



## **SOLID WASTE MANAGEMENT IN CROSS-BORDER RURAL AND COASTAL AREAS OF SOUTH EASTERN EUROPEAN REGION**

# **Process Paper No. 3**

Development and dissemination of pilot measures and policy recommendations for the pilot regions of Adriatic Coast, Sharra Mountain and river catchment of Tara - Drina - Sava





Published by:  
Open Regional Fund for South East Europe – Modernisation of Municipal Services (ORF MMS)

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Layout:  
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Printing:  
Print house Evropa 92 – Kochani, Macedonia

Skopje, June 2016.

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# 1. BACKGROUND

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The sub-project “Solid Waste Management in cross-border rural and coastal areas of South Eastern European region (SWMRCA)” was initiated with the aim to improve the conceptual and organisational framework conditions for integrated solid waste management in the rural and coastal areas. Its specific goals are to assess the cross-border adverse environmental and economic impacts and to develop models for integrated solid waste management that are environmentally effective and economically affordable.

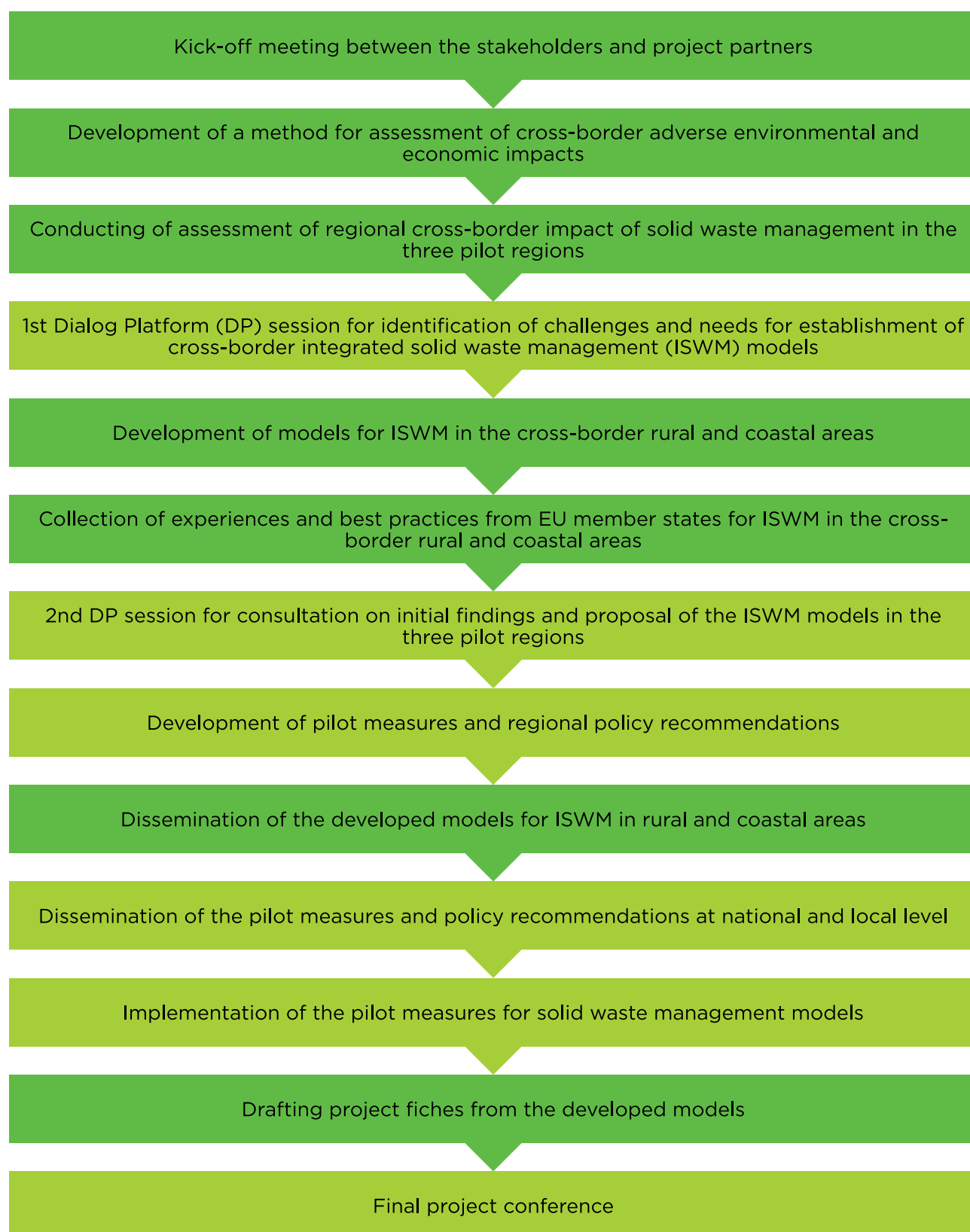
The SWMRCA sub-project is supported by the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Government of Switzerland through the GIZ Open Regional Fund for South East Europe - Modernisation of Municipal Services (ORF MMS). The implementation partners are the Regional Rural Development Standing Working Group (SWG) and the Network of Associations of Local Authorities of South-East Europe (NALAS).

