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# JOINT ACTION PROGRAM Final Implementation Report

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International  
Commission  
for the Protection  
of the Danube River  
Internationale  
Kommission  
zum Schutz  
der Donau

A stylized blue graphic element consisting of a curved line that starts above the 'icpdr' text and ends below the 'iksd' text, resembling a wave or a protective barrier.

## ANNEX 4 – Countries' reports

//// Deutschland //// Österreich //// Česká republika //// Slovensko //// Magyarország //// Slovenija //// Hrvatska //// Bosna i Hercegovina //// Srbija //// Crna Gora //// România //// България //// Moldova ////

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## Imprint

Published by:

ICPDR – International Commission for the Protection of the Danube River

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## Table of content

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ANNEX 4 - COUNTRY REPORTS	4
1.1 GERMANY	4
1.2 AUSTRIA	6
1.3 CZECH REPUBLIC	9
1.4 SLOVAKIA	12
1.5 HUNGARY	15
1.6 SLOVENIA	18
1.7 CROATIA	20
1.8 BOSNIA-HERZEGOVINA	22
1.9 SERBIA	26
1.10 BULGARIA	28
1.11 ROMANIA	30
1.12 MOLDOVA	34
1.13 UKRAINE	36

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## ANNEX 4 - COUNTRY REPORTS

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### 1.1 GERMANY

#### **TASK I Germany: Summary Report on the implementation of policies, regulations and measures of compliance in line with the JAP and EU water directives**

##### Policy Objectives

The German water management and protection policy is in compliance with EU water policy, aiming at achieving of good water status for all waters by 2015. With the elimination of biological and chemical pollutions from municipal and industrial sources the most important conditions for further continuous improvements of the water ecology are already met. Main priorities have been given to the over-fertilization of waters and structural changes as a result of river development.

##### Status of legislation dealing with water management

The legal framework for environmental management of water resources and ecosystems consists of a hierarchic system of decrees, laws, directives, ordinances, regulations and standards on different administrative levels. All EC directives have been transposed in Baden-Württemberg and Bavaria into the national law system. The transposition was finished through updated versions of the Water Resources Act (WHG – 18.6.2002), Bavarian Water Act (BayWG – 1.8.2003), Water Act for Baden-Wuerttemberg (WG - 22.12.2003) and implementation of appropriate ordinances as to the implementation of annex II and V WFD.

Germany has a fully appropriated national water management legislation and institutions for processing the EC Directives.

##### Main barriers to water-related policy and legal reform and JAP implementation

Main barriers in compliance with the objectives of the WFD are the diffuse pollutions from agriculture waters and the structural changes as a result of river development. By the reforms of the common agrarian EU-policy including particularly the funding system diffuse pollution could be reduced. The river development is only retractable in a limited rate, because often it is a precondition for an effective water use or part of the cultural development. Excessive extensions and unintentionally consequences of changes will be tackled in the future. Current efforts are taken to analyse more exactly the relationship between structure and ecology of water, which will further help the design of the further structure-improvements.

##### Actions and measures in response to JAP

###### *Municipal discharges*

In Germany the development of the public water supply and sewage disposal is widely sophisticated. In 2004, 98.8 % of population was connected to the public drinking water supply networks while 99.2 % were connected to the public sewerage.

###### *Industrial discharges*

In Germany big direct industrial discharges are reported according to EPER. Additionally, reporting to the ICPDR Emission inventories and List of priority substances is included.

###### *Agricultural discharges*

The Nitrates Directive 91/676/EEC is transposed into the national law system. The special action program according to article 3 clause 5 Nitrates Directive 91/676/EEC is applied for whole Germany. The over-fertilization of waters, particularly by nitrogen is stagnating in fact, but the over-fertilization is to reduce still more. A substantial progress for this is the amendment of the Fertilizer Ordinance.

*Wetlands and water ecosystem*

The wetlands were identified and registered. In the future they will be developed and protected according to the EU directives. There are more than 100 million Euro estimated to realize water courses development and floodplain projects. The projects were started in 2001 – 2002, one project is completed, and the other ones are schedule to be completed between 2005 and 2020. The Bavarian government is fully or partially financing the projects.

Estimated cost for reforms to respond to JAP

Germany has significantly achieved high standards of emission reduction und water pollution control. Current investment in the water sector in the German part of the Danube River Basin is at the level of about 0.35 billion Euro per year which is spend for communal wastewater treatment facilities (including 3<sup>rd</sup> stage for nutrient removal). With these investment Germany responds to EU Water Directives and in particular the Urban Waste Water Directive. An additional amount of 1.4 billion Euro were spent to achieve the proposed project of the JAP, in the period 2001 to 2005.

## 1.2 AUSTRIA

### **TASK I Austria: Summary Report on the implementation of policies, regulations and measures of compliance in line with the JAP and EU water directives**

#### Policy Objectives

Primary goal of water policy in Austria is aiming to ensure sustainable water management by allowing only a prudent human interference into waters in order to safeguard also for future generations an unimpaired use of water resources and, as far as possible, ecological sound water bodies.

Main principles are:

- (i) minimizing impacts on water quantity and quality and on the integrity of water bodies going beyond a level of insignificance via a stringent system of permits and control in order to maintain good status of waters,
- (ii) protection of population and its living place and goods against floods aiming at minimising possible damages by structural and non-structural measures, thereby reinforcing ecological orientation of structural measures at water bodies as well as bringing back water bodies far away from a natural state closer to nature , and
- (iii) raising public awareness on the value of water and for a conscious use, performed by specific protection activities, by education material for schools and other training activities.

Within all activities of the Austrian water administration, the implementation of the EU-Water Framework Directive (WFD) has gained first priority. This European legal act is regarded as the most important guiding instrument to achieve the goals of water policy in Austria.

#### Status of Legislation Dealing with Water Management

Under the Austrian 1990 Water Act, every impact on waters that is above the level of insignificance has to be licensed. Stringent requirements have been set for wastewater discharges, based on best available techniques. 53 sector-specific wastewater emission ordinances are currently in force. In 2003 the provisions for the assessment of water quality and water quantity were adapted to the needs emerging from the EU WFD. In the years that followed elaboration of Ordinances for defining water quality objectives for rivers as well as for lakes and for defining the legal and technical frame of the Austrian Water Data Register have taken place. For conclusion of these works the results of the inter-calibration process of surface waters as well as those other requirements and provisions will be taken on board which are presently in discussion at EU level. Particular focus was on the setting up of a central register for all wastewater treatment plants, which is revised on a regular basis. This register is providing an improved tool for regional water management plans and for meeting the reporting requirements on the EU-level efficiently.

Specific provisions are in force addressing the degradability detergents and the elimination of Phosphorus in washing powders.

#### Main barriers to water-related policy and legal reform and JAP implementation

Main barriers to achieve compliance with the objectives of the WFD are linked with the diffuse pollutions from agriculture and with the consequences of the past structural changes of water bodies as a result of river development.

#### Actions and measures in response to JAP

In response to the point sources of pollution, the wastewater collection and wastewater treatment stemming from population and industry has reached a high level of realisation. Pollution from

agricultural sources is counteracted by regulations stemming from the EU-Nitrate Directive and by implementing a Programme for the farmers for sustainable agricultural practice. Therefore and from the findings of the analysis 2004 under the EU-WFD it is to conclude that future main efforts of water-investments in Austria will primarily target on improvements of the hydro - morphological elements of water bodies (“structural health”).

In response to the disastrous floods 2002 activities for the protection against floods has been intensified taking into account developments on the international level.

#### *Municipal discharges*

In 2001 the percentage of population served by central wastewater treatment facilities has reached 86%, in 2003 - 89 % and thus equal to the percentage of population served by central water supply systems. In 2005 the total wastewater discharged to central wastewater collection systems amounted to 1.090 Mio m<sup>3</sup>/a and 84 % of this freight was treated in tertiary treatment plants, meaning P and/or N-removal.

In 2004 the annual BOD-load of the total wastewater was reduced by 96 %, the annual COD-load by 91 %, and the nutrient loads of P by 83 % and of N by 68 %. The share of 11 % of population not being served by central facilities due to scattered dwelling locations used either septic tanks or small domestic wastewater treatment units, primarily biological systems.

In fact somewhat less than predicted, a sum of 350 MEUR was invested solely for the improvement of the treatment plants. Additional investments were made for the extension and improvement of wastewater collection systems draining into these plants.

All investments to enlarge wastewater purification plant capacities in the reporting period have amounted to approximately 851 MEUR, 545 MEUR for treatment plants > 15,000 p.e., and 306 MEUR for treatment plants < 15,000 p.e.

Altogether a total of 4,195 MEUR had been invested in measures for wastewater collection and treatment, a sum, which corresponds to an average investment sum of 840 MEUR p/a.

These investments did not all result in a reduction of pollution loads because for a part former decentralised wastewater treatment facilities became substituted by central systems thereby facing a higher pollution load, but achieving also a higher degree of performance security.

#### *Industrial discharges*

In terms of COD-load approximately half of the industrial wastewater is discharged to central urban wastewater treatment facilities, half undergoes treatment by industry-owned purification plants.

This directly discharging industry accounts for about 237.000 t COD/a. Approximately 90 % of this COD-load undergoes tertiary treatment, the remainder biological purification, which altogether results in a treatment efficiency of 85 % reduction of pollution expressed in terms of COD.

