

**TWINNING INTERIM QUARTERLY REPORT NUMBER 4**



**EUROPEAN COMMISSION**

**TWINNING PROJECTS  
INTERIM QUARTERLY REPORT**

**Project Title: “Capacity Building in the Directorate of Water”**

**Partners: Ministry for Environment, Nature Conservation and Nuclear Safety of the Federal Republic of Germany (BMU)**

**Ministry for Agriculture, Forestry and Water Management of the Republic of Serbia, Directorate for Water (MAFWD)**

**Date: .06.2007**

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Signature of BC Project leader

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Signature of MS Project leader

**Section 1: Project data**

<b>Twinning Contract Number</b>	SR2005/IB/EN/01
<b>Project Title:</b>	“Capacity Building in the Directorate of Water”
<b>Twinning Partners (MS and BC)</b>	Ministry for Environment, Nature Conservation and Nuclear Safety of the Federal Republic of Germany (BMU)  and  Ministry for Agriculture, Forestry and Water Management of the Republic of Serbia, Directorate for Water (MAFWD)
<b>Report Number:</b>	4
<b>Period covered by the report:</b>	24 February to 23 May 2007
<b>Duration of the project:</b>	24 Months
<b>Rapporteur:</b>	Dr. Nikola Marjanovic (MAFWD) and Heinz-Jochen Poremski (BMU)

## **Section 2: Content**

### **2A – BACKGROUND**

#### **Policy Developments**

On May 15th 2007 the new Government of Serbia was elected in the National Parliament. The Government has Prime Minister, 22 Ministries plus 1 Vice Prime Minister for European Integration and 1 Minister without portfolio. It is coalition government of 3 parties, Democratic Party, Democratic Party of Serbia and Party G17+, which has majority in the parliament as well.

#### **Project Assumptions**

This Twinning project purposes to upgrade Serbia's institutional capacity to be able to implement and enforce the guiding principles of the EU's Water Framework Directive and related legislation. The overall objectives of this project are:

- Development of capacity in the WD to implement WFD and relevant water directives.
- Improve the organisation of the WD
- Improve public awareness.
- To upgrade the existing monitoring system up to EIONET standards.
- To strengthen the capacity of Serbian institutions engaged in water monitoring.

In order to achieve these wider objectives, the project will be carried out in 7 Components (besides Component 0: Project Co-ordination):

- Training Plan prepared and under implementation. (Sub-Component 1.1)
- Pilot application of the WFD under implementation. (Sub-Component 1.2)
- Action Plan for legal alignment with the Acquis Communautaire prepared and being implemented.(Sub-Component 1.3)
- Human Resource management Capacity established in water Directorate. (Sub-Component 1.4)
- WFD awareness programme implemented. (Sub-Component 1.5)
- Detailed Strategy for upgrading the water monitoring system prepared (including detailed list of equipment and infrastructure requirements together with a budget and financial plan) and under implementation. (Sub-Component 2.1)
- Inter- and intra-organisation communication procedures and systems implemented. (Sub-Component 2.2)

## **2B – ACHIEVEMENT OF MANDATORY RESULTS**

It is expected that the contents of this Twinning project will contribute substantially to achieving some of the wider objectives of Serbian Water Management and will lead to the following results:

- Training needs identified and prioritized.
- Training Plan including a time schedule for implementation and Training Material prepared and disseminated.
- First training units implemented within the scope of the Twinning project.
- Components of River Basin Management Plan prepared for a Pilot River basin implemented.
- Action Plan and Draft legislation elaborated and agreed in the water administration.
- Human Resource management staff appointed in Water Directorate, HRM procedures in operation.
- Awareness strategy relating to goals, target groups, media and measures including a time schedule elaborated.
- Key messages developed and WFD awareness campaign launched.
- Two events for raising awareness on WFD with stakeholders carried out.
- Strategy document adopted as Conclusions of the Government. Identified upgrading of the monitoring programmes and systems taking place.
- Communication procedures and systems, Standard Operating procedures and Quality Management Systems installed.

Three of the benchmarks above related with the mandatory results have been achieved so far. The works for achieving it are in progress.

## **2C – ACTIVITIES IN THE REPORTING PERIOD**

The following table reveals the current status of activities and benchmarks.

