

# **GUIDELINE ON INTEGRATED COASTAL ZONE MANAGEMENT IN THE BLACK SEA**

## **BACKGROUND**

This document, entitled as Guideline on Integrated Coastal Zone Management in the Black Sea (further below referred to as Guideline), sets out the guiding principles of integrated coastal zone management (ICZM) in the Black Sea region and refers to and supports the implementation of the following documents:

- [Convention on the Protection of the Black Sea Against Pollution](#) (Bucharest Convention), done in Bucharest, Romania, on 21 April 1992;
- Article 3 and Article 7 of the [Black Sea Biodiversity and Landscape Conservation Protocol](#) to the [Bucharest Convention](#), done in Sofia, Bulgaria, on 14 June 2002;
- Article 4, Paragraph 2(f) of the [Protocol on the Protection of the Marine Environment of the Black Sea from Land-Based Sources and Activities](#) to the [Bucharest Convention](#), done in Sofia, Bulgaria, on 7 April 2009;
- [Odessa Ministerial Declaration on the Protection of the Black Sea](#) of 7 April 1993, specifically its Article 15, the [Sofia Ministerial Declaration on the Protection of the Black Sea](#) of 14 June 2002, the [Bucharest Ministerial Declaration on the Protection of the Black Sea](#) of 23 February 2007 and the [Sofia Ministerial Declaration on the Protection of the Black Sea](#) of 17 April 2009;
- [United Nations Convention on the Law of the Sea](#), done at Montego Bay on 10 December 1982;
- [Convention on Wetlands of International Importance especially as Waterfowl Habitat](#), done at Ramsar on 2 February 1971;
- [Convention on Biological Diversity](#), done at Rio de Janeiro on 5 June 1992, to which all Black Sea Countries are Parties;
- Article 4, Paragraph 1(e), of the [United Nations Framework Convention on Climate Change](#), done at New York on 9 May 1992, regarding the cooperation for the development of appropriate and integrated plans for coastal zone management;
- [Strategic Action Plan for the Environmental Protection and Rehabilitation of the Black Sea](#), adapted in Sofia, Bulgaria, on 17 April 2009, specifically its Ecological Quality Objective 15, to develop and accept the regional Guideline on Integrated Coastal Zone Management in the Black Sea;
- Relevant documents and experiences of individual countries, various organizations, including the European institutions and other Regional Seas

Conventions (RSCs) in ICZM area, *inter alia*, [Protocol on Integrated Coastal Zone Management in the Mediterranean](#) etc.

The elaboration of this Guideline was stipulated by the following considerations:

- The coastal zones of the Black Sea are the common natural and cultural heritage of the peoples of the Black Sea Countries and they should be preserved and used judiciously for the benefit of present and future generations;
- Concern over the increase in anthropic pressure on the coastal zones of the Black Sea is threatening their fragile nature and the desire of halting and reversing the process of coastal zone degradation and of significantly reducing the loss of biodiversity of coastal ecosystems;
- Risks threatening coastal zones due to climate change, which is likely to result, *inter alia*, in a rise in sea level, and the need to adopt sustainable measures to reduce the negative impact of natural phenomena;
- Depletion of coastal resources, including continued loss of biodiversity and valuable natural complexes, increasing risks of coastal hazards, unabated sources of pollution, combined with multiple stakeholders and activities competing for scarce resources and inadequate framework and mechanisms for coastal planning, all threatening the achievement of sustainable development in the coastal zones.
- As an irreplaceable ecological, economic and social resource, the planning and management of coastal zones with a view to their preservation and sustainable development requires a specific integrated approach at the level of the Black Sea basin as a whole and of its coastal countries, taking into account their diversity and geomorphologic characteristics.

Taking into account the abovementioned, as well as willing to

- strengthen at the Black Sea level the efforts made by coastal countries to ensure integrated coastal zone management;
- stimulate national, regional and local initiatives through coordinated promotional action, cooperation and partnership with the various actors concerned with a view to promoting efficient governance for the purpose of integrated coastal zone management;
- ensuring that coherence is achieved with regard to integrated coastal zone management in the application of the [Bucharest Convention](#) and its [Protocols](#);

the Black Sea Countries – Contracting Parties to the [Bucharest Convention](#) – have agreed to adopt and endeavour to implement the following Guideline.

## PART 1

### GENERAL

#### I. GENERAL PROVISIONS

In conformity with the [Convention on the Protection of the Black Sea Against Pollution](#) and its [Protocols](#), the [Odessa Ministerial Declaration on the Protection of the Black Sea](#) and the [Strategic Action Plan for the Environmental Protection and Rehabilitation of the Black Sea](#) the Black Sea Countries may use this Guideline as a [roadmap](#) for the integrated management of the Black Sea coastal zone and take the necessary measures to strengthen regional co-operation for this purpose.

#### II. DEFINITIONS

For the purposes of this Guideline:

- (a) 'Black Sea Countries' means the Contracting Parties to the [Bucharest Convention](#). Reference to 'Black Sea Countries' in this Guideline, depending on a particular context, may imply the engagement at appropriate level(s) of governance (international, national, sub-national, local).
- (b) '[Bucharest Convention](#)' means the [Convention on the Protection of the Black Sea Against Pollution](#), done in Bucharest, Romania, on 21 April 1992.
- (c) '[Commission](#)' and its '[Secretariat](#)' mean the bodies defined in Article XVII of the [Bucharest Convention](#).
- (d) '[Centre](#)' means the [Activity Centre in Krasnodar, Russian Federation](#), coordinating with the [Advisory Group on the Development of Common Methodologies for Integrated Coastal Zone Management](#).
- (e) '[coastal zone](#)' means the geomorphologic area on either side of the seashore in which the interaction between the marine and land parts occurs in the form of complex ecological and resource systems made up of biotic and abiotic components coexisting and interacting with human communities and relevant socio-economic activities.
- (f) '[integrated coastal zone management](#)' means a dynamic process for the sustainable management and use of coastal zones, taking into account at the same time the fragility of coastal ecosystems and landscapes, the diversity of activities and uses, their interactions, the maritime orientation of certain activities and uses and their impact on both the marine and land parts.

#### III. GEOGRAPHICAL COVERAGE

1. The area to which the Guideline applies is the Black Sea area as defined in Article 3 of the [Black Sea Biodiversity and Landscape Conservation Protocol](#) to the [Bucharest Convention](#). The area is defined by:

- (a) the [seaward limit of the coastal zone](#), which is the external limit of the territorial sea of Black Sea Countries; and
- (b) the [landward limit of the coastal zone](#), which is the limit of the competent coastal units as defined by the Black Sea Countries.

2. If, within the limits of its sovereignty, a Black Sea Country establishes [limits different from those envisaged in Paragraph 1](#) of this Section, it is expected to communicate it to the [Commission](#), via its [Secretariat](#), in so far as:

- (a) the seaward limit is less than the external limit of the territorial sea;
- (b) the landward limit is different, either more or less, from the limits of the territory of coastal units as defined above, in order to apply, *inter alia*, the ecosystem approach and economic and social criteria and to consider the specific needs of islands related to geomorphologic characteristics and to take into account the negative effects of climate change.

3. Each Black Sea Country will aim to adopt or promote at the appropriate institutional level adequate actions to inform populations and any relevant actor of the geographical coverage of the present Guideline.

#### **IV. GOAL OF INTEGRATED COASTAL ZONE MANAGEMENT**

The goal of integrated coastal zone management is to develop and conserve, in a sustainable manner, the land and the sea resources of the Black Sea coast, in order to create more prosperous coastal economies and healthy and safe coastal environments for the benefit of the present and future generations in the Black Sea Countries.

#### **V. OBJECTIVES OF INTEGRATED COASTAL ZONE MANAGEMENT**

The objectives of integrated coastal zone management are to:

- (a) facilitate, through the rational planning of activities, the sustainable development of coastal zones by ensuring that the environment and landscapes are taken into account in harmony with economic, social and cultural development;
- (b) preserve coastal zones for the benefit of current and future generations;

- (c) ensure the sustainable use of natural resources, particularly with regard to water use;
- (d) ensure preservation of the integrity of coastal ecosystems, landscapes and geomorphology;
- (e) prevent and/or reduce the effects of natural hazards and in particular of climate change, which can be induced by natural or human activities;
- (f) achieve coherence between public and private initiatives and between all decisions by the public authorities, at the national, regional and local levels, which affect the use of the coastal zone.
- (g) establish efficient mechanisms of governance and decision-making for sustainable development of coastal zones.