The ICPDR-BAT-recommendations are covered by the branch-specific Ordinances for the limitation of emissions from the respective industries in combination with the General Wastewater Emission Ordinance.

#### *Agricultural discharges*

Agricultural point sources do not exist as defined by the respective BAT-guideline of the ICPDR. In Austria, the total figure of Livestock Units (LSU) slightly decreased over the timeframe of the JAP, amounting now to around 2,0 Mio LSU, resulting in a mean density of approximately 0,61 LSU/ha per ha agricultural land. Use of mineral fertilisers decreases in the time-frame of the JAP significantly (N by 18% and P by 25%) and amounted in 2005 to 100.000 t of N and 36.000 t of P<sub>2</sub>O<sub>5</sub>, resulting in a calculated mean application of roughly 29 kg N and 5,7 kg P per ha agricultural land.

Essential for the protection of water resources from diffuse agricultural pollution in Austria are: the Water Act, the national “Nitrate-Action Programme”, complying with the legal provisions of the EU-

Nitrate-Directive, the Austrian Programme for environmentally friendly agricultural practice “ÖPUL” and the rural advising network for advising farmers in environmentally sound practice and production methods.

*Wetlands and water ecosystem*

Five major wetland and floodplain restoration projects were finalized on the rivers Danube, Drau/Drava, Lech and Lafnitz and three major restoration projects were started on the rivers Danube, Mur and Ybbs. The project concerning river Lafnitz entails the erection of fish-passes and is not area-relevant for wetland or floodplain improvement. All listed projects were planned in coordination between Water Management and Nature Conservation and are co-financed by the European Commission throughout the LIFE-Nature Programme.

Estimated cost for reforms to respond to JAP

Between 2001-2005 on average 840 MEUR per year were invested in measures for wastewater collection and wastewater purification, summing up to 4.200 MEUR. The estimated investment costs of measures, which Austria listed for 11 defined wastewater treatment systems as part of the JAP 2001-2005 were 353 MEUR. Investments in measures for wastewater collecting systems and wastewater treatment of industry amounted to more than 120 MEUR. The costs of finalised wetlands projects for the period 2001-2005 were 22,3 MEUR, and approximately 10.6 MEUR are estimated for the newly started projects.

## 1.3 CZECH REPUBLIC

### **TASK I Czech Republic: Summary Report on the implementation of policies, regulations and measures of compliance in line with the JAP and EU water directives**

#### Policy Objectives

Water policy of the Czech Republic (CZ) is based on EU water legislation and on the principles of protection of water quantity and quality in complex river basins and hydrological regions. It is focused on ensuring the requirements of the Water Framework Directive (WFD) and other EU directives. Plan for the WFD implementation, approved by the Government, was drawn to coordinate the responsibilities and deadlines for the WFD implementation steps. Transition period in connection with implementation of the EC Directive 91/271/EEC has been agreed between CZ and EC by the end of 2010. Issues connected to step-by-step implementation of EC directives 91/676/EEC, 2006/44/EC and 2006/11/EC have been solved directly in the relevant Czech legislation. The emphasis in water policy is being further laid on improvement of flood protection, reduction of pollution from point and diffuse sources, prevention of accident impacts, wetlands rehabilitation, environmentally sound agricultural practice etc. Both the Ministry of Environment and the Ministry of Agriculture are competent authorities responsible for preparation and the implementation of water policy in the CZ.

#### Status of Legislation Dealing with Water Management

The Water Act No. 254/2001 Coll. and its Amendment No. 20/2004 Coll. form the basis for water legislation in the CZ. It delimits legal relations to surface and ground waters, lays down responsibilities of public administrative water authorities, outlines systems for water planning and flood protection, defines the rules for water management and covers economic instruments in the area of water. The area of drinking water supply and collection and waste water treatment is treated separately by the Water Supply and Sewerage Systems for Public Use Act No. 274/2001 Coll. The Public Health Act No. 258/2000 Coll. delimits requirements for drinking water quality. These three laws supplemented by related regulations and decrees create complex legislation in the area of water in the CZ. One of the most important is Government Regulation No. 61/2003 Coll. on the indicators and values of permissible pollution of surface and waste waters, the requisites of a permit for discharging waste water into surface waters and sewage systems and in sensitive areas and its Amendment No. 229/2007 Coll.

#### Main barriers to water-related policy and legal reform and JAP implementation

Generally stated, there are no significant barriers to implementation of water related policy and legislation reform. There is an endeavour to apply the principles of subsidiarity and democracy in the area of environmental measures implementation. This entails among others public participation in decision-making process, including e.g. Strategic Environmental Assessment, and Environmental Impact Assessment.

There are no large deficiencies concerning the implementation of JAP. The fulfilment of the 91/271/EEC Directive is coordinated and facilitated by the Government during the transitional period. The implementation of measures connected with industrial pollution sources depends on owners and operators and their financial sources. The Government creates legal conditions and economical incentives for them. The polluter can discharge wastewater only in permitted quality and quantity. The permit issued by the state administration must comply with Government Regulation No. 61/2003 Coll. and its Amendment. Moreover payment for permitted discharged pollution is embedded in law. The Czech legislation has range of further economic instruments to support the enforcement of legal requirements. Delay in implementation of JAP measures concerning wetland restoration has been caused by problems with unresolved ownership of land.

## Actions and measures in response to JAP

### *Municipal discharges*

Implementation of UWWT Directive with regard of the transitional period till 2010 requires considerable financial means from public and private sector in order to ensure construction/reconstruction of sewerage networks and UWWTPs. The Government through the “Strategy for financing of 91/271/EEC Directive implementation” which is being regularly updated coordinates the implementation process. There is a need of UWWTPs construction particular in agglomerations between 2 000 and 10 000 p.e. and reconstruction and intensification of UWWTPs in agglomerations over 10 000 p.e. in view of discharges into sensitive area which presents the whole Czech territory.

### *Industrial discharges*

The CZ implements both the 96/61/EEC Directive on integrated pollution prevention and control (IPPC) through the Act No. 76/2002 Coll., as well as the 166/2006/EC Regulation. Industrial plants in the CZ are private and cannot receive any state grants or subsidies. The measures must be financed from their own resources or from bank loans. According to the Czech law each person (juridical or physical) - who wants to discharge wastewater to surface water – must acquire the official permission. The permission is issued for the limited time period max. 10 years, for dangerous substances 4 years. Nevertheless, the polluter pays the Pollution Tax to State Environmental Fund for permitted COD, dissolved substances, undissolved substances, total phosphorus, ammonia nitrogen, inorganic nitrogen, AOX, mercury and cadmium concentrations exceeding limits established in the Water Act. This tool plays a role of financial incentive for polluters to reduce their pollution discharges and at the same time creates funds for subsidies and grants for eligible environmental measures.

### *Agricultural discharges*

For point agricultural pollution sources the same regulations as for the industrial discharges are valid. The diffuse agricultural pollution sources are controlled by the Government Regulation No. 103/2003 Coll. on establishment of vulnerable zones and on the use of fertilisers and manure, crops change and on the implementation of anti-erosion measures in these areas, which comply, with the 91/676/EEC Directive. The Regulation identifies vulnerable zones and method for their revision, it states the rules for the use of fertilisers and manure and their storage, for changing of crops and performing of anti-erosion measures to reduce the nutrients wash out from the soil. The Acts No. 326/2004 Coll. on plants medical care and No. 120/2002 Coll. on conditions for introduction of biocides and effectual substances to the market regulate the use of pesticides and biocides. Preparations and substances can be used in the CZ only when they are properly registered in line with the law.

### *Wetlands and water ecosystem*

The Ministry of Environment has two Programs for wetland restoration: Program for Revitalisation of River Systems and Program for Landscape Maintenance. Moreover subsidies can be granted from the State Environmental Fund and from the Operational Program Environment supported from EU. The unresolved proprietary rights to the land cause most of constraints for wetland and flood plains restoration. E.g. 24 small wetland restoration and rehabilitation projects with total area of 120 km<sup>2</sup> have been identified for JAP 2001 to 2005. The projects are under management of several state institutions as Agricultural Water Management Administration, Protected Landscape Area Litovelske Pomoravi, National Park Podyji, Forests of the Czech Republic, and Morava River Basin Administration. The accomplishment of the proposed projects was originally planned till the year 2005. Nevertheless, due to the financial and procedural complications – especially with regard to unresolved proprietary rights to the land – the time schedule proposed in 2001 was later updated. According to the updated time schedule some of projects will be finished till 2008.

Estimated cost for reforms to respond to JAP

Cost of measures implemented by the CZ in the framework of JAP is for municipal point sources 199.6 Mil. EURO, for industrial and agro industrial point sources 3.0 Mil. Euro and for wetland rehabilitation 7.0 Mil. Euro.

## 1.4 SLOVAKIA

### **TASK I Slovakia: Summary Report on the implementation of policies, regulations and measures of compliance in line with the JAP and EU water directives**

#### Policy objectives

The implementation of the EU legislation and the EU membership of the Slovak Republic since May 2004 have positively influenced the implementation of the Joint Action Programme for the Danube River Basin 2001 – 2005. Slovak water management and protection policy in compliance with EU water policy - Water Framework Directive (WFD) and other relevant directives - aims at achieving of good water status for all waters by 2015. The legislative tools for achieving of this aim have been prepared. All EU directives have been transposed into the national law system. The transposition was finished in 2004 through the updated version of the Water Act (No. 364/2004 Coll.).