Table 1: Activities completed and benchmarks delivered

Activity	Benchmark	Status
<b>Component 0: Project Coordination</b>		
0.1 Project set-up	RTA offices installed and operable. Relevant contact persons identified and contacted by project month 1	Done

0.2 Kick-off meeting	All project partners informed on the project work plan, time schedule and the further proceedings by project month 2	Done
0.3 Coordination with parallel projects and the International Commission for The Protection of the Danube (ICPDR)	Regular meetings with representatives of parallel projects in the water sector carried out and information disseminated in project month 4, 10, 17	Ongoing
0.4 Wrap-up workshop	Project results summarised and disseminated. Further steps for the harmonisation of the Serbian water sector with EU requirements identified by project month 23	
<b>Component 1: Strengthening the institutional capacity of the Directorate for Water and related institutions</b>		
<b>Sub-Component 1.1: Assessment of institutional capacities and planning of training activities</b>	Training Plan and Training Material prepared and disseminated.	
1.1.1 Assessment of the institutional structures and review of achieved training by the WD and Hidromet in the field of River Basin Management Planning	Assessment report on the current institutional situation, training status and training needs for WD and Hidromet staff elaborated and agreed by project month 3	Done
1.1.2 Establishment of joint working group with WD and Hidromet	First meeting of the joint working group carried out and meeting schedule fixed by project month 4	Done
1.1.3 Formulation of a training plan	A training plan for the staff of WD and Hidromet (department for hydrology and department for environmental control) is elaborated by project month 5	Done
1.1.4 Preparation of training material	Training material is developed and agreed by project month 3 – 19 parallel to the training sessions in the specific activities	Started
<b>Sub-Component 1.2: Joint elaboration of a RBMP for the pilot small river basin</b>	Components of River Basin Management Plan prepared for a Pilot River basin.	
1.2.1 Introduction of conceptual issues for the implementation of the Water Framework Directive	3 seminar series for the implementation of River Basin Management Planning (I Characterisation of river basins and programmes of measures, II Monitoring, III GIS and Reporting) held. Relevant staff at the WD and Hidromet trained by project month 14	Started
1.2.2 Characterisation of the river basin district, review of the environmental impact of human activity and economic analysis of water use (Article 5 WFD)	Characterisation of the pilot small river basin according to article 5 of the WFD delivered by project month 12.	Started
1.2.3 Formulation of a monitoring programme of surface water and ground water status according to WFD and Serbian legal requirements in the small river basin.	Monitoring Programme for the pilot small river basin developed and disseminated in the WD and Hidromet and involved institutions by project month 17.	Started

1.2.4. Formulation of the programme of measures (Article 11 WFD) for the RBMP	Programme of measures for the pilot small river basin developed by project month 21.	Started
1.2.5 Mapping out water resources in the pilot river basin with the help of GIS techniques.	RBMP maps according to Annex 7 of the WFD are prepared month 20.	Ongoing
1.2.6 Study tour on surface and groundwater monitoring and the use of GIS	5-day study tour for 10 persons from the WD and Hidromet implemented and potential technical and administrative solutions for Serbian monitoring system identified by the participants in project month 3.	Done
<b>Sub-component 1.3 Developing of action plans for the alignment of legislative, administrative and financial measures in the water sector</b>	Action Plans and Draft legislation elaborated and agreed in the water administration.	
1.3.1 Gap analysis of the existing legal framework in the water sector in Serbia	Gap analysis of the Serbian water legislation with regard to the harmonisation with the <i>acquis communautaire</i> is elaborated by project month 6.	Done
1.3.2 Preparation of the transposition of key directives	Central elements for the transposition of the selected key directives formulated and agreed in the water administration by project month 9.	Started
1.3.3 Upgrading administrative structures for enforcement	An action plan for administrative restructuring of the Serbian water administration according to the harmonisation needs is prepared and disseminated by project month 15.	Started
1.3.4 Development of a financial plan	Support to the elaboration of long-term financial plan for the harmonisation process with the EU is accomplished by project month 19.	Started
<b>Sub-Component 1.4 Human Resources Development</b>	Human Resource management staff appointed in Water Directorate and Hidromet, HRM procedures in operation.	
1.4.1 Restructuring of the administrative units responsible for human resource development	Core team for recruitment, HR development and motivation established and trained in a 1-week seminar on personnel management instruments by project month 4.	
1.4.2 Elaboration of a human resource development strategy	A human resources development strategy is elaborated and agreed between the partners by project month 21.	
<b>Sub-Component 1.5 Design of a WFD public awareness programme</b>	Awareness programme, Awareness raising materials and events implemented.	

1.5.1 Assessment of obstacles and opportunities for public participation in the implementation of the WFD	Assessment report on public participation elaborated by project month 11.	Started
1.5.2 Design of a multi-level awareness strategy	Awareness strategy relating to specific goals, key target groups, mix of medias and selection of measures including time frame elaborated by project month 13.	Started
1.5.3 Implementation of the public awareness programme	Key messages developed and WFD awareness campaign launched by project month 13. 2 stakeholder seminars with participation of the administrations, industry, NGOs, researchers involved in the water sector held by project month 14 and 20. Interim evaluation of awareness undertaken for a key target group by project month 22.	

