Environment and Climate Regional Accession Network (ECRAN)

Regional Workshop on Strategic Planning in Water Sector

3 – 4 June 2015
Podgorica, MONTENEGRO
ENVIRONMENTAL AND CLIMA REGIONAL NETWORK FOR ACCESSION - ECRAN

WORKSHOP REPORT
Strategic Planning in Water Sector
Joint Workshop
Water Management Working Group and
Strategic Planning and Investments Working Group

Activity No. 2.4 Water Management
Activity No. 2.2 Strategic Planning and Investments
3 – 4 June 2015
Podgorica, MONTENEGRO
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<tbody>
<tr>
<td>Acquis</td>
<td>Acquis communautaire - Community legislation</td>
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<tr>
<td>BAP</td>
<td>Best Agricultural Practice</td>
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<td>BAT</td>
<td>Best Available Techniques</td>
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<td>BEP</td>
<td>Best Environmental Practice</td>
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<td>BLS</td>
<td>Baseline Scenario</td>
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<td>BSC</td>
<td>Black Sea Commission</td>
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<td>BS SAP</td>
<td>Strategic Action Plan for the Rehabilitation and Protection of the Black Sea</td>
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<td>BiH</td>
<td>Bosnia and Herzegovina</td>
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<td>BWD</td>
<td>Bathing Water Directive</td>
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<td>CAP</td>
<td>Common Agricultural Policy</td>
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<td>CIS</td>
<td>Common Implementation Strategy</td>
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<td>DPSIR</td>
<td>Driver, Pressure, State, Impact and Response framework for environmental analysis</td>
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<td>Drina RB</td>
<td>Drina River Basin</td>
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<tr>
<td>DRB</td>
<td>Danube River Basin</td>
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<td>DRBD</td>
<td>Danube River Basin District</td>
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<td>DRBMP</td>
<td>Danube River Basin Management Plan</td>
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<td>DRPC</td>
<td>Danube River Protection Convention</td>
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<td>EC</td>
<td>European Commission</td>
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<td>ECRAN</td>
<td>Environment and Climate Regional Accession Network Project</td>
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<td>EEC</td>
<td>European Economic Community</td>
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<td>ERC</td>
<td>Environmental and Resource Cost</td>
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<td>FBiH</td>
<td>Federation of Bosnia and Herzegovina</td>
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<td>GIS</td>
<td>Geographic Information System</td>
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<td>GES</td>
<td>Good Ecological Status</td>
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<td>HRC</td>
<td>Danube RBD in Croatia</td>
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<td>HRJ</td>
<td>Adriatic RBD in Croatia</td>
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<td>ICPBS</td>
<td>International Commission for the Protection of the Black Sea</td>
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<td>ICPDR</td>
<td>International Commission for the Protection of the Danube River</td>
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<td>IPPC</td>
<td>Integrated Pollution Prevention and Control</td>
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<td>IED</td>
<td>Industrial Emissions Directive</td>
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<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>KTM</td>
<td>Key Type of Measures</td>
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<td>MS</td>
<td>Member State</td>
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<td>PoM</td>
<td>Programme of Measures</td>
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<td>ND</td>
<td>Nitrates Directive</td>
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<td>PS</td>
<td>Priority Substances</td>
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<td>RB</td>
<td>River Basin</td>
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<td>RBD</td>
<td>River Basin District</td>
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<td>RBMP</td>
<td>River Basin Management Plan</td>
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<td>RBSP</td>
<td>River Basin Specific Pollutants</td>
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<td>RS</td>
<td>Republic of Srpska</td>
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<td>SAA</td>
<td>Stabilisation and Association Agreement</td>
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<td>SAP</td>
<td>Stabilization and Association process</td>
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<td>SoE</td>
<td>State of the Environment</td>
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<td>SWMI</td>
<td>Significant Water Management Issue</td>
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<td>TAIEX</td>
<td>Technical Assistance and Information Exchange Office</td>
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<td>UWWT</td>
<td>Urban Waste Water Treatment</td>
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<td>WFD</td>
<td>Water Framework Directive</td>
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<td>WMWG</td>
<td>Water Management Working Group</td>
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Glossary of terms and definitions

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.

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.

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.

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.

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.

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.

Regional cooperation: means cooperation and coordination of activities between Member States and, whenever possible, third countries sharing the same marine region or subregion, for the purpose of developing and implementing marine strategies.
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 neighboring 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.

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

1. General information about the training

The joint workshop on Strategic Planning in Water Sector has been organized, in the period 3 – 4 June 2015, with the participation of the Water Management Working Group (WMWG) and Strategic Planning and Investments Working Group, and in close cooperation with ECRAN project team, and assisted by TAIEX facility.

The joint workshop considered the synergies between the tasks and activities of the two working groups, and established common approaches and specific issues of interest for both groups and all beneficiary countries.