## **VI. GENERAL PRINCIPLES OF INTEGRATED COASTAL ZONE MANAGEMENT**

In implementing this Guideline, the Black Sea Countries may be guided by the following principles of integrated coastal zone management:

- (a) The biological wealth and the natural dynamics and functioning of the intertidal area and the complementary and interdependent nature of the marine part and the land part forming a single entity shall be taken particularly into account.
- (b) All elements relating to hydrological, geomorphologic, climatic, ecological, socio-economic and cultural systems shall be taken into account in an integrated manner, so as not to exceed the [carrying capacity](#) of the coastal zone and to prevent the negative effects of natural disasters and of development.
- (c) The ecosystems approach to coastal planning and management shall be applied so as to ensure the sustainable development of coastal zones.
- (d) Appropriate governance allowing adequate and timely participation in a transparent decision-making process by local populations and stakeholders in civil society concerned with coastal zones shall be ensured.
- (e) Cross-sectorally organized institutional coordination of the various administrative services and regional and local authorities competent in coastal zones shall be required.
- (f) The formulation of land use strategies, plans and programmes covering urban development and socio-economic activities, as well as other relevant sectoral policies, shall be required.

- (g) The multiplicity and diversity of activities in coastal zones shall be taken into account, and priority shall be given, where necessary, to public services and activities requiring, in terms of use and location, the [immediate proximity to the sea](#).
- (h) The allocation of uses throughout the entire coastal zone should be balanced, and unnecessary concentration and urban sprawl should be avoided.
- (i) Preliminary assessments shall be made of the risks associated with the various human activities and infrastructure so as to prevent and reduce their negative impact on coastal zones.
- (j) Damage to the coastal environment shall be prevented and, where it occurs, appropriate restoration shall be effected.

## VII. COORDINATION

1. For the purposes of integrated coastal zone management, the Black Sea Countries will make efforts to:

- (a) ensure institutional coordination, where necessary through appropriate bodies or mechanisms, in order to avoid sectoral approaches and facilitate comprehensive approaches;
- (b) organize appropriate coordination between the various authorities competent for both the marine and the land parts of coastal zones in the different administrative services, at the national, regional and local levels;
- (c) organize close coordination between national authorities and regional and local bodies in the field of coastal strategies, plans and programmes and in relation to the various authorizations for activities that may be achieved through joint consultative bodies or joint decision-making procedures.

2. Competent national, regional and local coastal zone authorities are expected, insofar as practicable, to work together to strengthen the coherence and effectiveness of the coastal strategies, plans and programmes established.

## PART 2

### ELEMENTS OF INTEGRATED COASTAL ZONE MANAGEMENT

## VIII. PROTECTION AND SUSTAINABLE USE OF THE COASTAL ZONE

1. In conformity with the objectives and principles set out in Sections V and VI of this Guideline, the Black Sea Countries need to ensure the sustainable use and management of coastal zones in order to preserve the coastal natural habitats, landscapes, natural resources and ecosystems, in compliance with international and regional legal instruments.

2. For this purpose, the Black Sea Countries, may take steps to:

(a) establish in coastal zones, as from the highest winter waterline, a zone where construction is not allowed. Taking into account, *inter alia*, the areas directly and negatively affected by climate change and natural risks, this zone may not be less than 100 meters in width, subject to the provisions of subparagraph (b) below. Stricter national measures determining this width will continue to apply.

(b) adapt, in a manner consistent with the objectives and principles of this Guideline, the provisions mentioned above:

1) for projects of public interest;

2) in areas having particular geographical or other local constraints, especially related to population density or social needs, where individual housing, urbanisation or development are provided for by national legal instruments.

(c) inform the [Commission](#), via its [Secretariat](#), regarding their national legal instruments providing for the above adaptations.

3. The Black Sea Countries may also endeavour to ensure that their national legal instruments include criteria for sustainable use of the coastal zone. Such criteria, taking into account specific local conditions, may include, *inter alia*, the following:

(a) identifying and delimiting, [outside protected areas](#), open areas in which urban development and other activities are restricted or, where necessary, prohibited;

(b) [limiting the linear extension](#) of urban development and the creation of new transport infrastructure [along the coast](#);

(c) ensuring that environmental concerns are integrated into the rules for the management and use of the public maritime domain;

(d) providing for freedom of [access by the public to the sea and along the shore](#);

- (e) [restricting](#) or, where necessary, prohibiting the movement and parking of [land vehicles](#), as well as the movement and anchoring of [marine vessels](#), in fragile natural areas on land or at sea, including beaches and dunes.

## IX. ECONOMIC ACTIVITIES

1. In conformity with the objectives and principles set forth in Sections V and VI of this Guideline, and taking into account the relevant provisions of the [Bucharest Convention](#) and its [Protocols](#), the Black Sea Countries may also make efforts to:

- (a) accord specific attention to economic activities that require [immediate proximity to the sea](#);
- (b) ensure that the various economic activities minimize the use of natural resources and take into account the needs of future generations;
- (c) ensure respect for integrated water resources management and environmentally sound waste management;
- (d) ensure that the coastal and maritime economy is adapted to the fragile nature of coastal zones and that resources of the sea are protected from pollution;
- (e) define indicators of the development of economic activities to ensure sustainable use of coastal zones and reduce pressures that exceed their [carrying capacity](#);
- (f) promote [codes of good practice](#) among public authorities, economic actors and non-governmental organizations.

2. In addition, with regard to the following economic activities, the Black Sea Countries may consider the following measures to be taken:

- (a) Agriculture and industry,

to guarantee a high level of protection of the environment in the location and operation of agricultural and industrial activities so as to preserve coastal ecosystems and landscapes and prevent pollution of the sea, water, air and soil;

- (b) Fishing,

- (i) to take into account the need to protect fishing areas in development projects;



(ii) to ensure that fishing practices are compatible with sustainable use of natural marine resources;

(c) Aquaculture,

(i) to take into account the need to protect aquaculture and shellfish areas in development projects;

(ii) to regulate aquaculture by controlling the use of inputs and waste treatment;

(d) [Tourism, sporting and recreational activities](#),

(i) to encourage sustainable coastal tourism that preserves coastal ecosystems, natural resources, cultural heritage and landscapes;

(ii) to promote specific forms of coastal tourism, including cultural, rural and ecotourism, while respecting the traditions of local populations;

(iii) to regulate or, where necessary, prohibit the practice of various sporting and recreational activities, including recreational fishing and shellfish extraction;

(iii) to establish special protection regime for the seashore areas used for recreation;

(e) Utilization of specific natural resources,

(i) to subject to prior authorization the excavation and extraction of minerals, including the use of seawater in desalination plants and stone exploitation;

(ii) [to regulate the extraction of sand](#), including on the seabed and river sediments or prohibit it where it is likely to adversely affect the equilibrium of coastal ecosystems;

(iii) to monitor coastal aquifers and dynamic areas of contact or interface between fresh and salt water, which may be adversely affected by the extraction of underground water or by discharges into the natural environment;

(f) Infrastructure, energy facilities, ports and maritime works and structures,

to subject such infrastructure, facilities, works and structures to authorization so that their negative impact on coastal ecosystems,

landscapes and geomorphology is minimized or, where appropriate, compensated by non-financial measures;

(g) Maritime activities,

to conduct maritime activities in such a manner as to ensure the preservation of coastal ecosystems in conformity with the rules, standards and procedures of the relevant international conventions.

## **X. SPECIFIC COASTAL ECOSYSTEMS**

The Black Sea Countries may consider the measures to protect the characteristics of certain specific coastal ecosystems, as follows:

### **1. Wetlands and estuaries**

In addition to the creation of protected areas and with a view to preventing the disappearance of wetlands and estuaries, the Black Sea Countries may apply efforts to:

- (a) take into account in national coastal strategies and coastal plans and programmes and when issuing authorizations, the environmental, economic and social function of wetlands and estuaries;
- (b) take the necessary measures to regulate or, if necessary, prohibit activities that may have adverse effects on wetlands and estuaries;
- (c) undertake, to the extent possible, the restoration of degraded coastal wetlands with a view to reactivating their positive role in coastal environmental processes.