<b>Component 2: Support for the upgrading of the Water Monitoring system in Serbia</b>	Strategy document adopted as Conclusions of Government. Identified upgrading taking place.	
<b>Sub-Component 2.1 Enhancing monitoring system and laboratory capacity</b>		
2.1.1 Review of the existing monitoring programmes and facilities (measuring stations, i.e. monitoring sites) for surface water, groundwater and hydrological observations, i.e. water level, discharge, sediment transport	Monitoring programme and facilities reviewed and recommendations developed and agreed by project month 3.	Done
2.1.2 Redesign of the monitoring programme and observation network and sampling design for surface water, ground water hydrological observations, i.e. water level, discharge, sediment transport	Monitoring network for monitoring surface and groundwater meeting WFD and Eurowaternet requirements agreed by project month 8.	Ongoing
2.1.3 Technical Implementation plan for enhancing the monitoring system and the monitoring facilities (hardware)	Specifications for the preparation of the tender of the equipment for water monitoring / testing by project month 8.	Ongoing
2.1.4 Training of personnel involved in Water Monitoring	2-week intensive training on monitoring issues for 2 persons from Hidromet in Germany and transfer of specialised know-how on the operation of automated monitoring stations undertaken by project month 9.	
2.1.5 Development of a field handbook of methods for the collection, preservation and transportation of water samples.	Manual for (Serbian) procedures in collection, preservation and transportation of water samples drawn up as draft by project month 16.	Started
2.1.6 Technical implementation plan for enhancing the laboratory equipment and capacity	Hardware needs identified and agreed, cost estimation, investment needs and operating costs identified by project month 12.	Ongoing
2.1.7 Training of laboratory staff in processing/handling of samples and analytical techniques.	Relevant staff at Hidromet trained and training progress evaluated by project month 14.	
<b>Sub-Component 2.2 Enhancing organisational capacity of institutions undertaking water monitoring</b>	Communication procedures and systems, Standard Operating procedures and Quality management Systems installed.	
2.2.1 Assessment of intra- and inter-institutional communication procedures and data management	Existing communication procedures described and gaps analysed by project month 6.	Done
2.2.2 Improvement of communication between the institutions by the elaboration of standard communication /reporting procedures and systems	Recommendations for the improvement of communication procedures formulated and agreed by project month 12.	Ongoing
2.2.3 Quality assurance/control of the documentation of monitoring results and data	Guidance document for quality control system of monitoring results and data developed by project month 19.	

**Component 0: “Project Set-up”**

**Activity 0.3: Coordination with other projects and the International Commission for the Protection of the Danube (ICPDR).**

After the end of the Serbian-Dutch Twinning project SR 04 AG 01 at the MAFWM the project team kept the cooperation with Environmental Capacity Building Project (ECBP 2003) until their Final Event in May 2007. Regular meetings were held with the RTA and STEs active in the tasks related to organisational improvements and the proposals i.e. delineation of administrative structures in the Ministry of Agriculture, Forestry and Water Management.

**Sub-Component 1.1: “Assessment of institutional capacities and planning of training activities”**

**Missions related to Activities 1.1.1:**

Title: “Assessment of the institutional structures and review of achieved training by the WD and Hidromet in the field of River Basin Management Planning”

The activity focuses on the assessment of institutional structures, training status and training needs in the water sector in the Republic of Serbia, evaluating the administrative ability to implement and enforce EU water legislation. The major actors in the water sector are identified and the basic conditions for meeting the requirements of the EU Water Framework Directive (WFD) are listed. In addition, German experts propose which institution should be doing what in order to implement these requirements.

Referring to the analysis of the training needs, the beneficiary institutions were asked to express their views. A workshop for harmonising the findings and for creating a proper structure of the training needs was carried out. Such training needs assessment leads convincingly toward the feasible training plan within our project in the activity 1.1.3.

The assessment report is attached as Annex .

**Mission related to Activity 1.1.2:**

Title: „Establishment of joint working group with WD and Hidromet”

The Joint Working Group met on 27<sup>th</sup> of February and on 28<sup>th</sup> of March 2007. During the reporting period the focal point of the group was the elaboration of a proper training plan concerning Activity 1.1.3. Furthermore, the group took care about the preparation of the workshop on legal alignment (activity 1.3.1) and supported the project generally. 1 EU expert

visited 1 meeting presenting the actual state of his work in the project. He gave a detailed explanation of the planned activity 1.3.3 (“Upgrading administrative structures for enforcement”). The minutes of both meetings are attached as Annex .

