

ANNEX I: ROADMAPS TO IMPLEMENT EACH PA ACTION

Table 1: Roadmap to implement an action

ROADMAP FOR ACTION 1			
<i>EUSDR Target to which the Roadmap is related</i>	1. Achieve the management objectives set out in the Danube River Basin Management Plan		
<i>EUSDR Action to which the Roadmap is related</i>	1. Implementation of the Danube River Basin Management Plan	<i>Deadline (year) for finalising implementation of the EUSDR Action</i>	2021 and onwards
<i>Milestones</i>	<i>Definition of milestone</i>	<i>Planned deadline for achieving the milestone</i>	<i>Responsible actors for the milestone</i>
<i>Milestone 1</i>	Interim Report on the Implementation of the Joint Programme of Measures	2012 - completed	ICPDR
<i>Milestone 2</i>	Activities to support the alignment of funding and the support of the JPM of the Danube River Basin Management Plan – Development of Alignment of funding document	2021 and onwards	PA4
<i>Milestone 3</i>	Update of the Danube Basin Analysis Report	First half of 2014 - completed	ICPDR
<i>Milestone 4</i>	2nd Danube River Basin Management Plan	End 2015 - completed	ICPDR
<i>Milestone 5-6-7</i>	Interim Report on the Implementation of the Joint Programme of Measures /Update of the Danube Basin Analysis Report /3rd Danube River Basin Management Plan	2018/2019/2021	ICPDR

ROADMAP FOR ACTION 2

<i>EUSDR Target to which the Roadmap is related</i>	3.Elaborate a Danube Delta Analysis Report as a step towards completion of the Delta management Plan 5.Elaborate, adopt and implement the sub-basin management plans, such as Sava, Tisza and Prut sub-basins		
<i>EUSDR Action to which the Roadmap is related</i>	2.Strengthening the cooperation at sub-basin level	<i>Deadline (year) for finalising implementation of the EUSDR Action</i>	2021 and onwards
<i>Milestones</i>	<i>Definition of milestone</i>	<i>Planned deadline for achieving the milestone</i>	<i>Responsible actors for the milestone</i>
<i>Milestone 1</i>	<i>Implementation of the 1st ITRBM Plan</i>	<i>2021 and onwards</i>	<i>UA, SK, HU, RO, RS</i>
<i>Milestone 2</i>	<i>Interim report on the 1st ITRBM Plan – please clarify this (report on the implementation of the 1ST JPM of the Tisza Plan)</i>	<i>End 2013 - completed</i>	<i>UA, SK, HU, RO, RS, (ICPDR Tisza Group)</i>
<i>Milestone 3</i>	<i>Strengthening of cooperation in the Tisza River Basin (Establish relevant institution and set up project consortium)</i>	<i>2021 and onwards</i>	<i>EUSDR PA4, ICPDR, CC</i>
<i>Milestone 4</i>	<i>Development of the 2nd ITRBM Plan</i>	<i>2021</i>	<i>HU, RO, RS, SK, UA, (ICPDR Tisza Group)</i>
<i>Milestone 5</i>	<i>Danube Delta Sub-basin Analysis Report</i>	<i>2016</i>	<i>MD, RO, UA, ICPDR</i>
<i>Milestone 6</i>	<i>Danube Delta Management Plan</i>	<i>2021</i>	<i>RO, MD, UA</i>
<i>Milestone 7</i>	<i>Prut Management Plan</i>	<i>2016 and onwards</i>	<i>MD, RO, UA</i>
<i>Milestone 8</i>	<i>Implementation of the Sava River Basin Management Plan</i>	<i>End of 2014 and onwards</i>	<i>ISRBC</i>
<i>Milestone 9</i>	<i>Update of the Sava River Basin Analysis</i>	<i>2017</i>	<i>ISRBC</i>
<i>Milestone 10</i>	<i>Development of the 2nd Sava River Basin Management Plan</i>	<i>2019</i>	<i>ISRBC</i>

ROADMAP FOR ACTION 3

<i>EUSDR Target to which the Roadmap is related</i>	1. Achieve the management objectives set out in the Danube River Basin Management Plan		
<i>EUSDR Action to which the Roadmap is related</i>	3. Supporting the information collection systems already developed by ICPDR	<i>Deadline (year) for finalising implementation of the EUSDR Action</i>	2021 and onwards
<i>Milestones</i>	<i>Definition of milestone</i>	<i>Planned deadline for achieving the milestone</i>	<i>Responsible actors for the milestone</i>
<i>Milestone 1</i>	Update and maintenance of ICPDR databases	2021 and onwards	ICPDR
<i>Milestone 2</i>	Joint Danube Survey 3	30/09/2014 - completed	ICPDR
<i>Milestone 3</i>	Joint Tisza Survey 2	2021	
<i>Milestone 4</i>	INSPIRE compliant DanubeGIS	2015 - completed	ICPDR
<i>Milestone 5</i>	Establishment and completion of the SavaGIS	2015 - completed	ISRBC, ICPDR
<i>Milestone 6</i>	Joint Danube Survey 4	2021	ICPDR
<i>Milestone 7</i>	Update of the SavaGIS	2021 and onwards	ISRBC

