

TWINNING INTERIM QUARTERLY REPORT NUMBER 3



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: .03.2007

Signature of BC Project leader

Signature of MS Project leader

Section 1: Project data

Twinning Contract Number	SR2005/IB/EN/01
Project Title:	“Capacity Building in the Directorate of Water”
Twinning Partners (MS and BC)	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)
Report Number:	3
Period covered by the report:	24 November 2006 to 23 February 2007
Duration of the project:	24 Months
Rapporteur:	Dr. Nikola Marjanovic (MAFWD) and Heinz-Jochen Poremski (BMU)

Section 2: Content

2A – BACKGROUND

Policy Developments

After almost three months election campaign, marked by fair play among competing parties, the parliamentary elections took place in Serbia on January 21st 2007 bringing results which require negotiations between different parties to form the new government. In the given situation it can not be judged what influence the new government building process will have on the running project.

On February 7th 2007 a press conference took place to announce the implementation of three projects in water management in Serbia financed by the EAR in total value of 5,3 million of EUR. These projects are: Preparation of water management information system, Preparation of strategic master plan for waste waters collection and treatment in the Juzna Morava basin and Preparation of action plans for remediation of three heavily polluted hot spots.

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 EuroWaternet 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
Component 0: Project Coordination		
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	
Component 1: Strengthening the institutional capacity of the Directorate for Water and related institutions		
Sub-Component 1.1: Assessment of institutional capacities and planning of training activities		
	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 Hydromet in the field of River Basin Management Planning	Assessment report on the current institutional situation, training status and training needs for WD and Hydromet staff elaborated and agreed by project month 3	Done
1.1.2 Establishment of joint working group with WD and Hydromet	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 Hydromet (department for hydrology and department for environmental control) is elaborated by project month 5	Started
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	
Sub-Component 1.2: Joint elaboration of a RBMP for the pilot small river basin		
	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 Hydromet trained by project month 14	

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.	
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 Hydromet and involved institutions by project month 17.	
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.	
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.	Started
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 Hydromet implemented and potential technical and administrative solutions for Serbian monitoring system identified by the participants in project month 3.	Done
Sub-component 1.3 Developing of action plans for the alignment of legislative, administrative and financial measures in the water sector	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.	Started
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.	
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.	
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.	
Sub-Component 1.4 Human Resources Development	Human Resource management staff appointed in Water Directorate and Hydromet, 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.	
Sub-Component 1.5 Design of a WFD public awareness programme	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.	

Component 2: Support for the upgrading of the Water Monitoring system in Serbia	Strategy document adopted as Conclusions of Government. Identified upgrading taking place.	
Sub-Component 2.1 Enhancing monitoring system and laboratory capacity		
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.	Ongoing
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.	Started
2.1.4 Training of personnel involved in Water Monitoring	2-week intensive training on monitoring issues for 2 persons from Hydromet 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.	
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.	Started
2.1.7 Training of laboratory staff in processing/handling of samples and analytical techniques.	Relevant staff at Hydromet trained and training progress evaluated by project month 14.	
Sub-Component 2.2 Enhancing organisational capacity of institutions undertaking water monitoring	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.	Ongoing
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.	Started
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”

Activities 0.1 “Project Set-up”

The Short-term Experts still use a rented apartment as office space during their missions to Belgrade. Serbian colleagues do their best to solve the problem and offered the desks to the STEs that are temporarily not in use due to absence of staff.

On 15 December 2006 the 2nd Steering Committee Meeting took place. The minutes of this meeting are attached as Annex .

Both RTAs met Mr. Simon Davies and Mr. Branko Mikasinovic (EAR) on 7 February 2007. The progress of the project was discussed as well as possible amendments.

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

RTAs deepened not only the cooperation with the Serbian-Dutch Twinning project SR 04 AG 01 at the MAFWM, but contacted also the Environmental Capacity Building Project (ECBP 2003). RTA 1 visited the 2-day-workshop on “Reporting on Environment and Registry of Polluters – System Development” on 21 and 22 February 2007.

