessgewaesser GbR; Christian K. Feld, Armin Lorenz, Andrea Sundermann; 27 pages, 2006)
1.1 RBM – River Typologies: Comparison of National Typologies	**Final Report – River Typologies** (UBE; Tanja Pottgiesser, Sebastian Birk; 37 pages; 2006)
1.1-9 Sava Pilot RBMP: Sava River Basin management Plan– Pilot project	**Final report – phase 1: Preparation of the Sava RBM Plan*** (UNPD/GEF Danube Regional Project; prepared by Zinke environment consulting for CEE in Vienna; 35 pages; 2004) **Concept for the Preparation of the Sava RBM Plan*** (UNPD/GEF Danube Regional Project; prepared by Zinke environment consulting for CEE in Vienna; 35 pages; 2004)
	Final Report: Development of Sava River Basin Management Plan – Pilot Project (Hydro Inginieure, Umweltbundesamt, ECO Logic; Alexander Zinke and Zinke Environemnt Consulting for CEE; F. Humer, E. Kampa, Andreas Scheidleder, Franko Humer, Alfred Rauchbüchl; 202 pages, 2007)
2.2 Intercallibration - River Basin Management Tools	**River Basin Management Tools: Intercalibration - Technical Implementation and Communication of the WFD Intercalibration Exercise in the Danube River Basin** (UNDP/GEF Danube Regional Project; Sebastian Birk; 109 pages; 2007)

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
2.2 MLIM tools: Development of Operational Tools for Monitoring, Laboratory and Information management	**Final report – phase 1: Support for TNMN and EMIS Inventory Harmonization*** (Rodeco Consulting GmbH; Paul H.L. Buijs; 455 pages; 2003) with the following parts: > Executive Summary > Part I: Orientation on environmental quality standards for nutrients and other Danube specific priority substances > Part II: Preparation of a proposal for connection/operational link of the data collected during the Joint Danube Survey (JDS) into ICPDR Info System, with attention to biological database > Part III: Analysis of the results of the EMIS inventory and their comparison with TNMN and JDS results with particular attention to the EU Priority List of Pollutants > Part IV: Development of the Danube List of Priority Substances and SOPs for newly included determinands > Part V: Five-years Report on Water Quality in the DRB based on TNMN > Part VI: Development of a methodological concept for assessment of environment stress and impacts as a basis for preparation of a computer-based application for stress impact analysis
	Review and recommendations for upgrade of TNMN report (Environmental Institute; Jaroslav Slobodnik, Jarmila Makovinska; 73 pages; 2007) **Report on Water quality standards and classification for Nutrients** (Environmental Institute; Paul Buijs; 80 pages; 2006) **Report on Biological database** (Environmental Institute; Alex Hoebart; 58 pages; 2007)
4.2 Iron Gates: Sediments assessment	**Final report - Romanian Assessment of Sediments at Iron Gates** (ICIM Bucharest; Liviu N. Popescu, Carmen Hamchevici; 42 pages; 2006) **Report on technical assistance for sediments assessment** (VITUKI; Bela Csanyi, Maria Bihari; 49 pages; 2006) **Iron Gate Sediments Evaluation - Synthesis report** (UNDP/GEF Danube Regional Project; Ferenc Laszlo; 114 pages; 2007)