The main priority in relevant sectors (urban wastewater, industrial wastewater, land use, wetlands) is the implementation of EC directives requirements (urban and industrial wastewater during the transition periods), namely reduction of nutrients and priority substances and creation of effective water management that will be able to promote sustainable water use based on long - term protection of available resources.

The aim of water management and protection policy in Slovak Republic is implementation of the requirements for the protection of surface and ground waters by effective measures which include: a) prevent further deterioration of, protect and enhance the status of water resources, b) promote sustainable water use based on long-term protection of water resources, c) aim at enhancing protection and improvement of the aquatic environment through specific measures for the progressive reduction of discharges, emissions and losses of priority substances and the cessation or phasing-out of discharges, emissions and losses of the priority hazardous substances, d) ensure the progressive reduction of pollution of groundwater and prevents its further pollution, and e) contribute to the mitigation of the effects of floods and droughts.

Definition of potential measures and their assessment will lead to the elaboration of the Programme of Measures and assessment of costs in line with the WFD. Further, the River Basin Management Plan will be elaborated.

#### Status of legislation dealing with water management

The Slovak Republic was obliged to transpose the EU legislation into national law system until year 2004. To ensure all relevant tasks related to EU legislation transposition, new structure of the competencies in water management branch has been set up. Also, the regional state water administration system has been changed with purpose to ensure fulfilment of all key tasks. In line with the WFD requirements, the competencies and authorities of the river basin administrations have been extended.

The Ministry of Construction and Regional Development coordinated the preparation of the Slovak National Development Plan (NDP). This document which was a mid-term planning instrument detailing Slovak economic development policy until 2006 had been approved by the Slovak Government, having a basic condition - to allow access to the EU pre-accession funds. At present, the Slovak Republic use for fulfilment of the EU directives requirements, the Structural and Cohesion Funds.

The environmental sector had prepared the Sectoral Operational Programme (SOP) as the principal documents for implementation of the Structural Funds in the field of environment. Analyses and strategic documents were approved by the Government of the Slovak Republic within the field of environment as the Strategy, Principles and Priorities of State Environmental Policy (1993), National

Environmental Action Plan of the SR II (1999), National Strategy for Sustainable Development (2000), Water Management Policy of the Slovak Republic up to 2005 (2001), the Waste Management Programme of the Slovak Republic (2002), and National Development Plan (2003).

One of the priorities of NDP “Environment” also was aiming at achieving compliance with the EU directives relating to the protection and rational use of water; reduction of atmospheric pollution, waste management, and the protection of the natural environment.

In the area of infrastructure concerning to the protection and rational use of waters, the main issues in this field has been related mainly to the low rate of the connection of population to sewerage networks and wastewater treatment plants. In some cases, the results of the monitoring indicated the exceeding of limit values for some pollutants in drinking water (e.g., heavy metals, nitrates). In addition, a growing problem of floods is causing a serious concern.

#### Main barriers to water-related policy and legal reform and JAP implementation

Policy reform and legal reform were finished in Slovakia in 2004. That is a reason why the main risks have moved to the implementation process. Generally, for the implementation of all mentioned water protection and management directives, funding for the necessary investments is a key factor for their fulfilment.

The main risks are: 1) managing and implementation of many small and on different areas located constructions is very demanding on the conceptual, strategy and project preparation, construction of structures and bringing them into permanent operation; 2) objectives set up are realistic to achieve only with support of external funds. Costs for fulfilment of EU directives requirements will have an impact on the increase of water services prices, attracting consequences to the inhabitants and other customers.

Concerning JAP implementation there are not significant deficiencies. Problem can arise with industrial facilities, which are mostly private. There are less data than from municipal sources. In addition, data concerning investment is not available. Main barrier to implement measures for wetlands protection and conservation is mainly due to the lack of financial sources.

#### Actions and measures in response to JAP

Water management policy objectives in the Slovak Republic correspond with aims of JAP. For achieving the objectives during the programming period 2004-2006 the measures have been targeted to the following activities:

- to support drinking water supply for inhabitants for the required quality (achieve compliance with the Directive 98/83/EC) and quantity, reduce disproportions within individual regions
- to support connection of population to sewerage systems and thereby reducing the gap between access to drinking water networks and access to sewerage networks, reduce disproportions between individual regions and achieve compliance with the Directive 91/271/EEC
- to increase the rate of municipal wastewater to be treated and increase the quality of treated water and achieve compliance with the Directive 91/271/EEC.
- to increase safety of inhabitants, industry, agriculture and environment against adverse effects of floods and contribute to the protection against floods.

#### *Municipal discharges*

In 2005, 57,1% of population was connected to the public sewerage. The number of inhabitants living in houses connected to sewerage system with wastewater treatment plant represented 2,738,000 people. In 2005, there were 443,1 mil. m<sup>3</sup> of wastewater discharged into the water courses through public sewerage system, out of which 424,4 mil. m<sup>3</sup> were treated at communal wastewater treatment plants. Number of existing wastewater treatment plants in the country is 465.

Considering the international commitments, economic and technical possibilities, it is necessary to deal with all agglomerations with over 10,000 PE by the year 2010, while the agglomerations exceeding 2,000 PE will be dealt with by 2015.

Total investment in the Slovak Republic concerning municipal wastewater treatment during the JAP period: beginning of EU funds support until end 2006 represents 421.512 millions Euro (sources: state budget, EU funds, municipalities).

#### *Industrial discharges*

The transitional measures until 31 December 2006 were necessary for three installations, which discharge certain substances from List I. 10 specific installations have the transitional periods for fulfilling of IPPC Directive requirements and their deadline for achieving of compliance is set up between 31 December 2009 and 31 December 2011, at the latest.

#### *Agricultural discharges*

Agricultural land in the Slovakia occupies 49.7% of the territory, of which 18.7% represents extensive agriculture. Agriculture and soil erosion in the Slovak Republic are key factors, which have negative impact on water quality. Except water pollution by agriculture, soil erosion of arable land is a significant problem, because threatens 54 % of agricultural land. Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources is transposed and incorporated into Act No. 364/2004. The Slovak Environmental Agency is entrusted by reporting to this directive. The first report was elaborated in year 2003.

Financial sources for implementation of the Directive 91/676/EEC are needed mainly for sufficient storage capacity for organic fertilizers and set up action programmes into practice. Financial costs until year 2008 are assessed for 825 mil. Euro and they represent requirements of private sector.

#### *Wetlands and water ecosystem*

National inventory of wetlands started in 1991 and during years 1992-2000 more than 2,000 wetlands were identified and registered. The Action Plan for years 2003 – 2007 (actions, responsible institutions, deadline and costs) was approved on March 2003. Action plans contain list of specific actions, responsible institutions, deadlines and costs. Total estimated costs for implementation of Slovak National Wetland Policy - Action Plan for years 2003 – 2007 represents about 6.141 Mil. Euro.

#### Proposed schedule for approximation and the estimated cost for reforms to respond to JAP

Legal reform related the water sector has been finished. Full transposition of water protection and management EU Directives into national legislation was made by amendment of Water Act in 2004.

Cost assessment for implementation of the Water Framework Directive and relevant EU water directives, including flood protection and implementation of all objectives included in the document Conception of the Water Management Policy of the Slovak Republic until 2015 represents 5,614 millions Euro, of which 2,730 millions Euro is planned for wastewater treatment.

## 1.5 HUNGARY

**TASK I Hungary: Summary Report on the implementation** of policies, regulations and measures of compliance in line with the JAP and EU water directives

### Policy objectives

All water flowing through the country is concentrated into the Danube river basin. More than 90% of the drinking water supplies, as well as part of the industrial, irrigation and other water demand is provided by ground waters. The quality of groundwater is in general good and their adequate preservation should be considered. Still, some third of the groundwater is vulnerable to the pollution of surface origin.

The National Environmental Programme includes substantial provisions and measures for the conservation and management of surface and subsurface water resources. Some of the key targets and approved policy directions include: regulation development to encourage sustainable and economical water use; improvement of water quality for the main watercourses/water bodies (Danube and Tisza Rivers, Lake Balaton); gradual increase of the number of settlements with sewers; at least biological treatment of wastewater from sewers; nitrate and phosphorous load reductions for highly protected and sensitive waters. Main principles of the Plan on safety and rural development approved in 2004 in the Tisza area include: achievement of a higher level of flood safety, the improvement of the living standards of the rural and urban population of the region, the formulation and introduction of new types of agro-ecological land use in the area of the emergency flood retention reservoirs and the modernisation of the infrastructure in the settlements along the Tisza.

By year 2003 Hungary made the necessary legal harmonisation of WFD and it reflects in the two relevant Acts - General Rules of the Protection of the Environment and the Water Management. Finally, an important principle for the water management is linked to the necessity to ensure interdependence between the environmental protection, agriculture and the rural development.

The competent authority for the implementation of WFD in Hungary is the Ministry of Environment and Water.

### Status of legislation dealing with water management

In response to EU requirements, Hungary finalised in 2003 the legal framework and related institutional arrangements on water quality protection. More documents came into force in 2004, for i) adoption of the Water Framework Directive (2000/60/EEC) and ii) improvement and simplification of the relevant decrees, on the basis of the experiences gained during the initial phase of implementation. In order to implement the UWWT Directive, in 2001, a government regulation was issued which contains the national implementation program in harmony with the agreed derogation periods of EU-compliance, and taking into consideration the specific Hungarian requirements to protect the groundwater resources of drinking water supply.