The sub-project covers three cross-border pilot regions: the Adriatic Sea coastal region (Albania, Montenegro, Bosnia and Herzegovina, and Croatia); the mountainous region of Sharra Mountain (Albania, Kosovo and Macedonia); and the region of the river catchment Tara - Drina - Sava which consists of two sub-regions Tara - Drina (Montenegro, Bosnia and Herzegovina, and Serbia) and Drina - Sava (Bosnia and Herzegovina, Serbia, and Croatia). The NALAS region covers the Adriatic Sea coastal area while the Sharra and Tara-Drina-Sava represent SWG regions.

The project partner network includes Local Government Associations (LGAs) - members of NALAS from 4 countries: Albanian Association of Municipalities; Union of Municipalities of Montenegro; Association of Municipalities and Cities of the Federation of Bosnia and Herzegovina, and Association of Municipalities of the Republic of Croatia. Other stakeholders are: Ministries of Agriculture and Rural Development; Ministries of Environment; Area Based Development Approach stakeholder groups within the SWG structure in the targeted areas (consisted of municipalities, civil society organisations (CSOs) and the private sector)); 41 Municipalities in pilot areas (32 in SWG pilot areas (6 in Sharra region; 26 in Tara - Drina - Sava) and 9 in NALAS coastal area)); other CSOs, private sector, donor agencies, experts, academia, media and general population in the pilot areas.

The major sub-project activities and process flow leading to the achievement of the above mentioned objectives are presented in Figure 1.

**Figure 1: Major activities and process flow of SWMRCA sub-project**



The overall process related to the development and dissemination of the pilot measures and policy recommendations comprised a range of activities which are highlighted in light green colour in the above Figure. These activities are at the focus of this Paper and their main aspects are further presented herein.



## 2. METHODOLOGY

### 2.1 PROCESS OF DEVELOPING AND DISSEMINATING PILOT MEASURES AND POLICY RECOMMENDATIONS

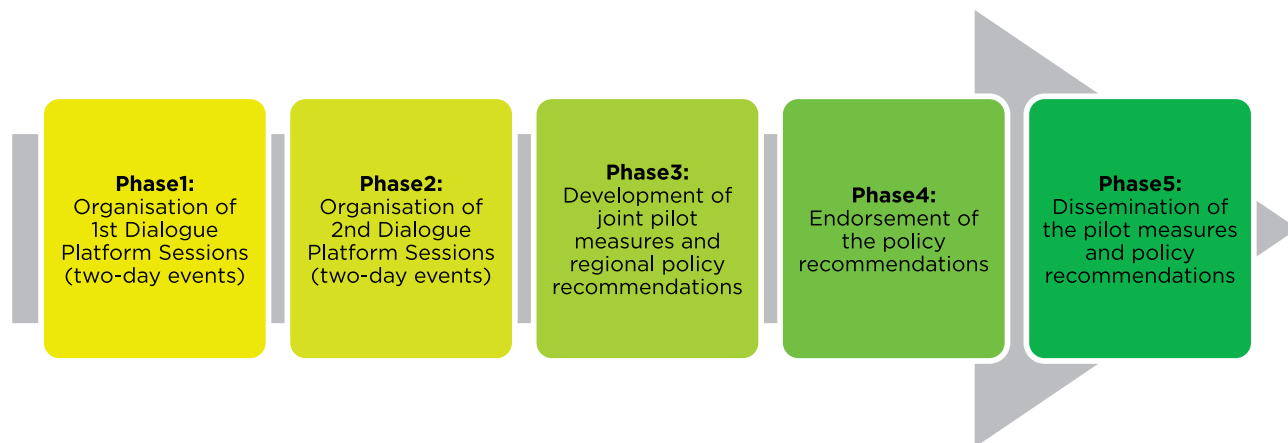
The pilot measures and policy recommendations were derived with the aim to enable pilot regions and countries involved to harmonise their approaches and use synergies in preventing marine litter/floating debris and addressing their sources. They build upon the models for Integrated Solid Waste Management (ISWM) and empower their cross-border implementation.