The workshop followed a first introductory workshop on Economic Analysis in accordance with the Water Framework Directive (WFD), with the participation of the Water Management Working Group (WMWG) and Strategic Planning and Investments Working Group, which took place in October 2014, in Skopje, Macedonia.

The main focus of this workshop was to establish a common understanding on basic terms, definitions and methodologies used in the economic analysis, on different policies and institutional frameworks of water pricing, as well as on issues linked to efficiencies of water utilities sector.

A specific topic was the “Water Sector Financing sources” reflecting the interlinkages between the Program of Measures developed as the key component of the River Basin Management Plan (RBMP) in line with the WFD – as one of the main task of the WMWG - and the sustainable water financing, as the main focus of the SPI WG.

A more detailed training has been organized during the Regional Workshop on “Strategic Planning in Water Sector”, 3- 4 June 2015, in Podgorica, Montenegro. The aim of this joint regional training was to facilitate the understanding and exchange of experience, and transfer of knowledge on the need to prepare planning documents in the water sector to accommodate the EU policies and directives requirements.

The tasks of the WMWG 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 the Water Framework Directive (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).

For the SPI WG, the focus is on providing assistance to the beneficiary countries for the improvement of strategic planning and of regional cooperation and information sharing related to the environmental investment as a key element of the approximation toward the EU.

The main objective of the joint training, from the perspective of both working groups was to benefit of TAIEX assistance for a more profound understanding of key national planning documents required for implementing relevant water Directives, based on countries needs and funding priorities.
The event was held in cooperation with TAIEX, in the Framework of the implementation of the Environment and Climate Regional Accession Network.

The benefits of strengthening the technical capacity of the workshop participants were maximized through the training, exchange of experience and lectures provided by selected experts, offered by TAIEX assistance to the ECRAN project beneficiary countries.

The following documents are available for download at http://www.ecranetwork.org/Events/86:

- Presentations made by TAIEX expert, and WM WG and SPI WG coordinators
- Agenda of the workshop
- List of participants
- Joint Training report
- Evaluation report

The sessions of the Regional Training have been moderated by the following facilitators:

- Ms Mihaela Popovici
- Mr Arunas Konduratas

The joint workshop took place in Podgorica (Montenegro) from 3 to 4 June 2015.

2. Current state of the affairs in the beneficiary countries in the specific sector

Activities to support the implementation of the WFD is underway in all beneficiary countries, through developing of national guidance documents and pilot testing of specific components of the WFD, carried out generally within the frame of various projects. Further, several additional initiatives are taken within the planning process, in line with other EU Directives such as Urban Wastewater Treatment Directive, Nitrates Directive, Drinking Water Directive, Flood Directive, including: urban wastewater treatment development, improvement of industrial areas, restructuring the agriculture, construction of recreational areas, measures taking into account events such as flooding or droughts.

The planning process in the water sector is organized based on requirements of the acquis, and it is an open and wide dialogue between the public, interest groups and authorities, to ensure integration of multiple objectives, maximum net economic benefits, environmental quality and social welfare in all beneficiary countries.

For all beneficiary countries, the NPAA is the key planning document, having the appropriate level of approval, renewal and monitoring mechanisms and can serve as a meta-plan covering all related sectors.

In spite of registered progress in preparing national planning documents in the water sector, there are some difficulties encountered in the beneficiary’s countries, such as: fragmentation of responsibilities in the decision process, the insufficient cooperation between competent authorities, absence of
interministerial structures/mechanisms to deal with interlinkages between various sectors, as water and agriculture.

2.1 Countries overview of the current status

**Albania** prepared several strategic documents for water sector towards WFD implementation, but also for implementing other water related directives, such as the National Strategy for Water Supply and Sewerages (2011-2017) in line with UWWTD Directive, Mati River Basin Management Plan or for covering cross-cutting issues, such as the Environmental Strategy for 2013 – 2017 and draft Cross Cutting Environmental Strategy 2015 – 2020.

The framework strategic document is provided by the Albanian National Strategy for Development and Integration (NSDI), which covers sectoral and sub-sectoral strategies. The water institutional framework has been organized in line with EU Directives, and an illustration of this effort is reflected thorough the creation of the National Water Council. Still Albania is focused on further strengthening the national administrative capacity and interministerial cooperation.

**Bosnia and Herzegovina** is benefiting from the cooperation within the frame of Danube river basin, and significant progress has been achieved towards the WFD implementation and preparation of the national contribution to the Danube River Basin Management Plan. Some steps were taken in drawing up river-basin management plans for the rivers Neretva-Trebisnjica and Sava. However, the complexity of institutional arrangements is posing some constraints in ensuring the needed institutional cooperation and coordination and advancing towards EU Directives implementation, harmonization of legal framework, improvement of administrative capacities, and improvement of the environmental infrastructure.