The 25/2002 government regulations contain the categorized list of identified agglomerations, and the applied deadlines of sewage collection and treatment developments of the settlements. Preparation of the pollution reduction programs has started, in compliance with the relevant EU directive IPPC Directive. Several key areas for remediation have been identified. Meeting obligation of the Nitrates Directive is also considered by Hungary. Increasing consumption and consequent economic activities increased the environmental risk. Sustainable agriculture is vital from the point of view environmental protection and nature conservation. Other pieces of legislation relevant to the JAP tasks include: the National Environmental Program with substantial provisions and measures for the conservation and management of surface and groundwater resources. A governmental program – the New Vásárhelyi

Plan - has been started in 2004 on the enhancement of flood safety and the related regional and rural development in the Tisza Valley.

#### Main barriers to water-related policy and legal reform and JAP implementation

Main barriers during implementation of the EU Directives might be linked with enforcement and availability of financial resources.

#### Proposed priority actions and measures to facilitate the development of policies, legal and institutional reforms

Ministerial decree on the observation and monitoring of ground waters and on the observation and monitoring of surface waters are prepared. Also, preparation of the pollution reduction programs has started, in compliance with the IPPC directive. Introduction of the best agriculture practices was started in 2002.

Before 2002 the main governmental responsibilities relating to the water sector were divided between the Ministry of Environment and the Ministry of Transport and Water. In 2002 as an important step towards the unified and comprehensive state regulation of natural resources the integration of water management has been completed with environmental protection and nature conservation affairs, along with such tasks accomplished by Ministry of Environment and Water as flood control and protection against inland water inundation as well as supervision of water supply public utilities.

Following the ministerial level, the reorganisation continued on the regional institutional level as well during the 2002-2005 periods. The main aim of this process was to establish a coherent system of environmental and water sector.

In order to create a conscious and efficiently functioning state, the systems of authorities and asset management institutions were separated, and a client friendly, integrated green authority was created from the water management, nature conservation and environmental protection specialised authorities.

#### *Municipal discharges*

The National Implementation Program of Urban Wastewater Collection and Treatment financing needs until 2015 is estimated for cca. 3,3 billion Euro.

Canalisation and sewage treatment projects worth 1,2 billion Euro of EU and Hungarian resources have been launched. New sewer network and sewage treatment infrastructure were built for almost 1.9 million citizens.

#### *Industrial discharges*

The joint programme of the Ministry of Environment and Water and the Hungarian Development Bank offers supplementary interest subsidy for investment programs of small and medium size enterprises as well as of local governments related to the protection of the environment. A subsidized credit line is available in frame of this project for decontamination of polluted areas, for investments for projects in the field of water quality protections as well.

Hungary succeeded in acquiring all the environmental protection grants of ISPRA and the Cohesion Fund 2004-2006. Hungary also applied for the available resources of the Structural Funds until 2005.

In connection with the IPPC Directive, Hungary reported the emission data of IPPC installations for the EU EPER database in 2003 and 2006, for the reference years 2001 and respectively 2004. A Hungarian EPER-PRTR database were also established and launched for public in 2004.

The number of EPER facilities in Hungary was 96 in 2004. Thereof 8 facilities had only direct emissions into water and 12 facilities into air and water (direct emission). The most emissions come from the chemical industry, production and processing of metals, mineral industry and "other activities", mainly paper industry, slaughterhouses and food production.

*Wetlands and water ecosystem*

Hungary indicated 4 wetland restoration projects in the ICPDR Joint Action Plan. Total area of the projects is 11 340 hectare, with about 7.4 million Euro estimated cost. All project areas were designated as a part of Natura 2000 network.

Proposed schedule for approximation and the estimated cost for reforms to respond to JAP

Hungary was granted the following transition periods in the area of water management: (i) until 31 December 2008 for urban waste-water treatment for agglomerations with a population of more than 15,000; until 31 December 2015 for waste-water treatment for agglomerations with a population between 2,000 and 15,000; until 31 December 2008 for discharges of biodegradable industrial wastewater plants (Directive 91/271/EEC on urban waste-water treatment), (ii) until 30 October 2007 for existing industrial installations for integrated pollution prevention and control (Directive 96/61/EC on industrial pollution control and risk management). Also, preparation of the pollution reduction programs in compliance with the IPPC directive until end of 2007 are cca. 1,8 billion €, for the implementation program of Nitrates Directive, aiming to the introduction of the best agriculture practices will cost for next 10 years about 200 MEUR. Preliminary estimated total cost to meet the requirements of the WFD is 440 MEUR.

## 1.6 SLOVENIA

### **TASK I Slovenia: Summary Report on the implementation of policies, regulations and measures of compliance in line with the JAP and EU water directives**

#### Policy objectives

Authority responsible for the transposition and implementation of EU environmental legislation requirements in Slovenia is Ministry of the Environment and Spatial Planning. The complete transposition of EU environmental Acquis in Slovenia's national law has been finished, while implementation and enforcement of the legislative measures is a long-term goal and key task of this constitution. The objectives and strategies for environmental protection and water management are outlined in the main legislative tools: Environment Protection Act (2004), National Environmental Action Programme (1999), Water Act (2002), and Nature Conservation Act (2002). Besides the 3 above-mentioned Acts the *Resolution on National Environmental Action Programme 2005-2012* (adopted at the end of 2005) is also considered as one of the significant legislative documents. Main policy objectives aim at improvement of environmental quality, the quality of life and protection of natural resources, achieving of good water status, integrated water management on river basin management and sustainable nature protection.

#### Status of legislation dealing with water management

Water management in Slovenian Region is divided into two main districts: Danube and Adriatic. Water Act (adopted 2002) considers the whole water policy such as protection of water, water use and by-water use areas, management of water and protection of water depending ecosystems. All-important chapters of current EU legislation from water sector are being well harmonized and summarized into national legislation policy.

#### Main barriers to water-related policy and legal reform and JAP implementation

Since the transposition of EU Acquis Communautaire in Slovenian legislation has been successfully finished, the next long-term goal is implementation of a legislative measures into above-mentioned sectors. The Resolution on National Environmental Action Plan is overall strategic document with main scope for improvement of the environment considering implementation of EU legislative demands. It is expected that capacity building will be the limiting factor for the JAP implementation as it depends on the limited number of available experts and budgetary constrains.

#### Actions and measures for individual relevant priorities of JAP

Full transposition of EC Directives related to water into national legislation is finalised. Implementation of national regulation accordant to Urban Wastewater Treatment Directive (91/271/EEC) will be ready in 2015. Slovenia's integration into EU has significantly marked the legal and programme frameworks of environmental management, particularly priority tasks of wastewater treatment. The key regulation for the area of wastewater collecting and treatment is Decree on the Emission of Substances in the Discharge of Waste – Water from Urban Waste – Water Treatment Plants. Phase one of its implementation (period between 1999 – 2006) is focused on the construction and improvement of the sewerage network and WWTP for municipal wastewater of the areas with the population above 15.000 PE, on the protection of water sources for public drinking water, and on the improvement and construction of water networks in water shortage areas. It is defined in an Operative programme for wastewater collecting and treatment, by a programme of water supply projects approved by the government in 1999. Phase two of the implementation (period between 2002 – 2015) is outlined by mentioned programme in areas with a population between 2.000 and 15.000 PE or less than 2.000 PE, approved by the government in 2001.

Slovenia as one of member state should aim to achieve the objective of at least good water status by defining and implementing the necessary measures within integrated programmes of measures. Where good water status already exists, it should be maintained according to Water Framework Directive.

Slovenia's integration into EU has significantly marked the legal and programme frameworks of environmental management, particularly priority tasks of wastewater treatment. The key regulation at the area of wastewater collecting and treatment is Decree on the Emission of Substances in the Discharge of Waste Water from Urban Waste Water Treatment Plants.

Priority actions to implement the above mentioned decree and the Operational Programme for Urban Waste Water Drainage and Treatment (for the period 2005-2017) in order to become in line with the Urban Waste Water directive is to prepare projects for construction of sewage (drainage) systems as well as for the urban waste water treatment plants. As the deadline for assuring treatment for the urban wastewater in the agglomerations bigger than 100.000 PE has already past the state of facts is that this task has been successfully accomplished (cities of Ljubljana and Maribor have UWWTP that are operating). The next task according to the Operational Programme is to construct UWWTP with tertiary treatment for agglomerations bigger than 10.000 PE, located on sensitive areas – deadline is the end of the year 2008.

#### Proposed schedule for approximation and the estimated cost for reforms to respond to JAP

The European Commission has allocated the following basic funds to Slovenia 25 MEUR, from Phare National Programme, 21 MEUR For ISPA (support to the construction of a large environmental and traffic infrastructure) and 6.3 MEUR For SAPARD (support to agricultural policy and rural development reform). The total environmental cost is about 2,723 MEUR.

In order to attain the good water status, a plan of measures (sewage systems and UWWTP to be constructed) is systematically described in above-mentioned Operational Programme for Urban Waste Water Drainage and Treatment (for the period 2005-2017), approved by Slovenian government in October 2004. The necessary measures listed and explained in this programme have already started and must be finished until the year 2015. Estimated costs for implementing the whole Operational Programme for Urban Waste Water Drainage and Treatment (for the period 2005-2017) are 883,8 MEUR. It has to be emphasized that the costs are shown as the sum of costs for the Danube river basin district and the Adriatic Sea river basin district.

