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# Environment and Climate Regional Accession Network (ECRAN)

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Report on the Workshop:  
“ TAIEX ECRAN Multi-  
beneficiary Workshop on  
Actions Toward Good  
Status of the Water  
Framework Directive ”

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11 - 13 July 2016, Sarajevo

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**ENVIRONMENT AND CLIMATE REGIONAL NETWORK FOR ACCESSION - ECRAN**

**WORKSHOP REPORT**

**Activity 2.3**

**“TAIEX ECRAN Multi-beneficiary Workshop on Actions Toward  
Good Status of the Water Framework Directive”**

**11– 13 July 2016, Sarajevo, Bosnia & Herzegovina**



This Project is funded by the  
European Union



A project implemented by  
Human Dynamics Consortium

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LIST OF ABBREVIATIONS	
<b>Acquis</b>	Acquis communautaire - Community legislation
<b>B&amp;A</b>	Bosnia and Herzegovina
<b>BAP</b>	Best Agricultural Practice
<b>BAT</b>	Best Available Techniques
<b>BEP</b>	Best Environmental Practices
<b>BLS</b>	Baseline Scenario
<b>BSC</b>	Black Sea Commission
<b>BWD</b>	Bathing Water Directive
<b>CAP</b>	Common Agricultural Policy
<b>CIS</b>	Common Implementation Strategy
<b>DPSIR</b>	Driver, Pressure, State, Impact and Response framework for environmental analysis
<b>DRB</b>	Danube River Basin
<b>DRBD</b>	Danube River Basin District
<b>DRBMP</b>	Danube River Basin Management Plan
<b>Drina RB</b>	Drina River Basin
<b>DRPC</b>	Danube River Protection Convention
<b>EC</b>	European Commission
<b>ECRAN</b>	Environment and Climate Regional Accession Network Project
<b>EEC</b>	European Economic Community
<b>EPER</b>	European Pollutant Emission Register
<b>EPTR</b>	European Pollutant Release and Transfer Register
<b>EQS</b>	Environmental Quality Standard
<b>EQSD</b>	Directive on Environmental Quality Standards
<b>ERC</b>	Environmental and Resource Cost
<b>FASRB</b>	Framework Agreement on the Sava River Basin
<b>FBiH</b>	Federation of Bosnia and Herzegovina
<b>GES</b>	Good Ecological Status
<b>HMWB</b>	Heavily Modified Water Body
<b>HRC</b>	Danube RBD in Croatia
<b>HRJ</b>	Adriatic RBD in Croatia
<b>ICPBS</b>	International Commission for the Protection of the Black Sea
<b>ICPDR</b>	International Commission for the Protection of the Danube River
<b>IED</b>	Industrial Emissions Directive
<b>IMPRESS</b>	Impact pressures assessment guidance
<b>IPPC</b>	Integrated Pollution Prevention and Control
<b>KTM</b>	Key Type of Measures
<b>MS</b>	Member State
<b>MSDF</b>	Marine Strategy Framework Directive
<b>ND</b>	Nitrates Directive
<b>NVZ</b>	Nutrient Vulnerable Zones
<b>NWRM</b>	National Water Retention Measures



LIST OF ABBREVIATIONS	
<b>PoM</b>	Programme of Measures
<b>PRTR</b>	Pollutant Release and Transfer Register
<b>PS</b>	Priority Substances
<b>RB</b>	River Basin
<b>RBD</b>	River Basin District
<b>RBMP</b>	River Basin Management Plan
<b>RBSP</b>	River Basin Specific Pollutants
<b>RefCond</b>	Reference Conditions
<b>RR</b>	Roof Report
<b>RS</b>	Republic of Serbia
<b>RS</b>	Republic of Srpska
<b>SAA</b>	Stabilization and Association Agreement
<b>SAP</b>	Stabilization and Association process
<b>SWMI</b>	Significant Water Management Issue
<b>TAIEX</b>	Technical Assistance and Information Exchange Office
<b>UWWT</b>	Urban Waste Water Treatment



## Glossary of terms and definitions

**Best available techniques:** The latest stage of development (state of the art) of processes, facilities or methods of operation which indicate the practical suitability of a particular measure for limiting discharges, emissions and waste

**Best environmental practice:** The application of the most appropriate combination of environmental control measures and strategies

**Common Agricultural Policy (CAP):** providing direct subsidies to farmers and land managers. A small part of these funds support rural development actions that mainly relate to agricultural activities, as well as forestry and environmental improvements on farmland.

**Common Implementation Strategy (CIS):** This strategy was agreed by the European Commission, Member States and Norway in 2001. The aim of the strategy is to provide support in the implementation of the Water Framework Directive and its daughter directives, by developing a common understanding and guidance on key elements of the Directives.

**Competent Authority:** An authority or authorities identified under Article 3(2) or 3(3) of the Water Framework Directive. The Competent Authority will be responsible for the application of the rules of the Directive within each river basin district lying within its territory.

**Cost effective:** In the context of the Water Framework Directive, it describes the least cost option for meeting an objective. For example, where there are a number of potential actions that could be implemented to achieve Good Ecological Status for a water body, Cost Effectiveness Analysis is used to compare each of the options and identify which option delivers the objective for the least overall cost.

**Characterisation (of water bodies):** A two-stage assessment of water bodies under the Water Framework Directive. Stage 1 identifies water bodies and describes their natural characteristics. Stage 2 assesses the pressures and impacts from human activities on the water environment. The assessment identifies those water bodies that are at risk of not achieving the environmental objectives set out in the Water Framework Directive. The results are used to prioritize both environmental monitoring and further investigations to identify those water bodies where improvement action is required

**Catchment:** The area from which precipitation contributes to the flow from a borehole spring, river or lake. For rivers and lakes this includes tributaries and the areas they drain.

**Chemical Status (surface waters):** The classification status for the surface water body. This is assessed by compliance with the environmental standards for chemicals that are listed in the Environmental Quality Standards Directive 2008/105/EC, which include priority substances, priority hazardous substances and eight other pollutants carried over from the Dangerous Substance Daughter Directives. Chemical status is recorded as good or fails. The chemical status classification for the water body, and the confidence in this (high or low), is determined by the worst test result.

**Classification:** Method for distinguishing the environmental condition or “status” of water bodies and putting them into one category or another.

**Coastal water:** surface water on the landward side of a line every point of which is at a distance of one nautical mile on the seaward side from the nearest point of the baseline from which the breadth of territorial waters is measured, extending where appropriate up to the outer limit of transitional waters.



**Current Chemical Quality:** A measure of the present chemical condition of a water body (also called Chemical Status). There are two classes of chemical status of a water body (good or fail).

**Current Ecological Quality:** A measure of the present ecological condition of a surface water body (also called Ecological Status). There are five classes of ecological status of surface waters (high, good, moderate, poor or bad)

**Driver, Pressure, State, Impact and Response framework for environmental analysis (DPSIR):** Driver: an anthropogenic activity that may have an environmental effect (e.g. agriculture, industry); Pressure: the direct effect of the driver (for example, an effect that causes a change in flow or a change in the water chemistry; State: the condition of the water body resulting from both natural and anthropogenic factors (i.e. physical, chemical and biological characteristics); Impact: the environmental effect of the pressure (e.g. fish killed, ecosystem modified); Response: the measures taken to improve the state of the water body (e.g. restricting abstraction, limiting point source discharges, developing best practice guidance for agriculture)

**Diffuse sources:** Sources of pollution that are not discrete and extend over a wide geographical area

**Discharge:** Intentional transfer of substances into water

**Disproportionate cost:** The determination of disproportionate cost requires a decision making procedure that assesses whether the benefits of meeting good status in a water body are outweighed by the costs.

**Ecological potential:** The status of a heavily modified or artificial water body measured against the maximum ecological quality it could achieve given the constraints imposed upon it by those heavily modified or artificial characteristics necessary for its use. There are five ecological potential classes for Heavily Modified Water Bodies/Artificial Water Bodies (maximum, good, moderate, poor and bad).

**Ecological status:** Ecological status applies to surface water bodies and is based on the following quality elements: biological quality, general chemical and physico-chemical quality, water quality with respect to specific pollutants (synthetic and non synthetic), and hydromorphological quality. There are five classes of ecological status (high, good, moderate, poor or bad). Ecological status and chemical status together define the overall surface water status of a water body.

**Ecosystem:** A complex set of relationships among the living resources, habitats, and residents of an area. It includes trees, plants, animals, fish, birds, microorganisms, water, soil and people. The community of organisms and their physical environment interact as an ecological unit.

**Environmental impact assessment (EIA):** Procedure to identify the potential impacts of a project or activity on the environment and to develop mitigation measures to reduce these to acceptable levels.

**Ecosystem approach:** The comprehensive integrated management of human activities based on the best available scientific knowledge about the ecosystem and its dynamics, in order to identify and take action on influences which are critical to the health of the marine ecosystems, thereby achieving sustainable use of ecosystem goods and services and maintenance of ecosystem integrity

**Eutrophication:** It means the enrichment of water by nutrients, especially compounds of nitrogen and/or phosphorus, causing an accelerated growth of algae and higher forms of plant life to produce an undesirable disturbance to the balance of organisms present in the water and to the quality of the water concerned



**Exemptions:** The environmental objectives of the Water Framework Directive are set out in Article 4. These include the general objective of aiming to achieve good status in all water bodies by 2015 and the principle of preventing any further deterioration in status. There are also a number of exemptions to the general objectives that allow for less stringent objectives, extension of deadline beyond 2015 or the implementation of new projects. Common to all these exemptions are strict conditions that must be met and a justification must be included in the river basin management plan. The conditions and process in which the exemptions can be applied are set out in Article 4.4, 4.5, 4.6 and 4.7.

**Groundwater:** all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

**Good chemical status (surface waters):** Means those concentrations of chemicals in the water body do not exceed the environmental standards specified in the Environmental Quality Standards Directive 2008/105/EC. These chemicals include Priority Substances, Priority Hazardous Substances and eight other pollutants carried over from the Dangerous Substance Daughter Directives.

**Good chemical status (groundwater):** See chemical status (groundwater). Means the concentrations of pollutants in the groundwater body do not exceed the criteria set out in Article 3 of the Groundwater Daughter Directive (2006/118/EC).