As indicated in the Progress Report for 2014, regarding water quality, the country still lacks a consistent and harmonised approach to water management at State level. This includes implementing water laws, monitoring and river-basin management plans. The water policy at State level remains to be adopted.

Through the National Strategy for European Integration, and the National Programme for the Adoption of the Acquis (NPAA), **FYR of Macedonia** is concentrated on the harmonisation of the national legislation with the EU legislation and the creation of necessary institutional structures for implementation of legislation. Still, the planning process is very demanding, and additional efforts are focused on strengthening the interlinkages between the existing strategies, such as National Strategy for Agriculture and Rural Development or National Strategy for Environmental Investments, and also on strengthening the administrative capacities for implementing the EU directives.

The National Water Strategy was adopted, together with amendments to implementing legislation. Further steps are being taken towards drafting river basin management plans. There are 4 river basin plans foreseen. 2 plans are developed and one (Strumica and Vardar) is under development. Number of planning documents are foreseen to be developed during 2016 – 2017. Such documents in water sector include Master Plan, Programme for Water Supply and Waste Water Collection and Treatment, Strategic Framework for Sludge Management, directive specific plans for UWWTD and Drinking Water Directive.
Kosovo*1 is also making progress towards EU Directives implementation, through periodical updates of the European Partnership Action Plan (EPAP, in response to challenges identified during the Stabilisation and Association Process Dialogue and in European Commission Progress Reports, preparation of several sector strategies, and the development of the new Law on the inspectorate of environment, water, nature, spatial planning and construction. Still, efforts are focused on further development of planning documents and in ensuring sufficient financial resources for environmental investments.

Recent progress in the sector includes development of the National Water Strategy for the period 2015 - 2034. The National Water Strategy provides the strategic objectives and the directions of water resource development based on the existing situation of the water sector, elaboration of requirements, management structures, international obligations, and requirements for protection and improvement of water status and quality, protection against water and protection of aquatic ecosystems.

Progress has been also achieved by Montenegro towards the preparation of the national strategic documents required for implementing the EU directives though still (as noted in the Progress Reports) planning in water sector remains in early stage. It is expected that the development of the National Environmental Approximation Strategy (NEAS) will represent a major step in establishing the priorities, the competent authorities and needed investments in infrastructure. Currently, pilot river basin management plans are developed, and efforts are still needed to further extent the implementation of the WFD to other river basins.

In Serbia, the revised National Plan for the Adoption of the Acquis (NPAA) for the period 2014-2018 establishes the needed steps towards implementation of EU directives. Serbia, as a Danube country, participated in the WFD implementation process and in the development of the Danube River Basin Management Plan and its 6 years cycle current update. Also, Serbia participated in the preparation of Save River Basin Management Plan, and related activities.

There is a revised NPAA document which will cover the period 2014 - 2018. The legal basis for water management is provided by the Water Law (May 2010) and a significant package of implementing rules (40 of 70 pieces).

Current activities are related to further development of strategic and legislative framework in order to improve water management policies and support further compliance with the requirements of the relevant EU acquis. The Water Management Strategy in the RS is available in its draft form, as well as the Water Pollution Protection Plan and expected to be approved until end of 2015. The Water Management Plan for the Danube River Basin is under development. Directive Specific Implementation Plans (DSIPs) for Water Framework Directive, Drinking Water Directive, Urban Waste Water Treatment Directive and Nitrates Directive are planned to be developed during 2015/2016. Based on directive specific implementation plans the overall Multiannual Investment and Financing Plan (MIFP) will be developed during 2016 – 2017 and will serve as main instrument for investment planning in water as well as other sectors.

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1 “This designation is without prejudice to positions on status, and is in line with UNSC 1244 and the ICJ Opinion on the Kosovo Declaration of Independence”.
Turkey includes environmental considerations in the 10th Development Plan (2014-2018) implemented by the State Planning Organization. Through IPA assistance, it is expected that large environmental investments will be supported.

The EU Integrated Approximation Strategy (2007-2023) contains detailed information concerning the technical and institutional infrastructure to be developed as well as environmental improvements and arrangements to be carried out in Turkey in order to ensure alignment with the EU’s environmental acquis and its effective implementation which all-together constitute a precondition for accession to the EU.