### **2. Marine habitats**

The Black Sea Countries, recognizing the need to protect marine areas hosting habitats and species of high conservation value, irrespective of their classification as protected areas, may apply efforts to:

- (a) adopt measures to ensure the protection and conservation, through legislation, planning and management of marine and coastal areas, in particular of those hosting habitats and species of high conservation value;
- (b) undertake to promote regional and international cooperation for the implementation of common programmes on the protection of marine habitats.

### **3. Coastal forests and woods**

The Black Sea Countries may apply efforts to adopt measures intended to preserve or develop coastal forests and woods located, in particular, [outside protected areas](#).

#### 4. Dunes

The Black Sea Countries may apply efforts to preserve and, where possible, rehabilitate in a sustainable manner dunes and bars.

### **XI. COASTAL LANDSCAPES**

1. The Black Sea Countries, recognizing the specific aesthetic, natural and cultural value of coastal landscapes, irrespective of their classification as protected areas, may consider to adopt measures to ensure the protection of coastal landscapes through legislation, planning and management.

2. The Black Sea Countries may take steps to promote regional and international cooperation in the field of landscape protection, and in particular, the implementation, where appropriate, of joint actions for [transboundary](#) coastal landscapes.

### **XII. ISLANDS**

The Black Sea Countries may take steps to accord special protection to islands, including small islands, and for this purpose to:

- (a) promote environmentally friendly activities in such areas and take special measures to ensure the participation of the inhabitants in the protection of coastal ecosystems based on their local customs and knowledge;
- (b) take into account the specific characteristics of the island environment and the necessity to ensure interaction among islands in national coastal strategies, plans and programmes and management instruments, particularly in the fields of transport, tourism, fishing, waste and water.

### **XIII. CULTURAL HERITAGE**

The Black Sea Countries may consider to

1. Adopt, individually or collectively, all appropriate measures to preserve and protect the cultural, in particular archaeological and historical, heritage of coastal zones, including the underwater cultural heritage, in conformity with the applicable national and international instruments.

2. Ensure that the preservation in situ of the cultural heritage of coastal zones is considered as the first option before any intervention directed at this heritage.

3. Ensure in particular that elements of the underwater cultural heritage of coastal zones removed from the marine environment are conserved and managed in a manner safeguarding their long-term preservation and are not traded, sold, bought or bartered as commercial goods.

#### **XIV. PARTICIPATION**

1. With a view to ensuring efficient governance throughout the process of the integrated management of coastal zones, the Black Sea Countries may apply efforts to ensure the appropriate involvement in the phases of the formulation and implementation of coastal and marine strategies, plans and programmes or projects, as well as the issuing of the various authorizations, of the various stakeholders, including:

- the territorial communities and public entities concerned;
- economic operators;
- non-governmental organizations;
- social actors;
- the public concerned.

Such participation may involve *inter alia* consultative bodies, inquiries or public hearings, and may extend to partnerships.

2. With a view to ensuring such participation, the Black Sea Countries are encouraged to provide information in an adequate, timely and effective manner.

3. The Black Sea Countries are encouraged to introduce mediation or conciliation procedures and to provide a right of administrative or legal recourse to any stakeholder challenging decisions, acts or omissions, subject to the participation provisions established by the Black Sea Countries with respect to plans, programmes or projects concerning the coastal zone.

#### **XV. AWARENESS-RAISING, TRAINING, EDUCATION AND RESEARCH**

The Black Sea Countries may apply efforts to

1. Carry out, at the national, regional or local level, awareness-raising activities on integrated coastal zone management and to develop educational programmes, training and public education on this subject.

2. Organize, directly, multilaterally or bilaterally, or with the assistance and facilitation of the [Commission](#), via its [Secretariat](#), the [Centre](#) or the international organizations concerned, educational programmes, training and public education on integrated management of coastal zones with a view to ensuring their sustainable development.

3. Provide for interdisciplinary scientific research on integrated coastal zone management and on the interaction between activities and their impacts on coastal zones. To this end, they may establish or support specialized research centres. The purpose of this research is, in particular, to further knowledge of integrated coastal zone management, to contribute to public information and to facilitate public and private decision-making.

### **PART 3**

#### **INSTRUMENTS FOR INTEGRATED COASTAL ZONE MANAGEMENT**

##### **XVI. MONITORING AND OBSERVATION MECHANISMS AND NETWORKS**

1. The Black Sea Countries will make use of and will strengthen existing appropriate mechanisms for monitoring and observation, or create new ones if necessary. They shall also prepare and regularly update national inventories of coastal zones which should cover, to the extent possible, information on resources and activities, as well as on institutions, legislation and planning that may influence coastal zones.

2. In order to promote exchange of scientific experience, data and good practices, the Black Sea Countries will participate, at the appropriate administrative and scientific level, in a Black Sea coastal zone network, in cooperation with the [Commission](#), via its [Secretariat](#).

3. With a view to facilitating the regular observation of the state and evolution of coastal zones, the Black Sea Countries will set out an agreed reference format and process to collect appropriate data in national inventories.

4. The Black Sea Countries will take all necessary measures to ensure public access to the information derived from monitoring and observation mechanisms and networks.

##### **XVII. BLACK SEA STRATEGY FOR INTEGRATED COASTAL ZONE MANAGEMENT**

The Black Sea Countries undertake to cooperate for the promotion of sustainable development and integrated management of coastal zones. To this end, the Black Sea Countries will define, with the assistance and facilitation of the [Commission](#), via its [Secretariat](#), the [Centre](#) or the international organizations concerned, a common regional framework for integrated coastal zone management in the Black Sea to be

implemented by means of appropriate regional action plans and other operational instruments, as well as through their national strategies.

## **XVIII. NATIONAL COASTAL STRATEGIES, PLANS AND PROGRAMMES, LAWS**

1. Each Black Sea Country may consider to further strengthen or formulate a national strategy for integrated coastal zone management and coastal implementation plans and programmes consistent with the common regional framework and in conformity with the integrated management objectives and principles of this Guideline and is encouraged to inform the [Commission](#), via its [Secretariat](#), about the coordination mechanism in place for this strategy.

2. The national strategy, based on an analysis of the existing situation, may set objectives, determine priorities with an indication of the reasons, identify coastal ecosystems needing management, as well as all relevant actors and processes, enumerate the measures to be taken and their cost as well as the institutional instruments and legal and financial means available, and set an implementation schedule.

3. Coastal plans and programmes, which may be self-standing or integrated in other plans and programmes, may specify the orientations of the national strategy and implement it at an appropriate territorial level, determining, *inter alia* and where appropriate, the [carrying capacities](#) and conditions for the allocation and use of the respective marine and land parts of coastal zones.

4. The Black Sea Countries may define appropriate [indicators](#) in order to evaluate the effectiveness of integrated coastal zone management strategies, plans and programmes, as well as the [progress of implementation](#) of the Guideline.

5. Each Black Sea Country may apply efforts to adopt, amend or replace, as most appropriate, a national legislation on integrated coastal zone management, consistent with the common regional framework and in conformity with the integrated management objectives and principles of this Guideline and is encouraged to inform the [Commission](#), via its [Secretariat](#), about the specific legislation in place for integrated coastal zone management. Such a legislation, will *inter alia* integrate with sectoral legislation concerned with coastal governance, as well as provide for specific mechanism and mandates for the preparation of national strategy, coastal plans and programmes, define specific indicators to evaluate their effectiveness.

## **XIX. ENVIRONMENTAL ASSESSMENT**

1. Taking into account the fragility of coastal zones, the Black Sea Countries may consider steps to ensure that the process and related studies of [environmental impact assessment](#) for public and private projects likely to have significant environmental effects on the coastal zones, and in particular on their ecosystems,

take into consideration the specific sensitivity of the environment and the inter-relationships between the marine and terrestrial parts of the coastal zone.

2. In accordance with the same criteria, the Black Sea Countries may formulate, as appropriate, a [strategic environmental assessment](#) of plans and programmes affecting the coastal zone.