The policy recommendations are targeting national level, and propose changes in the policies to provide enabling environment, especially considering the cross-border context where inter-government agreement is a pre-condition.

The roles of the implementing partners have been highly instrumental in pursuing the project goals. The SWG Secretariat manages the SEE network of Ministries of Agriculture and Rural development which in the case of Bosnia and Herzegovina, and Serbia cover the sector Environment as well. From the other side, the NALAS Secretariat manages the network of LGAs which affiliate the Local Government Units (LGUs) and are led by Majors. By this the project network had the access to the main decision makers at local (Mayors) and national level (Ministers) in the SEE region.

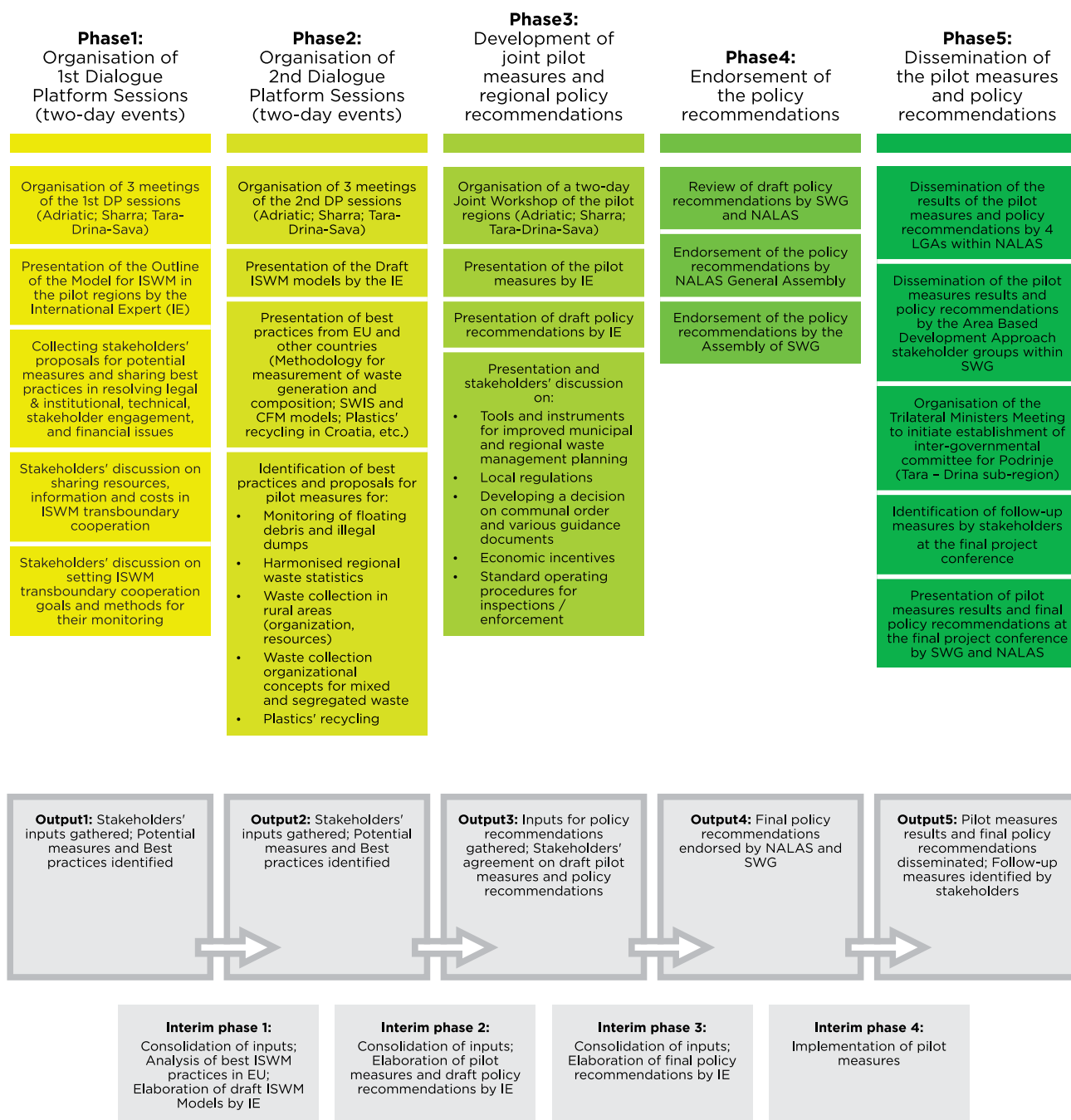
The process for developing the pilot measures and policy recommendations consisted of five main phases which are presented in Figure 2.