**Good ecological potential:** Those surface waters which are identified as Heavily Modified Water Bodies and Artificial Water Bodies must achieve 'good ecological potential' (good potential is a recognition that changes to morphology may make good ecological status very difficult to meet). In the first cycle of river basin planning good potential may be defined in relation to the mitigation measures required to achieve it.

**Good ecological status:** The objective for a surface water body to have biological, structural and chemical characteristics similar to those expected under nearly undisturbed conditions.

**Good status:** Is a term meaning the status achieved by a surface water body when both the ecological status and its chemical status are at least good or, for groundwater, when both its quantitative status and chemical status are at good status.

**Groundwater:** All water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

**Hazardous substances:** Substances or groups of substances which are toxic, persistent and liable to bioaccumulate, and other substances or groups of substances which give rise to an equivalent level of concern.

**Heavily Modified Water Body:** A surface water body that does not achieve good ecological status because of substantial changes to its physical character resulting from physical alterations caused by human use, and which has been designated, in accordance with criteria specified in the Water Framework Directive, as 'heavily modified'.

**Inland waters:** all standing or flowing water on the surface of the land, and all groundwater on the landward side of the baseline from which the breadth of territorial waters is measured.

**Measure:** This term is used in the Water Framework Directive and domestic legislation. It means an action which will be taken on the ground to help achieve Water Framework Directive objectives.





**Mechanisms:** The policy, legal and financial tools which are used to bring about actions (measures). Mechanisms include for example: legislation, economic instruments; codes of good practice; negotiated agreements; promotion of water efficiency; educational projects; research; development and demonstration projects.

**Monitoring points:** A location within a water body where different environmental parameters are measured, including biology, hydromorphology, physico-chemical, and priority and priority-hazardous substances for surface waters.

**Objective (surface waters):** Three different status objectives for each water body. These are:

- Overall status objective;
- Ecological status or potential objective;
- Chemical status objective.

These are always accompanied by a date by when the objective will be achieved.

*Ecological status* (or potential) objectives will be derived from the predicted outcomes for the biological elements and physico-chemical elements, plus any reasons for not achieving good ecological status (or potential) by 2015.

Chemical status objectives will be derived from the predicted outcomes for the chemical elements plus any reasons for not achieving good chemical status by 2015.

Overall status objectives will be derived from the ecological status and chemical status objectives.

**Point source:** Identifiable and localized point of emissions to air and discharges to water

**Pressures:** Human activities such as abstraction, effluent discharges or engineering works that have the potential to have adverse effects on the water environment.

**Priority substances:** A pollutant or group of pollutants, presenting a significant risk to or via the aquatic (surface water) environment that has been identified at Community level under Article 16 of the Water Framework Directive. They include 'priority hazardous substances'.

**Pollution:** The introduction by man, directly or indirectly, of substances or energy into the maritime area which results, or is likely to result, in hazards to human health, harm to living resources and marine ecosystems, damage to amenities or interference with other legitimate uses of the sea

**Population equivalent** is a measure of pollution representing the average organic biodegradable load per person per day: it is defined in Directive 91/271/EEC as the organic biodegradable load having a five-day biochemical oxygen demand (BOD5) of 60 g of oxygen per day.

**Programme of Measures:** A Programme of Measures, as used in the Water Framework Directive, is a group of actions designed to improve the environment in a river basin district and meet the objectives of the Directive.

**Reference conditions:** The benchmark against which the effects on surface water ecosystems of human activities can be measured and reported in the relevant classification scheme. For waters not designated as heavily modified or artificial, the reference conditions are synonymous with the high ecological status class. For waters designated as heavily modified or artificial, they are synonymous with the maximum ecological potential class.



**Risk:** The likelihood of an outcome (usually negative) to a water body or the environment, or the potential impact of a pressure on a water body.

**Risk assessment:** The analysis that predicts the likelihood that a water body is at significant risk of failing to achieve one or more of the Water Framework Directive objectives.

**Risk category:** The numerical or descriptive category assigned to water bodies that have been risk assessed, in order to make the risk-based prioritization of water bodies for action under the Water Framework Directive more manageable.

**River basin:** A river basin is the area of land from which all surface run-off and spring water flows through a sequence of streams, lakes and rivers into the sea at a single river mouth, estuary or delta. It comprises one or more individual catchments.

**River basin district:** the area of land and sea, made up of one or more neighbouring river basins together with their associated groundwaters and coastal waters, which is identified under Article 3(1) as the main unit for management of river basins.

**River Basin Management:** The management and associated planning process that underpins implementation and operation of the Water Framework Directive. It is both an overarching process in terms of existing processes and also defines new sub-processes such as those for hydromorphology. The river basin management plans are plans for river basin management.

**River Basin Management Plan:** For each River Basin District, the Water Framework Directive requires a River Basin Management Plan to be published. These are plans that set out the environmental objectives for all the water bodies within the River Basin District and how they will be achieved. The plans will be based upon a detailed analysis of the pressures on the water bodies and an assessment of their impacts. The plans must be reviewed and updated every six years.

**Surface water:** inland waters, except groundwater, transitional waters and coastal waters, except in respect of chemical status, for which territorial waters are also included.

**Significant Water Management Issues:** This is a report on each River Basin District that highlights significant water management issues in that River Basin District which will need to be addressed to achieve environmental objectives under the Water Framework Directive.

**Transitional waters:** bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater flows.

**Urban waste water** means waste water from residential settlements and services which originates predominantly from the human metabolism and from household activities (domestic waste water) or a mixture of domestic waste water with waste water which is discharged from premises used for carrying on any trade or industry (industrial waste water) and/or run-off rain water;

**Water body:** A manageable unit of surface water, being the whole (or part) of a stream, river or canal, lake or reservoir, transitional water (estuary) or stretch of coastal water. A 'body of groundwater' is a distinct volume of groundwater within an aquifer or aquifers



## I. Background/Rationale

### General information about the training

The “TAIEX ECRAN Multi-beneficiary Workshop on Actions Toward Good Status of the Water Framework Directive” has been organized as planned by ECRAN project team in 2015, in Sarajevo, 11-13 July 2016.

The tasks of the WM WG within the frame of ECRAN project are mainly focused on the strengthening of the technical capacities of the competent authorities in ECRAN beneficiaries’ countries on the implementation of WFD, specifically in providing assistance in the development of transboundary River Basin Management Plans (RBMPs, and performing economic and financial analysis of the Program of Measures (PoM). In addition, the WMWG provides the frame for capacity building on interlinkages between the WFD and Marine Strategy Framework Directive (MSFD).

The principal component of the WFD for each river basin district is the **development of river basin management plans** which will be reviewed on a six yearly basis and which set out the actions required within each river basin to achieve set environmental quality objective towards “**good water status**”.

Considering the need to ensure a greater particularization of the water management issues on a smaller scale but having potentially a larger impact, the countries in the Drina River Basin (Drina RB) will develop the **Drina River Basin Management Plan** which will include a **Joint Program of Measures**.

**Drina River Basin** (Drina RB) has been selected as the most appropriate **pilot river basin** for assistance to the beneficiary countries in the development of transboundary river basin management plans and performing economic and financial analysis of the Program of Measures (PoM).

The process of testing the development of the river basin management plan is meant to set up an interface between a sub – unit (3 countries) and the Sava River Basin (4 countries) and the whole Danube River Basin (19 countries), through the exchange and comparison of state-of-the-art knowledge, frameworks, practices and experiences gained at the Sava and Danube basin scale. The different scale and degree of detailing - at the sub unit level - offered the possibility of filling the missing data and gaps and bringing together the most comprehensive and up-to-date information and statistics when addressing the key challenges for the Drina basin.

The intent of the last organized workshop has been to provide an **open forum for consideration and revision of practical approaches and concepts, methodologies, screening templates and reporting schemes, discussions of countries inputs, implementation needs and challenges, to reach water good status, presentations and exchange of experience** on issues relevant for producing the PoM for Drina River Basin.

As for the preparation of the Drina RBM Plan all beneficiary countries have contributed with case studies or lessons learned from ongoing similar projects, the WM WG jointly prepared a final report which has been presented at the workshop.

The whole process of river basin management planning includes the preparation of programmes of measures at basin level for achieving the environmental objectives of the Water Framework Directive cost-effectively. The planning, implementation and evaluation of the programme of measures is an



iterative process that will include the river basin management plan of several cycles (2021, 2027, ..). Therefore, the main focus of the last workshop discussion has been on the **future implementation challenges to implementing the Water Framework Directive (WFD) and associated commitments under other EU directives.**

The workshop also considered **potential challenges posed not just by financing, institutional or policy changes, climate and environmental changes, but also by societal needs.** Building on these, it highlights research needs and key responses that may assist in tackling these challenges. At present, some responses may allow us to encourage **engaging with stakeholders to develop scenarios and explore barriers to the implementation of strategies at national and catchment scales.**

The benefits of strengthening the technical capacity of the workshop participants have been maximised through the training and exchange of experience offered by TAIEX assistance to the ECRAN project beneficiaries.

The Regional Workshop took place in Sarajevo, 11-13 July and it represents the last training workshop within the frame of ECRAN project.

The first 2 days of the workshop were dedicated to the discussion of the Drina River Basin Management Plan and Program of Measures, and of the case studies of all beneficiary countries, and of the actions towards the WFD good status - results, case studies and challenges.

The focus of the last day was on the organisation of a Round table on the barriers, needs and challenges related to the WFD implementation in the beneficiary countries.

Experiences from Romania have been shared on the development of the RBMP, coordination mechanism to support the fulfilment of the WFD objectives, Implementation of WFD Article 3 on close cooperation among riparians in river basin planning and management, and of monitoring of the implementation process and of their effects in the field of improving the status of water resources.