3. The environmental assessments may take into consideration the cumulative impacts on the coastal zones, paying due attention, *inter alia*, to their [carrying capacities](#).

## **XX. LAND POLICY**

1. For the purpose of promoting integrated coastal zone management, reducing economic pressures, maintaining open areas and allowing [public access to the sea and along the shore](#), Black Sea Countries may apply efforts to adopt appropriate land policy instruments and measures, including the process of planning.

2. To this end, and in order to ensure the sustainable management of public and private land of the coastal zones, Black Sea Countries may *inter alia* [adopt mechanisms for the acquisition, cession, donation or transfer of land to the public domain and institute easements on properties](#).

## **XXI. ECONOMIC, FINANCIAL AND FISCAL INSTRUMENTS**

For the implementation of national coastal strategies and coastal plans and programmes, Black Sea Countries may take appropriate measures to adopt relevant economic, financial and/or fiscal instruments intended

- (a) to support local, regional and national initiatives for the integrated management of coastal zones;
- (b) to dissuade and prevent activities damaging to the coastal zone and its integrated management.

## **PART 4**

### **RISKS AFFECTING THE COASTAL ZONE**

#### **XXII. NATURAL HAZARDS**

Within the framework of national strategies for integrated coastal zone management, the Black Sea Countries may take steps to develop policies for the prevention of natural hazards. To this end, they may undertake [vulnerability and hazard assessments](#) of coastal zones and take prevention, mitigation and adaptation measures to address the effects of natural disasters, in particular of climate change.

#### **XXIII. COASTAL EROSION**

1. In conformity with the objectives and principles set out in Sections V and VI of this Guideline, the Black Sea Countries, with a view to preventing and mitigating the negative impact of coastal erosion more effectively, may undertake to adopt the necessary measures to maintain or restore the natural capacity of the coast to adapt to changes, including those caused by the rise in sea levels.

2. The Black Sea Countries, when considering new activities and works located in the coastal zone including marine structures and coastal defence works, may take particular account of their negative effects on coastal erosion and the direct and indirect costs that may result. In respect of existing activities and structures, the Black Sea Countries may consider adopting measures to minimize their effects on coastal erosion.

3. The Black Sea Countries may anticipate the impacts of coastal erosion through the integrated management of activities, including adoption of special measures for coastal sediments and coastal works.

4. The Black Sea Countries are encouraged to share scientific data that may improve knowledge on the state, development and impacts of coastal erosion.

#### **XXIV. RESPONSE TO NATURAL DISASTERS**

The Black Sea Countries are encouraged to

1. Promote international cooperation to respond to natural disasters, and to take all necessary measures to address in a timely manner their effects.

2. Coordinate use of the equipment for detection, warning and communication at their disposal, making use of existing mechanisms and initiatives, to ensure the transmission as rapidly as possible of urgent information concerning major natural disasters. The Black Sea Countries are expected to inform the [Commission](#), via its



[Secretariat](#), which national authorities are competent to issue and receive such information in the context of relevant international mechanisms.

3. Promote mutual cooperation and cooperation among national, regional and local authorities, non-governmental organizations and other competent organizations for the provision on an urgent basis of humanitarian assistance in response to natural disasters affecting the coastal zones of the Black Sea.

## PART 5

### INTERNATIONAL COOPERATION

#### XXV. TRAINING AND RESEARCH

1. The Black Sea Countries are encouraged to undertake, directly or with the assistance and facilitation of the [Commission](#), via its [Secretariat](#), the [Centre](#) or the competent international organizations, to cooperate in the training of scientific, technical and administrative personnel in the field of integrated coastal zone management, particularly with a view to:

- (a) identifying and strengthening capacities;
- (b) developing scientific and technical research;
- (c) promoting centres specialized in integrated coastal zone management;
- (d) promoting training programmes for local professionals.

2. The Black Sea Countries are encouraged, directly or with the assistance and facilitation of the [Commission](#), via its [Secretariat](#), the [Centre](#) or the competent international organizations, to promote scientific and technical research into integrated coastal zone management, particularly through the exchange of scientific and technical information and the coordination of their research programmes on themes of common interest.

#### XXVI. SCIENTIFIC AND TECHNICAL ASSISTANCE

For the purposes of integrated coastal zone management, the Black Sea Countries are encouraged, directly or with the assistance and facilitation of the [Commission](#), via its [Secretariat](#), the [Centre](#) or the competent international organizations to cooperate for the provision of scientific and technical assistance, including access to environmentally sound technologies and their transfer, and other possible forms of assistance, to Black Sea Countries requiring such assistance.

#### XXVII. EXCHANGE OF INFORMATION AND ACTIVITIES OF COMMON INTEREST

1. The Black Sea Countries are encouraged, directly or with the assistance and facilitation of the [Commission](#), via its [Secretariat](#), the [Centre](#) or the competent international organizations, to cooperate in the exchange of information on the use of the best environmental practices.

2. With the support and facilitation of the [Commission](#), via its [Secretariat](#), the [Centre](#) or the competent international organizations the Black Sea Countries may in particular cooperate to:

- (a) define [coastal management indicators](#), taking into account existing ones, and cooperate in the use of such indicators;
- (b) establish and maintain up-to-date assessments of the use and management of coastal zones;
- (c) carry out activities of common interest, such as [demonstration projects](#) of integrated coastal zone management.

## **XXVIII. [TRANSBOUNDARY COOPERATION](#)**

The Black Sea Countries are encouraged, directly or with the assistance and facilitation of the [Commission](#), via its [Secretariat](#), the [Centre](#) or the competent international organizations, bilaterally or multilaterally, to coordinate, where appropriate, their national coastal laws, strategies, plans and programmes related to contiguous coastal zones. Relevant domestic administrative bodies will be associated with such coordination.

## **XXIX. [TRANSBOUNDARY ENVIRONMENTAL ASSESSMENT](#)**

1. Within the framework of this Guideline, the Black Sea Countries, before authorizing or approving plans, programmes and projects that are likely to have a significant adverse effect on the coastal zones of other Black Sea Countries, are encouraged to cooperate by means of notification, exchange of information and consultation in assessing the environmental impacts of such plans, programmes and projects, taking into account Section XIX of this Guideline and Article 4, Paragraphs 2(c) and 2(2), Article 12 and Article 14, Paragraph 1 of the [Protocol on the Protection of the Marine Environment of the Black Sea from Land-Based Sources and Activities](#), as well as the Article 6 and Article 9, Paragraph 2 of the [Black Sea Biodiversity and Landscape Conservation Protocol](#) to the [Bucharest Convention](#).

2. To this end, the Black Sea Countries may cooperate in the formulation and adoption of appropriate guidelines for the determination of procedures for notification, exchange of information and consultation at all stages of the process.

3. The Black Sea Countries may, where appropriate, enter into bilateral or multilateral agreements for the effective implementation of this Section.

## **PART 6**

### **INSTITUTIONAL PROVISIONS**

#### **XXX. NATIONAL FOCAL POINTS**

The network of ICZM National Focal Points (NFP) designated by members of the Commission will serve as liaison with the [Commission](#), the [Secretariat](#) and the [Centre](#) on the technical and scientific aspects of the implementation of this Guideline and in order to disseminate information at the national, regional and local level. The National Focal Points may meet and/or communicate periodically to carry out the functions deriving from this Guideline.

#### **XXXI. REPORTS**

The Black Sea Countries may submit to the ordinary Meetings of the Contracting Parties and of its ICZM Advisory Group, reports on the implementation of this Guideline, in such form and at such intervals as these Meetings may determine, including the measures taken, their effectiveness and the problems encountered in their implementation.

#### **XXXII. ENDORSEMENT OF GUIDELINE**

This Guideline and its modification is subject to endorsement by the [Commission](#).

## ANNEX

### EXPLANATORY AND REFERENCE NOTES TO SECTIONS OF GUIDELINE

#### Section I: 'roadmap'

First policy reference to the need for the implementation of Integrated Coastal Zone Management (ICZM) in the Black Sea was provided in the [Odessa Ministerial Declaration on the Protection of the Black Sea](#) of 7 April 1993. Specifically, its Article 15 calls 'to elaborate and implement national coastal zone management policies, including legislative measures and economic instruments, in order to ensure the sustainable development in the spirit of Agenda 21'.