2. AGRICULTURE AND DIFFUSE POLLUTION

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
1.2&1.3 Agriculture Reduction of Pollution Releases through agricultural Policy change and demonstrations by Pilot Projects	**Final Report- Phase 1: Policies for the Control of Agricultural Point and Non-point Sources of Pollution & Pilot Projects on Agricultural Pollution Reduction*** (GFA Terra Systems, Avalon; Mark Redman; 24 pages, 2004) Technical Reports*: > **Inventory of Agricultural Non-point Sources of Pollution by Nitrogen and Phosphorus in the Danube Basin** (GFA Terra Systems, Avalon; compiled by UNDP/GEF; 20 pages, 2004) > **Inventory of Agricultural Pesticide Use in the Danube River Countries** (GFA Terra Systems, Avalon; compiled by UNDP/GEF; 220 pages, 2004) > **Inventory of Policies for Control of Water Pollution by Agriculture in the Danube Countries** (GFA Terra Systems, Avalon; Jaroslav Prazan, Mark Redman; 379 pages; 2004) > **Inventory of Agricultural Fertilizer and Manure Use in the Danube River Countries** (GFA Terra Systems, Avalon; compiled by UNDP/GEF; 119 pages, 2004) > **Recommendations for Policy Reforms for the Introduction of Best Agricultural Practice in Central and Lower Danube Countries** (GFA Terra Systems, Avalon; compiled by UNDP/GEF; 48 pages, 2004) > **Pilot Projects for Promoting Best Agricultural Practice in the Central and Lower Danube Countries; Concepts and Project Proposals** (GFA Terra Systems, Avalon; Holger Afflerbach; 77 pages; 2004) > **BAP Technical Guidelines for Manure Management in Central and Lower Danube Countries - English Version** (GFA Terra Systems, Avalon; Mark Redman; 19 pages, 2004) > BAP Technical Guidelines for Manure Management in Central and Lower Danube Countries / national versions: **Error! Hyperlink reference not valid.** - **Error! Hyperlink reference not valid.** - **Error! Hyperlink reference not valid.** - **Error! Hyperlink reference not valid.** - **Error! Hyperlink reference not valid.** **Workshop on Promoting BAP in the Danube River Basin - Zagreb, October 2003** (GFA Terra Systems, Avalon; 102 pages; 2003) **Workshop on Developing Pilot Projects for the Promotion of BAP in the Danube River Basin - Bucharest, January 2004** (GFA Terra Systems, Avalon; 28 pages; 2003)

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
	Final Report: Reduction of pollution releases through agricultural policy change and demonstrations by pilot project (Carl Bro; Jesper Ansbaek, Slobodan Milosevic, Goran Pastrovic, Suzana Djordjevic Milosevic, Gisela Felkl, Henning Foged; 171 pages; 2007) Technical Reports: > **Best Agricultural Practice** (CarlBro; Suzana Djordjevic-Milosevic, Henning Lyngso Foged; 31 pages, 2006) > **Analysis of current national legislation on fertilizers, manure and pesticides** (Carl Bro; Jens Skau, Slobodan Milosevic, Jesper Ansbaek, Gisela Felkl; 26 pages, 2006) > **Review of agrochemical inventories and recommendations fro reduction the impact of agrochemicals** (CarlBro; Gisela Felkl, Jesper Ansbaek, Slobodan Milosevic; 55 pages, 2006) > **Recommendations for BAP and introduction of concepts for the application of BAP in lower DRB countries** (CarlBro; Jesper Ansbaek, Henning Foged, Slobodan Milosevic, Gisela Felkl; 35 pages, 2006) > **Detailed work programme for Pilot Project(s)** (CarlBro; Henning Foged; 55 pages, 2006) *More information is available on a CD*
4.4 Pollution trading: Study on economic instruments for pollution reduction	**Final Report*** (Niras; Jens Lonholdt; 218 pages; 2005) **Final Workshop report*** (Niras; Jens Lonholdt; 44 pages; 2005)
4.4 Pollution trading: Study on economic instruments for pollution reduction – phase II	**Cost Effective Measure for Agricultural Nutrient Reduction Implemented by Concerted / Joint Action in the Danube River Basin** (Stefan Speck; 12 pages; 2007)
4.4 Pollution trading: Danube Nutrients Studies	**Technical Support on Danube Nutrients** (Vienna Institute of Technology; Helmut Kroiss, Matthias Zessner, Christoph Lampert; 46 pages; 2007)