### Summary of the main topics covered

#### 1) Drina RBMP and PoM development

- Drina River Basin Management Plan (RBMP), the Program of Measures (PoM) and Case studies from all beneficiary countries
- Relevant EU policies and directives in the RBMP development
- Discussion of the relevant methodologies, concepts, guidance and references in the RBMP development
- River basin approach: planning, management, competent authority
- Review of the coordination mechanism at the basin, regional, national and international levels for RBMP development and implementation
- Legal Frameworks for Transboundary Management
- Institutions for Transboundary Management



- Implementation of WFD Article 3 on close cooperation among riparians in river basin planning and management
- Implementation of an effective pollution control policy to reach good water status
- Monitoring of the implementation process and of their effects in the field of improving the status of water resources
- Environmental Heavy-Cost Investment Planning to reach good water status
- Public Participation and Partnerships in transboundary context
- Cross-Compliance and the WFD
- Collaboration with the key sectors (energy, agriculture, navigation, etc.) at EU and MS level to reach water good status
- Need for innovative solutions–technologies, management approaches, governance and funding

## 2) **Case studies and lessons learned**

- Presentation of case studies in each of the beneficiary countries related to the barriers, needs and challenges related to the WFD implementation
- Innovative Solutions, technologies, management approaches, governance and funding Albania
- Innovative solutions in Macedonia
- Need for innovative solutions - technologies, management approaches, governance and funding along implementation process in Turkey
- Introduce the experience in the development of RBMP at the regional, national and international level-Case study Romania



## II. Objectives of the Training

### General Objective

The overall objectives of the workshop are to discuss the implementation challenges and explore barriers to implementation of the WFD together with all relevant needed actions and steps to full compliance with the WFD and reaching good water status in the beneficiaries' countries.

### Specific Objectives

- To present the final report of Drina RBM Plan and case studies of all beneficiary countries
- To present an overview of the contribution of all EU policies and directives to the WFD objectives
- To enhance the understanding on the responsibilities of different authorities in the WFD implementation process
- To discuss options for reaching more coherent institutional water management systems capable to implement the EU policies and directives
- To discuss the WFD compliance and enforcement challenges
- To discuss why WFD implementation is an administrative challenge
- To present an overview of existing tools and guidance for a holistic WFD implementation
- To increase the understanding on the need of enhanced transparency, communication and dialogue with the public and interested parties
- To recommend solutions towards improved implementation of environmental law
- To be better informed on the legal enforcement: complaints, petitions and other sources of infringement information
- To examine options to support decision makers from the local to the transboundary and international level on the enforcement challenges
- To review relevant needed coordination for the RBMP implementation at the national and regional level
- To discuss case studies prepared by all beneficiaries for the RBMP and PoM
- To share all lessons learned during the project, useful for the development of the RBMP and the PoM
- Facilitate dialogue among the beneficiaries on specific topics that are needed to ensure WFD implementation.

### Expected Results

- Improved understanding of the topics, barriers, challenges and tasks, and related responsibilities for WFD implementation
- Exchange of experience and knowledge significantly improved
- Active involvement of the participants through the preparation of case studies and the RBM plan.



### III. EU policy and legislation covered by the training

#### The Water Framework Directive (WFD) 2000/60/EC

The Water Framework Directive (WFD) 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy represents the European Union directive which commits European Union member states to achieve good qualitative and quantitative status of all water bodies by 2015. The Directive aims for 'good status' for all ground and surface waters that include rivers, lakes, transitional waters, and coastal waters, in the EU.

The Directive also requires Member States to establish river basin districts and for each of these a river basin management plan. The Directive envisages a cyclical process where river basin management plans are prepared, implemented and reviewed every six years. There are four distinct elements to the river basin planning cycle: characterisation and assessment of impacts on river basin districts; environmental monitoring; the setting of environmental objectives; and the design and implementation of the programme of measures needed to achieve them.

This Framework-Directive has a number of objectives, such as preventing and reducing pollution, promoting sustainable water usage, environmental protection, improving aquatic ecosystems and mitigating the effects of floods and droughts, aiming to achieve “good ecological and chemical status” for all Community waters by 2015.

Several successive amendments and corrections (2001, 2008 and 2009), have been incorporated to the WFD.

The river basin management established under the WFD (entered into force December 2009) begins with an analysis of the characteristics of the river basin district, a review of the impact of human activity on water status, and an economic analysis of water use. Programmes to monitor water status must be established, along with programmes of measures for each river basin district in order to achieve the specified environmental objectives. Then, for each river basin district, a river basin management plan must be produced with the active involvement of all interested parties.

Finally, the specific programmes of measures must be implemented so as to achieve the objective of good status for all waters within each river basin. The first RBM plans cover the period 2009-2015. They shall be revised in 2015 and then every six years thereafter.

#### The River Basin Management Plan (RBMP) and the Program of Measures (PoM)

The principal component of the Water Framework Directive for each river basin district is the development of river basin management plans which will be reviewed on a six yearly basis and which set out the actions required within each river basin to achieve set environmental quality objectives.

The best model for a single system of water management is management by river basin - the natural geographical and hydrological unit - instead of according to administrative or political boundaries. While several Member States already take a river basin approach, this is at present not the case everywhere. For each river basin district - some of which will traverse national frontiers - a "river



basin management plan" will need to be established and updated every six years, and this will provide the context for the co-ordination requirements identified above.

The river basin management plan (RBMP) is essentially a snapshot in time and is the subject of continual review. Essentially, the first river basin management plans finalized ended on December 2009 and represents the transition between the initial analysis carried out in 2004 and implementation of the Directive. Their 6-years updating is a refining process based on improved data and understanding and allowing for revision of the circumstances in the river basins.

The first river basin management plans have been published by the end of 2009 and summarized the quality and quantity objectives to be achieved by 2015.

The river basin management plan (RBMP) represents the main achievement tool of the WFD objectives, which is realized in 6-year cycles and consists of preparation, implementation and revision phases.

Essentially, the RBMP provides:

- 1) evidence and documentation mechanism for the information gathered including: pressures and impact assessment, environmental objectives for surface and ground waters, quality and quantity of waters, and the impact of human activity on water bodies;
- 2) facilitates coordination of the programmes of measures and other relevant programmes within the river basin district;
- 3) guarantees the main progress reporting mechanism to the EC - the WFD Art. 15.

Within the Water Framework Directive (WFD), the environmental objectives will be set for all water bodies. One of its main aims is that all water bodies (including rivers, lakes, coasts, estuaries and groundwater) achieve "good status" by 2015. Water bodies must also be protected to prevent any deterioration in status.

Through the gap analysis, for each water body, any possible discrepancy between its existing status and that required by the Directive is identified.

If a water body is considered unlikely to achieve its environmental objectives by 2015 (including those for protected areas and groundwater), the WFD requires that management measures to be put in place to meet the WFD goals. Individual measures and/or packages of measures for water bodies must be integrated in a co-ordinated and cost-effective programme of measures

### **The Urban Wastewater Treatment Directive (UWWTD)**

The Council Directive 91/271/EEC concerning urban waste-water treatment was adopted on 21 May 1991. Its objective is to protect the environment from the adverse effects of urban waste water discharges and discharges from certain industrial sectors (Annex III of the Directive) and concerns the collection, treatment and discharge of:

- Domestic waste water
- Mixture of waste water
- Waste water from certain industrial sectors (see Annex III of the Directive)





The UWWTD addresses the major point sources, in particular the municipal waste water discharges and requests the identification of sensitive areas and compliance with treatment requirements.

The UWWTD has been amended by Commission Directive 98/15/EC, Regulation 1882/2003 and Regulation 1137/2008, Commission Implementing Decision concerning formats for reporting on the national programmes for the implementation of Council Directive 91/271/EEC (notified under document C(2014) 4208, (2014/431/EU)).

Four main principles are laid down in the Directive:

- Planning
- Regulation
- Monitoring
- Information and reporting

Specifically the Directive requires:

- The collection and treatment of waste water in all agglomerations of >2000 population equivalents (p.e.);
- Secondary treatment of all discharges from agglomerations of > 2000 p.e., and more advanced treatment for agglomerations >10 000 population equivalents in designated sensitive areas and their catchments;
- A requirement for pre-authorisation of all discharges of urban wastewater, of discharges from the food-processing industry and of industrial discharges into urban wastewater collection systems;
- Monitoring of the performance of treatment plants and receiving waters; and
- Controls of sewage sludge disposal and re-use, and treated waste water re-use whenever it is appropriate.

### **Nitrates Directive (ND)**

The implementation of the Nitrates Directive (91/676/EEC) forms an integral part of the Water Framework Directive and is one of the key instruments in the protection of waters against agricultural pressures. The Nitrates Directive has the general purpose of “reducing water pollution caused or induced by nitrates from agricultural sources and preventing further such pollution” (Art.1). A threshold nitrate concentration of 50 mg/l is set as the maximum permissible level in water resources, and the Directive limits the application of livestock manure to land in excess of 170 kg N/ha/yr.

Waters referred to by the Nitrates Directive include all waters: surface, ground, transitional and coastal and marine waters.

The Nitrates Directive defines waters which are polluted or are liable to pollution as:

- Surface freshwaters, in particular those used for the abstraction of drinking water, which contain or could contain (if preventative action is not taken) nitrate concentrations greater than 50 mg/l;
- groundwaters which contain or could contain (if preventative action is not taken) nitrate concentrations greater than 50 mg/l;



- natural freshwater lakes, or other freshwater bodies, estuaries, coastal waters and marine waters which are found to be eutrophic<sup>1</sup> or in the near future may become eutrophic if preventative action is not taken.

The first steps along the ND implementation included the designation of Nitrate Vulnerable Zones (NVZs) and the introduction of a strengthened range of measures in the NAP that farms within NVZs must comply with, such as:

- Identification of water polluted, or at risk of pollution
- Designation as "Nitrate Vulnerable Zones"(NVZs)
- Establishment of Codes of Good Agricultural Practice to be implemented by farmers on a voluntary basis
- Establishment of action programmes to be implemented by farmers within NVZs on a compulsory basis
- National monitoring and reporting.

The Nitrates Directive provides two options for designation of Nitrates Vulnerable Zones pursuant to its Article 3: to designate separate zones or announce the whole national territory as vulnerable to nitrate pollution. The aim of designating Nitrate Vulnerable Zones is to identify land sites and consequentially coastal areas where the discharge of an excess of nitrates could cause environmental degradation. Existing EU Member States have adopted different strategies for designation of the vulnerable zones.