Great deal of efforts were applied by the Black Sea Countries individually and jointly and with support of international community to do necessary groundwork mandated by the [Odessa Ministerial Declaration on the Protection of the Black Sea](#), well documented in the review paper by Antonidze (2010).

These concerted efforts resulted in certain legally binding commitments on ICZM, introduced in two additional [Protocols](#) to the [Bucharest Convention](#).

[Black Sea Biodiversity and Landscape Conservation Protocol](#) to the [Bucharest Convention](#), done in Sofia on 14 June 2002, in particular, its Article 3 instructs each Black Sea Country to designate coastal zones (including wetlands) for Black and Azov Seas, while Article 7 directly mandates that Black Sea Countries 'shall encourage introduction of intersectoral interaction on regional and national levels through the introduction of the principles and development of legal instrument of integrated coastal zone management seeking the ways for sustainable use of natural resources and promotion of environmentally friendly human activities in the coastal zone'.

[Protocol on the Protection of the Marine Environment of the Black Sea from Land-Based Sources and Activities](#) to the [Bucharest Convention](#), also done in Sofia, Bulgaria, on 7 April 2009, in its Article 4, General Obligations, obliges Black Sea Countries under the Paragraph 2(f) to 'endeavour to apply the integrated management of coastal zones and watersheds'.

Decade of experience with the implementation of integrated coastal zone management approaches matured in the need to respond to policy direction of [Odessa Ministerial Declaration on the Protection of the Black Sea](#) and binding requirements of above mentioned two [Protocols](#) and to introduce certain regional instruments to address coastal governance issues through harmonized application of ICZM among the Black Sea Countries. As explained, below, this finally manifested in the agreement to develop the common Guideline.

In the meantime, the Black Sea Countries were following with great interest the encouraging developments in the neighbouring enclosed regional Mediterranean Sea, which negotiated and adopted the novel legally binding instrument in the form of the [Protocol on Integrated Coastal Zone Management in the Mediterranean](#) (signed on 21 January 2008, entered into force on 24 March 2011). Certainly, the possibility to engage in adopting the similar legally binding instrument in quite similar regional enclosed marine area like the Black Sea was and remains the possibility worth of consideration.

The overall need in favour of the preparation of the Guideline, in consultation with the [Commission](#), its [Secretariat](#) and [Advisory Group on the Development of Common Methodologies for Integrated Coastal Zone Management](#), was first identified in the reference work of Vinogradov (2007), as an interim measure until the feasibility of the legally binding instrument for ICZM in the Black Sea would become real. Respective action was therefore included in the [Strategic Action Plan for the Environmental Protection and Rehabilitation of the Black Sea](#) of 2009 as the short term target No. 15 under EcoQO 2b: 'Conserve coastal and marine habitats and landscapes' (BS-SAP, 2009). Time allocated for this target is 5 years. Indicator of success is: 'BS Regional ICZM Guidelines written and accepted'.

In order to provide the means for the implementation of this task, in 2010, at the request of the [Commission](#) through its [Secretariat](#), the European Commission's 7<sup>th</sup> Framework Programme project PEGASO (<http://pegasoproject.eu>) agreed to amend the project Description of Work (DoW) and to include the Guideline as one of the project output ([Secretariat](#), representing the [Commission](#), was PEGASO Partner No. 25). In particular, amendment in the DoW provided for the following:

'Deliverable D5.2D Black Sea ICZM Guidelines as the governance tool for the development and application of the legal agreement framework (such as protocol) for ICZM in the Black Sea (M47)'

Further in DoW the following description of the task was provided under Work Package 5:

'ICZM Guidelines will be elaborated for the Black Sea Countries based on the findings of the CASES and the regional assessment (WP5), in conjunction with the results achieved within the ICZM Platform (WP2) as well as with promotion of the proposed regional legal framework (WP7). The Black Sea ICZM Guidelines will be explaining and detailing the ways of application of the legal instruments (such as ICZM Protocol) and tools (such as ICZM Indicators) for practical implementation in the countries of the Black Sea region. It is envisaged that ICZM Guidelines will be presented to the Black Sea [Commission](#) for endorsement.'

For that purpose the Annotated Table of Contents for the Guideline was first developed in response to the Decision 13.2.6 of the Annual Meeting of the [Commission's Advisory Group on the Development of Common Methodologies for](#)

[Integrated Coastal Zone Management](#), held on September 30th - October 1st, 2010, in Istanbul, Turkey. The approach taken when preparing the Annotated Table of Contents for Guideline was to produce the practical document which could provide guidance in the interpretation and implementation of legal instrument such as the ICZM Protocol.

As the Mediterranean ICZM Protocol is the only example of such international legal document in force, the contents of the Guideline was composed around the main themes (institutional, legal, technical, etc.) covered by the ICZM Protocol. The second practical approach employed was to utilize outputs of PEGASO and integrate into guideline format (such as indicator sets, land and ecosystem accounts, participatory methods, etc.). Thirdly, a useful guidance, interpreting the requirements of the ICZM Protocol (see reference produced by Rochette et al., 2012) was utilised extensively to generate the Annex with Explanatory and Reference Notes to the Guideline. Other useful references followed included Brachya et al. (1995) and Jan et al. (1996), as well as plethora of guidance documents in the field of ICZM. Last but not least, it was considered necessary that all key accomplishments of the Black Sea region in the field of ICZM to be incorporated or referred to into the Guideline.

To test the feasibility of the applicability of the instrument such as ICZM Protocol, the [Secretariat](#) engaged the Black Sea Country representatives (ICZM National Focal Points to the [Commission](#)) in the important PEGASO project task, jointly with the Mediterranean countries, the ICZM implementation audit inventory, performed through stock-taking questionnaires, modelled against the requirements of the ICZM Protocol, and appropriately modified for the Black Sea to reflect the non-binding nature of the ICZM Protocol for these countries. The Black Sea Countries successfully completed stock-taking exercise individually as well as produced regional synthesis report, which is documented in Abaza et al. (2011) and Antonidze et al. (2013).

Positive experience with the capabilities of the Black Sea Countries to produce the quality implementation audit reports in par with the Mediterranean countries proved the ICZM Protocol model as feasible to follow in this regional sea as well. This is yet another argument in support of modelling the Guideline in tight proximity with the contents of the ICZM Protocol for the Mediterranean.

Therefore the approach taken with the Guideline was to produce it in the form very closely following the text of the Mediterranean ICZM Protocol. Some issues not relevant for the Black Sea region were removed, while some specificities of the Black Sea introduced. The texts, where appropriate, were modified to reflect the format of Guideline requirements rather than legally binding Protocol. Changes in the innovative text of the ICZM Protocol were avoided, unless absolutely necessary, to maintain the integrity and self-consistency of the document. Besides, close resemblance of the format used for the main part of the document with the legally binding text would allow streamlined development of such a binding instrument

once the national stakeholder are convinced in its necessity. Last but not least, due to vast number of issues and themes covered, the documentation was produced in the online coastal wiki-type format (<http://www.coastalwiki.org>), 'linking' the respective parts of the main text of the Guideline with the Explanatory and Reference Notes as the Annex to the Guideline, produced in the format referencing respective Sections and Paragraphs of the main body of the Guideline. In addition to this, specific documents serving as further guidance on specific issues (such as, for instance, questionnaire format for the ICZM stock-taking, guideline for filling ICZM progress indicators, factsheets for coastal sustainability indicators, etc.), could be attached to the Guideline as separate Appendixes numbered consecutively.

It is also proposed to disclose the entire documentation as on-line tool moderated by the [Secretariat](#) with input of the [Advisory Group on the Development of Common Methodologies for Integrated Coastal Zone Management](#), other stakeholders and the wider public, when found appropriate. Approach with moderation would be utilising already existing ICZM relevant resources and developing them further in a participatory manner as more progress is achieved with the understanding and implementation of ICZM in the Black Sea region. All such interoperations, as introduced, are to be mandated through the endorsements by the [Commission](#).