3. Summary of the main topics covered as per Training Needs Assessment

The main topics presented and discussed at the Joint Training included:

1. Introduction of the thematic synergies between SPI WG and WM WG that justify the joint training
   • General work plan of the two WGs with tasks and activities
   • Illustration on how the expected regional training results will be incorporated into the WG activities

2. Strategic planning in water sector: application of ECRAN check list
   • National environmental priorities
   • Planning of approximation process
   • Requirements for planning documents as part of acquis
   • Planning documents depending on selected strategy for negotiations
   • Horizontal planning documents to support implementation of institutional and sectoral policies

3. Requirements for national planning documents as part of the Acquis: Programme for the implementation of UWWT Directive
   • Requirements of the UWWTD
   • Programme for implementation of the directive
   • Action Programme

4. UWWTD – Directive Specific Implementation Plan (DSIP)
• Content of a DSIP
• Requirements of the EU legislation
• Approximation Plan
• Steps toward DSIP for UWWTD
• Development of DSIP
• Cost assessment
• Financing Strategy

5. Requirements for national planning documents as part of the Acquis: Implementation plan for Drinking Water Directive
• Presentation of the legal frame
• Remedial actions and derogations
• Experience of MS developing action plans
• How to decide: DSIP or Action plan?
• Implementation schedule
• Main steps in developing the Action Plan

6. Requirements for national planning documents as part of the Acquis: River basin management plans in line with WFD
• Legal frame
• Planning documents and requirements
• Approaches
• Data collection process and implementation schedule
• Main steps for development of the RBMP
• Exemplification for Drina River Basin.

7. Introduction of World Project in Drina river basin
• Project Background
• Project Objectives
• Approach
• Current Status
• Main Outputs/Deliverables
• Constraints

8. Requirements for national planning documents as part of the Acquis: Action Programme for implementation of the Nitrates Directive
   • ND requirements
   • Nutrient Vulnerable Zones
   • Requirements for Action Programmes
   • Deadlines for development and implementation
   • Main steps in developing Action Programmes
   • Development of Action Programmes and EU membership negotiations

9. Requirements for national planning documents as part of the Acquis: Flood risk management plans in line with Flood Directive
   • Presentation of the legal frame
   • Planning documents required by Flood Directive
   • Experience of MS or CC developing management plans
   • Scheduling implementation
   • Main steps in developing Action Plan

10. Prioritization criteria for water investments
    • Presentation of the concept for criteria selection
    • Evaluation of prioritization criteria
    • Exemplification

11. Key issues of environmental investment and financing planning
II. Objectives of the training

General objectives

The WM WG and SPI WG Joint Training aimed to strengthen national capacities for effectively addressing the large number of implementation challenges of the EU Directive, analyzed based on the needs of the national strategic planning documents.

Specific objectives

The workshop referred to:

- Examination of the content and implications in terms of national strategic documents of the requirements of implementing EU Directives, such as the WFD, the Urban Wastewater Treatment Directive (UWWTD), Drinking Water Directive (DWD), Flood Directive (FD), Nitrates Directive (ND)
- Presentation and discussion of various tools – such as action plans - required for implementing the EU water directives
- Discussion of the horizontal planning documents to support institutional and sectoral water policies, especially the Institutional Development Plans and Environmental Investment and Financing Plans
- Presentation of funding possibilities for river basin management and related program of measures
- Introduction of prioritization criteria of water investments
- Exploration of the reference and concept documents required for EU water directives implementation process
- Brainstorm of all national obstacles (involvement and commitment, data and methodologies, coordination and cooperation, capacity building needs) towards the preparation of water strategic planning documents in line with EU requirements
- Discussion of the needs of the countries and possible options of support through the activities of ECRAN project, including training needs
- Facilitating dialogue among the countries on specific concepts and actions that are needed to ensure EU water policies implementation
• Selection of topics which could be approached in an integrated manner, such as financing of measures and funding strategies, and to consider actions to assist in the development of synergies for capacity building (training, guidance) for both SIP WG and the WM WG.

The results of the meeting include:

• Improved understanding of the topics, challenges and remaining tasks, and related responsibilities along the development of planning documents in line with EU water strategic policies and directives
• Clarification of the role of national implementation plans and action plans designed to schedule the EU Directives implementation steps
• Key obstacles impeding the tasks implementation and related solutions identified
• Exchange of experiences and knowledge significantly improved

III. EU policies and legislation covered by the training

1. Summary of the main provisions for each EU Directive/Regulation covered by the training

1.1 The Water Framework Directive (WFD)


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.

The river basin management plan (RBMP) represents the main achievement tool of the WFD objectives, and consists of preparation, implementation and revision phases.

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 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 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 RBMP provides (i) 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, (ii) facilitates coordination of the programmes of measures and other relevant programmes within the river basin district, and (iii) guarantees the main progress reporting mechanism to the EC as required by the WFD Art. 15.

The chapters of river basin management plan for each river basin district are:

- 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.
- 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.
- List of the environmental objectives set for all water bodies, including those where the use has been made of derogations.
- Summary of the economic analysis of water use.
- Summary of the programme or programmes of measures.
- Register of any more detailed programmes and management plans and a summary of their contents.
- Summary of the public information and the consultation measures taken, their results and the changes to the plan as a consequence.
- List of competent authorities.
- Contact points and procedures for obtaining background documentation and information, including actual monitoring data.