### **Common Agricultural Policy**

Agriculture affects both the quantity and quality of water available for other uses. In some parts of Europe, pollution from pesticides and fertilizers used exclusively in agriculture remains one of the main causes of poor water quality. Agriculture, especially the intensified agriculture can lead to nutrient pollution affecting water and soil, changing natural habitats and disturbing landscapes, plants and animals, through the excessive application of fertilizers and pesticides and the use of an irrigation water of poor quality and quantity.

These considerations have imposed development and promotion by the EU of the Common Agricultural Policy (CAP), with the objective of achieving sustainable and environmentally friendly agriculture. The EU's objective is to limit the negative effects and encourage the positive effects of agriculture on ecosystems biodiversity, climate, and landscape and nature conservation.

Based on FAO estimates for 2025, water saving and efficiency of its use measures are greatly needed as the estimates indicate that the amount of water needed for agriculture will increase by 14% compared to the current level, while for 2050 will not be enough fresh water necessary for food production worldwide.

There is a great potential to achieve positive environmental effects through merging the efforts of the two policies Common Agricultural Policy (CAP) and the Water Framework Directive (WFD). Several tools of the CAP, e.g. the Cross-Compliance and the Rural Development Programmes, could

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<sup>1</sup> Eutrophication is the enrichment of waters by excessive input of nutrients such as nitrogen or phosphorus compounds. This results in the accelerated growth of algae and higher forms of plant life, resulting in an undesirable disturbance to the balance of organisms present and to the quality of the water concerned.



contribute to implementation of the WFD. The Common Agricultural Policy backs up the Nitrates Directive through direct support and rural development measures.

The fact that WFD includes numerous provisions related to agricultural activity shows the importance of considering the synergies and their related effects between the WFD and CAP.

#### WFD provisions justifying the need for integration with CAP

The relevant WFD provisions highlighting the need of integration with CAP include:

- The amount of water used and how to use
- Waste water discharge conditions
- Economic activities which could give rise to diffuse pollution
- Physical changes produced in water bodies such as heavily modified water bodies.

#### WFD provisions related to different actions or inappropriate application of best agricultural practices

- Sampling of water for irrigation without a permit (WFD Article 11.3.e)
- Discharge of wastewater directly or indirectly into water courses without authorization (WFD Article 11.3.g & j)
- Inappropriate application of pesticides (period of application, type of pesticides, their application in the vicinity of water courses, etc.) (WFD Article 11.3.h)
- Modification of riparian areas of a water body without a permit (WFD Article 11.3.i).

Failing to comply with these provisions restrict the support or compensation for the farmers, which are not anymore eligible to get support.

#### WFD basic measures as cross compliance requirements under CAP

The most important WFD measures which are relevant for cross compliance are the basic measures (WFD Article 11). For this reason, the Water Directors of the Member States have agreed, at their meeting on 28-29 November 2012, on the feasibility of including basic measures in the cross-compliance requirements, recognizing that if these measures will be implemented by the farmers, this will contribute to the overall goals of water policy, as required by the WFD.

The basic measures address the pressure from agriculture on water resources as organic and nutrients point and diffuse pollution (WFD Article 11 (3)) contributing to achieve the WFD objectives.

### **The Environmentally Quality Standards**

The EQSD established:

- in Annex I, limits on concentrations of the priority substances in surface waters of 33 priority substances and 8 other pollutants



- the list of 33 priority substances in Annex II as Annex X of the Water Framework Directive (WFD);
- the possibility of applying EQS for sediment and biota, instead of those for water;
- the possibility of designating mixing zones adjacent to discharge points where concentrations of the substances in Annex I might be expected to exceed their EQS;
- a requirement for Member States to establish an inventory of emissions, discharges and losses of the substances in Annex I;
- an obligation to review the list of priority substances by 13 January 2011.
- Amended by Directive 2013/39/EU of the European Parliament and of the Council of 12 August 2013 amending Directives 2000/60/EC and 2008/105/EC as regards priority substances in the field of water policy.

### **Flood Directive 2007/60/EC on the assessment and management of flood risks**

Its aim is to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity

The following stages are covered by the implementation process:

- Preliminary risk assessment
- Flood mapping
- Flood risk management plans

Implementation shall be carried out in coordination with the Water Framework Directive, by flood risk management plans and river basin management plans being coordinated, and through coordination of the public participation procedures.

### **Initiative on Water Scarcity and Droughts**

Based on the periodical follow-up results, assessment of the River Basin Management Plans and further information, a Policy Review for water scarcity and droughts has been completed in November 2012, which is part of the "Blue Print for Safeguarding European Waters" adopted by the European Commission on 14 November 2012.

In the next implementation cycles of the WFD this need to be ensured along with further integration of water quantity issues into sectoral policies. In addition, the integrating water quantity issues more fully into the overall policy framework will be key to the river basin management.

### **Pesticides legislation**

Regulation (EC) no 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC

Directive 2009/128/EC of the European Parliament and of the Council establishing a framework for Community action to achieve the sustainable use of pesticides



Regulation (EC) no 1185/2009 of the European Parliament and of the Council concerning statistics on pesticides

Directive 2009/127/EC of the European Parliament and of the Council amending Directive 2006/42/EC with regard to machinery for pesticide application

### **Directive 2010/75/EU on industrial emissions (replacing IPPC Directive)**

Main EU instrument regulating pollutant emissions from industrial installations

Aims to achieve a high level of protection of human health and the environment taken as a whole by reducing harmful industrial emissions across the EU, in particular through better application of Best Available Techniques (BAT)

Activities listed in Annex I of the IED are required to operate in accordance with a permit (granted by the authorities in the Member States). This permit should contain conditions set in accordance with the principles and provisions of the IED.

Based on several pillars:

- integrated approach,
- use of best available techniques,
- flexibility,
- inspections
- public participation

Through the European Pollutant Release and Transfer Register (E-PRTR) emission data reported by Member States are made accessible in a public register.

### **Guidance documents**

In order to address the WFD implementation challenges in a coordinated way, the Commission agreed on a number of 33 guidance documents and 10 technical reports which have been produced to assist EU Member States with an overall methodological approach, which could be adjusted to specific circumstances by each EU Member State. The Guidance documents cover many aspects of implementation, such as establishing monitoring programmes, undertaking economic analyses, engaging the public, developing classification systems, how to identify and designate heavily modified and artificial water bodies.

Guidance documents finalized are made available on CIRCA.

The most relevant guidance documents for this workshop are the following:

- N° 1 – Economics and the Environment
- N° 2 – Identification of Water Bodies
- N° 3 - Analysis of Pressures and Impacts
- N° 11 - Planning Processes
- N° 12 - The Role of Wetlands in the Water Framework Directive



N° 13 - Overall Approach to the Classification of Ecological Status and Potential

N° 20 - Exemptions to the environmental objectives

N° 21 - Guidance for reporting under the WFD

N° 24 - River Basin Management in a changing climate

The most relevant EU documents in support of the WFD implementation include:

- "Common Strategy on the Implementation of the Water Framework Directive" (CIS)
- "Carrying forward the Common Implementation Strategy for the Water Framework Directive - Progress and Work Programme 2003/2004"
- "Moving to the next stage in the Common Implementation Strategy for the Water Framework Directive - Progress and Work Programme 2005/2006"
- "Improving the comparability and the quality of Water Framework Directive implementation – Progress and Work Programme 2007-2009"
- "Supporting the implementation of the first river basin management plans - Work programme 2010-2012"
- "Strengthening the implementation of EU water policy through the second river basin management plans - Work Programme 2013-2015".

The CIS is a key document, prepared in recognition that an integrated approach to river basin management throughout Europe is crucial for the successful implementation of the WFD Directive.

The purpose is to:

- (i) develop a common understanding and approach to implementation throughout the EU,
- (ii) elaborate informal technical guidance and share experiences between MS to avoid duplication of effort, and
- (iii) to support efficient application of the WFD requirements.

In addition, the Commission produced Thematic CIS information sheets which provided more information and resource material publicly available on a variety of subjects, such as: River Basin Management, Reporting and WISE, Ecological Status, Groundwater, Chemical Aspects, Flood Risk Management, Climate Change and Water, Water Scarcity and drought, Agriculture and Water, Biodiversity and water, Hydromorphology and the Economic Issues.

#### **Other relevant EU legislation for approaching River Basin Management Plan and the Program of Measures**

- Decision 2455/2001/EC of the European Parliament and of the Council of 20 November 2001 establishing the list of priority substances in the field of water policy and amending Directive 2000/60/EC of water policy (WFD).
- 2005/646/EC: Commission Decision of 17 August 2005 on the establishment of a register of sites to form the intercalibration network in accordance with Directive 2000/60/EC of the European Parliament and of the Council.



### Groundwater

- Council Directive 80/68/EEC of 17 December 1979 on the protection of groundwater against pollution caused by certain dangerous substances.
- Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration

### Flood protection

- Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks.

### Municipal urban wastewater treatment

- Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment
- 93/481/EEC: Commission Decision of 28 July 1993 concerning formats for the presentation of national programmes as foreseen by Article 17 of Council Directive 91/271/EEC.
- The Sewage Sludge Directive (86/278/EEC).

### Drinking water

- Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption.
- Council Directive 79/869/EEC of 9 October 1979 concerning the methods of measurement and frequencies of sampling and analysis of surface water intended for the abstraction of drinking.

### Dangerous substances

- Council Directive 76/464/EEC of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.
- Council Directive 86/280/EEC of 12 June 1986 on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Directive 76/464/EEC.
- Directive 2006/11/EC of the European Parliament and of the Council of 15 February 2006 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.
- Council Directive 82/176/EEC of 22 March 1982 on limit values and quality objectives for mercury discharges by the chlor-alkali electrolysis industry.
- Council Directive 83/513/EEC of 26 September 1983 on limit values and quality objectives for cadmium discharges.
- Council Directive 84/491/EEC of 9 October 1984 on limit values and quality objectives for discharges of hexachlorocyclohexane.
- Council Directive 84/156/EEC of 8 March 1984 on limit values and quality objectives for mercury discharges by sectors other than the chlor-alkali electrolysis industry.



### Industrial discharges

- Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control.
- Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control (Codified version).
- Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control).
- The Major Accidents (Seveso) Directive (96/82/EC).