Participants: 1 STE (Mr. Peter Kessler), 2 from Directorate for Water (Mrs. Olivera Grozdic, Dragana Milovanovic Counterpart RTA 2, Mrs. Valentina Mileusnic, Counterpart RTA 1), 1 from Hidromet (Mrs. Milica Nadezdic), 1 from Srbijavode (Mr. Arpad Varga), 3 from Vode Voivodine (Mr. Nenad Stefanovic, Ms. Olivera Gavrilovic, Ms. Sanja Pantelić), RTA 1 Mr. Heuberger, RTA 2 Mr. Christian Ebel

**Mission related to Activity 1.1.3:**

Title: „Formulation of a Training Plan”

Considering the relevant results identified in Activity 1.1.1 EU experts formulated a training plan that was discussed with representatives from the Water Directorate, the Hydrometeorological Service, Serbia Vode and Vode Vojvodine. The joint working group double-checked the result and agreed. The training plan covers primarily general topics like legal, economical and public participation / training topics, scientific topics of the River Basin Management Planning like the pressure and impact analyse, the monitoring and the program of measures and reporting topics like aspects of the new EC Water Information System of Europe. One focus will be on cooperation among governmental institutions, including participants from other ministries, i.e. health, nature conservation, finance or economy. Even if previous experience with trainings has been taken into account, the training is considered as a dynamic process that needs the updating of the program every now and then. This has also to be recommended because of the given staff fluctuation and the enlargement of the target groups. The training plan is attached as Annex .

**Missions related to Activity 1.1.4:**

Title: “Preparation of Training Materials.”

Within this activity two missions (between the 19.03 - 23.03.07 and 25.04 - 27.04.07) comprising the general philosophy of the WFD were carried out by the STE Mr. Stephan von Keitz. The corresponding training material is in progress of preparation. It is planned to deliver the training material together with the corresponding seminar i.e. training workshop foreseen under activity 1.2.1 and the corresponding training plan. It was originally planned to hold a workshop on the level of political decisions takers with the aim to familiarize the corresponding audience with the philosophy of the WFD during his second mission. Due to

uncertainties and delays in the formation of the new government this seminar was postponed to a later stage of the project.

One mission (23.03 -27.04.07) comprising the preparation of training material comprising the economic analysis of water use according to the WFD (23.03 - 27.04.07) of STE Mr Andreas Mühlberg took place. The corresponding training material is in progress of preparation. After receiving the agreement of the of the Water Directorate it is planned to deliver the training material before the taking place of the corresponding seminar i.e. training workshop foreseen under activity 1.2.1.

Three missions (07.05 - 11.05.07) of STE Juergen Domroese, STE Georg Berthold and STE Peter Neumann took place related to the delineation and characterisation of groundwater bodies according to the WFD. In addition to the preparation of the training material a training seminar comprising the mentioned topic was held by the three experts at the Hidrometeorological Service of the Republic of Serbia (Hidromet) on the 27.04.07. The workshop was attended by representatives of key competence institutions in this field as are Hidromet, the Ministry of Agriculture, Forestry and Water Management, Directorate for Water, the Geological Institute of Serbia and Institute Jaroslav Cerni. For the participants see the presence list in the Annex of this report. Furthermore a joint working group was formed to organise and deliver the necessary baseline information for the redesign of the groundwater monitoring system in Serbia comprising Serbian and German experts. An additional mission of STE Juergen Domroese took place between 07.05 - 11.05.07 took place in the scope of preparation of the next groundwater related training seminars and workshop.

Duration: 33 days

Participants: 5 STEs (Dr. v. Keitz, Mr. Berthold, Mr. Neumann, Mr. Domroese, Mr. Mühlberg), RTA 1 Mr. Heuberger, RTA 2 Mr. Christian Ebel, staff of Hidromet, staff of the Directorate for Water, staff of the Geological Institute of Serbia and staff of the Institute Jaroslav Cerni.

## **Sub-Component 1.2: “Joint elaboration of a River Basin Management Plan (RBMP) for the pilot small river basin”**

### **Mission related to Activity 1.2.4:**

Title: „Formulation of the programme of measures (Art. 11 WFD) for the RBMP”

Two missions were carried out by STE Mr. Sven Schulz and STE Mr. Holger Diening. The missions aimed to undertake the necessary preparations for the formulation of the programme of measures at an early stage for the RBMP of the chosen Pilot region.

Duration: 10 days

Participants: 2 STEs . Mr. Sven Schulz and Mr. Holger Diening  
staff of the Directorate for Water and staff of the Jaroslav Cerni Institute.