Essential elements provided in the Annex and its Appendixes were developed by [Secretariat](#)'s PEGASO project team, but further details were specified upon completion of the PEGASO project with participatory contribution of ICZM National Focal Points and experts of the Black Sea Countries, Members of the [ICZM Advisory Group](#), prior to presenting the full text for the endorsement of the [Commission](#). Endorsement of the Guideline (and its subsequent modification) is to be mandated by the [Commission](#). As noted above, it is proposed to use the endorsed main text of the Guideline without change unless absolutely necessary, keeping it as a roadmap for the implementation of the ICZM in the Black Sea region, while introducing appropriate modifications and interpretations through the Annex of Explanatory and Reference Notes and various Appendixes to the Guideline.

## **Section II, Paragraph (e): 'coastal zone'**

Historically, governance of terrestrial and marine areas has been approached as separate entities (Rochette et al., 2012). However, the coastline does not separate two worlds, the land and the sea, but unites two environments that interact at the physical and economic levels. Spatial integration therefore implies going beyond this restrictive approach in order to reconstitute the unity of the land-sea ecosystem. Consequently, it is necessary to determine an appropriate field of intervention, transcending the traditional administrative units, which are unsuited to geographical and economical realities, in order to take into account the interrelationships between land and marine habitats and activities. The definition of the coastal zone put forward by the European Union in 1996 – 'the coastal zone is defined as a strip of land and sea of varying width depending on the nature of the environment and management needs' – perfectly reflects this approach. There are

many other textbook definitions of the coastal zone (see, for instance, Brachya et al., 1995 and Jan et al., 1996), but land-sea integration in the coastal zone is always considered the cornerstone of its integrated management.

It is then all the more important to notice that the Guideline calls for the unity of the land-sea ecosystem to be taken into account when defining the coastal zone in Section II Paragraph (e). The next Section III on the geographical coverage of the Guideline (essentially establishing the limits of the seaward and landward extent of the 'coastal zone') confirms the necessity for the Black Sea Countries to implement spatial integration.

### **Section II, Paragraph (f): '*integrated coastal zone management*'**

There are many definitions of Integrated Coastal Zone Management (ICZM) provided in various guidelines.

According to Brachya et al. (1995) it is 'a process of achieving goals and objectives of environmentally sustainable development in coastal areas, within the constraints of physical, social and economic conditions, and within the constraints of legal, financial and administrative systems and institutions seems the most comprehensive'.

Jan et al. (1996) define it as 'a process of governance and consists of the legal and institutional framework necessary to ensure that development and management plans for coastal zones are integrated with environmental (including social) goals and are made with the participation of those affected'.

BS-SAP (2009) shares the definition of ICZM with that of the EC (2000) formulating it as 'a dynamic, multidisciplinary and iterative process to promote sustainable management of coastal zones. It covers the full cycle of information collection, planning (in its broadest sense), decision making, management and monitoring of implementation. ICZM uses the informed participation and cooperation of all stakeholders to assess the societal goals in a given coastal area, and to take actions towards meeting these objectives. ICZM seeks, over the long-term, to balance environmental, economic, social, cultural and recreational objectives, all within the limits set by natural dynamics'.

From a methodological viewpoint (Rochette et al., 2012) aim of these and various other definitions is to go beyond the sectoral approach and to make coastal management coherent by striving to achieve an articulated approach to all of its components. This does not however imply abandoning sectoral policies, since ICZM is intended to bring them into line rather than to replace them.

Guideline on ICZM in the Black Sea therefore opted for the definition provided in the Mediterranean ICZM Protocol (UNEP/MAP/PAP, 2008) as the only example of the international legally binding instrument for the regional sea in this field and in



order to maintain consistency with this document used as the model for the Guideline.

PEGASO project (<http://pegasoproject.eu>) provides the detailed coast wiki guidance of [The ICZM Process - a Roadmap towards Coastal Sustainability](#).

**Section III, Paragraph 1(a): ‘seaward limit of the coastal zone’**

Section III on the geographical coverage of the Guideline reveals the necessity for the Black Sea Countries to take into account the specificity of the coastal zones, and in particular to implement spatial integration.

Section III, Paragraph 1(a) requires the Black Sea Countries to implement the Guideline’s provisions at sea, until the limits of the territorial sea. The seaward limit does not require specific developments: it corresponds to the limit of the territorial sea, which can extend up to 12 nautical miles according to [United Nations Convention on the Law of the Sea](#).

**Section III, Paragraph 1(b): ‘landward limit of the coastal zone’**

Section III on the geographical coverage of the Guideline reveals the necessity for the Black Sea Countries to take into account the specificity of the coastal zones, and in particular to implement spatial integration.

Section III, Paragraph 1(b) requires the Black Sea Countries to implement the Guideline’s provisions at land on the ‘competent coastal units’, which could be the municipalities in some Black Sea Countries, or other corresponding subdivisions in other countries, such as rayon, wilayas, counties (Rochette et al., 2012), which could be considered comparatively equivalent to LAU 1 level Local Administrative Units, as classified by the EuroStat (<http://ec.europa.eu/eurostat/web/nuts/local-administrative-units>).

**Section III, Paragraph 2: ‘limits different from those envisaged in Paragraph 1’**

Section III on the geographical coverage of the Guideline reveals the necessity for the Black Sea Countries to take into account the specificity of the coastal zones, and in particular to implement spatial integration.

First, Section III, Paragraph 1 requires the Black Sea Countries to implement the Guideline’s provisions (a) at sea, until the limits of the territorial sea, (b) at land, on the ‘competent coastal units’.

However, in order to adapt to specific national and local conditions, and in particular to apply the ecosystem approach, Section III, Paragraph 2 authorises Black Sea Countries to establish different limits from those envisaged in Section III, Paragraph 1. Provided they declare it to the [Commission](#), via its [Secretariat](#), the

Black Sea Countries can decide to implement the Guideline (a) on a marine area smaller than the whole territorial sea, (b) on a terrestrial area smaller or wider than the territory of the competent coastal units. At land, it means that the geographical coverage of the Guideline can be smaller than a coastal city or include one or several other municipalities which, although not on the sea coast, forms part of a population centre or an important component of a coastal ecosystem (such as a wetland located near to the sea). The underlying objective of Section III, Paragraph 2 is to encourage the Black Sea Countries to consider the coastal zone not only in terms of an administrative frontier, but also according to ecological, social and economic approaches. This flexibility granted by Section III, Paragraph 2 therefore aims at implementing the Guideline on a relevant area, determined by several criteria (administrative, ecological, social, economic, etc.) and concepts (including the ecosystem approach and spatial integration). It is in general expected that landward limit as a minimum to include the coastal administrative subdivisions equivalent to LAU 2 level Local Administrative Units, as classified by the EuroStat (<http://ec.europa.eu/eurostat/web/nuts/local-administrative-units>).

**Section VI, Paragraph (b): ‘carrying capacity’**

The Guideline calls for the use of the concept of ‘carrying capacity’ in the development of coastal policy and management. This capacity should be assessed at the level of homogeneous portions of the coast and may be understood as the development threshold that an area cannot exceed without irremediably going against environmental objectives and/or adversely disturbing the socio-cultural or socio-economic equilibrium of the human communities present. Easy to use indicators of sustainability for economic activities should therefore be defined, regulated and enforced (Rochette et al., 2012).

**Section VI, Paragraph (g): ‘immediate proximity to the sea’**

As coastal zones are facing a growing number of conflicting uses, a result of the phenomenon of coastal development, the Guideline proposes a method for regulating these disputes, by promoting and giving priority only to development activities requiring immediate proximity to the sea (Rochette et al., 2012). Black Sea Countries need to introduce this concept via regulations where setback zones are concerned, providing for derogations for this type of activity – essentially traditional coastal activities.

**Section VIII, Paragraph 3(a): ‘outside protected areas’**

Where beaches, dunes, wetlands, estuaries, marine habitats and coastal forests and woods or other coastal resources are concerned, the Guideline provides for protection whether or not they are classed as protected areas. This is a key provision aimed at encouraging the Black Sea Countries to ensure the systematic protection of these habitats, irrespective of the possible establishment of protected areas. This provision thus requires rules for protecting such ecosystems to be

included in the national legislation/regulations to identify and delimitate *'outside protected areas, open areas in which urban development and other activities are restricted or, where necessary, prohibited'* (Rochette et al., 2012).