### Agriculture

- Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources
- Common Agricultural Policy

### Bathing water

- Council Directive 76/160/EEC of 8 December 1975 concerning the quality of bathing water
- Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC

### Bathing water

- Bathing Water Directive (EC, 2006)

### Environmental Impact assessment

- The Environmental Impact Assessment Directive (85/337/EEC).
- Strategic Environmental Impact Assessment Directive (2001/42).

### **Useful references on practical guides or links to various WFD web sites**

At the EC, <https://circabc.europa.eu/> provides comprehensive sources of reference documents related to WFD, Flood Directive, and other relevant policies and directives.

### **EU LEGISLATION, GUIDELINES AND REPORTS**

#### **WATER**

[http://ec.europa.eu/environment/water/waterframework/objectives/implementation\\_en.htm](http://ec.europa.eu/environment/water/waterframework/objectives/implementation_en.htm)

[http://ec.europa.eu/environment/water/flood\\_risk/](http://ec.europa.eu/environment/water/flood_risk/)

#### **ECRAN & RENA NETWORK**

<http://www.ecranetwork.org/>

<http://www.renanetwork.org/>

#### **TAIEX**

<http://ec.europa.eu/enlargement/taieux/>





## IV. Highlights from the Training

Reference is made to Annex I for the agenda. Below only the main elements are highlighted. The presentations are provided in Annex III.

### Highlights Day 1

The first two days have been dedicated to the discussion of the Drina River Basin Management Plan and the Program of Measures.

#### 1. River Basin Planning Process

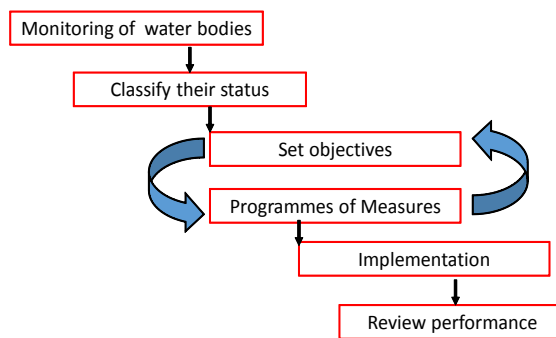
The elements of the river planning process

- Establishing principles for river basin planning
- Set up proper administrative arrangements
- Ensure the framework for public consultation and participation
- Ensure coordination with other plans and planning processes

Role of River Basin Planning

- Improve and support sustainable and integrated water management to deliver the requirements of the Water Framework Directive

### River Basin Planning Process



- Provide a framework for developing institutional arrangements and coordination with other plans
- Provide opportunity for public participation and partnership activities
- Provide a framework for transparent decision making considering environmental, social and economic needs within the river basin district

### Water Framework Directive Management

- Update legal framework and transposition of the WFD
- Establish the River Basin Districts
- Set up/strengthen the administrative framework
- Improve the coordination of involved public authorities
- Update the water monitoring system
- Establishing a reporting system
- Ensure public information and participation
- Coordination at the International River Basin District level

### Establish the River Basin Districts

- Identify the River Basin which your waters belong
- Decide on the sub basing approach
- Establish River Basin Districts (include more than one River Basin for administrative purpose)
- Assign the groundwater bodies to the River Basin Districts

### Administrative Framework for River Basin Management

Typical overall structure to support River Basin Water Resources Management includes:

- Central government
- National level coordinating and policy body
- River Basin Organisation
- River Basin Council
- Local authorities

### Role of Basin Organisations

The basin organisations are the main authorities for water resources planning, development and management, and have the following roles:

- Planning for water resources development within the basin
- Day-to-day management of water resources (allocation, licensing, etc.)
- Raising local awareness of problems and solutions
- A Water Council serves also to coordinate with stakeholders



## 2. Overview of the Drina RBMP final draft

The WM WG agreed to prepare a report on the River Basin Management Plan and the Program of Measures, which will include information not only to Drina River Basin, but also case studies covering the non-Drina countries, on the same topics as for the Drina countries.

The report followed the agreed methodology, includes the contributions of all beneficiary countries, and reflects the knowledge and the experience of the participants of the WM WG which is outstanding. Considering the data gaps, some parts of the report will be more theoretical than those where real assessment and interpretation have been made.

### CONTENT OF THE REPORT ON THE PROGRAM OF MEASURES IN DRINA BASIN AND CASE STUDIES FROM ECRAN BENEFICIARY COUNTRIES

The Drina RBM plan is structured as follow:

- 1. Introduction**
- 2. Legal basis**
- 3. General description of the characteristics of the river basin district**, including a map showing the location and boundaries of the surface and ground water bodies and a further map showing the types of surface water bodies within the basin.
- 4. Overview on the Significant Water Management Issues of the Drina RB**  
Summary of the significant pressures and the impact of anthropogenic activity on the status of surface and ground waters, including point source pollution, diffuse pollution and related land use, the quantitative status of water including abstractions and an analysis of other impacts of human activity on water status.
- 5. Identified significant pressures in the Drina RBD**
  - a. Organic pollution
  - b. Flooding
  - c. Hydromorphological alterations
  - d. Nutrient pollution
  - e. Hazardous substances pollution
  - f. Other significant issues
    - i. Groundwater
      1. Groundwater quality
      2. Groundwater quantity
- 6. Monitoring networks and ecological/chemical status**
- 7. Environmental objectives and exemptions**
- 8. Economic analysis of water uses**
- 9. Drina Joint Programme of Measures**
  - a. Organic pollution



<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>i. Visions and management objective</li> <li>ii. JPM approach toward the management objective</li> <li>iii. Summary of joint measures on the basin wide scale</li> </ul> </li> <li>b. Flooding           <ul style="list-style-type: none"> <li>i. Visions and management objective</li> <li>ii. JPM approach toward the management objective</li> <li>iii. Summary of joint measures on the basin wide scale</li> </ul> </li> <li>c. Hydromorphological alterations           <ul style="list-style-type: none"> <li>i. Visions and management objective</li> <li>ii. JPM approach toward the management objective</li> <li>iii. Summary of joint measures on the basin wide scale</li> </ul> </li> <li>d. Nutrient pollution           <ul style="list-style-type: none"> <li>i. Visions and management objective</li> <li>ii. JPM approach toward the management objective</li> <li>iii. Summary of joint measures on the basin wide scale</li> </ul> </li> <li>e. Hazardous substances pollution           <ul style="list-style-type: none"> <li>i. Visions and management objective</li> <li>ii. JPM approach toward the management objective</li> <li>iii. Summary of joint measures on the basin wide scale</li> </ul> </li> </ul>
<b>10. Conclusions</b>
<b>11. List of competent authorities.</b>
<b>Annexes</b>

### 3. Legal Frameworks for Transboundary Management

Proper implementation requires knowledge of the legislation to be implemented, measures taken and gaps to be addressed.

Main priorities in the water policy

1. **A new strategy to reinforce water management** - Blueprint to Safeguard Europe's Water Resources –
  - The Water Blueprint's time horizon is closely related to:
  - the EU's 2020 Strategy and, in particular, to
  - the 2011 Resource Efficiency Roadmap, of which the Blueprint is the water milestone.

The Blueprint covers a longer time span, up to 2050, and is expected to drive EU water policy over the long term.



## 2. European Innovation Partnership

EIP Water Steering Group Renewal - Public Call for Expression of Interests Jan 2016

The EIP Water has entered into its second phase, focusing on the delivery of impacts in fostering the uptake of innovations to address the key water challenges.

## 3. Water Scarcity and Droughts

The main overall objective of EU water policy: to ensure access to good quality water in sufficient quantity for all Europeans, and to ensure the good status of all water bodies across Europe. Therefore, policies and actions are set up in order to prevent and to mitigate water scarcity and drought situations, with the priority to move towards a water-efficient and water-saving economy.

2012 Water Scarcity and Droughts Policy Review - November 2012, which is part of the "Blue Print".

The review concludes that the overall objective of the Water Scarcity & Droughts (WS&D) policy - to revert the WS&D trends - has not been achieved!

## 4. Flood Risk Management

Floods Directive (2007/60/EC): MS prepared their Preliminary Flood Risk Assessments (PFRAs) and Flood Hazard & Risk Maps (FHRMs) before 22 December 2011, resp. 22 December 2013. According to Article 10, MS made available to the public the preliminary flood risk assessment, the flood hazard maps, the flood risk maps and the flood risk management plans.

The European Overview Report on PFRAs provides information on the MS' PFRAs and Areas of Potential Significant Flood Risk (APSFs).

The European Overview Report on FHRMs provides information on MS' FHRMs.

The individual MS Reports provide relevant background to the two Overviews. For the individual MS Reports there are 2 folders:

- The individual Member State PFRA Reports
- The individual Member State FHRM Reports

The individual MS Reports largely reflect the situation as reported by the MS to the EC in 2012 (PFRA) and in 2014 (FHRM).

The 2nd cycle of implementation of the FD - 2018.

An overview report has been produced based on the reporting of MS' Flood Risk Management Plans (FRMPs) - 22 March 2016.

The preparation of FRMPs concluded the 1st cycle of implementation of the Floods Directive.

## 5. River basin management in a changing climate. Water is at the core of climate change adaptation

- Adapting the management of Water and Environmental Resources in response to Global Change
  - White Paper on adapting to climate change
  - As part of the actions included in the White Paper, Water Directors adopted in December 2009 a Guidance document on adaptation to climate change in water



management to ensure that the River Basin Management Plans (RBMP) are climate-proofed.

#### 4. Institutions for Transboundary Management

##### Implementing institutions

The key responsibility for ensuring effective implementation and enforcement of EU legislation lies with national authorities and very often at regional and local levels.

The goals of greater responsiveness are to build citizen confidence in their administrations that EU environment laws are properly enforced.

##### Regional and local authorities

- Close cooperation between national authorities and the EC contributes to a better implementation.
- Regional and local authorities are also key players and co-operation with the Committee of the Regions is facilitated by a Technical Platform for Cooperation on the Environment.
- Local and Regional Authorities and Environment - crucial actors in environmental protection, as they are often responsible for rule-making and undertaking investments, and can have inspection and oversight functions.