The RBMP includes several maps, such as: map of the results of the pressures assessment (point and diffuse pollution), of the monitoring network and programme showing the status of all water bodies and protected areas, or of the protected areas.

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.

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 EU documents in support of the WFD implementation is the Common Strategy on the Implementation of the Water Framework Directive” (CIS).

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 CIS is aiming to develop a common understanding and approach to implementation throughout the EU, elaborate informal technical guidance and share experiences between MS to avoid duplication of effort and 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.

1.2 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) and concerns the collection, treatment and discharge of:

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

The UWWTD is based on four main principles:

- 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.

1.3 The Drinking Water Directive


The Drinking Water Directive applies to:

• all distribution systems serving more than 50 people or supplying more than 10 cubic meter per day, but also distribution systems serving less than 50 people/supplying less than 10 cubic meter per day if the water is supplied as part of an economic activity;

• drinking water from tankers;

• drinking water in bottles or containers;

• water used in the food-processing industry, unless the competent national authorities are satisfied that the quality of the water cannot affect the wholesomeness of the foodstuff in its finished form.

The DWD is based on four main principles:

• Planning
• Regulation
• Monitoring
• Information and reporting.

The Directive requires providing regular information to consumers. In addition, drinking water quality has to be reported to the European Commission every three years. The scope of reporting is set out in the Directive. The Commission assesses the results of water quality monitoring against the standards in the Drinking Water Directive and after each reporting cycle produces a synthesis report, which summarizes the quality of drinking water and its improvement at a European level.

1.4 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\(^2\) or in the near future may become eutrophic if preventative action is not taken.

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.

1.5 Floods Directive (FD)

The Floods Directive applies to all kinds of floods (river, lakes, flash floods, urban floods, coastal floods, including storm surges and tsunamis), on all of the EU territory requires Member States to approach flood risk management in a three stage process including:

- Member States will by 2011 undertake a preliminary flood risk assessment of their river basins and associated coastal zones, to identify areas where potential significant flood risk exists.

- Where real risks of flood damage exist, they must by 2013 develop flood hazard maps and flood risk maps for such areas. These maps will identify areas with a medium likely hood of flooding (at least a 1 in 100 year event) and extreme events or low likelihood events, in which expected water depths should be indicated. In the areas identified as being at risk the number of inhabitants potentially at risk, the economic activity and the environmental damage potential shall be indicated.

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\(^2\) 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.
Finally, by 2015 flood risk management plans must be drawn up for these zones. These plans are to include measures to reduce the probability of flooding and its potential consequences. They will address all phases of the flood risk management cycle but focus particularly on prevention (i.e. preventing damage caused by floods by avoiding construction of houses and industries in present and future flood-prone areas or by adapting future developments to the risk of flooding), protection (by taking measures to reduce the likelihood of floods and/or the impact of floods in a specific location such as restoring flood plains and wetlands) and preparedness (e.g. providing instructions to the public on what to do in the event of flooding). Due to the nature of flooding, much flexibility on objectives and measures are left to the Member States in view of subsidiarity.

These steps need to be reviewed every 6 years in a cycle coordinated and synchronised with the Water Framework Directive (WFD) implementation cycle. The first milestone included also the development of reporting formats by 2009 and the appointment of competent authorities in spring 2010.

1.6 Other relevant EU legislation for approaching the topics of the Joint Training

Legislation relevant for the preparation of the Preparing the River Basin Management Plan and the Program of Measures


• The Major Accidents (Seveso) Directive (96/82/EC)


• Common Agricultural Policy

2. Useful references on practical guides or links to various web sites


EU LEGISLATION, GUIDELINES AND REPORTS

WATER


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/taiex/

3. Case studies/examples from EU Member States to illustrate practical situations or best practices that have been covered during the training

3.1 Implementation of the Urban Wastewater Treatment Directive in Romania

Mr. Gheorghe Constantin introduced the importance of implementing UWWTD in Romania, justified by the fact that entire Romania is a sensitive area due to the Black Sea, presenting as well the challenges and the obstacles along the implementation process.

Romanian obligations in line with the UWWTD included:
• Designation of sensitive areas (sensitive water bodies) in accordance with three specific criteria, and review their designation every four years

• Identification of the relevant catchment areas of the sensitive areas and ensure that all discharges from agglomerations with more than 10 000 p.e. located within the catchment shall have more stringent than secondary treatment

• Establishment of less sensitive areas if relevant - it is not the case

• Establishment of a technical and financial programme for the implementation of the Directive for the construction of sewage collecting systems and wastewater treatment plants addressing treatment objectives within the deadlines set up by the Directive and the Accession Treaties

• Establishment systems of prior regulation or authorization for all discharges of urban wastewater

• Preparing monitoring programs for both discharges from urban wastewater treatment plants and receiving waters

• Ensuring information and reporting for the European Commission and the public.