2. INDUSTRY AND MUNICIPAL ACTIVITIES

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
1.5 Industry: Industrial Reform and Development of Policies and Legislation for application of BAT towards reduction of Nutrients and Dangerous Substances	**Final report – phase 1: Industrial reform and the development of policies and legislation towards the reduction of nutrients and dangerous substances***(RAMBOLL; Stanislav Kosina, Tom Owen, Danka Jassikova-Thalmeinerova; 125 pages; 2004)
	Final Report – Phase 2: Industrial Reform and Development of Policies and Legislation for application of Best Available Techniques towards Reduction of Nutrients and Dangerous Substances (RAMBOLL, Ekopen; Eleonora Bartkova, Stanislav Kosina, Danka Thalmeinerova, Martina Vagacova; 191 pages, 2007)
1.8 Detergents: Recommendations for the Reduction of Phosphorus in Detergents	**Summary Final Report** (WRc plc; Helene Horth, Edward Glennie, Lacey-Jane Davis, Pauline Jones, Oana Tortolea; 133 pages; 2006) **Technical Report of the Stakeholder Seminar** (UNDP/GEF Danube Regional Project; 4 pages; 2007)
2.2 DBAM: Technical Assistance to the Monitoring & Assessment Expert Group	**Final report – phase 1:Development and maintenance of the Danube Basin Alarm Model*** (Delft Hydraulics; Jos van Gils; 116 pages; 2003)
	Assessment of TNMN and gap analysis* (Delft Hydraulics; Jos van Gils; 22 pages; 2006)
2.3 APC – Accident Risk Spots Inventory	**Final report – phase1: Support for the Extension of Accident Risk Spots Inventory and Preventive Measures*** (ICSS, IABG; Kathrin Werner, Andre Dahn; 212 pages; 2004)
2.3 APC – M2 methodology: Activities for Accident Prevention - Development of M2 methodology / checklists	**Final report: Development of M2 methodology and check list** (Umweltbundesamt; Hermine Weber; 118 pages; 2006)
2.3 Refineries Pilot Project: Activities for Accident Prevention / Pilot Project - Refineries	**Final Report: Pilot Project on Refineries** (R+D Indistrie Consult; Ralph von Dincklage, Jorg Platkowski; 31 pages; 2006) *An **Interactive view of all products** is available on a CD*

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
1.6 – 1.7 Tariffs and Charges The study on assessment and development of Water and Waste Water Tariffs and Effluent Charges in DRB	Final Reports – Phase 1: Assessment and Development of Municipal Water and Waste Water Tariffs and Effluent Charges in the Danube River Basin > **Volume 1: An Overview of Tariff and Effluent Charge Reform Issues and Proposals*** (MAKK; Glenn E. Morris, Andras Kis; 173 pages; 2004) > Volume 2: Country-Specific Issues and Proposed Tariff and Charge Reforms*: > Bosnia I Herzegovina – **National Profile** (64 pages)/ **Case Study** (53 pages)/ **Summary** (7 pages) (UNDP/GEF Danube Regional Project; Ramiza Allic; 2004) > Bulgaria – **National Profile** (UNDP/GEF Danube Regional Project; Galia Bardanrska; 80 pages; 2004)/ **Case Study** (Dimitar Tropchev; 54 pages; 2004) , **Summary** (UNDP/GEF Danube Regional Project; Dimitar Tropchev; 6 pages; 2004) > Croatia – **National Profile** (56 pages)/ **Case Study** (42 pages) / **Summary** (8 pages) (UNDP/GEF Danube Regional Project; Dubravka Mokos and Ivan Klakocer; 2004) > Czech Republic – **National Profile** (50 pages)/ **Case Study** (42 pages)/ **Summary** (6 pages) (UNDP/GEF Danube Regional Project; Lenka Camrova, 2004) > Hungary – **National Profile** (UNDP/GEF Danube Regional Project; Gabor Ungvari, Zsuzsanna Mohai; 52 pages; 2004))/ **Case Study** (UNDP/GEF Danube Regional Project; Gabor Ungvari; 25 pages; 2004) / **Summary** (UNDP/GEF Danube Regional Project; Gabor Ungvari; 11 pages; 2004) > Romania – **National Profile** (78 pages)/ **Case Study** (34 pages) / **Summary** (8 pages) (UNDP/GEF Danube Regional Project; Victor Platon, Geroge Dulcu; 2004) > Slovakia – **National Profile** (35 pages)/ **Case Study** (33 pages) / **Summary** (7 pages) (UNDP/GEF Danube Regional Project; Danka Thalmeinerova; 2004)
	ASTEC Model User Guide (UNDP/GEF Danube Regional Project; Glenn Morris, Andras Kis, 47 pages; 2007) **Case study Pitesti** (UNDP/GEF Danube Regional Project; Glenn Morris, Andras Kis, Magdalena Dumitru; 84 pages; 2007) **Case study Karlovac** (UNDP/GEF Danube Regional Project; Glenn Morris, Andras Kis; 72 pages; 2007)