## 1.7 CROATIA

### **TASK I Croatia: Summary Report on the implementation of policies, regulations and measures of compliance in line with the JAP and EU water directives**

#### Policy objectives

Croatia received a candidate status for EU membership in June 2004, by means of which the Government of Croatia indicated its commitment to the process of adoption of the existing EU legislation. Following the signing of the Stabilisation and Association Agreement (SAA) with the EC, much of the country's administration, legislation and infrastructure has already been brought into alignment with the EU. The Water Act regulates the legal status of water and water estate, the methods and conditions of water management (water use, water protection, regulation of watercourses and other water bodies, and protection from adverse effects of water), the method of organizing and performing water management tasks and functions, basic conditions for carrying out water management activities; powers and duties of state administration bodies and other state bodies, local self-government units and other legal subjects, and other issues of importance to water management.

#### Status of legislation dealing with water management

The legal framework for water management consists of the Constitution of the Republic of Croatia, the Water Act, which includes 42 sub legal acts envisaged by the main act, the Water Management Financing Act, the Law on Environmental Protection, the Nature Protection Act and other relevant regulations. Related to the harmonization of the national legislation with the relevant EU legislation there are two project financed by the EU CARDS program. The main task of this two project is to develop a Strategy for the approximation in environmental sector. Based on results of this two projects and screening which is planned to start end of 2004 the exact dates of the harmonization of specific law, by-law will be defined.

The Water Management Strategy is the basic planning document in the field of water management, having undergone a public consultation procedure, it is now under adoption procedure before the Government and Parliament of the Republic of Croatia. The Strategy defines the long-term vision, objectives, and tasks of the national water management policy. Under the Strategy, a general objective of water management is the establishment of an integrated and coordinated water regime. In the field of water protection this implies preserving good water status, preventing devastation of water bodies at risk, and recovery of water status where it has been degraded, particularly in order to protect human health and the environment.

#### Main barriers to water-related policy and legal reform and JAP implementation

Main deficiencies related to existing legislation are that it is not harmonized with relevant EU legislation. Generally, the existing legal framework is almost complete on the state level. The legal framework, which is under the competence of local authorities, is still not completed. Related to policy reform as main barriers are considered the areas/tasks of the JAP those are not regulated by national legislation. These areas are: reductions of pollution from diffuse sources, wetland and floodplain restoration, reduction of pollution from inland navigation, product control related to phosphate free detergents. As these areas are not/not sufficiently regulated in national legislation implementation of this tasks is performed with lot of difficulties. Other tasks of the JAP can be evaluated as relatively good regulated and implemented, but further improvement are needed. Generally, the harmonization of policies and activities between environment, nature protection, and water management is not coordinated well and funds and resources are not always used effectively. Main barriers to legal reform are insufficient capacity of state administration to deal with increased tasks related to EU harmonization of legislation and development of implementation mechanisms.

Existing financing mechanisms in environmental/nature/water protection have to be reformed/improved to better support implementation of the relevant legislation.

Actions and measures in response to JAP

Proposed changes of relevant laws and regulations are oriented mainly to harmonization of the national legislation with the relevant EU legislation. Based on results of two CARDS projects and screening which is planned to start end of 2004 the exact activities and deadlines of the harmonization of specific law, by-law will be defined. In area of institutional arrangements the main task is oriented in decentralization of the water management system and strengthening of the local government capacity to implement legislative framework.

In Croatia, as to the JAP programme, in the framework of measures for improvement of quality referring to municipal waste water discharges, measures for more than 540 MEUR were taken, which include the construction of more than 15 WWTPs, reconstruction of the sludge line and the pumping station or construction of the sewerage network.

Estimated cost for reforms to respond to JAP

No estimates of costs connected with the reforms have been made until now. According to rough estimates total environmental investments (water, air, waste) will be at the level of at least 1,500-2,000 ECU per capita. For all other areas costs of legislative harmonization will lie between 5 and 8 % of the total expenditures required. A rough break-down of costs related to meeting the requirements that arise from legislative harmonization is as follows: for water protection 40-45 % of the total costs, for nature protection 4-5 %, for industrial pollution control and risk minimization 2 %, for horizontal legislation harmonization 0.3-0.4 %, and for the rest 0.1 %.

## 1.8 BOSNIA-HERZEGOVINA

### **TASK I Bosnia and Herzegovina: Summary Report on the implementation of policies, regulations and measures of compliance in line with the JAP and EU water directives**

#### Policy objectives

Water sector in B&H is undergoing reform since 1998. The main aim is to establish transparent and cost-efficient water management at river basin level based on principles of the EU Directive 2000/60/EC, of 23 October 2000, which defines framework for activities in water sector. The changes in the water sector in Bosnia and Herzegovina were positively influenced by the fact that until 2005 there were several projects in the area of Institutional strengthening in the water and environmental sector and specially that in 2004 B&H ratified the Danube convention and became an equal member in the ICPDR family. During the preparation of the B&H National report (2005-2006) for the Danube River Basin, significant changes occurred in the national legislation in water sector: the legal base was developed for the start of transposition of European legislation in B&H legal system.

The most important results of mentioned reform are: establishment of legal and institutional framework for water management on entity level in B&H based on water laws and establishment of legal preconditions for establishing of Water Agencies in 2007 as institutions responsible for implementation of regulations. With the adoption of set of entities legislation the country has expressed its readiness to apply the European standards, instruments and measures aimed to reduce environment pollution and promote sustainable use of natural resources. Within the entity water laws the accent is given on application and implementation of WFD.

The last Progress Monitoring Project for the precandidate countries of South East Europe resulted in the conclusions that these new Water laws cover almost fully requirements of WFD and to less extent requirements of other water related EU directives. Future activities regarding water-related policies will focused on embedment of the requirements of relevant EU directives in sub-laws and regulations of bought Water laws and development of the strategy in water sector.

The water policy in Bosnia and Herzegovina is based on implementation of EU legislation and on principles of protection of quality and quantity of water in river basins. The emphases in the water policy are further laid on improvement of flood defence, reduction of diffuse and point pollution sources, prevention against accident pollution etc. Ministries in both entities responsible for the implementation of the water laws are competent authorities for preparation and implementation of the water policy. Final compilation and coordination on the state level are under the competencies of Ministry for Foreign Trade and Economic Relations.

More that 75% of the total waters in Bosnia and Herzegovina belong to river basins draining into the Black Sea (Danube watershed). In general, river water quality in the downstream parts of the rivers is poor due to lack of wastewater treatment and waste disposal. The main sources of water pollution are human settlements, industry and agriculture. The lack of sewage treatment and poor management practices result in severe pollution and consequently public health problems may arise as a result of poor water quality management and hygiene in both urban and rural populations. A new water law are primarily based on compliance with WFD as well as on application of other EU directives required or listed as related directives with WFD (e.g. UWWT, Nitrates Directive etc.) is planned within the framework of the secondary legislation.

The political and governmental structure in B&H is rather complex. The country of Bosnia and Herzegovina has two major, highly autonomous “Entities”: the Federation of Bosnia and Herzegovina (FB&H), and Republika Srpska (RS). Each has its own laws dealing with the delivery of water and wastewater services, addressing most aspects of technical, administrative and financial matters. Each

has its own Ministries responsible as competent authorities for preparation of the legislation regarding water management and environment, and each has responsible authorities (public enterprises in FBiH and Republic Directorate for waters in RS) for its implementation.

The adoption of new Water laws in FB&H and RS envisages the transposition period of 6 months from existing Companies into the 4 Entities Water Agencies. Whilst responsibilities of the Public Companies and Directorate in past included more activities on water policy and infrastructure development and sector planning, its main role in new Water law is related to implementation aspect of river basin management planning, licensing, enhanced public participation and water quality and quantity monitoring.

In addition to the above-mentioned ministries, several other institutions in Bosnia and Herzegovina deal with water as resource but not with integral water management and there is no overlapping in competencies for certain activities. These include other ministries, independent administrative offices and institutions, and institutions related to the ministries. Other ministries with secondary responsibilities for water are usually the ones dealing with health, industry, energy and mining (or the economy in general), labour and public welfare.

The role of the coordinating bodies in the sector has been increasing in B&H over the past years, in view of increasing international obligations of B&H and a need for an improved coordination at state level and ensuring more efficient use of scarce resources available to the Sector. The State level coordination role is assigned to the Ministry of Foreign Trade and Economic Relations and its Sector for Environment, Energy and Natural Resources.

**Federation B&H:** The main authorities responsible for environment and water issues are the Federal Ministry of Agriculture, Water Management and Forestry (MoAWMF) and the Federal Ministry of Environment and Tourism (following a recent restructuring). The Federal Ministry of Agriculture, Water Management and Forestry (is responsible for the water policy and strategy development, the issue of approvals and permits, setting of standards and regulations. The Federal Ministry of Environment and Tourism is responsible for the preparation of the environmental policy and strategy-related documents, quality standards for air, water, and soil, environmental monitoring as well as supervision of relevant institutions from the environment sector. The part of authority in Federation is delegated to the cantons.