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 Hydromet in the field of River Basin Management Planning”

On 24th of January 2007 a workshop on training needs was carried out. More than 50 participants representing the main institutions of the Serbian water management, in fact Water Directorate, Hydromet, Srbia Voda and Vode Vojvodine, discussed on the basis of a rough structure the contents of the working plan. To be sure that all the needs of the Serbian staff for training topics will be considered the Twinning partners provided the possibility to add more ideas in written within 3 weeks. The documents of the workshop are attached as Annex .

The assessment report is completed and will be submitted as soon as the Serbian partners will have agreed on it.

Duration: 10 days

Participants: 2 STEs (Mr. Kessler, Mr. Meyer), representatives from Directorate for Water, Srbjivode, Vode Voivodine, RTA 1 Mr. Heuberger

Mission related to Activity 1.1.2:

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

The Joint Working Group met on 12th of December 2006 and on 16th of January 2007. The minutes of these meetings are attached as Annex .

Participants: 4 STE (Ms. Irina Franken, Ms. Anja Stottmeister, Mr. Uwe Schulz, Mr. Olaf Voigt), 2 from Directorate for Water (Mrs. Olivera Grozdic, Mrs. Valentina Mileusnic, Counterpart RTA 1), 1 from Hydromet (Mrs. Milica Nadezdic), 1 from Srbjivode (Mr. Arpad Varga), 2 from Vode Voivodine (Mr. Nenad Stefanovic, 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”

In close connection with the findings in Activity 1.1.1 a structure of the training plan is elaborated. Since the Serbian colleagues from Vode Voijvodine did not submit their comments on Training needs before 20 February 2007 it was not possible to produce the training plan during this project quarter. It will be completed in the 4th project quarter.

Duration: 15 days

Participants: 3 STE (Ms. Unger, Mr. S. Schulz, Mr. Domroese), staff of Water Directorate, Hydromet, Srbjivoda, Vode Vooivodine), RTA 1 Mr. Heuberger, RTA 2 Mr. Ebel

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

Missions related to Activity 1.2.5:

Title: „Mapping out water resources in the pilot river with the help of GIS techniques”

The first mission of STE Baumgardt and STE Schultz took place between the 11th and 15th of December 2007. Within these missions the experts visited the relevant institutions and evaluated the existing technical (hardware and software) GIS facilities and the capacity of the staff with relevant knowledge in this field. The experts visited Hydromet, the Directorate for Water and the Institute Jaroslav Cerni.

The GIS capacities of the institutions involved in this project are in general rather weak if existing. The lack of skilled staff and adequate technical equipment became obvious during the first visit of the experts. The application of GIS techniques is per se considered a corner stone in modern environment protection administration. Actually such unit doesn't exist neither at Hydromet nor at the Directorate for Water. The maps produced for reporting purposes of the Directorate for Water are made through external consultants (i.e. Institute Jaroslav Cerni) who are contracted for providing such services. The interest for introducing GIS techniques into daily office life is high among the Serbian colleagues and the demand is clearly seen by everyone. For more specific details please see the annexed interim report of both experts.

The given GIS situation at the institutions makes it difficult to produce the proposed maps of the RBMP as planned benchmarks in this project activity.

The second mission of Mr Schultz (12.02-16.02.2007) concentrated on the one hand on the evaluation of the type of data and digital maps material that is available for producing the required maps. On the other hand Mr Schultz contacted the Twinning project at the National Geodetic Service of Serbia since it is important that GIS implementation strategies developed in the future at other institutions are embedded harmonically into the general conceptual framework of the National Geodetic Service of Serbia and do not reflect dead end developments. At the moment hardly any contacts (on the working level) between the different institutions who are potentially GIS users exist. The second visit of Mr. Schultz yielded a data catalogue of available digital maps which could be purchased officially at the Military Geodetic Service of Serbia. This material must be tested and evaluated before use.