Romania experienced numerous problems related to UWWT, such as lack of access to centralized water/wastewater services (less than 50% of population have access to centralized water/wastewater services), discharge of untreated water (almost 80% of wastewater) in natural receivers, poor water infrastructure, excessive fragmentation of water sector systems and services, inappropriate maintenance and operating services in most small and medium agglomerations, high specific water consumption (more than 350 l/inhabitant and day).

In addition, Romania had insufficient capacity to attract substantial funding for investment needs in majority of small and medium agglomerations, while the private sector has not been interested to invest in short term.

Needed wastewater infrastructure in Romania according to UWWT Directive was the following:

• Building new urban wastewater treatment plants

• Upgrading the existing urban wastewater treatment plants

• Upgrading the existing local industry wastewater treatment plants

• Rehabilitation of the existing urban sewerage.

In Romania, the most demanding environmental sector is the water sector, covering:

• 19 billions Euro – total estimated investment costs for compliance with EU Water Directives

• App. 8.6 billions Euro needed by 2013 for water and wastewater, only 4 bil. available within SOP framework

• App. 9.5 billions Euro needed for implementation of Urban Wastewater Treatment Directive.
3.2 The development of the Directive Specific Implementation Plan (DSIP) for UWWTD in Romania

According to the presentation made by Mr. Gheorghe Constantin, the development of the Directive Specific Implementation Plan provided the basis for the establishment of the transitional periods to be granted by the EU. Implementation plan provided background for not complying with the EU acquis, established a staged schedule for compliance and commitment for its implementation.

Based on the Implementation plan, negotiated transition periods were the following:

- Till 31 December 2013 for collection of wastewater in 263 agglomerations (61,9 % from biodegradable load)
- Till 31 December 2018 for collection in 2346 agglomerations (38,1 % from biodegradable load)
- Till 31 December 2015, for urban wastewater treatment in 263 agglomeration with more than 10000 i.e. (including P and N removal)
- Till 31 December 2018, for urban wastewater treatment for 2346 agglomerations with less than 10000.

Implementation plan was developed under the coordination of the Ministry of the Environment, with the cooperation of all involved institutes and authorities. The plan included information on the: (i) obligations according to the UWWTD; (ii) existing situation; and (iii) proposed implementation and costs.

Romania considered three types of defining the agglomerations:

- Definition in the Implementation Plan
- Definition in the Master Plan
- Detailed boundaries in the Feasibility Study.

Information was also provided on the advantages of regionalization of water services - mainly driven by pre-accession programmes (FOPIP and ISPA), aiming for the best use of the available resources.

**Lesson learned:**

- Development of the wastewater infrastructure requires important financial resources
- Securing the financial resources requires a mixture of instruments provided by EU, national and local budget, IFIs and operators
- A careful planning could lead to a better ratio cost/benefits
- Tariff policy is a key issue for a sound investment
- Regionalization facilitates the investment.
3.3 Implementation of Drinking Water Directive (DWD) in Romania

Mr. Constantin presented the DWD requirements, the challenges and implementation status in Romania.

The requirements by the date of accession included the following activities:

- Monitoring the quality of drinking water: completed by December 2005
- Meeting the parametric values set forth in Annex I, Parts A and B - excepting those for which transition periods were obtained
- Implementation and compliance with the Compliance Plans

Proposed measures in problematic areas covered:

- Implementation of the Methodology for surveillance and control (Order of the Minister of Health no. 598/2003)
- Setting up the reference laboratory and the regional laboratories
- Improvement of the equipment endowment and training of the personnel from the monitoring labs
- Setting up the management system of the laboratory and data inspection
- Completion of the secondary legislation with the provisions on drinking water monitoring and on the registering of the labs that will monitor the quality of drinking water
- Implementation of the analytical quality system
- Technological improvements of the water treatment plants and of the distribution systems.

A considerable attention was given to the stakeholders and their implication in the implementation process, such as: producers and suppliers of drinking water and consumers of water from public water supply systems, public wells or bottled water.

The transition periods obtained by Romania are:

**By 31 December 2010**

- for Oxidisibility, Ammonium, Aluminum, Iron, Pesticides, Manganese for the localities of more than 100,000 inhabitants;
- for Oxidisibility and Turbidity for the localities with a population between 10,000 and 100,000 inhabitants;
- for Oxidability, for the localities of less than 10,000 inhabitants.

**By 31 December 2015**

- for Ammonium, Nitrates, Aluminum, Iron, Lead, Cadmium, Pesticides and Manganese for the localities with a population between 10,000 and 100,000 inhabitants.
• for Ammonium, Nitrates, Turbidity, Aluminum, Iron, Lead, Cadmium and Pesticides, for the localities of less than 10,000 inhabitants.