**Sub-Component 1.3: “Developing of action plans for the alignment of legislative, administrative and financial measures in the water sector”**

**Mission related to Activity 1.3.1:**

Title: „Gap analysis of the existing legal framework in the water sector in Serbia”

The STEs reviewed the current water law and various versions of the draft of a new Water Law drawn up by Jaroslav Cerni Institute on the order of the Water Directorate. On the basis of the results achieved during the workshop with legal experts of all the Serbian institutions dealing with water management including the Institute of Jaroslav Cerni on 28 February 2007 the final table of concordance was elaborated. 4 points were agreed to review again:

1. Identification of RBD and national and international coordination within RBD
2. Competences of the Autonomous Province of Vojvodina
3. Programme of Measures, Art. 11 Par. 3 e – I WFD
4. Information of the public, Art. 14 Par. 1 WFD.

The findings were cross-checked with the consultation of various Serbian acts, e.g. the Law on Ministries, the Omnibus Law, the Law on competences of Public Companies, the Law on Water Regime, the Law on Environment Protection etc. The report is attached as Annex .

Duration: 10 days

Participants: 2 STE (Ms. Stottmeister, Dr. Spuller), RTA 1 Mr. Heuberger

**Mission related to Activity 1.3.2:**

Title: „Preparation of the transposition of key directives”

During 6 missions the strategy of the implementation of the WFD into the Serbian legal framework and the transposition of the key directives (Nitrate and Urban Waste Water treatment) was started. The strategy for the implementation of the WFD which deals with the

requirements of the legal implementation of the WFD based on the situation in Serbia as stipulated in the current Water Law, the draft of the Water Act (Status 2005), some documentation of discussions by different Serbian Institutions and meeting protocols were the basis for the first steps. The strategy is divided in the main regulation topics of the WFD. For every topic the coercive requirements of the WFD are stressed and useful regulations are mentioned. In cases, administrative structure is relevant, proposals are given. The strategy ends with a proposal for a possible time schedule for its transposition. Furthermore the Drinking Water, the Groundwater, the Bathing Water and the Flood Water Directives also will be taken into consideration. This activity will not be finalised before 2008.

Duration: 30 days

Participants: 3 STE (Dr. Pawlowski, Dr. Spuller, Dr. Mayer), Water Directorate, RTA 1 Mr. Heuberger

**Mission related to Activity 1.3.3:**

Title: „Upgrading administrative structures for enforcement”

5 missions carried out by 4 experts built the basis for the upgrading of the administrative structures in the water management administration. They started with a thorough analysis of the given situation in Serbia and will develop an adequate structure for the achievement of the requirements of the WFD. They aim to elaborate an action plan focusing on a proposed new institutional framework for the water sector of the Republic of Serbia and its implementation. The optimization of institutional settings and improvement of intra- and inter-organizational communication and coordination within the water sector will also be taken into consideration. Due to the lack of the availability of the experts this activity won't end before the beginning of 2008.

Duration: 25 days

Participants: 4 STE (Mr. Kessler, Mr. Oehlerich, Ms. Geisler, Mr. Hotopp), Water Directorate, RTA 1 Mr. Heuberger

**Mission related to Activity 1.3.4:**

Title: „Development of a financial plan”

2 experts started with the first steps for the elaboration of a financial plan. They produced a structure and are now awaiting the first results of the activities 1.3.2 and 1.3.3. In close co-

operation with the experts of these activities a proper financial plan according to the contract will be produced.

Duration: 10 days

Participants: 2 STE (Mr. Diehl, Ms. Stoff-Isenberg), Water Directorate, RTA 1 Mr. Heuberger

**Mission related to Activity 1.5.2:**

Title: „Design of a multi-level awareness strategy”

The public awareness strategy is completed. The EU Water Framework Directive (WFD) with its integrative approach requires a broad and intensive exchange of information on all levels. That includes especially the information and hearing of the public, as well as the active participation of the citizenship in order to improve the water quality and the conscious relation to the water. Also the connection with the policy areas involved in these matters, such as agriculture, nature and soil protection and spatial and urban planning is of great importance. Therefore the overall objective of the public awareness strategy is to support the vision of the Water Directorate which relies on an enhanced communication with all stakeholders in Serbia. This communication as a dialogue and the strategy describes the objectives of the communication of the Directorate, the organisation of the communication and the activities to reach the goals. Good communication is the precondition for public participation in water management decision making and for sustainable solutions to water problems. The strategy covers the proactive strategic communication as well as the reactive communication based on contacts to the Directorate from stakeholders. As such the strategy is to become a working tool for the staff of the Directorate.

The report is elaborated and agreed with the Serbian partners. After the signature of the Serbian project leader it will be submitted.

Duration: 5 days

Participants: 1 STE (Ms. Franken), 2 from Directorate for Water, RTA 1 Mr. Heuberger

**Sub-Component 2.1: “Enhancing monitoring system laboratory capacity”**

**Missions related to Activity 2.1.2:**

Title: "Redesign of the monitoring programme and observation network and sampling design for surface water, groundwater, hydrological observations, i.e. water level, discharge, sediment transport."