On special and urgent request of the Director of the Directorate for Water Mr. Schultz developed a short document during his stay with basic requirements for the purchase of GIS equipment (hardware and software) in future. The document is annexed to this report. Unfortunately it was not possible for Mr Schultz to talk to any representatives of Serbiawater or the Directorate of Water during his stay as the relevant colleagues were unforeseeable absent during his mission.

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”

Ms. Stottmeister completed the table of concordance regarding the compliance of the draft of a new Water Act with the WFD. As announced, the table of concordance will be discussed during a workshop with lawyers of all the Serbian institutions dealing with water management including the Institute of Jaroslav Cerni. The workshop will take place on 28 February 2007 and the results will be the basis of the final table of concordance.

Duration: 5 days

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

Mission related to Activity 1.5.1:

Title: „Assessment of obstacles and opportunities for public participation in the implementation of the WFD”

During 2 missions the procedure of a public participation was basically drafted. Among others the identification and the contacting of the potential stakeholders were considered as well as the question, which institution should initiate and organise the public participation and how could it be done. Due to the lacking availability of the main STE in this activity and having in mind the cooperation with the colleagues dealing with activity 2.2.2 this activity might not be finalised before the beginning of 2008.

Duration: 10 days

Participants: 1 STE (Dr. Schütte), Water Directorate, RTA 1 Mr. Heuberger

Mission related to Activity 1.5.2:

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

3 short term experts worked out a draft of a public awareness strategy. It contains a questionnaire which shall help to evaluate the awareness for WFD related issues. There is

only one mission left in this activity that will be carried out during the week from 14th to 18th of May 2007. Afterwards the implementation of the strategy will start.

Duration: 15 days

Participants: 3 STE (Ms. Franken, Mr. Schneider, Mr. Sittig), 1 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.”

Surface Water

The mission of STE Sommerwerk, STE Seel and STE Henneberg took place between the 31st of January and the 2nd of February. During the workshop held on the 1st of February at Hydromet the experts STE Sommerwerk and STE Seel presented the core elements of their recommendations after the assessment was done under activity 2.1.1. The workshop was held in order to initiate the works necessary for the redesign of the surface water monitoring programme and networks. Mr. Henneberg as one of the STEs responsible for this work package presented as an example the technical approach of the river Weser basin community in Germany concerning monitoring activities and the respective design of a station network. This was done in order familiarise the Serbian colleagues with the complexity of the core elements of monitoring aspects according to the Water Framework Directive requirements. Due to illness the representative of the Water Directorate was not able to be present.

The report of the delineated recommendations concerning surface water monitoring is at the moment under consideration of the Serbian partners. This report reflects the reached benchmark of activity 2.1.1. This report represents the baseline for the works carried out under activity 2.1.2. The completion/approval of the recommendations by the Serbian partners is expected by the end of February 2007.

Duration: 3 days

Participants: STE Sommerwerk, STE Seel, STE Henneberg, RTA Ebel, Institute "Jaroslav Cerni", Hydromet, Institute Sinisa Stankovic.

Groundwater

The work on the redesign of the monitoring system for groundwater continued with one mission and the respective visit of STE Domroese between the 18th to the 22nd of December.

STE Domroese presented the draft of their recommendations (reflecting the benchmark of activity 2.1.1) concerning groundwater to the colleagues at Hydromet and Water Directorate at two different meetings. STE Domroese prepared illustrative presentations in order to visualize the rationale of the recommendations and the necessary next working steps for the redesign and decisions to be made by the partners involved.

Taking the recommendations into account Hydromet already has prepared a first draft of the necessary groundwater vulnerability map for the Kolubara catchment area which is the pilot region for this project. This is a very valuable contribution for the further work to be carried out as it is the backbone for the selection of groundwater measuring wells in this area.