**Figure 2: Process of developing and disseminating pilot measures and policy recommendations**



A more detailed snapshot of the key phases is displayed in Figure 3, and it is followed by a brief presentation of their aims and contents.

**Figure 3: Development and dissemination of pilot measures and policy recommendations for the pilot regions of Adriatic Coast, Sharra Mountain and river catchment of Tara-Drina-Sava**





## 2.2 KEY PHASES OF THE PROCESS FOR DEVELOPING AND DISSEMINATING PILOT MEASURES AND POLICY RECOMMENDATIONS FOR THE PILOT REGIONS

Main feature of the process for development of pilot measures and policy recommendations was its strong emphasis on a multi-level and multi-stakeholder participatory approach, in particular within the 1st and the 2nd Dialogue Platform and the Joint Workshop. This approach enabled active involvement of the stakeholders - as the most competent experts on the actual situation, needs and constraints - and intensive gathering of their experiences, best practices and proposals for solutions as core inputs in the design of the measures and recommendations. In that way, the achievement of several important goals was facilitated. Some of these goals include clear identification of the root causes of the pollution problems, and designing of applicable solutions that both take into account the actual SWM capabilities of the pilot regions and are able to address the causes and the adverse effects of the waste mismanagement in an effective and efficient way. Importantly, the participatory approach enabled clear understanding of the necessity and the advantages of cross-border cooperation and laid the groundwork for harmonised planning and implementation of joint SWM policies, procedures and actions.

### 2.2.1 Phase 1: Organisation of 1st Dialogue Platform (DP) Sessions (two-day events)

A two-day session of the 1st Dialogue Platform was held in each pilot region: the NALAS Adriatic Coast region, the SWG Sharra region, and the SWG Tara-Drina-Sava region. Each of these platforms brought together several countries and municipalities - involved in a joint cycle of generating and/or receiving adverse environmental impacts - with the aim to share experiences, search for common solutions and discuss the ways for future cooperation in installing proper ISWM. In total, 108 participants (62 persons representing public institutions / organisations, thereof 7 persons delegated from national ministries, took part in the sessions.

The second day of the 1st Dialogue Platform sessions was dedicated to the development of the Model for ISWM in the pilot regions which simultaneously yielded initial proposals for potential measures and identification of best practices. The presentation of the Outline of the Model was followed by the discussions of four focus groups on possible solutions for improving the legal / institutional, technical, and stakeholder engagement aspects of the existing SWM practices, and on estimating the financial implications and options.

The concluding part of the sessions brought a presentation on the transboundary movement of waste and provided for two more focus group discussions. The topics included methods towards preventing the occurrence of floating waste; stakeholders' discussion on sharing resources, information and costs in ISWM transboundary cooperation, and discussions on setting ISWM transboundary cooperation goals for the Memorandum of Cooperation to be signed by the involved pilot municipalities and ways of measuring the achievement of these targets.

Within the Interim phase 1 which followed the 1st Dialogue Platform, the outcomes from the discussions were analysed and consolidated by the International Expert. Along with the findings from the analysis of best ISWM practices in EU, they were incorporated into the draft ISWM Models for the pilot regions and have provided the first insights into the possible outline of the pilot measures and policy recommendations.