4. PUBLIC PARTICIPATION

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
3.2 SGP: Small Grants Programme	**Guidelines for National Grants** (REC, UNDP/GEF Danube Regional Project; 18 pages; 2005) **Guidelines for Regional Grants** (REC, UNDP/GEF Danube Regional Project; 22 pages; 2005) **National SGP Announcements** (REC, UNDP/GEF Danube Regional Project; 15 pages; 2005) **Regional SGP Announcement** (REC, UNDP/GEF Danube Regional Project; 17 pages; 2005) **Final report 1st round** (Regional Environmental Center; Entela Pinguli; 49 pages; 2006) > **Full list of projects** (18 pages)
3.2 SGP Evaluation	**Evaluation Mission Report – 1st round** (Zinke Environmental Consulting; Alexander Zinke; 24 pages; 2005) **Evaluation Mission Report – 2nd round** (Zinke Environmental Consulting; Alexander Zinke; 72 pages; 2007)
3.4 Public access to information: Enhancing Access to Information and Public Participation in Environmental Decision Making	**ICPDR Assessment on Public Participation and Observer Status** (The Regional Environmental Center, RESOURCES, NYU Law; E.E. Meijer; 53 pages; 2004) **Inception Report** (The Regional Environmental Center, RESOURCES, NYU Law; Magda Toth Nagy, Jane B. Stewart, Ernestine Meier, Ruth Greenspan Bell; 210 pages; 2004) **1st Progress Report** (The Regional Environmental Center, RESOURCES, NYU Law; 41 pages; 2005) **2nd Progress Report** (The Regional Environmental Center, RESOURCES, NYU Law; 98 pages; 2005) **3rd Progress Report** (The Regional Environmental Center, RESOURCES, NYU Law; 25 pages; 2006) **4th Progress and Final Report** (The Regional Environmental Center, RESOURCES, NYU Law; UNDP/GEF Danube Regional Project; 48 pages; 2006)

5. WETLANDS

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
1.4 Wetlands: Integrated land use and wetland management – Pilot projects	**Final report – phase 1: Field and Policy Action for Integrated Land Use in the Danube River Basin – Methodology and Pilot Site testing with special reference to wetland and floodplain management*** (UNPD/GED Danube Regional Project; WWF International Danube-Carpathian Programme; 152 pages; 2003)
	Field and Policy Action for Integrated Land Use in the Danube River Basin – Methodology and Pilot Site Testing with Special Reference to Wetland and Floodplain Management (WWF Danube-Carpathian-Programme Office; Michael Baltzer, Christine Bratrich, Darko Grlica, Orieta Hulea, Andreia Petcu, Gyongyi Ruzsa, Jan Seffer, Susanna Wiener; 62 pages, 2007
4.3 Wetland Monitoring	**Final report – phase 1: Monitoring and Assessment of Nutrient Removal Capacity of Riverine Wetlands*** (WWF International Danube-Carpathian Programme David Tickner, Thomas Hein, Helmut Kroiss, Jan Seffer, Philip Weller, Susanna Wiener, Isabel Wolte, Matthias Zessner; 110 pages; 2004)
	Technical guidance document on the integration of the nutrient reduction function in riverine wetland management – Summary (University of Natural Resources and Applied Life Sciences, Vienna; WasserCluster Lunz GmbH, Technical University, Vienna, Geological Institute of Hungary (MAFI); Thomas Hein, Elisabeth Bondar, Verena Kucera-Hirzinger, Oliver Gabriel, Matthias Zessner, Gyozo Jorda; 32 pages; 2007)
4.3 Wetland Monitoring	Case Studies: - "Monitoring and Assessment of Nutrient Removal Capacity of Riverine Wetlands" (Romania, Moldova and Ukraine): > **Case Study Romania: Lower Danube Wetland - Corabia and Turnu Magurele Sector** (UNDP/GEF Danube Regional Project; Iulian Nichersu, Mircea Staras; 50 pages; 2007) > **Case Study Moldova: Yalpugh and Cahul River Basins, Moldova** (ECOS; Dumitru Drumea; 45 pages; 2007) > **Case study Ukraine: Restoration of Katlabuh Lake - Danube Delta, Ukraine** (Project management: WWF Danube - Carpathian Programme Project implementation: Odessa Oblast State Water Management Board (WMB), Mikhail Nesterenko; 41 pages; 2007)
3.3 DEF Wetlands Campaigns	Reports from DEF campaigns on Wetlands: > **Croatia** (Franjo Koscec; Dora Radosavljevic, Marko Stancin; 20 pages; 2006) > **Serbia** (Nature Conservation Movement of Sremska Mitrovica; 12 pages; 2006) > **Slovakia** (DAPHNE – Institute of Applied Ecology, Milan Janak, Barbara Immerova; 59 pages; 2007