The delineated recommendations of the groundwater assessment (benchmark of activity 2.1.1) were commented and approved by the Serbian partners.

Duration: 6 days

Participants: STE Domroese, RTA Ebel, 6 persons from Hydromet, Dragana Milovanovic from the Directorate for Water,

Missions related to Activity 2.1.3:

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

The missions of STEs Mr. Lechelt and Mr Anke took place between the 19th to the 23rd of February 2007. Mr. Lechelt and Mr. Anke focused on their mission to identify and describe the equipment for the first automated surface water monitoring station in Beli Brod/Kolubara catchment. The German team will assist the Serbian partners in formulating the technical specification document for the corresponding tender process for the purchase of monitoring equipment for automated monitoring stations in the year 2007.

The hydrological observation station at Beli Brod and an alternative location at the Morava River were visited together with Serbian colleagues in order to gain site specific details for the tender document preparation and the technical specifications.

The German team favours a step by step approach regarding the installation of automated monitoring stations in Serbia. Priority should be given to the sustainability of the investment with a critical view to the maintenance and operative costs of such high investments. At the moment no institution in Serbia has the personnel or the financial capacity to operate and maintain numerous automated stations.

At the moment other different institutions have developed plans for automated stations/observation posts at surface water.

- Hydromet purchased measuring equipment for the Tisza river within an Interreg project with Hungary.
- The Ministry of Science and Environment filed a proposal for the purchasing of four automated stations on the Danube (2), Sava (1) and Tisza (1) by financial means of the National Investment Plan of Serbia.

The Twinning project can help to streamline and coordinate these activities by setting the standards and possible technical harmonic solutions within this project. Otherwise the valuable investment of the involved parties is at stake. In order to harmonise the activities in the best possible way Hydromet's Director invited to a joint meeting between all actors in this field on the 23rd February 2007.

Duration: 10 days

Participants: STE Mr. Anke, STE Mr. Lechelt, Hydromet, Directorate for Water,

Missions related to Activity 2.1.6:

Title: "Technical implementation plan for enhancing the laboratory equipment and capacity"

The missions of Mr. Bergholz and Mr. Ternes (18.12. – 19.12.2006) concentrated on the assessment of the laboratory capacities and procedures at the Laboratory of Hydromet in Belgrad. During their two day lasting visit they had intensive talks to the chief of the laboratory and the other laboratory staff at Hydromet. They were assisted during their meetings by Mrs. Olivera Grozdic (Directorate for Water).

The assessment revealed that the laboratory equipment of Hydromet is mostly modern and suitable for the necessary analytical tasks Hydromet has to carry out regularly. From the

STE's viewpoint a completing the valuable new instrumental analytical equipment purchased in the past (by the donors) could lead to optimising the equipment with respect to possible analytical possibilities. Additional training of the staff for a proper and better handling and operating has to be delivered for the equipment of the various donors. This could mean that the amount of expert days foreseen in the contract under activity 2.1.7. might be expanded by shifting them from other activities. This might be necessary at a later stage.

The STE presented a review and proposals in form of a draft report of what should be changed and modified in the future in order to accomplish better laboratory practice and to achieve a better organisation of the laboratories daily work.

The draft of the report concludes: *"The staff has a high degree of education for the routine work performed by the laboratory. The instrumentation is of a high and modern standard. To get all benefit of the advanced instruments further education of the staff is highly recommended"*. With respect of the technical enhancement of the laboratories of Hydromet the report concludes: *"Due to the inappropriate sensitivity of the liquid chromatograph (LC) single mass spectrometry (MS) provided by the EU this will not allow to measure polar compounds in low concentrations. Therefore, it is strongly recommended to extend the equipment for organic analysis by an LC tandem MS. That would help to measure also polar emerging compounds and will reduce the time of the sample preparation."* At the moment the reached detection of the LC single MS instrument can only be used for analysis in accidental cases with higher concentrations. In addition the introduction of a Laboratory Information and Management System to document and handle the analytical data in a more efficient way is strongly proposed.