ROADMAP FOR ACTION 4

<i>EUSDR Target to which the Roadmap is related</i>	1. Achieve the management objectives set out in the Danube River Basin Management Plan		
<i>EUSDR Action to which the Roadmap is related</i>	4. Boosting major investments in building and upgrading urban wastewater treatment facilities	<i>Deadline (year) for finalising implementation of the EUSDR Action</i>	2021 and onwards
<i>Milestones</i>	<i>Definition of milestone</i>	<i>Planned deadline for</i>	<i>Responsible actors for the</i>

		<i>achieving the milestone</i>	<i>milestone</i>
<i>Milestone 1</i>	Overview on the progress in the measure implementation in urban waste water sector (Interim Report on the Implementation of the Joint Programme of Measures)	2012and 2018	ICPDR
<i>Milestone 2</i>	Financial planning for programme implementation – organising donor conference, event	2017-2019	PA4
<i>Milestone 3</i>	Technology developments –study preparation, field trips, stakeholder conference and workshops, set up project consortium,workshop on technology development (e.g. back to back with PM EG)	2017/2018	PA4

ROADMAP FOR ACTION 5			
<i>EUSDR Target to which the Roadmap is related</i>	2.Reduce the nutrient levels in the Danube River to allow the recovery of the Black Sea ecosystems to conditions similar to 1960s		
<i>EUSDR Action to which the Roadmap is related</i>	5.Establishing the buffer strips along the rivers and promotion of alternative collection and treatment of waste waters in small rural settlements	<i>Deadline (year) for finalising implementation of the EUSDR Action</i>	2021 and onwards
<i>Milestones</i>	<i>Definition of milestone</i>	<i>Planned deadline for achieving the milestone</i>	<i>Responsible actors for the milestone</i>
<i>Milestone 1</i>	Survey of the situation on buffer zones	first half of 2013	HU, PA4
<i>Milestone 3</i>	Survey of the situation on management of solid waste in small rural settlements	first half of 2013	HU, PA4
<i>Milestone 4</i>	Survey of the situation on alternative collection and treatment wastewater in small rural settlements	2013	HU, PA4
<i>Milestone 5</i>	Promoting best practices in WWT and Programme of Measures and wastewater treatment for small settlements		
<i>Milestone 6</i>	Implementation projects and promotion of site-specific and eco-friendly waste water treatment for less than 2000 PE settlements (e.g. SanDanube original milestone 6	2021 and onwards	

ROADMAP FOR ACTION 6

<i>EUSDR Targetto which the Roadmap is related</i>	2.Reduce the nutrient levels in the Danube River to allow the recovery of theBlack Sea ecosystems to conditions similar to 1960s		
<i>EUSDR Action to which the Roadmap is related</i>	6.Improvement of the dialogue and cooperation between agriculture and environment sectors aimed at reduction of agricultural pollution	<i>Deadline (year) for finalising implementation of the EUSDR Action</i>	2021 and onwards (continuous)
Milestones	<i>Definition of milestone</i>	<i>Planned deadline for achieving the milestone</i>	<i>Responsible actors for the milestone</i>
Milestone 1	Strengthen the cooperation between agriculture and water authorities (workshops and dissemination materials)	2021 and onwards	SK, PA4, ICPDR
Milestone 2	Promotion of the implementation of good agricultural practices–organising workshops, events, development guidance document, best farmer’s prize)	2021 and onwards	ICPDR , Danube countries, PA4

ROADMAP FOR ACTION 7

<i>EUSDR Targetto which the Roadmap is related</i>	2.Reduce the nutrient levels in the Danube River to allow the recovery of the Black Sea ecosystems to conditions similar to 1960s		
<i>EUSDR Action to which the Roadmap is related</i>	7.Legislating the limit of phosphates in detergents	<i>Deadline (year) for finalising implementation of the EUSDR Action</i>	2017and onwards
Milestones	<i>Definition of milestone</i>	<i>Planned deadline for achieving the milestone</i>	<i>Responsible actors for the milestone</i>
Milestone 1	Reduction of phosphate content in detergents supported by national legislation	2012 and onwards	Danube countries
Milestone 2	Policy response on the Overview Report- survey on the reduction of P	2013/2017 onwards	PA4

	free detergents. Non-EU countries in the focus – develop a questionnaire jointly and meeting in Zagreb and discuss in the frame of the Sava Commission.		
Milestone 3	Scenario calculation for P reduction in laundry and dishwasher detergents and incorporation in 2 nd DRBM Plan	2015 - completed	ICPDR