##### Priorities for institutional capacity development

The capacity of water managers and policy-makers within transboundary basins needs to be developed:

- in terms of their knowledge of the most suitable techniques to support of cross-sectoral stakeholder participation in planning and public participation, and
- their ability to implement what can be very resource-intensive participatory activities.

Awareness raising, from the public to the political levels, needs to be improved if transboundary cooperative mechanisms are to be prioritized and sufficiently funded.

#### Highlights Day 2

##### 1. Environmental Heavy-Cost Investment Planning to reach good water status

##### The challenges in financing the development of urban wastewater

The recipe for financeability of environmental objectives resides in:

- Building up a water sector that can fulfill its environmental role and be a framework for viable investment in environmental protection!!
- Ensuring active policies by governments towards financeability of the water sector (prioritization, medium-term investment planning, enforcement and facilitating access to funding)
- Collect as much revenue from users as they are able to pay



- Blending different sources of finance and
- Making full use of available EU grant resources.
- Regulatory framework (such as WFD) – essential!, and need for clear technical guidelines (such as discharge permits)
- Sustainability issues and cost recovery as stipulated by the WFD (Cost reflective tariffs for water are critical for sustainability of measures)
- Need to elaborate transparent and consistent national affordability guidelines for projects.

#### The challenges in financing the agricultural measures

**RD = 2nd CAP Pillar** policy helps the rural areas to meet economic, environmental and social challenges.

- Improved for period 2014-2020 through CAP reform + legislative acts.
- In line with Europe 2020 and the overall CAP objectives **three long-term strategic objectives** for EU RD policy 2014-2020 are:
  - fostering the **competitiveness** of agriculture;
  - ensuring the **sustainable management of natural resources**, and **climate action**; and
  - achieving a **balanced territorial development of rural economies and communities** including the creation and maintenance of **employment**.

**Still as for 2007-2013, the National and/or regional rural development programmes (RDPs)** will run for seven more years.

## 2. Financing and funding sources in the Drina Basin

### Financing sources

Domestic public finance remains the dominant source for water & sanitation. Among the funding sources, there are:

- EU funds (Pre accession and then cohesion);
- National and local budgets;
- Loans and PPP;
- Environmental Fund;
- Water operators;
- Consumers (tariffs and taxes).

The implementation of the POM considers the financing sources from:

- European funds - Cohesion Funds for implementation of the requirements of Drinking Water Directive and Urban Waste Water Directive and for financing of the measures addressing hydromorphology, priority substances and groundwater, EFARD, EFRD, LIFE, European Fisheries Fund, etc.



- Governmental budget, Environmental Fund, local budget, ministerial environment budget for specific research activities.
- Operators for water services and own sources of economic units for implementation of the technical measures;
- River basin authorities – contributions from all water users;
- Other sources (i.e. international loans).

The implementing financing strategy should consider:

- Ensure EU funds adsorption
- Linking the strategy to the budgetary decision making process
- Ensuring that tariff policies are sustainable from economic and social point of view
- Increase the collection rate for water bills
- Rehabilitate and rationalize infrastructure by adjusting its capacity to present and future
- Optimizing capital and operational expenditure

There are measures to improve creditworthiness, such as:

- Agreed programme of tariff increases, taking into account social considerations
- Clear / predictable allocation from central/local tax revenues
- Improved operational management/collections
- Increase data availability to make informed decisions.

Issue to be further explored include:

- Reassess the environmental cost in water price (including drinking water and waste water)
- Assess, establish and internalize the environmental costs for diffuse pollution and hydromorphological alteration
- Reassess the environmental cost of water for irrigation
- Promote a system of social protection in order to improve affordability
- Balance supply and demand
- Implement the bonuses as an incentive for reaching good water status.

### 3. Need for innovative solutions–technologies, management approaches, governance and funding

The countries presented innovative solutions implemented in their countries, such the Water Information System in **Macedonia**, steps undertaken to establish the WIS as solid decision making tool to support the MOEPP/WD in the management of water resources.

**Albania** considers the necessity to identify innovative solutions for the following tasks:





- Improving performance of water utilities
- Building wastewater treatment plants – secondary treatment
- Rehabilitation of aged irrigation channels
- Improve monitoring system
- Water cadastre.

The main goal of using innovative solutions for **Turkey** is that:

- The new water management is more coordinated, cooperated and efficient management at national and basin levels.
- Sustain the participatory approach and so increase of the public participation
- Academicians, NGOs and all related institutions are the part of the structure

In addition, an innovative approach is foreseen for the online monitoring stations:

- 5 in Meriç Basin
- 4 in Büyük Menderes Basin
- Data has been taken in per 30 min.

This will enable to continuous control of water quality and thereby direct actions regarding the possible pollution sources could be taken.

### Highlights Day 3

The last workshop day was dedicated to the presentation of countries case studies related to the barriers, needs and challenges related to the WFD implementation in the beneficiary countries in a Round table. In spite of great improvements in the harmonization transposition and implementation process, in the beneficiary countries there are still barriers to overcome, needs to consider and challenges to approach.

Albania presented the status of compliance with the WFD 2000/60/EC and the barriers towards full implementation, which include:

- **Regular Monitoring**
  - Rivers 35 monitoring stations
  - Lakes: 3 lakes
  - Bathing waters: 71 stations
  - Groundwater: 41 stations

Environmental status report yearly produced by the National Environmental Agency

- **Financing**
  - Budget allocation for monitoring reduced during last years;
  - Equipment are expensive;
  - Lack of available and public historical data;



- Socio-economic status of the country;
- Investments are expensive.

As **challenges**, Albania identified:

- Improve water supply and sanitation services;
- Increase the water utilities efficiency in urban and rural areas by applying the principle of full cost recovery;
- Review of the tariff structure;
- Reorganise water utilities in compliance with the new territorial reform;
- Construction of wastewater treatment plants in accordance with the National Master Plan for Water Supply and Sewerage.

In **Bosnia & Herzegovina**, the challenges refer to the:

- Implementation of Nitrates Directive;
- Pollution reduction;
- Flood risk reduction;
- Policy development for integration of Ecosystem;
- Institutional development;
- Economic instruments;
- Construction of sewer systems, urban and industrial WWTPs;
- Strengthening of monitoring systems;
- Protection of drinking water sources;
- Employment of new water tariffs and water fees policy;
- Improvement of the water quality (pollution) and quantity (abstractions) control.

In Bosnia & Herzegovina, the barriers refer to the:

- Harmonization of legislation;
- Lack of funding;
- Synchronization of legislation with the WFD;
- Compatibility of the Water Framework Directive and the Floods Directive;
- Organic matters pollution of the surface water;
- Nutrients pollution of the surface waters;
- Hazardous substances pollution of the surface water;
- Hydro-morphological alterations of the surface water bodies;
- Quantitative and qualitative changes in groundwater;
- Low cost recovery.



Finally, the needs were listed as:

- More coordination cooperated and efficient management at national and basin level;
- Sustainable management;
- Implementation of WFD;
- Harmonization of WFD and FD;
- Training of employees in the water sector;
- Strengthening the vertical and horizontal cross-sectoral coordination;
- The management of water demand;
- Qualitative and quantitative aspects of the management of river sediment transport.

**Former Yugoslav Republic (FYR) of Macedonia** identified the need to prioritize the projects.

As challenges, Macedonia presented the Plan for Strengthening the Administrative capacity for water management – Timetable of Implementation with Short term 2016, and Longer term 2017-2020 for MoEPP, HMA, MAFWE, ME, SEI, MH, MoTC, HBI.

**Republic of Serbia** presented as well the barriers, needs and challenges related to Directive 2000/60 /EC Water Framework, which cover:

- Due to complexity WFD implementation requires institutional changes related to:
  - Legislation development,
  - Institutional set up and inter institutional cooperation, (vertical and horizontal)
  - Improvement of Monitoring system (establishment of the appropriate network and building the necessary laboratory capacities (assessed to 5 – 6 years))
  - Financing system
- WFD objectives are connected with the achievement of objectives of several other directives (particularly UWWT, ND and DWD).
- The estimated cost for compliance with the Water Framework Directive and other water-related directives is high and consequently can create a challenge for the macroeconomic stability of the country.

**Turkey** considered that substantial efforts are needed to raise the awareness through Awareness campaigns in the basins by means of EU and national projects and Basin Management Committees and Provincial Water Management Coordination Committees's.

The challenges for the Meriç basin include:

- Single RBMP for Meriç Basin should be established.
- Closer and effective trilateral cooperation among riparian countries (Greece and Bulgaria) should be sustained at the basin level.



- Trilateral coordination in the process of implementation of the WFD should be established at the appropriate stages of implementation.
- Good level of cooperation on early warning for floods.

Therefore, Turkey considers that it is not possible to achieve the requirements of the WFD and ultimately to the good water status at the Meriç Basin unless necessary trilateral transboundary cooperation is established.

### Other key points of discussion

In addition to the highlighted topics, other issues were raised and discussed at the meeting, including the following topics:

1. Information System to assist in river basin planning and management
2. Database of water resources and water quality data for each river basin
3. Use of economic instruments, assessment of cost recovery through water pricing, water tariff reforms implemented to charge the "full price of water", to achieve the WFD objectives of full cost recovery and efficient water use
4. Regionalization of water services, in terms of consolidating water utility ownership, operations, or management within a politically geographic or hydrogeological area. Regionalization reflects institutional change in terms of establishing public policy and resource planning frameworks that encompass regional considerations.
5. Funding sources and distribution for specific type of investments, mainly for attractive investments where the results can be recorded in short time

### Final Workshop Outcomes

Based on the discussions at the workshop, the outcomes of the training consist of the following:

- Improved understanding of the topics, challenges and tasks, and related responsibilities for the development of the RBMP in line with the WFD
- Agreement on the final draft of the Drina RBM Plan and the Program of Measures
- Exchange of experiences and knowledge significantly improved
- Key obstacles and barriers impeding the tasks implementation and related solutions identified
- Active involvement of the participants through the preparation of case studies on the needs, challenges and barriers towards WFD implementation
- Guidance documents related to the WG tasks discussed and clarified

The participants have also discussed about possible topics to be considered for future trainings, similar with ECRAN project, of which results, assistance and support for the current activities in the beneficiary countries have been highly appreciated.