### 2.2.2 Phase 2: Organisation of 2nd Dialogue Platform Sessions (two-day events)

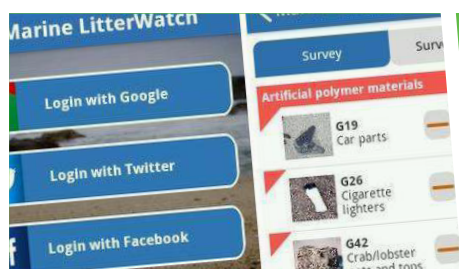
Each pilot region hosted a two-day session of the 2nd Dialogue Platform as a further step in the processes of eliciting and collecting stakeholders' inputs for the development of both the ISWM Model and the ISWM potential measures and best practices. The 2nd Dialogue Platform sessions were attended by 103 participants, representing local and national governments (thereof 3 representatives of national ministries), public and private waste management operators, CSOs, companies and media.

The introductory part delivered a presentation on best practices from EU and other countries to acquaint the participants with proven approaches that might be deployed in a genuine or tailored form in the pilot regions as well. These practices included among others the Methodology for measurement of waste generation and composition, which was developed in 2008 with GTZ support (GIZ since January 2011) in order to define the strategy of secondary raw materials in the sustainable development of the Republic of Serbia; Municipal Solid Waste Information System (SWIS) and Cost and Finance Model (CFM) which were developed with support of the GIZ ORF MMS Project "Solid Waste Data Collection in South-East Europe"; and plastics' recycling in Croatia.

Focus groups were organized to define the best practices and generate proposals for pilot measures in the areas of critical importance. The discussed issues and the measures and practices to address them are presented in Figure 4.



Figure 4: Measures and best practices to address critical ISWM areas



### Monitoring of marine litter / floating debris

- Physical survey: location selection; sample unit definition; collection, classification and quantification of debris; data entry and reporting
- Photo guide marine litter / floating debris categories
- Marine LitterWatch: mobile app developed by the European Environment Agency to provide support to European policy making
- The pilot municipalities can independently undertake monitoring of beach litter only



### Monitoring of illegal dumps

- Remote sensing: high resolution satellite images
- Physical survey: identification of survey zones and recruitment of surveyors; visual observation and recording of waste categories; record keeping and reporting
- TrashOut: mobile app to locate and report illegal dumps all around the world

ies)	239,950,000	266,880,000	258,450,000	245
ies)	239,200,000	265,110,000	257,890,000	244
3 countries)	:	:	:	:
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	9,714,196	14,078,621	11,085,573	15,
	886,715	944,320	1,082,985	1,
ublic	4,455,269	4,075,940	4,014,192	4,

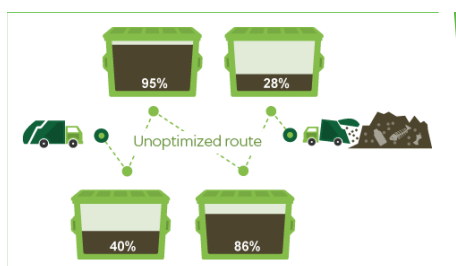
### Harmonised regional waste statistics

- Harmonized methodologies for data collection
- Reporting streams
- Mechanism for data validation
- Mechanism for data sharing



### Waste collection in rural areas (organization, resources)

- Segregated collection
- Drop-off sites
- Rural transfer station
- Involvement of rural communities / Interface with municipal operators
- Involvement of private recycling companies / Interface with rural communities
- Home composting



### Waste collection organizational concepts for mixed and segregated waste - calculation and planning of:

- Collection routes
- Length of trip and cost of fuel
- Number of containers
- Volume of trucks
- Location of transfer stations



### Plastics' recycling

- Segregated collection (drop-off sites)
- Establish extended producer responsibility (EPR) schemes
- Establish deposit refund schemes

The Interim phase 2 brought consolidation of the newly collected participants' inputs which enabled sketching of the first draft of pilot measures and draft policy recommendations by the International Expert.

### 2.2.3 Phase 3: Development of pilot measures and regional policy recommendations

A two-day joint Workshop was organised by NALAS and SWG with the aim to develop measures and regional policy recommendations for application of the models for integrated solid waste management in a cross border context. The Workshop gathered the representatives from the pilot municipalities and the public utility companies from seven pilot countries<sup>1</sup>, and the relevant stakeholders such as representatives of the central and local government institutions, public companies, private operators, national experts, civil society organization and Local Government Associations. In total 90 participants attended the Workshop, thereof 5 representing national ministries.