**Republika Srpska:** Certain similarities with those in Federation B&H existed in water management organization within Republika Srpska. There are two Ministries in Republika Srpska responsible for environment and water issues, namely: Ministry of Agriculture, Forestry and Water Management (MAFWM RS), responsible for integrated water management and implementation of the most of the water sector regulation and EU WFD, and Ministry of Spatial Planning and Ecology of RS that is responsible for decision making or participating in process of making by-laws for Water law and/or WFD (like rules of good agricultural practice etc.). It is also responsible for set of environmental laws and by-laws (waste, air, nature etc...).

Besides mentioned ministries, there is also Republic Directorate for Waters as separate administration organisation in RS authorised for enactment of the law and by-laws, performs monitoring of polluters and water users, prepares aments for water management, prepares other elements for relevant ministry, etc.

#### Status of legislation dealing with water management

Key pieces of legislation relevant to water resources are the new generally harmonised and adopted Water law at entity level, which have been prepared with the assistance of the EC project. They incorporate the principles of the EU Water Framework Directive, as the principal document based upon which has the European Union implementing its water policy since 2000. Full start of implementation of the Water laws in both entities is expected in 2007. In District Brčko, a Commission for drafting of a new Water law has been formed and the law is expected to be adopted in 2007. The new Water legislation has taken into account current constitutional set-up when defining

the institutional concept for new and integrated management at river basin level in accordance with all authorities responsible in the water sector in B&H. By these laws, entities will still be in charge with preparation of river basin management plan, which is falling under their administrative competence, while harmonization will take place at district level.

The adoption of new water legislation enabled creation of legal framework for economic instruments for water protection. The Water laws recognize the “polluter pays” and “user pays” principles. The use of economic instruments is also foreseen in other recent environmental laws, specifying fees, penalties and other instruments for the purposes of water protection, air protection, waste management, and nature protection. Even though the water laws have officially entered into force, the economic instruments listed in them cannot be implemented until the necessary secondary legislation (by-laws, regulations and guidelines) have been adopted (e.g. to detection and record of polluters and water users as well as specification of the amount of fees and charges to be paid by polluters and users). The development of this secondary legislation is in the process of preparation

#### Main barriers to water-related policy and legal reform and JAP implementation

Given the extreme budgetary constraints, which apply in B&H, it will be necessary to establish mechanisms that will fund environmental protection. Targeted investment support in essential infrastructure needs to be provided.

The role of the coordinating bodies in the water sector has been increasing in B&H over the past years, in view of increasing international obligations of B&H and a need for an improved coordination at state level and ensuring more efficient use of scarce resources available to the Sector.

#### Actions and measures in response to JAP

BiH is faced with major challenges in the environmental area. There is an urgent need to make progress in the development of environmental strategies and action plans. The institutional capacity of the ministries needs to be strengthened. The priority actions include the achievement of consensus on the direction of the reform, drafting of regulations to assure correct harmonisation with EU legislation, preparatory work for future River Basin Management Plans, preparation of a new framework for financing of the water sector, creating mechanism for access to information and public participation. Although responsibility for environmental affairs rests with the entities and cantons, a BiH wide mechanism is required to ensure coordination and coherence between the different actors and to represent BiH internationally.

Fact and figures in B&H regarding water supply (ca 50 % inhabitants in the Sava watershed in B&H are linked to the public water supply system), and wastewater (less than 45 % are linked to the sewage system and only 2,5% to proper wastewater treatment facilities), are useful tools for ranking of priorities in the water sector. Construction of needed infrastructure scores high in the action list and priority is to be given to construction, reconstruction and/or completion of construction of WWTPs in accordance with Council Directive 91/271/EEC. Mentioned indicators are more connected to the communal infrastructure but are very useful to highlight importance of this segment of water management.

According to the Water law of Federation BiH, the Strategy for the water management in B&H should be prepared in 2009 and River basin management plans are expected in 2012.. In order to meet mentioned deadline as legal obligations for making these capital documents for water sector in B&H, there is necessity to start in the immediate future with preparation of the needed ingredients. It is necessary to continue work on monitoring according to WFD, drawing up a register of protected areas, delineation and determination of the status of water bodies, determination of the reference state and estimation of the key water management issues in the river basin(s).

#### Estimated cost for reforms to respond to JAP

The proposed schedule for approximation with EU indicates new Water Law and Law on Environment, compatible with the Acquis, to enter into force by January 2005. Financial allocation

for 2002-2004 is 25,6 mil euro. The EC has adopted a EUR63 million Annual Program for BiH for 2003, within the Community Assistance for Reconstruction, Development and Stabilisation (CARDS) Program Democratic Stabilization.

## 1.9 SERBIA

### **TASK I Serbia: Summary Report on the implementation of policies, regulations and measures of compliance in line with the JAP and EU water directives**

#### Policy objectives

The water management in Serbia is faced with serious tasks that require, above all: (i) creation of a stable water management financing system, (ii) reorganization of water management sector, and (iii) revision of water legislation and related regulations, in order to be compliant with the requirements of EU legislation.

It is considered that the current system of policy objectives is not yet clearly developed. However, the country is determined to overcome and reduce this gap and accelerate reforms that are taking place in the field of environment and water management.

Major objectives aim at satisfying all water users demands, achieving good water status according to EU standards, in particular according to WFD, having adequate flood protection, and implementing necessary organizational, legal and financial changes in the water administration.

These objectives can be achieved only with a gradual transition to realistic water prices and fees for water services, which will in turn create an environment of self-financing for water management.

#### Status of legislation dealing with water management

The current Water Law, which was adopted in 1991, is not harmonized with EU legislation.

#### Main barriers to water-related policy and legal reform and JAP implementation

Financial problems in water sector and in whole state economy create main barrier for the implementation of reforms and other necessary measures.

Lack of a unifying concept on policy instruments across various levels of government still exist, although considerable efforts have been made to overcome such problems.

Professional capacity in all institutions (Water directorate, Public water companies, etc.) has to be improved.

#### Actions and measures in response to JAP

##### 1. Harmonization with EU water and environmental legislation

It is necessary to pass the new Water Law, as well as other numerous laws and decrees that support harmonization of various aspects of water management and environmental protection practices with EU legislation and practice on these issues. New Environmental Protection Law (2004) is mostly harmonized with EU legislation. The draft of new Law is being prepared by the Water Directorate.

##### 2. Approval of conventions regarding water and environmental protection

Some important conventions should be approved (Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991); Convention on the Protection and use of Transboundary Watercourses and International Lakes, (Helsinki, 1992); Convention on the Law of the Non-Navigational Uses of International Watercourses (New York, 1997). Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus, 1998), etc.

3. Establishment of cooperation with other countries on the basis of conventions and multilateral agreements. Serbia has been an ICPDR member from 2003, and also signed Framework Sava Agreement in 2002.

Estimated cost for reforms to respond to JAP

It is still not possible to estimate total costs of the implementation of all EU water related legislation, but estimated costs so far are not lower than 6-7 billion Euros.

## 1.10 BULGARIA

### **TASK I Bulgaria: Summary Report on the implementation of policies, regulations and measures of compliance in line with the JAP and EU water directives**

#### Policy objectives

Bulgaria Joined the EU in 2007. The Bulgarian government approved the National Program for Adopting the EU Acquis Communautaire. The 2000-2006 National Economic Plan sets out the economic priorities for the accession period. The legislation in the “Water quality” sector is amended in line with EU standards. The general policy objectives proclaimed in the Strategy for the Integrated Management of Waters include: ensuring of water for drinking, recreation, curative and other needs, meeting water needs for economic sectors, protection of the environment and aquatic eco-systems, and limiting the impacts of floods and drought.

The water management policy development in Bulgaria included the development of National Strategy for Management and Development of Water Sector (2004), the National Environmental Strategy (2005), the Water Act (1999) and implementation initiatives such as establishment of National Program for Priority Construction of Urban Wastewater Treatment Plants (1999). The EU WFD represented a key milestone in the process of reform of the water sector as a whole, and it will have far-reaching effects on social, economic and environment issues in Bulgaria as it is implemented over the next two decades.

#### Status of legislation dealing with water management

Bulgaria has made progress in dealing with management of waters in the past few years. The process for revising and future development the legal basis as an important instrument to introduce WFD requirements culminated with last amendment of Water Act, which was approved by the Bulgarian Parliament in August 2006. Back on 1999 the framework of the Water Act was developed based on the requirements of the EC water directives and planning is designed to be compatible with the implementation plan of the WFD. The principles of the EU policy in the water sector are introduced in the national legislation through the Water Act. An important part of implementation of the Water Act, was the creation of new institutions for RBM, four River Basin Directorates were established, one for each of the water management areas. The development of river basin management plans and programs for water bodies' pollution reduction and elimination is regulated. Currently in progress of development and adoption are regulation of the characteristics of the surface water bodies, ordinance for establishing list of priority substances, regulation of water monitoring, regulation on the exploration, use and protection of groundwater, regulation on use of surface water.

#### Main barriers to water-related policy and legal reform and JAP implementation

The budget and other national resources are insufficient for the implementation of the national water sector programmes. The generated resources are not returned directly into the water sector but are re-distributed through the centralized state budget and the municipalities. The environmental costs for the water sectors are only 26% of the overall environmental expenses in 2002. The rate of collection of fees for water-use and/or water body use, of the sanctions for non-compliance with the permits, and the penalties for non-compliance with the concession agreements has been assessed as unsatisfactory. The wastewater related fees do not cover the full costs of the WWTPs operation and maintenance. The development and implementation of a national programme for conservation of soil fertility and of the environmentally clean agricultural lands is lagging.