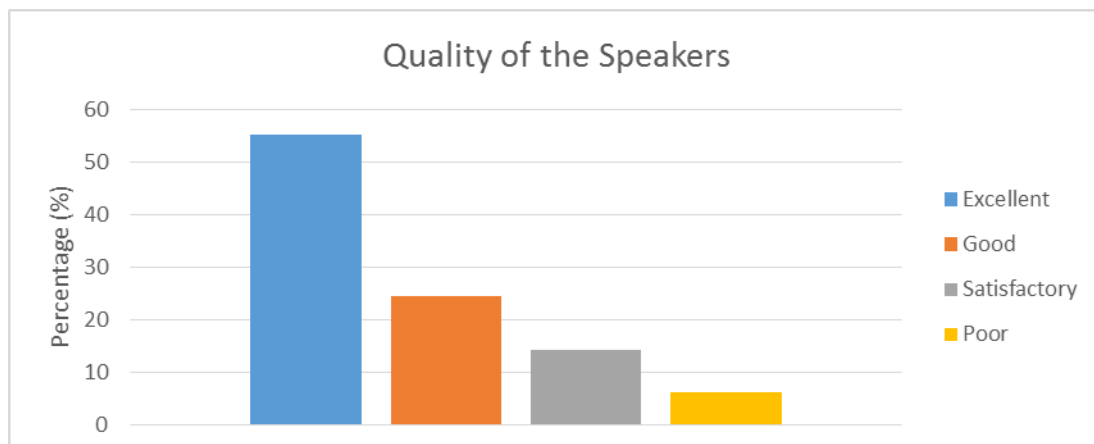
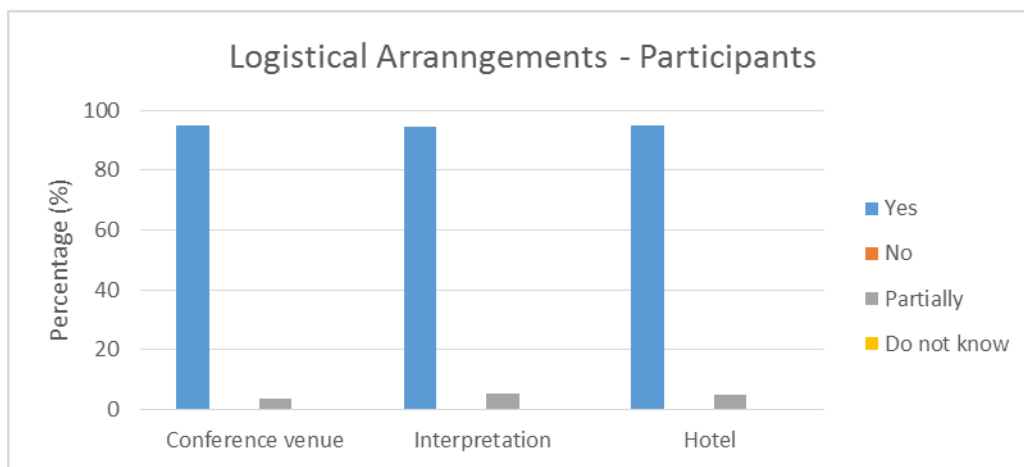
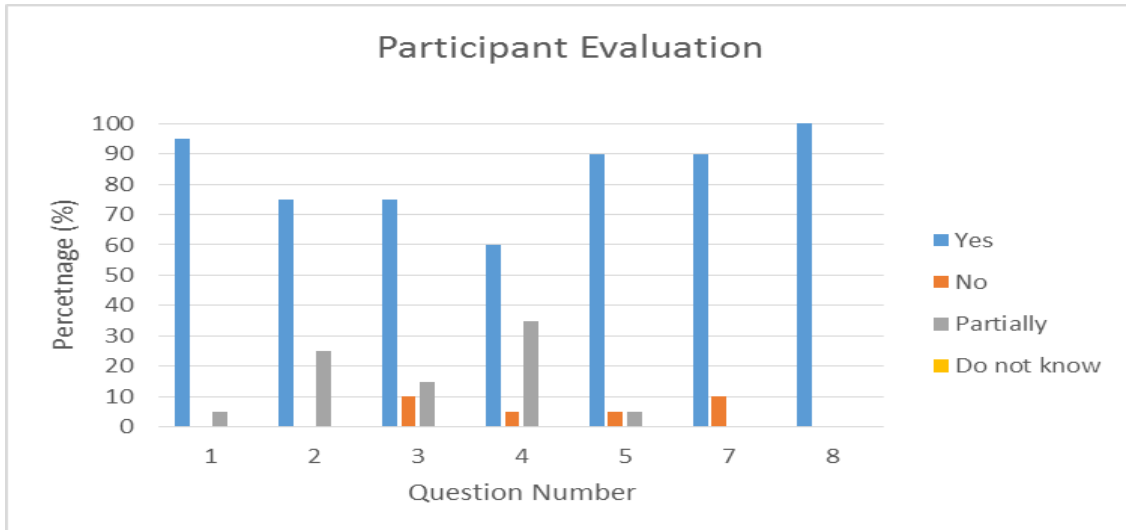
## V. Evaluation

### Workshop – Participants' Evaluation

Question	N°. Responses	Yes	No	Partially	Do not know	
1. Was the workshop carried out according to the agenda	20	19 (95)%	0 (0)%	1 (5)%	N/A	
2. Was the programme well structured?	20	15 (75)%	0 (0)%	5 (25)%	N/A	
3. Were the key issues related to the topics addressed?	20	15 (75)%	2 (10)%	3 (15)%	N/A	
4. Did the workshop enable you to improve your knowledge?	20	12 (60)%	1 (5)%	7 (35)%	N/A	
5. Was enough time allowed for questions and discussions?	20	18 (90)%	1 (5)%	0 (0)%	N/A	
6. How do you assess the quality of the speakers?	<b>Speaker/Expert</b>	<b>N°. Responses</b>	<b>Excellent</b>	<b>Good</b>	<b>Satisfactory</b>	<b>Poor</b>
	3	49	27 (55)%	12 (24)%	7 (14)%	3 (6)%
Question	N°. Responses	Yes	No	Partially	Do not know	
7. Do you expect any follow-up based on the results of the workshop (new legislation, new administrative approach, etc.)?	20	18 (90)%	2 (10)%	N/A	N/A	
8. Do you think that further TAIEX assistance is needed (workshop, expert mission, study visit, assessment mission) on the topic of this workshop?	15	15 (100)%	0 (0)%	N/A	N/A	
9. Were you satisfied with the logistical arrangements, if applicable?	Conference venue	20	19 (95)%	0 (0)%	1 (5)%	0 (0)%
	Interpretation	19	19 (94)%	0 (0)%	1 (5)%	0 (0)%
	Hotel	20	19 (95)%	0 (0)%	1 (5)%	0 (0)%
Comments: <ul style="list-style-type: none"> <li>• Suggestion for the future: Traveling from Monday and come back Friday, because Sunday is a private day dedicated to family. Thank you;</li> <li>• Mihail Dimovski did not attend the workshop. Nearly all presentations in three days were done by Ms. Mihaela Popovici and she was terrible. Except two presentations, all presentations were given by the same person (Ms. Popovici) with the same tone of voice without any visual elements and any example of practical application which could help to get the attention of all participants. Speakers, instead of talking about new solutions and suggestions, told the WFD that we already know by heart;</li> <li>• This workshop was extremely useful for us, we learnt a lot, discussed the emerging issues with the consultant and regional representatives. Besides the knowledge we acquired, the networking among water professionals in the region is the most important added value of this project. The consultants were more than helpful, ready to answer all our questions and to solve our doubts related to water management on the national, regional level and trans bound contest. Mr. Dimovski was not present;</li> </ul>						



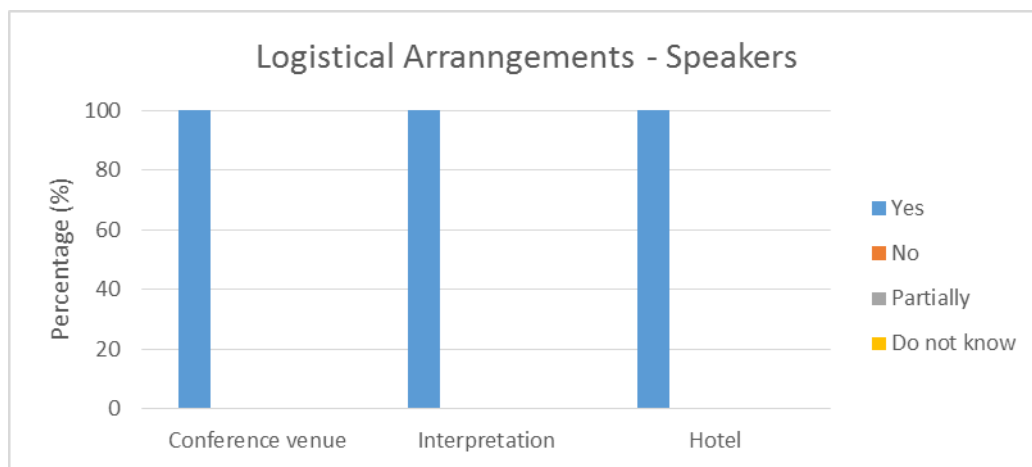
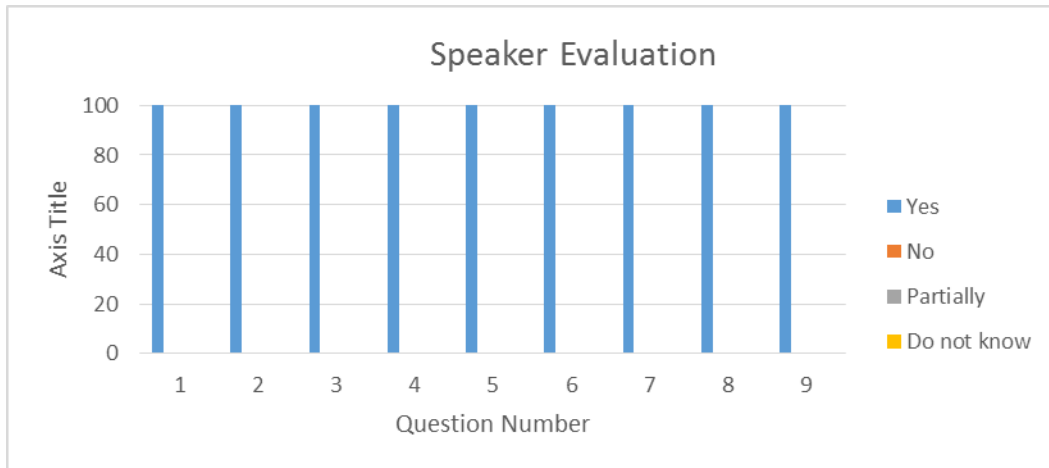
- I suggest that the organization of future workshops and local participants given daily allowances for better engagement;
- I hope that this project will continue in other name or organization. Wee still have some gaps that we have to overlap. Thank you very much for enormous help and knowledge you share with us.