The institutional capacity building and the improvement of the efficiency of waste management services, which implies among others extension of collection services to currently non-covered rural areas, were the major goals in designing the policy recommendations. The subjects relevant to achieving these goals were introduced and discussed through a mixture of presentations, focus groups work and plenary dialogue. This exchange of information and proposals resulted in preliminary definition of the central policy recommendations and their scope as displayed in Figure 5.



1. Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Kosovo\*, and Serbia.

**Figure 5: Key policy recommendations and their scope discussed at the Joint Workshop**

#### **Planning reforms**

- Setting a regionally harmonised outline of plans
- Operating with accurate data on waste generation and composition
- Setting realistic waste collection service coverage
- Monitoring floating debris and illegal dumpsites
- Setting realistic objectives for extension of waste collection, improvement of recycling and clean-up of floating debris and illegal dumpsites

#### **Better local regulation**

- Introduce a waste collection permitting system for all operators (PUCs and private companies)
- Articulate the scope of service (waste streams, schedule, collection method – kerbside or drop of, primary segregation, vessels and excess waste etc.), responsibilities of service users and service providers and compliant mechanisms in local regulations and suitable guidance documents
- Establish a requirement upon permitting of new residential and commercial establishments to provide sufficient storage accommodation for waste and recyclable material

#### **Economic incentives**

- Introduce tax for non-compliant landfilling
- Design suitable deposit refund schemes for waste streams constituting the largest share in the floating debris (i.e. plastics)
- Weight, volume or lift based charges

#### **Good governance / enforcement**

- Dealing with complaints
- Preparations for inspections
- Site inspection
- Coordination with other relevant stakeholders
- Post-inspection documentation (e.g. reporting)
- Enforcement options: warning letter, notice and order to correct violation, notice of civil infraction (ticket)
- Court

Reaching a stakeholders' agreement on pilot measures and policy recommendations has marked an important milestone in the overall process of their development. Thereby, the kick-off of the implementation of the pilot measures was agreed upon, and consent was given for drafting a further elaborated version of the policy recommendations in the Interim phase 3.

#### **2.2.4 Phase 4: Endorsement of policy recommendations**

The draft policy recommendations were submitted to NALAS and SWG for a two-stage endorsement process. Firstly, within NALAS structure, they were presented, discussed and agreed within the Task Forces and at the meeting of the Committee of Liaison Officers (CLO). The complementary review was conducted within the SWG Working Groups, some of them involving Ministries of Environment, and at the SWG Assembly Session.



In the concluding stage, the reviewed versions were presented and endorsed at the NALAS General Assembly and the SWG Assembly Session.

The policy recommendations endorsed by the two organisations have only slight variation in the accent placed on the principles to be embedded in the local regulations on municipal waste management, which reflected the differing focus of their policies. While NALAS focused on the principles of sustainable tourism development, SWG has given equal importance to the principles of both sustainable tourism and rural development.



### **2.2.5 Phase 5: Dissemination of the pilot measures and policy recommendations**

The three pilot regions have initiated the implementation of the pilot measures and have conducted a number of actions for awareness raising and cleaning and monitoring of illegal dumpsites, marine litter and floating debris stranded at the beaches of reservoirs or riverbanks. The actions were organised by NALAS and SWG in cooperation with the country coordinators of “Let’s Do It! World”, a civic-led mass movement which aims to unite the global community, raise awareness and implement true change to achieve the final goal - a clean and healthy planet. The pilot municipalities from the seven participating countries actively participated in this initiative. The results of the actions have been publicised both in the media and the social networks. Further dissemination was done to the other municipalities by the four NALAS Local Government Associations from Albania,

Montenegro, Bosnia and Herzegovina, and Croatia, where each of them organised 2 dedicated events in its domicile country.

A high-level trilateral meeting of the Ministers for Agriculture / Environmental Protection from Bosnia and Herzegovina, Montenegro and Serbia was held in Vishegrad with the aim to review the results of the project specifically in the region of the river Drina. As a result, it was decided to initiate establishment of an inter-governmental committee for Podrinje (Tara – Drina sub-region) that would be dedicated to the preservation of the river Drina and the protection of the environment in this region.