6. INSTITUTIONAL STRENGTHENING

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
2.1 IMCM: Interministerial Coordination Mechanisms	**Final report – phase 1: Setting up of Inter-ministerial coordination mechanisms for the pollution control - Evaluation of Results of National Reports** (UNDP/GEF Danube Regional Project; Michael von Berg, Joachim Bendow; 70 pages; 2004)
	Current status on IMCM (EKOPEN; Eleonora Bartkova, Martina Vagacova; 51 pages; 2006)
2.1 Support for Bosnia and Herzegovina	**Assistance for Bosnia & Herzegovina on WFD Compliant Monitoring – Towards WFD compliant Monitoring in BiH** (UNDP/GEF Danube Regional Project, Nicolaus Fleischmann; 75 pages; 2007)
2.4 Danubis; Support for reinforcement of ICPDR Information System DANUBIS	**Assessment of the ICPDR Information System - Danubis** (UNDP/GEF Danube Regional Project; Stefan Schwarzer, Sylvain Ponserre; 47 pages; 2004) **Report on the 'Restructuring of the ICPDR Information System',** (UNDP/GEF Danube Regional Project; Miroslav Melisko; 28 pages; 2005) **Reconstruction Analysis** (Datalan ; Michal Rusko ; 49 pages ; 2006)
2.5 Danube – Black Sea cooperation / JTWG and MoU Implementation	**Report to the GEF council** (GEF Council; 19 pages; 2005) > **Annex 1: Strategic Partnership Progress report** (DRP,BSERP; 70 pages; 2007) > **Annex 2: Summary report on Partnership mid-term evaluation and Stocktaking Meeting** (UNDP/GEF Danube Regional Project; 10 pages; 2005) **Improving the understanding of the Danube River impact on the status of the Black Sea** (report to the D-BS JTWG) (BSERP, WRc; W. Parr, Y. Volovik, S. Nixon, I. Lipan; 114 pages; 2005) **Trends in nutrient loads from the Danube River and trophic status of the Black Sea** (UNDP/GEF Danube Regional Project; 26 pages; 2006)
2.6 Trainings / capacity building	**Quality guidelines for workshops** (UNDP/GEF Danube Regional Project; Holger Nauheimer; 31 pages; 2002) **Facilitation skills training – background doc** (Beraterkompetenz; UNDP/GEF Danube Regional Project; 75 pages; 2003) **DRP guidelines for reporting** (UNDP/GEF Danube Regional Project, Agentur Sieben; Marcella Fabianova, Peter Whalley, Fanak Mossaheb; 12 pages; 2006) **Open-Space ICPDR Workshop** (Instinct Domain; 39 pages; 2005) **ICPDR Reporting** (WRc PLC; Tim Lack, Steve Nixon; 25 pages; 2005) **Exit strategy** (UNDP/GEF Danube Regional Project; 14 pages; 2006)
3.1 DEF support:	**DEF Strategy and Work Plan** (DEF, UNDP/GEF Danube Regional Project, 36 pages; 2006)

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
Support for Institutional Development of NGOs and Community Involvement: Developing the DEF Network	**DEF Final Report 2002***(DEF, UNDP/GEF Danube Regional Project, 55 pages; 2002) **DEF Final Report 2003***(DEF, UNDP/GEF DRP, 65 pages; 2003) DEF Bulletins: **Volume 1** (5 pages)/ **Volume 2** (6 pages)/ **Volume 3** (7 pages) **DEF Leaflet** (1 page) **DEF Training Material on Nutrient Reduction and Wetlands Restoration** (DEF; Jan Seffer, Jaromir Sibl; 110 pages; 2003) **DEF Report on National Trainings** (DEF; 46 pages; 2003)
4.1 Indicators: Indicators	**Final report – Phase 1: Development of Indicators for Monitoring and Impact Evaluation*** (UNDP/GEF Danube Regional Project; J. Dogterom, J.P.E. van Leeuwen, N. Koopmans, G. Robijn; 74 pages; 2004)
	Final Report: Testing of a selection of core indicators to monitor stress reduction, status and process for the GEF DRP (updated draft version) (UNDP/GEF Danube Regional Project; J. Dogterom, J.P.E. van Leeuwen; 122 pages; 2007)