The cost of implementation of the Drinking Water Directive in Romania is estimated at 5,608.1 million Euro, for the period 2004-31.12.2015.

Lesson learned:

Implementation of the Drinking Water Directive will require a good coordination and planning
Existing information on drinking water quality and drinking water systems should be collected
There is a need to carry out a study on the needs for complying with the directive in order to assess the necessary changes/improvements
Correlation with Water Framework Directive and Urban Waste Water Directives should be carried during the development of the planning process.

IV. Highlights from the training

Synergies between the Water Management and Strategic Planning and Investments Working Groups

The synergy and the need to integrate the efforts and focus of the two WGs is justified by the need to develop Directive Specific Implementation Plans for each of the water related directives and to take a stepwise approach in developing investment and financing plans based on sectoral policy planning documents.

Application of ECRAN check list in strategic planning in water sector

National environmental priorities: priority problems, EU strategic documents influencing national priorities and strategies and plans to address national priorities.

Planning of approximation process: transposition plans, implementation plans, institutional plans, financing plans.

Requirements for planning documents as part of acquis: foreseen in the acquis as obligatory, foreseen in the acquis as optional, depending on the selected way for implementation of requirements which may require development of additional supporting documents (i.e., plan foreseen under LCP requirements if postponing targets option is used).

Planning documents depending on selected strategy for negotiations: expected transitional periods and Directive Specific Implementation Plans to cover each transitional request.

Horizontal planning documents to support implementation of institutional and sectoral policies: Institutional Development Plans, Environmental Investment and Financing Plans.

WFD legal requirements
• Take a new approach to water protection – the integrated river basin approach - basin-wide scale, addressing all pressures and impacts (Article 5, Article 6, Annex II, Annex III)
• Use ecological health as the indicator of success (Article 2 (22), Annex V)
• It covers all water categories; rivers, lakes, groundwater as well as coastal and transitional waters
• To make operational the monitoring networks by 2006 (Article 8)
• To identify by 2009 a PoM for achieving the WFD objectives cost-effectively (Article 11, Annex III)
• To produce and publish RBMPs for each RBD including the designation of heavily modified water bodies, by 2009 (Article 13, Article 4.3)
• To implement water pricing policies by 2010 (Article 9)
• To make the measures of the programme operational by 2012 (Article 11)
• To implement the PoM and achieve the environmental objectives by 2015 (Article 4).

WFD planning process:

The WFD planning process need to be precise and consider: the complexity of the WFD and its implementation, the necessity to anticipate the obligatory deadlines, the numerous interlinked tasks, the obligation of involvement of a large number of stakeholders, the integration of several levels: EU, national, districts and basins.

(2) Perfect understanding of the planning and management requirements of the WFD facilitates the establishment of RBMP and the PoM, and hence contributes to the establishment of WFD overall environmental goals

(3) The river basin planning process is followed by PoM implementation

(4) The planning process together with the implementation of the PoM is referred to as river basin management.

Nitrates Directive requirements

• Water monitoring
• Identification of polluted waters
• Identification of waters which could be affected by pollution if measures are not taken
• Designation of Nitrates Vulnerable Zones (NVZs), review (4 years)
• Designation of NVZs not required if an AP is implemented on the whole territory
• Establish a code of good agricultural practice (CGAP)
CGAP to be implemented by farmers on a voluntary basis

Implementation of the measures of the GGAP: mandatory in NVZs

Measures to be included: at least those in Annex II

Design and implement action programmes in NVZs

Measures: at least those in Annex III and CGAP

Assess effectiveness of action programmes

Report on directive implementation to the EC every four years

**ND policy implications**

- Nitrates Directive is a key instrument to protect water from nitrate pollution from agricultural sources. Significant progress has been made in implementation in the recent years.
- Further progress are required in Nitrates Vulnerable Zone Designation and Action Programme implementation.
- WFD and CAP – two major policies in Europe.
- Timetables are not matching, but “windows of opportunity” exist.

**EU Flood Directive requirements**

- Undertake a Preliminary Flood Risk Assessment (PFRA) by 22 December 2011, to identify areas of existing or foreseeable future potentially significant flood risk (referred to as ‘Areas for Further Assessment, or ‘AFA’s).

- Prepare flood hazard and risk maps for the AFAs by 22 December 2013, and,

- Prepare flood risk management plans by 22 December 2015, setting objectives for managing the flood risk within the AFAs and setting out a prioritised set of measures for achieving those objectives.

**Cost of measures vs costs to society due to floods damage**

Costs of prevention, protection and preparedness can be substantial ...

... but so are the costs to society of the damage caused by floods!

It makes economic sense to select measures which have multiple benefits for society – for the environment as well as for flood protection!
Measures that are robust and flexible in view of the uncertainties surrounding the effects of climate change should also be favoured ("no-regret").