As soon as the draft report is commented and considered by the Serbian partners the benchmark of this activity could be considered achieved.

Duration: 4 days

Participants: STE Bergholz, STE Thomas Ternes, 1 from the Directorate for Water, complete staff of the laboratory of Hydromet

Sub-Component 2.2 "Enhancing organisational capacity of institutions undertaking water monitoring"

Missions related to Activity 2.2.1:

Title: "Assessment of intra- and inter-institutional communication procedures and data management."

The missions of STE Olaf Voigt took place between the 11th and the 15^h of December 2006 and between the 5th and the 9^h of January 2006.

On the 13th of December a workshop was held at Hydromet, where the results of the submission of the filled questionnaire by the relevant institutions involved in water resources management was presented by the corresponding representatives. Mr. Voigt had elaborated a questionnaire in order to analyse the data flow and communication of water monitoring related data between the involved institutions in water resources management. The workshop counted with the participation of more than 20 representatives who had submitted the filled questionnaire concerning data and communication procedures. Unfortunately the institution Serbiavoda did not respond nor was the institution present at this workshop as one of the key players. Both Twinning partners would be happy if Serbiavoda would participate more actively in this project.

During his missions Mr. Voigt analysed the results of the inquiry of the questionnaire and identified the numerous communication paths and sketched them up in form of a information/communication flow diagram and drafted a gap analysis. The draft of the report is currently under consideration of the Twinning team and the Serbian partners.

Duration: 10 days

Participants: STE Olaf Voigt, RTA II Ebel, more than 10 persons from Hydromet, 4 persons from Michail Pupin Institute, 1 from the Serbian Environment Protection Agency, 1 from the Directorate for Water, 5 from VojvodinaVoda, others,

Missions related to Activity 2.2.2:

Title: "Improvement of communication between the institutions by the elaboration of standard communication/reporting procedures and systems."

Two missions were carried out under this activity by the STE Mr. Heinrich Schneider and STE Matthias Menger. Their missions took place between the 5th and 9th of February and between the 12th and 16th of February 2007 respectively. Based on the findings under activity 2.2.1 (Assessment) STE Mr. Schneider and STE Mr. Menger are developing an optimal standard reporting procedure by describing the process of the flow of data and information and its conjunction with the involved institutions. Their work started recently. Special emphasis will be made on the requirements of European environmental reporting concepts and Serbian legal requirements. In order to create stronger links between the

different activities of other EU related projects within the Directorate for Water and other institutions of the public administration in the field of water management contacts between the TA Project “Development of a Water Information and Management System” have been established and a meeting was held. It was agreed to disseminate the relevant internal project reports for a faster and more efficient implementation of the TA project and to minimise double work. For the next missions a workshop is planned to familiarise the Serbian institutions with the ideas of the Twinning team in this field as well as to gather important further input from the Serbian partners.

Duration: 10 days

Participants: STE Heinrich Schneider, STE Matthias Menger, RTA Ebel, 1 participant from Michail Pupin Institute, 3 Participants from EU TA Project (“Development of a Water Information and Management System”).

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	
Component 0: Project Coordination																									
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																									
Component 1: Strengthening the institutional capacity of the Directorate for Water and related institutions																									
Sub-component 1.1: Assessment of institutional capacities and planning of training activities																									
Activity 1.1.1: Assessment of the institutional structures and review of achieved training by the WD and Hydromet in the field of River Basin Management Planning				x																					
Activity 1.1.2: Establishment of joint working group with WD and Hydromet					x																				
Activity 1.1.3: Formulation of a training plan						O																			
Activity 1.1.4: Preparation of training materials																									
Sub-component 1.2: Implementation of training for the pilot application of RBMP issues																									
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																									
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																									
Activity 1.2.4: Formulation of the programme of measures (Art. 11 WFD) for the RBMP																									
Activity 1.2.5: Mapping out water resources in the pilot river basin with the help of GIS techniques																									
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					o																				