The final project conference that was jointly organised by SWG and NALAS in June 2016 actually marked the concluding dissemination event within the project life cycle. The conference gathered high officials of the central and the local governments of the seven participating countries, experts, representatives of the donor community, NGOs, media and other stakeholders. On this occasion, the principal project results, experiences and messages were presented to the wider public.

At the same time, the conference gave impetus to further efforts for broad and intensive cross-border cooperation in implementing sound ISWM practices. Most important events in this sense were the identification of the follow-up measures, the official signing of the Memoranda for Cooperation between pilot municipalities for implementation of models for ISWM and the presentation of the Project Fiches for follow-up projects (e.g. Trilateral CBC in the Adriatic Coastal region).



### 3. KEY MESSAGES

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#### **Key message 1: Multi-level and multi-stakeholder participatory approach**

The strong accent on multi-level and multi-stakeholder participation, which characterised the preceding project phases, was maintained as well during the phases of developing and disseminating the pilot measures and the policy recommendations. In that way, the coherence of the course of actions, from the initial concept to the final results, was assured. The stakeholders' ownership of all segments of the process was a parallel result arising from this approach and has laid the necessary foundation for future independent and sustainable solid waste management in the pilot regions.

#### **Key message 2: Need of involvement of national level institutions and in particular Ministries of Environment**

The involvement of the national level institutions and in particular the Ministries of Environment is an indispensable precondition in enabling appropriate legal framework and subsequent implementation of the cross-border pilot measures and the policy recommendations.

#### **Key message 3: Institutionalisation of the inter-state cooperation**

Setting up a well-functioning inter-state cooperation is another crucial prerequisite in implementing the project outputs. The positive example of the International Sava River Basin Commission, which manages the implementation of the Framework Agreement on the Sava River Basin, provides convincing arguments in favour of institutionalisation as an optimal organisational form of inter-state cooperation. The principles of this proven practice were reflected in the initiative for establishing the inter-governmental committee for Podrinje (Tara – Drina sub-region).

#### **Key message 4: First cooperation between SWG and NALAS**

The cooperation between SWG and NALAS was for the first time established within the SWMRCA project based on a Memorandum for Understanding. This resulted among others in bringing together and establishing direct link between both regional networks of key decision makers: Mayors from one side and Ministers from the other side. Thereby, the flow of information between the national and local government level was facilitated and the designing of more coordinated and harmonised SWM policies and actions was supported.