## Workshop – Speakers’ Evaluation

Question	N°. Responses	Yes	No	Partially	Do not know
1. Did you receive all the information necessary for the preparation of your contribution?	3	3 (100%)	0 (0%)	0 (0%)	N/A
2. Has the overall aim of the workshop been achieved?	3	3 (100%)	0 (0%)	0 (0%)	N/A
3. Was the agenda well structured?	3	3 (100%)	0 (0%)	0 (0%)	N/A
4. Were the participants present throughout the scheduled workshop?	3	3 (100%)	0 (0%)	0 (0%)	N/A
5. Was the beneficiary represented by the appropriate participants?	3	3 (100%)	0 (0%)	0 (0%)	N/A
6. Did the participants actively take part in the discussions?	3	3 (100%)	0 (0%)	0 (0%)	N/A
7. Do you expect that the beneficiary will undertake follow-up based on the results of the workshop (new legislation, new administrative approach etc.)	3	3 (100%)	0 (0%)	N/A	N/A
8. Do you think that the beneficiary needs further TAIEX assistance (workshop, expert mission, study visit, assessment mission) on the topic of this workshop?	3	3 (100%)	0 (0%)	N/A	N/A
9. Would you be ready to participate in future TAIEX workshops?	3	3 (100%)	0 (0%)	N/A	N/A
10.If applicable, were you satisfied with the logistical arrangements?	Conference venue	3	3 (100%)	0 (0%)	0 (0%)
	Interpretation	3	3 (100%)	0 (0%)	0 (0%)
	Hotel	3	3 (100%)	0 (0%)	0 (0%)
Comments:					







## ANNEX I – Agenda

### Day 1: Monday 11 July 2016

<b>Topic: WM WG – Actions towards the WFD good status - results, case studies and challenges:</b>				
<b><u>Results and legal enforcement</u></b>				
<b>Chair and Co-Chairs: Mihail Dimovski and Mihaela Popovici</b>				
<b>08:30</b>	<b>09:00</b>	<b>Registration</b>		
09.00	09.15	Welcome and opening	Mr. Mihail Dimovski ECRAN Team Leader	Address by ECRAN
09.15	09.30	Introduction of the Agenda of the workshop	Ms. Mihaela Popovici	Introduction to the purpose of the workshop and its expected outcome  Presentation and adoption of the agenda
09.30	10.30	Presentation and discussion of the results achieved related to the WFD workshops	Ms. Mihaela Popovici	Presentation of the approach, methodologies and the results achieved  Method : PPP and Q&A
<b>10:30</b>	<b>11:00</b>	<b>Coffee Break</b>		
11.00	12.30	Drina River Basin Management Plan (RBMP), the Program of Measures (PoM) and Case studies from all beneficiary countries	Ms. Mihaela Popovici	1) Presentation of the comments, additions and suggestions formulated by the experts  2) Presentation of the final report  Method : PPT and Q&A
<b>12:30</b>	<b>14:00</b>	<b>Lunch Break</b>		
14:00	15:00	River basin approach: planning, management, competent authority	Mr. Gheorghe Constantin Head of Water Department, Ministry	Review of all steps towards river basin management and related implementation responsibilities  Method : PPP and Q&A



			of Environment Romania TAIEX expert All participants	
15:00	15:30	Review of the coordination mechanism at the basin, regional, national and international levels for RBMP development and implementation	Mr. Gheorghe Constantin TAIEX expert	Presentation of the coordination and implementation mechanisms of the RBMP at different levels Method : PPP and Q&A
<b>15:30</b>	<b>16:00</b>	<b>Coffee Break</b>		
16:00	16:30	Legal Frameworks for Transboundary Management	Ms. Mihaela Popovici	Overview of the legal aspects related to transboundary management Method : PPP and Q&A
16.30	17.00	Institutions for Transboundary Management	Ms. Mihaela Popovici	Through this presentation the administrative and institutional arrangements are summarized



## Day 2: Tuesday 12 July 2016

**Topic: WMWG - Actions towards the WFD good status - results, case studies and challenges:**

**WFD compliance**

**Chair: Mihaela Popovici and Gheorghe Constantin**

Start	Finish	Topic	Speaker	Sub topic/Content
09:00	09:30	Implementation of WFD Article 3 on close cooperation among riparians in river basin planning and management	Mr. Gheorghe Constantin TAIEX expert	Presentation of an overview of best practices for transboundary planning and management  Method : PPP and Q&A
09:30	10:00	Implementation of an effective pollution control policy to reach good water status	Mihaela Popovici	Overview of all EU policies and directives dealing with pollution control and recommendations for an efficient implementation  Method : PPP and Q&A
10:00	10:30	Monitoring of the implementation process and of their effects in the field of improving the status of water resources	Mr. Gheorghe Constantin	Presentation of the monitoring of both the implementation process alone as well as the implementation effects in the field of improving the status of water resources in terms of both – their quantity and quality  Method : PPP and discussions
<b>10:30</b>	<b>11:00</b>	<b><i>Coffee Break</i></b>		
11:00	12:00	Environmental Heavy-Cost Investment Planning to reach good water status	Mihaela Popovici	Overview of the most costly directives and their contribution to reach good water status  Method : PPT and Q&A



12:00	12:30		Ms. Mihaela Popovici	Method : PPP and Q&A
<b>12:30</b>	<b>14:00</b>	<b>Lunch Break</b>		
14:00	14:30	Public Participation and Partnerships in transboundary context	Mr. Gheorghe Constantin	Presentation of the best lessons learned on ensuring communication and involvement, and recommendations regarding transparency, communication and dialogue with the public and interested parties  Method : PPP and Q&A
14:30	15:00	Cross-Compliance and the WFD	Mihaela Popovici	Presentation of the cross compliance mechanism and its contribution towards reaching good water status  Method : PPP and Q&A
<b>15:30</b>	<b>16:00</b>	<b>Coffee Break</b>		
16:00	16:30	Collaboration with the key sectors (energy, agriculture, navigation, etc.) at EU and MS level to reach water good status	Mihaela Popovici	Presentation of the issues of integration among the sectors  Method : PPP and Q&A
16:00	17:00	Need for innovative solutions – technologies, management approaches, governance and funding	All participants	Presentation of possible innovative solutions, such as technologies, management approaches, governance and funding along implementation process  Method : PPP and Q&A



**Day 3: Wednesday 13 July 2016**

**Topic: WMWG - Actions towards the WFD good status - results, case studies and challenges:  
Round table: barriers, needs and challenges related to the WFD implementation in the  
beneficiary countries**

**Chair and Co-Chairs: Mihaela Popovici and Gheorghe Constantin**

Start	Finish	Topic	Speaker	Sub topic/Content
09:00	09:30	Wrap up of the key points of discussion from the first two days meeting	Ms. Mihaela Popovici	
09:30	10:00	Barriers, needs and challenges related to the WFD implementation in Albania	Speaker from Albania	Barriers, needs and challenges related to the WFD implementation and suggestions Method : Round table
10:00	10:30	Barriers, needs and challenges related to the WFD implementation in BiH	Speaker from BiH	Barriers, needs and challenges related to the WFD implementation and suggestions Method : Round table
<b>10:30</b>	<b>11:00</b>	<b>Coffee Break</b>		
11:00	11:30	Barriers, needs and challenges related to the WFD implementation in Kosovo	Speaker from Kosovo*	Barriers, needs and challenges related to the WFD implementation and suggestions Method : Round table
11:30	12:00	Barriers, needs and challenges related to the WFD implementation in Macedonia	Speaker from Macedonia	Barriers, needs and challenges related to the WFD implementation and suggestions Method : Round table



12.00	12.30	Barriers, needs and challenges related to the WFD implementation in Montenegro	Speaker from Montenegro	Barriers, needs and challenges related to the WFD implementation and suggestions Method : Round table
<b>12:30</b>	<b>14:00</b>	<b>Lunch Break</b>		
14:00	14:30	Barriers, needs and challenges related to the WFD implementation in Republic of Serbia	Speaker from Republic of Serbia	Barriers, needs and challenges related to the WFD implementation and suggestions Method : Round table
14:30	15:00	Barriers, needs and challenges related to the WFD implementation in Turkey	Speaker from Turkey	Barriers, needs and challenges related to the WFD implementation and suggestions Method : Round table
<b>15:30</b>	<b>16:00</b>	<b>Coffee Break</b>		
16.00	16.30	Wrap-up and final conclusions	Ms. Mihaela Popovici	



## ANNEX II – Participants

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Vuk	Đurašković	Institute of Hydrometeorology and	Montenegro	<a href="mailto:vukdjuraskovic@gmail.com">vukdjuraskovic@gmail.com</a>



First Name	Family Name	Institution Name	Country	Email
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### **ANNEX III – Workshop materials (under separate cover)**

Workshop materials including presentations and case studies can be downloaded from:

[http://www.ecranetwork.org/Files/Workshop\\_Presentations\\_WFD\\_Final\\_Workshop\\_July\\_2016\\_Sara\\_jevo.zip](http://www.ecranetwork.org/Files/Workshop_Presentations_WFD_Final_Workshop_July_2016_Sara_jevo.zip)



This Project is funded by the  
European Union



A project implemented by  
Human Dynamics Consortium