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																								
Activity 1.3.3: Upgrading administrative structures for enforcement																								
Activity 1.3.4: Development of a financial plan																								
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	
Component 2: Support for the upgrading of the water monitoring system in Serbia																									
Sub-component 2.1: Enhancing monitoring system and laboratory capacity																									
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.				○																					
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.				○																					
Activity 2.1.3: Technical implementation plan for enhancing the monitoring system and the monitoring facilities (hardware)				○																					
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.																									
Activity 2.1.6: Technical implementation plan for enhancing the laboratory equipment and capacity				○																					

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 2.1.7: Training of laboratory staff in processing / handling of samples and analytical techniques																								
Sub-component 2.2: Enhancing organisational capacity of institutions undertaking water monitoring																								
Activity 2.2.1: Assessment of intra- and inter-institutional communication procedures and data management					O																			
Activity 2.2.2: Improvement of communication between the institutions by the elaboration of standard communication /reporting procedures and systems																								
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

The start of activity 1.4.1 is delayed more than three months. The reason for that is the difficulty in identifying the administrative unit responsible for human resource development in the Water Directorate. Least in the central administration of the Ministry for Agriculture a human resource department could be found. This unit had received instructions for this issue by the Serbian-Dutch Twinning project SR 04 AG 01 at the MAFWM,

Furthermore the prioritizing of the activities that are building the basis for other ones to make up the delay resulting from the first 5 months. In addition to that the availability of the experts was due to illness and to overload with work not given. With regard to the time schedule of the next months it doesn't seem to be possible to start up with this activity before summer time. The close connection to the content of Activity 1.4.2 will cause a close cooperation with this Activity.

Delays in activity 2.1.1

The "benchmark document" for activity 2.1.1 will be produced until the mid of March 2007. The recommendations concerning surface water and groundwater monitoring are currently under consideration of the Serbian partners and institutions. The recommendations concerning necessary works for reformulating the groundwater monitoring already are approved and will be merged in a common documents with the findings for surface water. The works for the redesign of the monitoring programmes already started based upon the findings of the assessment carried out as activity

2E ASSESSMENT

Overall assessment of progress

Even the project saw the Christmas holiday and the new elections in Serbia during the reporting period 27 missions of STEs (under Activities 1.1.1, 1.1.3, 1.2.5, 1.3.1, 1.5.1, 1.5.2, 2.1.2, 2.1.3, 2.1.6, 2.2.1 and 2.2.2) have been carried out in accordance with the work plan. However it was not possible to equalise the delay resulting from the first project months. Regarding the availability of the STEs on the one hand and the needs of the Serbian staff on the other RTAs decided to start even with activities that are scheduled later in the time table of the contract (e.g. Act. 1.5.2). Some activities now are in delay others before time. All in all, the persons in charge will keep their efforts for keeping the time schedule. The cooperation between the Project partners is developing fruitful and constructive and the working atmosphere is pleasant after overcoming some natural starting frictions which are to be explained due to the fact that this project is the first in the sphere of the Directorate for Water. The STEs and RTAs 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 from the Directorate for Water are burdened with heavy workload due to understaffing of the Directorate for Water and are doing their best in this project under the given circumstances.

2F ANNEXES

List of annexes

Interim report concerning activity 1.2.5 *“Mapping out water resources in the pilot river basin with the help of GIs techniques”*

Short outlined background paper of STE Mr Schultz concerning the purchasing of GIS related equipment at the Directorate for Water (12.02-16.02.2007).

Workshop “Training needs” – participants list and results

Minutes of the second Steering Committee Meeting

Minutes of the second meeting of Joint Working Group

Minutes of the third meeting of Joint Working Group

Quarterly Financial Report