In total six missions took place by the STE Mrs Nike Sommerwerk (26.03-30.03.2007), STE Mrs Ursula Schmedtje(26.03-28.03.07), STE Mr. Peter Seel and STE Simon Henneberg (both between 26.03-30.03.07 and 14.05-18.05.07))and relating to surface water. The missions aimed to draft a revised monitoring strategy for surface water as well as the preparation a formulated monitoring programme according the WFD approach for the Kolubara River Basin and its respective River Basin Management Plan.

Within a joint meeting (27.03.2007) with colleagues from the Serbian Institutions from the Directorate for Water, Hidromet and Institute Jaroslav Cerni the assessment report comprising surface water monitoring systems in Serbia was formally agreed (see Activity 2.1.1 of the project covenant). A strategy and a draft time plan for the work comprising the monitoring redesign was agreed. For the formulation of a monitoring programme for surface waters the prior delineation of surface water bodies is necessary. As the surface water body were already within the SAVA CARDS Project satisfactorily delineated (other as for groundwater) it was agreed that Hidromet formulates a first draft for the surface monitoring programme of the Kolubara River Basin until the mid of June 2007 and is assisted by the German experts as necessary.

Duration: 26.5 days

Participants: 4 STEs U. Schmedtje, STE P.Seel, N.Sommerwerk, STE S. Henneberg, Hidromet, Institute Jaroslav Cerni, Directorate for Water.

### **Missions related to Activity 2.1.3:**

Title: "Technical implementation plan for enhancing the monitoring system and the monitoring facilities (hardware)."

Three missions of the STEs Mr. Werner Blohm (19. - 23.03.07), STE Mr Stefan Anke and STE Michael Lechelt (23.04 - 27.04.07) took place during this reporting period.

STE Mr Blohm visited during his stay in Belgrade the installations of the hydrological monitoring site at Grdelica (Morava) together with the Serbian colleagues from Hidromet. This was done in order to identify the necessary equipment for a possible upgrading of the existing monitoring station with continuous surface water monitoring devices.

STE Mr. Stefan Anke and STE Mr. Michael Lechelt completed a tender document which is required for the provision of monitoring equipment by the European Union for three selected monitoring sites. Furthermore they carried out preparatory work concerning quality control aspects related with automated monitoring stations. The locations by name are Grdelica, Raska and Beli Brod. The station at Beli Brod is envisioned to function as training site for the staff appointed to operate the automated stations in future.

During the progress of work in this component the project was informed that the Ministry of Environment and Science (MoE) is undertaking similar activities planning the establishment of four automated monitoring installations at the border sites of the transnational rivers in Serbia financed by the National Investment Plan of Serbia. The Directorate for Water and the Director of Hidromet aim to a coordination of the activities developed in the framework of the Twinning project and of the MoE in this field and invited MoE for related meetings. However, the contacts on the working level with the Ministry for Environmental Protection (formerly: Ministry of Environment and Science) still can be improved.

Duration: 15 days

Participants: 3 STE (M. Lechelt, STE W. Blohm, STE S. Anke), staff of Hidromet, RTA I Mr. Christian Ebel, MoE, Directorate for Water.

#### **Missions related to Activity 2.1.5:**

Title: "Development of a field handbook of methods for the collection, preservation and transportation of water samples.

One mission concerning the sampling of groundwater samples took place by STE Mr. Thomas Nuber accompanied the Serbian colleagues into the field assisting the sampling of groundwater wells. The objectives of the mission was to delineate recommendations for the improvement of the groundwater sampling procedure carried out by Hidromet. These recommendations were based on the participation of a typical groundwater sampling by the experts. They comprise the working steps until the stabilization of the samples. The goal is to achieve a standardized groundwater sampling procedure and to ensure its

representativeness. The standardized procedure should be compatible to the specific conditions in Serbia and they also should meet the international accepted methods and standards

The mission with respect to surface water aspects is to take place during the next reporting period.

Duration: 1 STE 5 days.

Participants: T. Nuber, STE J. Domroese (assisted partly), Staff of Hidromet.

### **Sub-Component 2.2 “Enhancing organisational capacity of institutions undertaking water monitoring”**

#### **Missions related to Activity 2.2.2:**

Title: “Improve communication between the institutions by the elaboration of standard communication/reporting procedure and systems.”

Three missions took place by STE Mr Mathias Menger (21.05 - 25.05.07) and STE Mr Heinrich Scheider (19.03- 23.03.07 and 21.05 - 25.05.07) in which a delineation of recommendations for the improvement of communication procedures was achieved. The draft of the report with the findings concerning this activity has to be agreed between the parties of the Twinning Project. The draft of the benchmark report is currently under consideration by the Serbian partners. As the last two missions were not finalised until the end of this reporting period reference to this activity will be made more extendedly in the next quarterly period.