**Section VIII, Paragraph 3(b):** *'limiting the linear extension ... along the coast'*

Several marine and coastal activities must be regulated in order to limit or remove their footprint on natural areas and resources. Regulating, restricting or prohibiting these activities implies adopting and implementing laws governing either the activities themselves, or their development within a given coastal zone (Rochette et al., 2012).

The Guideline, in particular, requires national regulations *'limiting the linear extension of urban development and the creation of new transport infrastructures along the coast'* (Rochette et al., 2012).

**Section VIII, Paragraph 3(d):** *'access by the public to the sea and along the shore'*

The Guideline invites the Black Sea Countries to recognise and provide freedom of access by the public to the sea and along the shore. This provision particularly implies: (i) taking this requirement into account in when regulating the localisation of coastal activities, whether economic or recreational, and (ii) regulating and organising this access, especially by instituting easements (Rochette et al., 2012).

**Section VIII, Paragraph 3(e):** *'restricting ... land vehicles ... marine vessels'*

Several marine and coastal activities must be regulated in order to limit or remove their footprint on natural areas and resources. Regulating, restricting or prohibiting these activities implies adopting and implementing laws governing either the activities themselves, or their development within a given coastal zone (Rochette et al., 2012).

The Guideline requires the Black Sea Countries to regulate the movement and parking of land vehicles: this provision invites the Black Sea Countries to adopt a regulation to restrict or prohibit the movement and parking of vehicles within fragile natural areas, such as beaches, dunes or forests.

Similarly, maritime traffic must be regulated in order to avoid the degradation of marine ecosystems. By way of example, the anchoring of vessels in areas with high concentrations of sea grass (risk of degradation) or invasive species (risk of propagation) should be prohibited. The Guideline does not specify the particular type of navigation concerned, therefore it is to be considered that these provisions apply to all types of commercial, scientific research, sailing, and military vessels subject to the provisions of Section IV, Paragraph 2, while national security and defence activities are encouraged to be developed in the respect of the Guideline.

### **Section IX, Paragraph 1(f): 'codes of good practice'**

The promotion of codes of good practice draws on various international experiences (Rochette et al., 2012), such as the Code of Conduct for European Aquaculture (2000) prepared by the Federation of European Aquaculture Producers (<http://www.feap.info/shortcut.asp?FILE=1180>). Another well-known example is the FAO Code of conduct for responsible fisheries adopted in 1995 (<http://www.fao.org/3/a-v9878e.pdf>).

Coastal Code of Conduct for the Azov and Black Seas, based on similar European document (CE, 2000), was produced within the TACIS 1998-2000 assistance project to the Black Sea Environmental Programme (Bosch, 1999, EUCC, 1999 and 2000).

### **Section IX, Paragraph 2(d): 'Tourism, sporting and recreational activities'**

Tourism is covered by specific provisions in the Guideline. This activity, which is an important source of revenue for the Black Sea Countries, contributes to biodiversity depletion by fostering the artificialisation of land and marine areas, the degradation of sites of special interest, the introduction of non-native species or the over-exploitation of natural resources. It has considerable impacts on different ecosystems such as coastal dunes (construction of hotels and other infrastructure, trampling, etc.), wetlands (drainage, waste water, solid waste, competition with tourist water consumption, etc.), underwater vegetation (coastal development, artificial beaches, sailing, etc.), algae, and coastal forests, and also endangers the survival of several species such as cetaceans, birds and fish. Nature tourism itself, if poorly regulated, may have adverse effects due to the (excessive) number of visitors it brings to natural areas, especially to beaches, wetlands and other fragile areas when the carrying capacity is exceeded. The Guideline therefore encourages sustainable coastal tourism and the regulation of sporting and recreational activities (Rochette et al., 2012).

### **Section IX, Paragraph 2(e)ii: 'to regulate the extraction of sand'**

Sand extraction may have multiple adverse effects on the marine and coastal environment (turbidity of water that is harmful to benthic fauna and flora, changes to currents, increase in coastal erosion, etc.); therefore, it must be subjected to impact assessment and regulated (Rochette et al., 2012) both in the coastal zone and in the wider catchment basin.

### **Section XVII: 'Black Sea strategy for integrated coastal zone management'**

This provision advises countries to establish common regional framework for integrated coastal zone management in the Black Sea, inter alia through developing jointly the regional Black Sea Strategy for ICZM. It is logical to structure regional strategy following the same requirements proposed for the national strategies for integrated coastal zone management (see Section XVIII, Paragraph 2). Black Sea

countries have earlier developed the first iteration of such a document (RAC, 2004a). The document requires endorsement by the BSC to become effective.

**Section XVIII, Paragraph 1:** *'national strategy for integrated coastal zone management'*

This provision is indeed the core of the Guideline (Rochette et al., 2012), requiring the Black Sea Countries to adopt a National Strategy for ICZM. It is important to underline that the terms 'strategy'/ 'strategies', 'national strategy'/ 'national strategies' or 'coastal strategy'/ 'coastal strategies', used in multiple Sections VI, VII, X, XII, XIV, XVII, XVIII, XXI, XXII, XXVIII and XXXII, designate the same document, despite the utilisation of these different terms, and essentially mean the 'national strategy for integrated coastal zone management'.

A simple policy declaration or reference to the strengthening or adoption of a national strategy for ICZM is certainly not insufficient, as Section XVIII, Paragraph 2 sets out important requirements as to the minimum content of this strategy: (i) analysis of the existing situation; (ii) objectives; (iii) priorities; (iv) identification of ecosystems needing management; (v) identification of relevant actors and processes; (vi) measures to be taken and their cost; (vii) institutional instruments and legal and financial means available, and (viii) an implementation schedule.

PEGASO project made draft Guidelines for the Preparation of National ICZM Strategies available [http://www.pegasoproject.eu/wiki/ICZM Strategies, Plans or Programmes](http://www.pegasoproject.eu/wiki/ICZM_Strategies,_Plans_or_Programmes) through coast wiki (PAP/RAC, 2012). This guidance was drafted specifically for the preparation of National Strategies for ICZM, consistent with the requirements of the Protocol on ICZM in the Mediterranean, useful for Black Sea Countries as well within the framework of this Guideline. Draft version has been used by the 'MedPartnership' project in Algeria and Montenegro. The experience of these two countries in preparing their national strategies is to be used to finalise the document.

Earlier experience of Georgia demonstrates (ECBSea, 2009b), that contents of the cited guidance are quite compatible with the approaches used in this country. Another Black Sea Country having certain experience with national strategy for ICZM is Romania. In both cases approval of the national strategies are pending, but adoption of this Guideline is to stimulate the national processes.

**Section XVIII, Paragraph 4:** *'indicators ...to evaluate ... progress of implementation'*

Colour coded set of indicators to evaluate progress of ICZM implementation was first proposed by the ICZM Expert Group of the European Commission (EC, 2005; Pickaver et al., 2004). Similar reporting methodology was applied in the Black Sea region as well, with support of the EuropeAid funded ECBSea project (Environmental Collaboration for the Black Sea). Six coastal countries reported on

progress with ICZM under the auspices of the [Commission](#), with initial results published in the State of Environment of the Black Sea (BSC, 2008). [Advisory Group on the Development of Common Methodologies for Integrated Coastal Zone Management](#) to the [Commission](#) has further fine-tuned the progress reporting to their needs, expanding it to include the indexed reference system, corresponding in textual format the reasoning for upgrading or downgrading colour coded markers. After this initial attempt in 2008, [ICZM Advisory Group](#) decided at its annual meeting of 2010 and developed by the next meeting the concise user manual, entitled as Guidelines for Filling ICZM Progress Indicators – The Black Sea Region. This document is proposed as part of the Guideline, included as its [Appendix 1](#).

Important test of the feasibility of Guideline proved to be the ICZM implementation audit inventory, performed through stock-taking questionnaires, organized by the [Secretariat](#) within PEGASO project, engaging ICZM National Focal Points from Black Sea Countries. Stock-taking questionnaire was modelled against the requirements of the Mediterranean ICZM Protocol, content of which in basic terms is equivalent to this Guideline. All six Black Sea Countries successfully completed stock-taking exercise individually as well as produced regional synthesis report, which is documented in Abaza et al. (2011) and Antonidze et al. (2013). Implementation audit questionnaire was adjusted for the Black Sea specificities, allowing progress cross-comparison with Mediterranean region as well. This document is proposed as part of the Guideline, included as its [Appendix 2](#).