ROADMAP FOR ACTION 8

<i>EUSDR Target to which the Roadmap is related</i>	1. Achieve the management objectives set out in the Danube River Basin Management Plan		
<i>EUSDR Action to which the Roadmap is related</i>	8. Treating the hazardous substances and contaminated sludge with the best available technology and developing the remediation measures	<i>Deadline (year) for finalising implementation of the EUSDR Action</i>	2021 and onwards
Milestones	<i>Definition of milestone</i>	<i>Planned deadline for achieving the milestone</i>	<i>Responsible actors for the milestone</i>
Milestone 1	Inventory of polluted sites by upgrading the 'hot spot' inventory	2014 and end 2017	ICPDR
Milestone 2	List of activities and research needs	2015 and onwards	ICPDR, PA4
Milestone 3	Implementation of projects on tailing management facilities	2021	ICPDR, Danube countries,
Milestone 4	Knowledge transfer (e.g. cooperation with JRC)	continuous	EU

ROADMAP FOR ACTION 9

<i>EUSDR Target to which the Roadmap is related</i>	1.Achieve the management objectives set out in the Danube River Basin Management Plan		
<i>EUSDR Action to which the Roadmap is related</i>	9.Assuring the proper control and progressive substitution of problematic substances for Danube Region	<i>Deadline (year) for finalising implementation of the EUSDR Action</i>	2014and onwards
<i>Milestones</i>	<i>Definition of milestone</i>	<i>Planned deadline for achieving the milestone</i>	<i>Responsible actors for the milestone</i>
<i>Milestone 1</i>	Testing of the EU Guidance document on EQS Directive	Dec 2012 - completed	ICPDR
<i>Milestone 2</i>	Inventory on emissions, discharges and losses of priority substances	End of 2017	ICPDR
<i>Milestone 3</i>	Update of the Danube River Basin specific substances	End of 2021	ICPDR
<i>Milestone 4</i>	Basic survey on the level of pharmaceuticals in the water with the aim to set up consortium and prepare the project).	2021	PA4

ROADMAP FOR ACTION 10

<i>EUSDR Target to which the Roadmap is related</i>	4.Secure viable populations of Danube sturgeon species		
<i>EUSDR Action to which the Roadmap is related</i>	10.Reducing water continuity interruption for fish migration in the Danube River Basin	<i>Deadline (year) for finalising implementation of the EUSDR Action</i>	2020
<i>Milestones</i>	<i>Definition of milestone</i>	<i>Planned deadline for achieving the milestone</i>	<i>Responsible actors for the milestone</i>
<i>Milestone 1</i>	Revision and update of the ICPDR ecological prioritisation approach for addressing longitudinal continuity interruptions in the Danube River Basin	2015 - completed	ICPDR, Danube countries
<i>Milestone 2</i>	Application of the updated approach for 2nd Danube River Basin	2015 - completed	ICPDR, Danube countries

	Management Plan		
Milestone 3	Feasibility study for restoring continuity at the Iron Gate dams (elaboration of a ToR for the feasibility study, investigating potential funding sources for implementation of the study)	2016 and onwards	RO, RS, ICPDR
Milestone 4	To carry out a sediment balance analysis to identify appropriate measures ensuring a balanced sediment transport on the Danube basin-wide scale (Danube Sediment Project) t	2017 and onwards	AT, HU, RO, ICPDR
Milestone 6	Study on the improvement of longitudinal continuity of rivers with operational changes in existing installations and low cost improvements in the light of the specific needs of various migratory fish species and taxa (coordination with PA6): Measures for ensuring fish migration at transversal structures (ICPDR Technical paper); Supporting the implementation of Danube Sturgeon Task Force 2020 (e.g. REVISTUR project)	2011, 2021 and onwards	ICPDR, HU, Danube countries
Milestone 7	Examination of the biodiversity and environmental status of sediment, water and biota in the Sava River Basin	2020	ISRBC