7. DRP SPECIFIC REPORTS AND PRODUCTS

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
3.3 Communication and public participation	DRP Publications and Brochures > **DRP Brochure: Danube Regional Project** (UNDP/GEF DRP; 2 pages) > **DRP Brochure: Danube Regional Project and Danube River Basin Analysis** (UNDP/GEF Danube Regional Project; 4 pages;) > **DRP Brochure: Danube Regional Project and Public Participation** (UNDP/GEF Danube Regional Project; 3 pages) > **DRP Brochure: Danube Regional Project - January 2007** (UNDP/GEF Danube Regional Project; 8 pages) > **DRP posters** (UNDP/GEF Danube Regional Project; 2 pages) > **"15 years of GEF intervention in the DRB"** (UNDP/GEF Danube Regional Project; 46 pages; 2007) > **Project Information Sheets – 1st edition** (on River Basin Management, Agriculture, Wetlands, Industry and Municipal activities and Public Participation) (UNDP/GEF Danube Regional Project; 125 pages; 2007) Other reports: > **Communication Strategy** (UNDP/GEF Danube Regional Project; 72 pages; 2005) > **Communication Planning Manual** (joint report produced with IW Learn)…. (UNDP/GEF; Kari Eik, Paul Csagoly, Steve Menzies; 48 pages; 2006) > **DRP Draft Final Report** (UNDP/GEF DRP; 56 pages, June 2007)

5. WETLANDS

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1.4 Wetlands: Integrated land use and wetland management – Pilot projects	**Final report – phase 1: Field and Policy Action for Integrated Land Use in the Danube River Basin – Methodology and Pilot Site testing with special reference to wetland and floodplain management*** (UNPD/GED Danube Regional Project; WWF International Danube-Carpathian Programme; 152 pages; 2003)
	Field and Policy Action for Integrated Land Use in the Danube River Basin – Methodology and Pilot Site Testing with Special Reference to Wetland and Floodplain Management (WWF Danube-Carpathian-Programme Office; Michael Baltzer, Christine Bratrich, Darko Grlica, Orieta Hulea, Andreia Petcu, Gyongyi Ruzsa, Jan Seffer, Susanna Wiener; 62 pages, 2007
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	Technical guidance document on the integration of the nutrient reduction function in riverine wetland management – Summary (University of Natural Resources and Applied Life Sciences, Vienna; WasserCluster Lunz GmbH, Technical University, Vienna, Geological Institute of Hungary (MAFI); Thomas Hein, Elisabeth Bondar, Verena Kucera-Hirzinger, Oliver Gabriel, Matthias Zessner, Gyozo Jorda; 32 pages; 2007)
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2.1 IMCM: Interministerial Coordination Mechanisms	**Final report – phase 1: Setting up of Inter-ministerial coordination mechanisms for the pollution control - Evaluation of Results of National Reports** (UNDP/GEF Danube Regional Project; Michael von Berg, Joachim Bendow; 70 pages; 2004)
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2.1 Support for Bosnia and Herzegovina	**Assistance for Bosnia & Herzegovina on WFD Compliant Monitoring – Towards WFD compliant Monitoring in BiH** (UNDP/GEF Danube Regional Project, Nicolaus Fleischmann; 75 pages; 2007)
2.4 Danubis; Support for reinforcement of ICPDR Information System DANUBIS	**Assessment of the ICPDR Information System - Danubis** (UNDP/GEF Danube Regional Project; Stefan Schwarzer, Sylvain Ponserre; 47 pages; 2004) **Report on the 'Restructuring of the ICPDR Information System',** (UNDP/GEF Danube Regional Project; Miroslav Melisko; 28 pages; 2005) **Reconstruction Analysis** (Datalan ; Michal Rusko ; 49 pages ; 2006)
2.5 Danube – Black Sea cooperation / JTWG and MoU Implementation	**Report to the GEF council** (GEF Council; 19 pages; 2005) > **Annex 1: Strategic Partnership Progress report** (DRP,BSERP; 70 pages; 2007) > **Annex 2: Summary report on Partnership mid-term evaluation and Stocktaking Meeting** (UNDP/GEF Danube Regional Project; 10 pages; 2005) **Improving the understanding of the Danube River impact on the status of the Black Sea** (report to the D-BS JTWG) (BSERP, WRc; W. Parr, Y. Volovik, S. Nixon, I. Lipan; 114 pages; 2005) **Trends in nutrient loads from the Danube River and trophic status of the Black Sea** (UNDP/GEF Danube Regional Project; 26 pages; 2006)
2.6 Trainings / capacity building	**Quality guidelines for workshops** (UNDP/GEF Danube Regional Project; Holger Nauheimer; 31 pages; 2002) **Facilitation skills training – background doc** (Beraterkompetenz; UNDP/GEF Danube Regional Project; 75 pages; 2003) **DRP guidelines for reporting** (UNDP/GEF Danube Regional Project, Agentur Sieben; Marcella Fabianova, Peter Whalley, Fanak Mossaheb; 12 pages; 2006) **Open-Space ICPDR Workshop** (Instinct Domain; 39 pages; 2005) **ICPDR Reporting** (WRc PLC; Tim Lack, Steve Nixon; 25 pages; 2005) **Exit strategy** (UNDP/GEF Danube Regional Project; 14 pages; 2006)
3.1 DEF support:	**DEF Strategy and Work Plan** (DEF, UNDP/GEF Danube Regional Project, 36 pages; 2006)