Above mentioned two progress monitoring tools were developed as online instruments with support of the European Commission's 7<sup>th</sup> Framework Programme IASON uptake project (<http://iason-fp7.eu>) and are described and available for use as part of the IASON Knowledge Base at [http://eopower.grid.unep.ch/drupal\\_IASON/?q=node/22](http://eopower.grid.unep.ch/drupal_IASON/?q=node/22) (colour coded progress reporting) and at [http://eopower.grid.unep.ch/drupal\\_IASON/?q=node/18](http://eopower.grid.unep.ch/drupal_IASON/?q=node/18) (stock-taking on-line survey tool, accessible at this link <http://iason-fp7.eu/survey>).

### **Section XIX: 'environmental assessment'**

Environmental assessments are appropriate mechanisms for preventing the degradation of biodiversity and ensuring coastal activities are compatible with the preservation of ecosystems. Consequently, Section XIX envisages the use of assessments through two types of instruments: (i) environmental impact assessments (EIAs) for public and private projects likely to have significant environmental effects on the coastal zone, and (ii) strategic environmental assessments (SEAs) for plans and programmes that are likely to significantly affect the integrity of ecosystems. In addition to the environmental section, the Guideline also calls for prior assessment of risks associated with different human activities and infrastructure (Rochette et al., 2012).

### **Section XX, Paragraph 1: 'public access to the sea and along the shore'**

The Guideline invites the Black Sea Countries to recognise and provide freedom of access by the public to the sea and along the shore. This provision particularly implies: (i) taking this requirement into account when regulating the localisation of coastal activities, whether economic or recreational, and (ii) regulating and organising this access, especially by instituting easements (Rochette et al., 2012).

**Section XX, Paragraph 2:** *'adopt mechanisms for the acquisition, cession, donation or transfer of land to the public domain and institute easements on properties'*

These provisions (Rochette et al., 2012) are directly inspired by the mechanism set up in France through the *Conservatoire del'Espace Littoral et des Rivages Lacustres* (Conservatoire du Littoral - French coastal protection agency, <http://www.conservatoire-du-littoral.fr>). A public institution created in 1975, the Conservatoire du Littoral conducts a coastal land acquisition policy, and can acquire land situated in coastal districts as defined by the law of 1975. Since 2002, the Conservatoire du Littoral also has the authority to operate in the public maritime domain, with the aim of ensuring integrated coastal zone management. Thus, with a view to integrating land and marine areas, the Conservatoire du Littoral may now act on the foreshore, beaches and may be given portions of the public domain by the country for duration of 30 years. As the property belonging to the organisation is part of the public domain, the land acquired benefits from consolidated legal protection.

The Black Sea Countries are encouraged to introduce similar mechanisms for the acquisition, cession, donation or transfer of the valuable parts of the coastal zone into the public domain and in order to institute in public interest the easements across the coastal properties.

**Section XXII:** *'vulnerability and hazard assessments'*

Although the notions such as risk, hazard, vulnerability are subject to debates among specialists, it is often considered that hazard assessments evaluate the potential extreme event *per se*, whereas vulnerability assessments combine the hazard assessment with an evaluation of its impacts on a given territory (Rochette et al., 2012).

**Section XXVII, Paragraph 2(a):** *'coastal management indicators'*

The PEGASO project has developed a core set of indicators that are instrumental in measuring the implementation of ICZM policies and programmes. The core set of ICZM indicators was developed to address the specific requirement of Section XXVII of the Protocol to 'define coastal management indicators' and 'establish and maintain up-to-date assessments of the use and management of coastal zones'. In doing so, the PEGASO project has widely built on previous and existing indicator sets developed by different institutions and projects, and which are duly acknowledged (see '[Methodological paper for the selection and application of](#)

[PEGASO ICZM indicators'](#) for further reading and background material. Noteworthy are, in particular, the indicators produced by DEDUCE project, see at <http://www.vliz.be/projects/deduce/results.html>).

15 Methodological Factsheets are available for end users from PEGASO. This set of factsheets is conceived to support a harmonized approach to calculate ICZM indicators at different spatial scales in the Mediterranean and Black Sea regions.

The indicators proposed by PEGASO are:

[Added value per sector](#)

[Area of built-up space](#)

[Bathing water quality](#)

[Commercial fish stocks](#)

[Coastal and marine litter](#)

[Economic Production](#)

[Employment](#)

[Erosion and instability](#)

[Natural capital](#)

[Hypoxia](#)

[Number of enterprises](#)

[Population size and density](#)

[Risk assessment](#)

[Sea level rise](#)

[Water efficiency index](#)

Further information about coastal sustainability indicators is also available at the following [coast wiki link: http://www.pegasoproject.eu/wiki/Sustainability\\_indicators](http://www.pegasoproject.eu/wiki/Sustainability_indicators).

### **Section XXVII, Paragraph 2(c): 'demonstration projects'**

Several demonstration/pilot efforts were applied in Black Sea Countries with the support of the international community to test ICZM governance methods at various scales. Initial efforts were documented in the review paper by Antonidze (2010). Primary aims of these efforts were to successfully test the Methodology of Spatial Planning for the Coastal Zones (ICZM RAC, 2000, further developed by Yarmak, 2004). Based on this methodology two ICZM pilot projects were implemented for the coastal resorts of Malaya Yalta (Ukraine, Azov Sea coast) and Gelendzhik (Russia, Black Sea coast) in 1998-2000 (TACIS) and 2002-2004 (EuropeAid) project support (see ICZM RAC, 2004), followed by another two ICZM pilots with BSERP support in Akçakoca Municipality on the Black Sea coast of Turkey (ITU, 2007) and with EuropeAid Environmental Collaboration for the Black Sea (2006-2009) project support in Tskaltsminda community of Georgia, latter complemented with the participatory development of national ICZM Strategy for this country (ECBSea, 2009b).



Approaches available for demonstration projects were further enhanced by the EU FP7 PEGASO project (<http://pegasoproject.eu>). Its 10 CASES (Collaborative Application SitES) aimed at testing and validating the assessment tools developed during the project at different spatial scales, and at contributing to the Regional Assessment at basin scale of the Mediterranean and Black Sea. The CASES have been chosen in order to obtain a set of heterogeneous coastal situations; the CASES selected both in the Mediterranean (7 CASES) and in the Black Sea (3 CASES) represent different coastal physical features, geographic scales, socio economic contexts, coastal issues, conflicts among uses, and ICZM experiences. General information about CASES and PEGASO approaches can be found at [http://www.pegasoproject.eu/wiki/PEGASO\\_CASES](http://www.pegasoproject.eu/wiki/PEGASO_CASES), while specific information about these demonstration projects, the Black Sea CASES in particular, is available at following links:

Danube Delta: [http://www.pegasoproject.eu/wiki/Danube\\_Delta](http://www.pegasoproject.eu/wiki/Danube_Delta)

Sevastopol Bay: [http://www.pegasoproject.eu/wiki/Sevastopol\\_Bay](http://www.pegasoproject.eu/wiki/Sevastopol_Bay)

Guria Coastal Region: [http://www.pegasoproject.eu/wiki/Guria\\_Coastal\\_Region](http://www.pegasoproject.eu/wiki/Guria_Coastal_Region)

### **Sections XXVIII and XIX: ‘transboundary’**

Integration is also defined between countries whose respective actions affect the coastal zones of their neighbours (Rochette et al., 2012). A number of provisions on strengthening regional cooperation refer to this dimension of integration, especially those relating to transboundary cooperation for coastal strategies, plans and programmes (Section XVIII) and to transboundary environmental assessments (Section XIX).

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## **APPENDIXES TO GUIDELINE**

[Appendix 1](#). Guidelines for Filling ICZM Progress Indicators – The Black Sea Region

[Appendix 2](#). Stock-Taking on ICZM in the Black Sea – Implementation Audit Questionnaire