#### **Key message 5: Pilot measures can raise awareness and involve people**

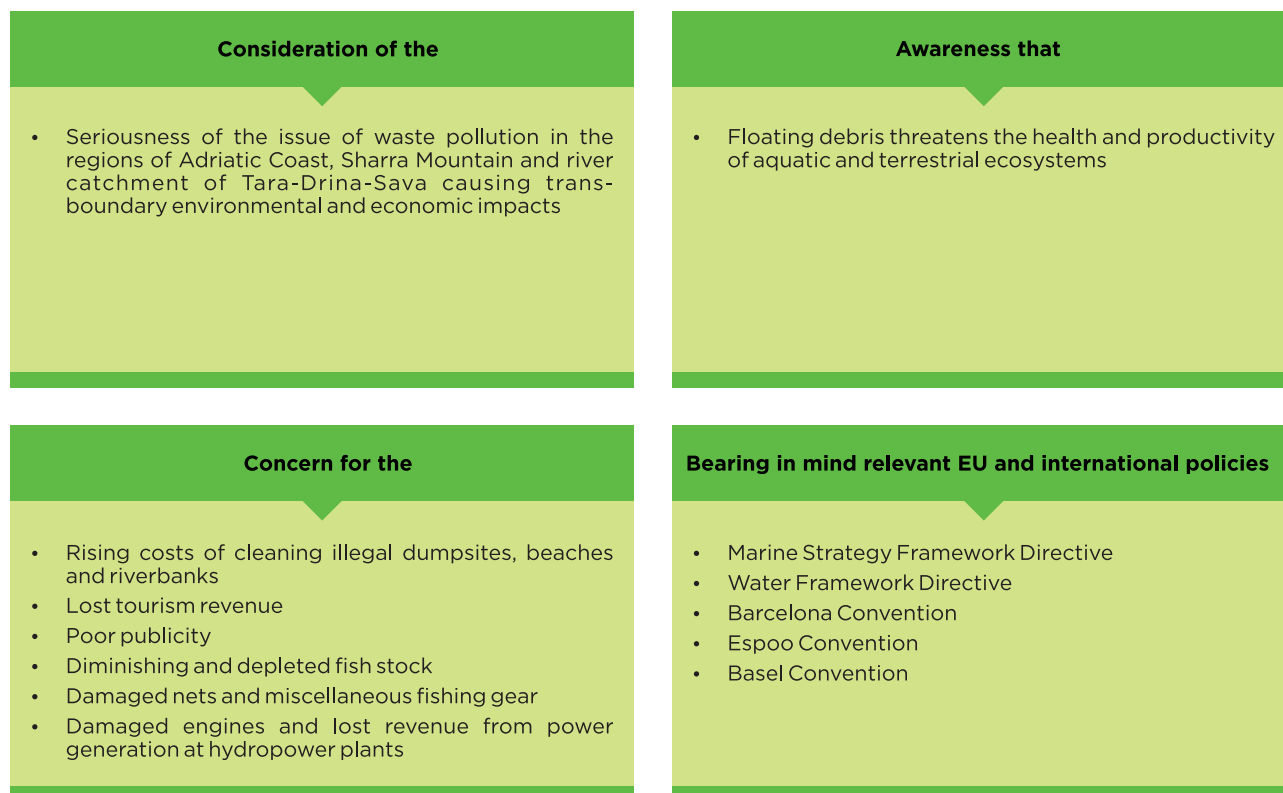
The implementation of pilot measures can raise awareness and involve people which is an essential factor in SWM management considering the fact that littering habits of the population are one of the core sources of the floating waste and/or pollution. Furthermore, the measures for cleaning and monitoring of illegal dumpsites and floating debris stranded at the beaches of reservoirs or riverbanks, and monitoring of marine litter can help in collecting data on the quantity and composition of the waste and hence provide the needed information for designing suitable policies and actions.

## 4. KEY FINDINGS

The Policy Recommendations on Solid Waste Management in Cross-Border Rural and Coastal Areas of South Eastern European Region address three major categories of decision makers and support providers: national and regional governments; local government; and donors and international partners.

The definition of the recommendations was based on four basic principles depicted in Figure 6:

**Figure 6: Basic principles in defining policy recommendations**



The highlights of the recommendations are presented in Figure 7.

**Figure 7: Policy recommendation in a nutshell**

### **Invitation to National and Regional Governments to**

- Consider the development and adoption of a framework agreement on a regional scale for cooperation on floating debris' prevention;
- Support the establishment of a mechanism for regional cooperation that will allow the exchange of experiences and transfer of know-how on the prevention of floating debris;
- Take advantage of synergies between ongoing programmes and projects that address floating debris and/or its sources;
- Enforce good governance principles to prevent the floating debris' generation;
- Implement reform of national and municipal waste management planning in order to enact the EU policy for floating debris, as well as to better reflect the trans-boundary character of the floating debris;
- Establish the necessary legal framework for tackling floating debris at regional and national levels, as well as guide the operationalisation of these legal frameworks at the local level;
- Introduce economic instruments that will facilitate the prevention of floating debris;
- Preventing illegal dumping by developing Standard Operating Procedures for use by inspection entities;
- Supporting local authorities in their endeavours to plan and implement adequate measures for minimisation of floating debris by the provision of necessary resources and financial support.

### **Encouragement of Local Elected Officials and Local Governments to**

- Develop or revise and adopt the existing local regulations on municipal waste management;
- Adjust the municipal waste management planning process to better facilitate the prevention and management of floating debris;
- Use Inter-municipal Cooperation as an alternative service provision in the area of municipal solid waste management by ensuring economy of scale and regionalization of services;
- Recognise the improved local Solid Waste Management planning as a precondition for local economic and tourism development.

### **Economic incentives to**

- Provide the necessary financial support to the initiatives for prevention of floating debris in the pilot regions;
- Promote the exchange of organizational and institutional know-how, technologies and instruments in support of the floating debris prevention.



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Open Regional Fund for South East Europe – Modernisation of Municipal Services (ORF MMS)

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