Duration: 13 days

Participants: 2 STEs (Mr M. Menger and Mr. H. Schneider)

**2D – TIMING AND DELAYS**

**Table 2: Time schedule of the project**

Project Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
<b>Component 0: Project Coordination</b>																									
0.1 Project set-up	x																								
0.2 Kick-off meeting		x																							
0.3 Coordination with other projects and the ICPDR	o																								
0.4 Wrap-up workshop																									
<b>Component 1: Strengthening the institutional capacity of the Directorate for Water and related institutions</b>																									
<b>Sub-component 1.1: Assessment of institutional capacities and planning of training activities</b>																									
Activity 1.1.1: Assessment of the institutional structures and review of achieved training by the WD and Hidromet in the field of River Basin Management Planning				x																					
Activity 1.1.2: Establishment of joint working group with WD and Hidromet					x																				
Activity 1.1.3: Formulation of a training plan												x													
Activity 1.1.4: Preparation of training materials																									
<b>Sub-component 1.2: Implementation of training for the pilot application of RBMP issues</b>																									
Activity 1.2.1: Introduction of conceptual issues for the implementation of the WFD																									

**Table 2 (cont.): Time schedule of the project**

Project Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Activity 1.2.2: Characterisation of the river basin district, review of the environmental impact of human activity and economic analysis of water use										O														
Activity 1.2.3: Formulation of a monitoring programme of surface water and ground water status according to WFD and Serbian legal requirements in the small river basin										O														
Activity 1.2.4: Formulation of the programme of measures (Art. 11 WFD) for the RBMP										O														
Activity 1.2.5: Mapping out water resources in the pilot river basin with the help of GIS techniques									O															
Activity 1.2.6: Study tour on surface and groundwater monitoring and the use of GIS and						x																		
Sub-component 1.3: Development of action plans for the alignment of legislative, administrative and financial measures in the water sector																								
Activity 1.3.1: Gap analysis of the existing legal framework in the water sector in Serbia												x												

**cont. Table 2: Time schedule of the project**

Project Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Activity 1.3.2: Preparation of the transposition of the UWWTD and Nitrates Directives										O														
Activity 1.3.3: Upgrading administrative structures for enforcement										O														
Activity 1.3.4: Development of a financial plan										O														
Sub-component 1.4: Human resources development																								
Activity 1.4.1: Restructuring of the administrative units responsible for human resource development																								
Activity 1.4.2: Elaboration of a human resource development strategy																								
Sub-component 1.5: Design of a WFD public awareness programme																								
Activity 1.5.1: Assessment of obstacles and opportunities for public participation in the implementation of the WFD						O																		
Activity 1.5.2: Design of a multi-level awareness strategy						O																		
Activity 1.5.3: Implementation of the public awareness programme																								

**cont. Table 2: Time schedule of the project**

Project Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
<b>Component 2: Support for the upgrading of the water monitoring system in Serbia</b>																									
<b>Sub-component 2.1: Enhancing monitoring system and laboratory capacity</b>																									
Activity 2.1.1: Review of the existing monitoring programmes and facilities (measuring stations, i.e. monitoring sites) for surface water, groundwater and hydrological observations, i.e. water level.											X														
Activity 2.1.2: Redesign of the monitoring programme and observation network and sampling design for surface water, ground water and hydrological observations, i.e. water level.				O																					
Activity 2.1.3: Technical implementation plan for enhancing the monitoring system and the monitoring facilities (hardware)				O																					
Activity 2.1.4: Training of personnel involved in water monitoring																									
Activity 2.1.5: Development of a field handbook of methods for the collection, preservation and transportation of water samples.												O													
Activity 2.1.6: Technical implementation plan for enhancing the laboratory equipment and capacity				O																					

**cont. Table 2: Time schedule of the project**

<b>Project Month</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>
Activity 2.1.7: Training of laboratory staff in processing / handling of samples and analytical techniques																								
<b>Sub-component 2.2: Enhancing organisational capacity of institutions undertaking water monitoring</b>																								
Activity 2.2.1: Assessment of intra- and inter-institutional communication procedures and data management								X																
Activity 2.2.2: Improvement of communication between the institutions by the elaboration of standard communication /reporting procedures and systems										O														
Activity 2.2.3: Quality assurance/control of the documentation of monitoring results and data																								

Legend of the table:

- tick box x = activity accomplished,
- tick box mission O = activity started and ongoing,
- grey tick box = activity planned,
- black tick box = delay of activities of exceeding 3 months