The strategy for achieving the objectives of Directive 91/271/EC requires the implementation of a complex of coordinated measures in different spheres of the management process. It is necessary to undertake legislative initiatives related to the precise definition of the ownership status of the

wastewater treatment plants and the sewerage. The present ownership among the water utilities, the state and the municipalities will become a more serious obstacle for the utilization of the funds from EU. The main challenges faced by the country in achieving the Directive's objectives are as follows: first – sufficient financial resources (National + EU); second – improving the capacity for absorption of the provided resources. The provision of national financing for the National Program for Priority Construction of Urban Wastewater Treatment Plants is related to the country's strategy and policy for improving the budget process mechanisms and procedures in compliance with the EU criteria and requirements. Urban wastewater treatment is the main priority in Operational Program Environment.

#### Actions and measures in response to JAP

##### *Municipal discharges*

Priority is given to completion of construction of the wastewater treatment plants, regarding transitional period for the implementation of Directive 91/271/EC (2014).

##### *Agriculture discharges*

Bulgarian legislation is harmonised with EU practices, following requirements of the Directives 91/676/EEC in the field of Good Agricultural Practice and the Code for Good Agricultural Practice implemented. Further efforts in communication with farmers concerning the Nitrate Directive and the agri-environment scheme will contribute to its effect implementation.

##### *Wetlands and ecosystem*

The National Biodiversity Strategy and National Wetland Strategy have identified priority areas for conservation and restoration of wetlands. Bulgaria currently implementing a large scale GEF/World Bank projects for Wetlands Restoration and Pollution Reduction in the Danube River Basin. Further efforts are required, however, to upgrade national plan for conservation of wetlands, within an adequate budget and including coordinated restoration plan.

#### Estimated cost for reforms

Cost assessment for implementing EU directives is estimated to be about implementation of the WFD 11,000 MEUR.

## 1.11 ROMANIA

### **TASK I Romania: Summary Report on the implementation of policies, regulations and measures of compliance in line with the JAP and EU water directives**

#### Policy objectives

In 2007 Romania has joined the European Union. As part of the accession process, on the environmental protection side, Ministry of Environment and Sustainable Development has harmonized the national legislation to EU law and specific directives, including those related to water. In order to reach the goals of the specific directives and mainly the Water Framework Directive (WFD) Romania is now in the process of designing and implementing an integrated water management system. Starting with year 2000, an intensive legal process took place in order to approximate the Romanian legislation to the EU directives. This process has been ended in the first half of 2004 when the Water Framework Directive has been transposed by the modification of the Water Law 107/1996. The new Water Law provides the framework of the water management activities and also establishes the main objectives of such activities.

The development of the capacity for integrated water management was not motivated only by the legal requirements of EU accession. Romania has experienced significant economic losses from floods, accidental spills, and droughts, costs that could be substantially reduced through improved monitoring, use of effective decision support system tools in managing water allocation and quality, and implementation of a comprehensive communication network to ensure timely response by water users and the public to forecasts and warnings. Main priority in relevant sectors (urban wastewater, dangerous substances discharges, protection against nitrates coming from agricultural sources, wetlands) is implementation of the specific EC directives requirements, including treatment of urban wastewater, reduction priority substances discharges and improvement of water management that will be able to promote sustainable water use based on long - term protection of available resources.

Main objectives of the water management are:

- conservation, development and protection of water resources, and ensuring of a free water flow
- protection against any form of pollution and modification of water resources characteristics, banks, riverbeds, or basins;
- restoration of the surface and groundwater quality;
- conservation and protection of the aquatic ecosystems;
- ensuring of the drinking water supply to population and of public sanitation
- sustainable water management and rational and balanced water distribution
- prevention and control of floods and of any dangerous hydrometeorological phenomena
- ensuring of water demands for agriculture, industry, power generation, transport, aqua-culture, tourism, recreation, and nautical sports, as well as any other human activities;
- integration of quantitative and qualitative aspects of both surface waters and groundwater, which belong to the same ecological, hydrological and hydrogeological system;
- ensuring of protection of aquatic ecosystem located near the coasts, gulfs or in Black Sea;
- promotion of sustainable water use based on a long-term protection of available water resources
- conservation, protection and improvement of the aquatic environment, inter alia, through specific measures for the progressive reduction of discharges, emissions and losses of priority substances and the cessation or phasing-out of discharges, emissions and losses of the priority hazardous substances;

- progressive reduction of pollution of groundwater and prevents its further pollution;
- achieving the objectives of the Convention on the Protection of the Black Sea against Pollution regarding ceasing or phasing out discharges, emissions and losses of priority hazardous substances, with the ultimate aim of achieving concentrations in the marine environment background values for naturally occurring substances close to zero for man-made synthetic substances.
- prevention of further deterioration and protection and enhancement of the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems.

General principles concerning the water policy refer to: management at the basin level, precaution, prevention, addressing of pollution at the source, polluter pays, and integration of environmental protection into other sectors.

#### Status of legislation dealing with water management

Fundamental document of the water policy in Romania is the Water Management Strategy. This strategy outlines the main directions that have to be followed by the water sector and has as main objective and integrated management of the water resources. The legislative tools for achieving policy objectives have been prepared. All EC directives have been transposed into the national legislation. The implementation of all commitments taken in the EU integration process is depending on the EC support (ISPA, Cohesion funds, Structural funds).

#### Main barriers to water-related policy and legal reform and JAP implementation

Romania has concluded the process of legislation approximation in order to be in line with the EU legislation. Therefore the main problems have been transferred to the implementation process for this new legislation. This implementation will suppose a huge investment effort made both by the population and economic units. In this respect one of the main barriers is related to the population affordability to support, on short term, the necessary improvements in drinking water, wastewater and waste management infrastructure.

Taking into account the commitments done by Romania both within the European integration process and international convention to which is a Party, the existing monitoring capacity should be improved. This includes also a huge need for training mainly related to the priority substances and biological monitoring.

#### Actions and measures in response to JAP

Legal and institutional reforms have been finished. Ministry of Environment and Sustainable Development is the competent authority for WFD implementation. In principle, priority at present is elaboration of updated water strategy and the concrete actions in the plans of measures for future period. One important element of this strategy will be related to the implementation of the new legislation concerning wastewater treatment, drinking water quality, and dangerous substances. The main achievements are:

- Improvement of the monitoring capacity in order to meet the specific requirements established in the new national legislation. In this sense, the Ministry of Environment and Sustainable Development has promoted by Ministerial Order the Manual for Romanian Water Integrated Monitoring System modernization and development. Also the water integrated monitoring national system has been reorganized including the water quality assessment system according to the Water Framework Directive.
- Strengthening of the personnel technical capacities in order to face the challenges rose by the implementation of the new legislation. This is valid both for the water management and environmental protection authorities but at the same level for the operators of drinking water, wastewater treatment of waste management facilities. A very important aspect is related to the implementation of Nitrate Directive. The Ministry of Environment and Sustainable Development

developed the Implementation Plan of Nitrates Directive and the Action Programs for vulnerable areas.

- The Black Sea Environmental Program (BSEP) Studies revealed that 58% of the total nitrogen and 66% of the total phosphorous flowing in dissolved form into the Black Sea come from the Danube river basin. More than half of all nutrient loads into Danube River originate from agriculture, about one fourth from private households and about 10 - 13% from industry. Romania is the largest contributor of nutrients to the Black Sea as its entire territory drains into the Black Sea.
- The Ministry carried on with the support of the World Bank the Agricultural Pollution Control Project which is aimed at increasing significantly the use of environment friendly agricultural and household practices in rural areas in order to ultimately reduce the discharge of nutrients and other agricultural pollutants into the Danube River and Black Sea through integrated land and water management. In 2006, the implementation at national level has been approved, the extended project amounting 50 millions euro and having in view to realize the programs and plans established for the vulnerable areas identified on the Romania's territory.
- Establishment of a financing framework based on EU instruments and policies, national and local sources, IFIs and bilateral resources. One very important aspect will be related to the development of public/private partnership. The investment needs in water and waste water infrastructure – which are evaluated at almost 15 billion euros – in order to comply to the European legislation, has determined Romania to ask for a longer period of transition (during the negotiations with the European Commission) than other recent member states, which can allow the achievement of the investment efforts needed.
- Development of a strategic document named the Sectoral Operational Program for Environment that covers the period 2007 – 2013 and supports the fulfilment of the Romania's obligations in the environmental field, offering investment opportunities across the country. The SOP strategy focuses on collective investments and services necessary to raise the competitiveness on long term, to create new jobs and to obtain sustainable development. During the mentioned period, for all the investments in the environmental sector, Romania has in view a contribution of 4.5 billions euro from the Structural and Cohesion Funds, amount that is far below the needs estimated for the same period.
- Improvement of the research and development capacity in order to find the most appropriate and cost/effectiveness solutions for reducing or stopping the discharge of priority substances into surface and groundwater.
- Promotion of two ministerial orders for the approval of Procedure for public consultation in the decision making process related to water management field (Ministerial Order no. 1044/27 October 2005) and Procedure for public information access related to water management field (Ministerial Order no. 1012/19 October 2005).