ROADMAP FOR ACTION 11

EUSDR Target to which the Roadmap is related	1. Achieve the management objectives set out in the Danube River Basin Management Plan		
EUSDR Action to which the Roadmap is related	11. Promoting the measures to limit water abstraction	Deadline (year) for finalising implementation of the EUSDR Action	2015 and onwards
Milestones	Definition of milestone	Planned deadline for achieving the milestone	Responsible actors for the milestone
Milestone 1	Collection of good practice examples dealing with limiting water abstraction	2021	HU, PA5, PA4, GWP DS task Force
Milestone 2	Dissemination of results of the best practices and policies for decision-makers and stakeholders	2021	HU, PA4
Milestone 4	Pilot projects based on best practices of milestone n°1 and promotion	continuous	Project leaders

ROADMAP FOR ACTION 12

<i>EUSDR Target to which the Roadmap is related</i>	1.Achieve the management objectives set out in the Danube River Basin Management Plan		
<i>EUSDR Action to which the Roadmap is related</i>	12.Strengthening awareness and facilitating exchange of good practice in integrated water management issues	<i>Deadline (year) for finalising implementation of the EUSDR Action</i>	<i>continuous</i>
<i>Milestones</i>	<i>Definition of milestone</i>	<i>Planned deadline for achieving the milestone</i>	<i>Responsible actors for the milestone</i>
<i>Milestone 1</i>	Danube Day annual events held in 14 countries	continuously every year for Danube Day	ICPDR, Danube countries
<i>Milestone 2</i>	Re-launch of the ICPDR Website as a tool to communicate accessible and appealing information on RBM efforts of the ICPDR as a contributing organization in implementation of some PAs of EUSDR. Link to the Danube region website	June 2012 for re-launch of the ICPDR website - completed End of 2012 for including and linking EUSDR items - completed	ICPDR, PA4
<i>Milestone 3</i>	Organisation of the Danube Art Master as a basin-wide competition among schools and youth care facilities	June of every year	ICPDR
<i>Milestone 4</i>	Information for the broad public on the progress report of the DRBMP implementation through an appropriate article in Danube Watch	15 December 2012 - completed	ICPDR, PA4
<i>Milestone 5</i>	Information exchange on the progress, achievements and current events of EUSDR PA4 to strengthen of general awareness	continuous	PA4, ICPDR
<i>Milestone 6</i>	Updated solutions in the assessment of new sustainable human development activities towards the Danube Region development (in accordance with the Article 4.7 of the WFD – 2000/60/EC) - workshop	2021	PA4

ROADMAP FOR ACTION 13

<i>EUSDR Targetto which the Roadmap is related</i>	1.Achieve the management objectives set out in the Danube River Basin Management Plan		
<i>EUSDR Action to which the Roadmap is related</i>	13.Promoting measures aimed at knowledge deficit reduction, developing and transferring tools, methods and guidelines concerning the safeguarding of drinking water supply	<i>Deadline (year) for finalising implementation of the EUSDR Action</i>	<i>continuous</i>
<i>Milestones</i>	<i>Definition of milestone</i>	<i>Planned deadline for achieving the milestone</i>	<i>Responsible actors for the milestone</i>
<i>Milestone 1</i>	Identify responsible authorities, enterprises, associations responsible for drinking water supply	End of 2012 - completed	SK
<i>Milestone 2</i>	Develop joint actions with responsible authorities, enterprises, associations responsible for drinking water supply including transboundary issues on shared water resources (workshops organised in 2013 and 2015)	2013– completed in 2015	SK, suppliers' umbrella organizations
<i>Milestone 3</i>	Implementation of joint actions with responsible authorities, enterprises, associations responsible for drinking water supply	continuous	Danube countries and suppliers, BDCP

ROADMAP FOR ACTION 14

<i>EUSDR Targetto which the Roadmap is related</i>	3.Elaborate a Danube Delta Analysis Report as a step towards completion ofthe Delta management Plan		
<i>EUSDR Action to which the Roadmap is related</i>	14.Strengthening the Integrated Coastal Zone Management and Maritime Spatial Planning practices on the Western shores of the Black Sea	<i>Deadline (year) for finalising implementation of the EUSDR Action</i>	<i>2013and onwards</i>
<i>Milestones</i>	<i>Definition of milestone</i>	<i>Planned deadline for achieving the milestone</i>	<i>Responsible actors for the milestone</i>
<i>Milestone 1</i>	Development of specific project regarding the improvement of the	2012	RO

	Integrated Coastal Zone Management in the Black Sea Region		
<i>Milestone 2</i>	Provide contribution to the development of the ICZM Strategy for the Black Sea	2021 and onwards	RO, BG, UA
<i>Milestone 3</i>	Development of a project proposal concerning Black Sea marine environment protection considering the Marine Strategy Framework Directive and using the Maritime Spatial Planning	2021 and onwards	RO