## **Recuperation of delays**

### **Delays in activity 1.4.1**

The start of activity 1.4.1 is delayed more than three months. The reason for that is the lack of an administrative unit that is responsible for human resource management in the Water Directorate. Only in the central administration of the MAFWM there is a human resource department. But this unit of the human resource department consists only of 4 assigned employees who are organising the total staff of the whole ministry (more than 1200 persons). So, it is obvious that there are not adequate staffs for building a core team for the human resource development issue in this project. For the time being there is no concrete perspective existing how the delay i.e. the overall execution of this activity could be tackled. The Serbian partners agreed to find new staff for this activity within a time period of 1 month. If this will fail, all the involved persons will find the best solution for the benefit of the project. It is to underline that this problem does not influence the elaboration of a human resource development strategy. This strategy will be elaborated in activity 1.4.2 that will start in the 14<sup>th</sup> month of the project.

### **Delays in activity 2.1.1 "Review of the existing monitoring programmes and facilities", and linked activities 2.1.2 and 2.1.3.**

The Review of the existing monitoring programmes and facilities of activity and recommendations benchmark concerning necessary works for reformulating the groundwater and surface water monitoring programme are approved and are merged in a common document. Minor changes were necessary and must be agreed with the Serbian Partner before submission. The progress of activity 2.1.2 "*Redesign of the monitoring programme and observation network and sampling design for surface water*" is in delay since baseline material has to be produced before the monitoring programmes could be reformulated. These works are currently under development. Activity 2.1.3 "*Technical Implementation plan for enhancing the monitoring system and the monitoring facilities*" is delayed due to its close relation with and the accomplishment of activity 2.1.2.

### **Delays in activity 2.1.4 "Training of personnel involved in Water Monitoring"**

It was decided to send the identified staff for the training on the operation of automated monitoring systems to Hamburg in the late autumn 2007. This was agreed to be most

convenient between the project partners as it is planned to build up monitoring stations in Serbia in the course of the year 2008/9. This underlies the condition that the planned tender procurement is successful for purchasing of the equipment could be timely produced and procured. The training will take place in the laboratory installations of the City of Hamburg.

## **2E ASSESSMENT**

### **Overall assessment of progress**

During the reporting period 164 expert days took place and 3 benchmarks have been achieved in accordance with the work plan. However it was not possible to equalise the delay resulting from the first project months. All the same, after the half time of the project the twinning team is on a good way to fulfil all the benchmarks in time. But even all the persons in charge are ambitious to keep the time schedule there is still a huge workload to close the gap. The cooperation between the Project partners is still developing fruitful and constructive and the working atmosphere is pleasant.

Finalising activity 1.1.1 and 1.1.3 a crucial step for the achievement of the benchmark referring to the Training issues is done. Now the Training materials will be prepared and the training units will be carried out. On the basis of the results in activity 1.3.1 the action plan and Draft legislation can be produced. Having the awareness strategy relating to goals, target groups, media and measures the team can start with the implementation of the awareness campaign. The appointment of the Human Resource management staff is still missing.

Activity 2.1.1 is finalised and only minor changes in the benchmark document are necessary before formal approval by the Serbian partners. The delay of the activities referring to the activities 2.1.2 and 2.1.3 are not so pronounced that the reaching of the benchmarks is endangered. A working group of experts was founded to accompany the monitoring redesign works for surface water and groundwater. This working group comprises not only the project partners Directorate for Water and Hidromet but also interdisciplinary related institutions as are the Institute J. Cerni, the Serbian Geological Institute and the University of Belgrade "Sinisa Stankovic" Institute.

The given critical personal resource situation at the Directorate for Water which is definitely severely understaffed is a considerable hindering barrier to bring the work of the project faster forward in time.

On 02 March 2007 the 3rd Steering Committee Meeting took place. The minutes of this meeting are attached as Annex .

Both RTA's held regular informal meetings with the Task Managers of the EAR for permanent information exchange.

The project partners would like to express their gratitude to all the involved colleagues and contributors. It is also to express that they are well aware of the fact that the Serbian partners are burdened with heavy workload due to understaffing and are doing their best in this project under the given circumstances.

On 17-18.05.2007 an internal workshop initiated by the German Water Director F. Holzwarth was held wrapping up the activities carried out and results achieved. The meeting was also used for streamlining the project for the second half of its execution and analysing further possibly evolving common projects in the sphere of water. Participant list and minutes of the meeting are annexed.

## **2F ANNEXES**

List of annexes

Final report Activity 1.1.1

Final report Activity 1.1.3 (without annexes)

Final report Activity 1.3.1 (without annexes)

Minutes of meetings of the Joint Working Group

Minutes of 3. Steering Committee Meeting

Participants list and minutes of Internal Workshop

Detailed participants list of the training seminar held concerning the delineation and characterisation of groundwater bodies on the 20.04.2007.

Quarterly Financial Report