Essential elements of an environmental investment plan

- Clearly defined objectives (specific, measurable, realistic and time-bound, complying with EU approximation needs)
- State of related infrastructure
- Needed investment actions to develop new or upgrade the existing infrastructure complying with environmental requirements
- Cost estimates of achieving the objectives (at project level)
- Criteria for project selection and priority setting
- Ranked list of projects.

Essential elements of an environmental financing plan

- Financing sources and expected allocations by year
- Cost recovery potential
- Distribution of financial resources among sectors
- Matching investment needs and available or potential financial resources
- Policy to close the gap if any
- Clearly defined terms of financing, co-financing requirements, maximum/minimum level of support
- Affordability criteria to “accept” investments
- Eligible project types
- Eligible beneficiaries
- Well-documented principles, rules and operating procedures for project cycle management.

Prioritization criteria

The environmental investments can be ranked using prioritization criteria which can be grouped in categories such as:

- Environmental Impact
- Black Sea Impact
• Finance-ability
• Technology efficiency
• Compliance

Affordability criteria

Affordability criteria are essential to “accept” investments. Key points of discussion referred to:

• There is no EU wide affordability level established in EU
• It is not expected that EC will develop a methodology which would fit for all
• Political decision on affordability
• Assessing affordability of water services is part of the wider assessment of disproportionate costs of the Programme of Measures
• At this stage for the countries in the region most important is affordability in household sector

Sustainable cost recovery

• Notion of sustainable cost recovery instead of full cost recovery
• In most of countries full cost recovery can be achieved only in the future
• Each new investment has to achieve at least sustainable cost recovery which includes first of all recovery of operational and maintenance costs
• Investment costs to the cost recovery mechanism shall be added when affordability limits allow

Recommendations for environmental investment and financing planning

• Management of the approximation process, including meta-planning
• Include investment and financing planning
• Use it for EU assistance planning
• Make good coordination with national financing sources
• Cooperation among units in the Ministry, other Ministries, regional and local authorities.

2. Outputs during individual/group work.

Exercise focused on identification of strategic planning documents using ECRAN check lists:
List of documents based on “part of acquis (mandatory, optional, depending on selected way of implementation)” criteria included:

<table>
<thead>
<tr>
<th>Directive</th>
<th>Plan. Check list 3</th>
<th>Integration</th>
</tr>
</thead>
</table>
| WFD       | 1. River basin management plans (number???)  
            2. Programmes of measures (specified in the RBMP)  
            3. Programmes for the monitoring of water status |             |
| UWWTD     | 1. Programme for implementation of the directive  
            2. Action Programme (for longer implementation periods as part of the Programme for implementation of the directive) |             |
| MSD       | 1. Marine strategy/ initial assessment  
            2. Programme of measures  
            3. Plan of action  
            4. Monitoring Programme |             |
| FD        | 1. Flood Risk Management Plans (number???) |             |
| DWD       | 1. Plan for the necessary remedial action |             |
| ND        | 1. Action programmes (for all country or in respect of designated vulnerable zones)  
            2. Monitoring programme |             |

Further discussion during the exercise focused on “Planning documents depending on selected strategy for negotiations (e.g., Directive Specific Implementation Plans)” criteria. Results of the discussion are presented in the table above:
Discussion during the exercise also focused on the necessity of national planning documents based on “Strategies and plans to address national priorities” criteria and exchange of information regarding situation in beneficiary countries developing national Water Strategies.

3. Conclusions for further improvements in the relevant field

Following the intense discussions on the margin of the presentations made at the joint training, the conclusions addressing further improvements needs include:

(i) Further support for the beneficiary countries to strengthened their national capacities in developing and implementing the national strategic documents in response of the complex process on implementing the EU Directives in the water sector

(ii) The WFD is a complex, comprehensive and demanding directive, which imposes close and timely coordination with other EU Directives, such as ND, FD, UWWTD

(iii) Concentrating resources on the most expensive sectors, such as the urban wastewater collection and treatment

(iv) Meeting EU requirements for the lowest cost

(v) Public funds allocated for priority public infrastructure

(vi) Long term planning to improve investment process

(vii) Managing costs, not only raising financing:

a. Regionalisation
b. Increasing efficiency

c. PUCs reform

(viii) Further analysis of affordability and social acceptability

(ix) Training in cost benefit analysis as a tool for investment management

(x) Shift towards more cross cutting issues in enforcement to avoid duplication and waste of resources

(xi) Negotiation will be performed directive by directive therefore positions including strategic planning has to be prepared for each directive. But it does not necessary mean that strategic documents have to prepared for each directive separately. Where possible and feasible, the same strategic document can take several directives into consideration.

(xii) Using good examples available in the region (e.g., regionalization in Croatia, tariffs reform in Macedonia)

V. Evaluation

Annexes