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
Support for Institutional Development of NGOs and Community Involvement: Developing the DEF Network	**DEF Final Report 2002***(DEF, UNDP/GEF Danube Regional Project, 55 pages; 2002) **DEF Final Report 2003***(DEF, UNDP/GEF DRP, 65 pages; 2003) DEF Bulletins: **Volume 1** (5 pages)/ **Volume 2** (6 pages)/ **Volume 3** (7 pages) **DEF Leaflet** (1 page) **DEF Training Material on Nutrient Reduction and Wetlands Restoration** (DEF; Jan Seffer, Jaromir Sibl; 110 pages; 2003) **DEF Report on National Trainings** (DEF; 46 pages; 2003)
4.1 Indicators: Indicators	**Final report – Phase 1: Development of Indicators for Monitoring and Impact Evaluation*** (UNDP/GEF Danube Regional Project; J. Dogterom, J.P.E. van Leeuwen, N. Koopmans, G. Robijn; 74 pages; 2004)
	Final Report: Testing of a selection of core indicators to monitor stress reduction, status and process for the GEF DRP (updated draft version) (UNDP/GEF Danube Regional Project; J. Dogterom, J.P.E. van Leeuwen; 122 pages; 2007)

7. DRP SPECIFIC REPORTS AND PRODUCTS

COMPONENT / TASK	DELIVERABLES – FINAL REPORTS AND OTHER FINAL PRODUCTS
3.3 Communication and public participation	DRP Publications and Brochures > **DRP Brochure: Danube Regional Project** (UNDP/GEF DRP; 2 pages) > **DRP Brochure: Danube Regional Project and Danube River Basin Analysis** (UNDP/GEF Danube Regional Project; 4 pages;) > **DRP Brochure: Danube Regional Project and Public Participation** (UNDP/GEF Danube Regional Project; 3 pages) > **DRP Brochure: Danube Regional Project - January 2007** (UNDP/GEF Danube Regional Project; 8 pages) > **DRP posters** (UNDP/GEF Danube Regional Project; 2 pages) > **"15 years of GEF intervention in the DRB"** (UNDP/GEF Danube Regional Project; 46 pages; 2007) > **Project Information Sheets – 1st edition** (on River Basin Management, Agriculture, Wetlands, Industry and Municipal activities and Public Participation) (UNDP/GEF Danube Regional Project; 125 pages; 2007) Other reports: > **Communication Strategy** (UNDP/GEF Danube Regional Project; 72 pages; 2005) > **Communication Planning Manual** (joint report produced with IW Learn)…. (UNDP/GEF; Kari Eik, Paul Csagoly, Steve Menzies; 48 pages; 2006) > **DRP Draft Final Report** (UNDP/GEF DRP; 56 pages, June 2007)