#### *Municipal discharges*

In 2003, 68 % of population was connected to the public drinking water supply networks while 51,8% were connected to the public sewerage. Romania committed to deal with all agglomerations with over 10 000 PE by the year 2015, while the agglomerations exceeding 2 000 PE will be dealt with by 2018.

#### *Industrial discharges*

The transitional measures until 31 December 2009 are necessary for 51 installations, which discharge certain substances from List I. 195 specific installations have transition periods for fulfilling of IPPC Directive requirements and their deadline for achieving of compliance is set up between 31 December 2008 and 31 December 2015 at the latest.

*Agricultural discharges*

Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources is transposed. Ministry of Environment and Sustainable Development together with the Ministry of Agriculture and Rural Development had to report on this directive.

*Wetlands and water ecosystem*

There are 2 wetlands of international importance and 26 wetlands of European importance. Romania has a huge potential for rehabilitation of wetlands, which are mainly located in the Danube floodplain.

Estimated cost for reforms to respond to JAP

Cost assessment for implementation of the WFD is about 15 MEUR for years 2003 – 2015, of which for 2004 – 2006 is assumed an amount of 8 MEUR. State budget is the main source of finance.

## 1.12 MOLDOVA

### **TASK I Moldova: Summary Report on the implementation of policies, regulations and measures of compliance in line with the JAP and EU water directives**

#### Policy objectives

The need to implement a unified policy on the environment and the use of natural resources, which integrates environmental requirements into the process of national economic reform, along with the political desire for European integration, has resulted in the review of the existing environmental legislation. Major objectives of the environmental policy were adjusted to take account of the social and economic changes in the country, as well incorporating regional and global programmes and trends in order to prevent the deterioration of the environment. The main objectives of the environmental policy are: a) the prevention and mitigation of negative impact of economic activities upon the environment, natural resources and public health in the context of sustainable national development; b) ensuring a safe environment for the country.

The current priorities for water management include the strengthening of institutional and management capability through improvement of economic mechanisms for environmental protection and the use of natural resources, setting internal environmental performance targets and controls, self-monitoring, review of current legislation in line with European Union Legislation, the adjustment or elaboration on a case-by-case basis of implementation mechanisms. The basic principles of water resources policy adopted in 2003 refer to the integrated river basin management, pollution prevention, rational water use, reversibility, ownership and water rights. The main challenge for the competent authorities is to amend the current environmental legal framework as to entirely respond to EU requirements.

#### Status of legislation dealing with water management

There is no specific program dealing with water management. Still, the key issue is to improve environmental legislation, to establish new standards in line with EU and to transfer some responsibilities from central ecological authorities to local ones. Current legislation include the National Strategy for Sustainable Development “Moldova 21”, the NEAP, 1995, the Concept of the Environmental Policy, adopted on November 2001. Approved in 2002, the Water Supply and Sewage Programme until 2006 highlights the major objectives that will ensure an increase of population connection to water facilities. Since 2003 the National Water Resource Management Strategy is under preparation, which considers the new social and economic conditions in the country as well as the internationally accepted principles and methods in water resource planning and management. Finally, a new National Water Policy has been adopted in July 2003, focussing on integrated water resource management and introduction of river basin concept.

#### Main barriers to water-related policy and legal reform and JAP implementation

Moldova has a comprehensive set of environmental laws and regulations, which is being supplemented by additional ones. However, enforcement and compliance are considered as the main barriers to their effective implementation. The main constraints are therefore due to weak enforcement, ineffective penalties system, the current structure/content of the laws, and the conflicts and overlapping of some provisions in various laws. Other barriers impeding the implementation of JAP actions are linked to the insufficient capacity building, lack of access to water and environmental relevant information, absence of public participation mechanism in the environmental decision-making process.

### Estimated cost for reforms to respond to JAP

Proposed schedule for approximation and the estimated cost for reforms to respond to JAP Actions should be taken to produce a strategic environmental plan for Moldova, which should include realistic priority actions and modalities for their implementation. The current legislation should be entirely revised and appropriate amendments need to be operated. New structure having clear responsibilities for environmental protection should be established. There is a need to strengthen capacities of all sectoral ministries as to support the integration of environmental concerns. These are closely interlinked in Moldova and considerable institutional change may be required to ensure more effective and sensitive stewardship in the future. Enforcement and compliance mechanisms need to be in place. Improved future environmental management requires the collection, synthesis and evaluation of key environmental data at both national and local levels as well as related capacity (hardware and maintenance capability) to operate an integrated environmental monitoring network. Given the current financial and institutional context, a reformed institutional and managerial framework should be established, with appropriate financial support.

Moldova is committed to implement the WFD and the ICPDR JAP. A detailed revision of needs in terms of legislation to respond to WFD is not yet done. Agreement was reached with Romania and Ukraine to implement the WFD on the respective transboundary rivers. Assessment of cost for implementation of the WFD and other EU Directive is not available. The needed investments for JAP implementation are: 296.7 Mio. EURO for municipal wastewater treatment plants, including sewerage systems, 111.2 MEUR for industrial wastewater treatment plants, and 85.0 MEUR for restoring and protecting the wetlands.

## 1.13 UKRAINE

### **TASK I Ukraine: Summary Report on the implementation of policies, regulations and measures of compliance in line with the JAP and EU water directives**

#### Policy objectives

Ukraine has undertaken serious efforts into the development and implementation of environmental policy based on modern principles of Environment for Europe Process and Agenda 21. The “Principal Directions of the State Policy of Ukraine in Environmental Protection, Use of Natural Resources and Ensuring Environmental Safety” gives the general framework document is considered as an overall basis of national environmental programme. General environmental protection principles have been determined in the basic Law on Environmental Protection (1991) and specified later in some other legal documents. They are: priorities of the environmental safety requirements; mandatory compliance with environmental standards, norms and limits to use the natural resources; ensuring the environmental safety for human health and life; precautionary principle in environmental protection; application of environmentally friendly management and technologies into production activities and nature resources usage and rehabilitation; conservation of the diversity and integrity of natural bodies and ecosystems; integration of environmental, economic and social objectives based on scientific prognostication of the state of the environment. Water quality is on the top of national environmental priorities.

#### Status of legislation dealing with water management

As of 2004, the Ukrainian legislative and regulatory system in the field of water protection and water management consists of policy documents approved at the level of Parliament and Cabinet of Ministers, basic laws determining relations in this sphere and key rules and principles, set of laws specifically addressing the water issues, large number of sub legal acts approved by the Cabinet of Ministers and other governmental authorities, and focused on practical implementation of the provisions of basic laws national, regional and local environmental programs specifying the mechanisms, resources, institutional provisions, and time frame for achieving defining priorities. Updated version of the Conception of Sustainable Development was resubmitted for approval. The system looks very comprehensive and, in general, provides background for regulation of human activities aimed at the protection of water environment and exploitation of water resources. In March 2004, the State Program of adaptation of legislation of Ukraine to EU legislation has been approved, and this fact is an evidence of the importance of European orientation of Ukraine. The first phase of the Program implementation is scheduled for 2004–2007, and environment as well as protection of human, plants and animals health is determined as a priority sectors.

In March 2005, All-State Programme “Drinking Water of Ukraine” for 2006-2012 was ratified by Ukrainian Parliament. It is aimed at the provision of the population with high-quality water supply and prevention of emergency epidemic situations.

The current water management in Ukraine is a combination of command-and-control (standards, norms, environmental impact assessment, permits and limits for water use and discharge, State inspection) and economic instruments (charges for water use and pollution discharge, fines).

The Water Code defines general use and special use of water. New edition of the Water Code is submitted and approved by the Verkhovna Rada as a basic one on 18.01.2006. At present, it is planned in September 2007 to adopt it fully. The "Concept of Water Resources Protection" was prepared by the Ministry of Environmental protection. The main innovation of this law is adoption and practical implementation of basin principle in Ukraine. It is planned to adopt it by the end of 2007.

### Main barriers to water-related policy and legal reform and JAP implementation

Barriers to policy reform relate more to the policy implementation rather than to formulation of the policy objectives and priorities. Analysis of declared policy provisions and current practice may result in conclusion that the main barrier in the subject area is clear domination of economic priorities (and less – social ones) over the environmental objectives. As consequences, water sector is not considered as an integral system, and water economy issues are separated from water protection.

Practical domination of economic objectives is proved many times by reality. Another factor hindering the environmental policy in water sector is an inconsistency of general governmental policy. Difficulties of the transformation period of Ukrainian economy and influence of political factors caused multiple turnovers in top level of executive power of the state.

### Actions and measures in response to JAP

Reforming the legal system has two dimensions. Improvement of current legal basis by means of further development and adaptation to EU rules and principles of new acts and updating existing ones is very important dimension. To increase an effectiveness of legislative acts, the avoiding contradictions and making the laws easy to implement is an enforcement system. Both improvement of legal framework and providing the resources (human and financial) are prerequisite to strengthen the enforcement system. In order to address these issues, consistent integration of water policy into other sectoral policies (namely, industrial, agricultural, energy, communal, transport, regional and others) should be considered as a prerequisite. The complexity of the issue and the lack of appropriate institutional capacity, human and financial resources hinder effective resolution of current environmental problems, implementation of water policy and stipulate prioritisation of planned activities for transition period.

### Estimated cost for reforms to respond to JAP

Estimation on the preparatory period for development of the relevant regulations of national legislation and draft national law identical to EU Directive will take from 18 to 24 months provided appropriate financing. Estimation of time frame and cost needed are not available.