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ANNEX I. BSEP Publications on the State and Management of the Environment of the Black Sea

Black Sea Environmental Series. Thematic Regional Studies published by UNDP through UN Publications, New York. Volumes available are:

- 1) *Vol. 1. Black Sea Bibliography (English), 1995.*
- 2) *Vol. 2. Marine Aquaculture in the Black Sea (English), 1996.*
- 3) *Vol. 3. Biological Diversity in the Black Sea: A study of change and decline (English), 1997.*
- 4) *Vol. 4. Black Sea Biological Diversity: Romania (English), 1997.*
- 5) *Vol. 5. Black Sea Biological Diversity: Bulgaria (English), 1997.*
- 6) *Vol. 6. The Most Blue in the World, by Y. Zaitsev (an introduction to the Black Sea). In Russian, 1998*
- 7) *Vol. 7. Black Sea Biological Diversity: Ukraine (English), 1998.*
- 8) *Vol. 8. Black Sea Biological Diversity: Georgia (English), 1998.*
- 9) *Vol. 9. Black Sea Biological Diversity: Turkey (English), 1999*
- 10) *Vol. 10. Black Sea Pollution Assessment (English), 1999.*

Black Sea Red Data Book (English), 1999.

Black Sea Studies. Research Report Series, including the socio-economic studies.

Black Sea Environmental Priorities Studies. Available from UN Publications, New York:

- 1) *Vol. 1. Ukraine: Black Sea Environmental Priorities Study, 1998*
- 2) *Vol. 2. Turkey: Black Sea Environmental Priorities Study, 1998*

Black Sea NGOs Directory, 1999

How to Save the Black Sea? Your Guide to the Black Sea Strategic Action Plan

Annex II. Basis for Cooperative Measures

Table II.1. Conventions to which the Black Sea Coastal States Are Contracting Parties.

Ratification- (R)
 Accession- (Ac)
 Acceptance- (A)
 Entry into force- (E)
 Signed (S)

Country	BULGARIA		GEORGIA		ROMANIA		RUSSIA		TURKEY		UKRAINE	
	S	R/A	S	R/A	S	R/A	S	R/A	S	R/A	S	R/A
UN Convention on Biological Diversity-CBD	12.06.1992	17.04.1996 (R)		02.06.1994 (Ac)	05.06.1992	17.08.1994 (R)	13.06.1992	05.04.1995 (R)	11.06.1992	14.02.1997 (R)	11.06.1992	07.02.1995 (R)
UN Convention on International Trade of Endangered Species-CITES		16.01.1991 (Ac) 16.04.1991 (E)	1971	13.09.1996 (Ac) 12.12.1996 (E)		18.08.1994 (Ac) 16.11.1994 (E)		13.01.1992 (Ac) 01.01.1992 (E)		23.09.1996 (Ac) 22.12.1996 (E)		30.12.1999 (Ac) 29.03.2000 (E)
UN Convention on Combat Desertification-CCD		21.02.2001 (Ac) 22.05.2001 (E)	15.10.1994	23.07.1999 (R) 21.10.1999 (E)		19.08.1998 (Ac) 17.11.1998 (E)			14.10.1994	31.03.1998 (R) 29.08.1998 (E)		
European Landscape Convention	20.10.2000				20.10.2000				20.10.2000			

Country	BULGARIA		GEORGIA		ROMANIA		RUSSIA		TURKEY		UKRAINE	
	S	R/A	S	R/A	S	R/A	S	R/A	S	R/A	S	R/A
UN Convention on Wetlands of International Importance especially as Waterfowl Habitat-RAMSAR		24.01.1 976 (E)		07.06.1 997 (E)		21.09.1 991 (E)		11.02.1 977 (E)		13.11.1 994 (E)		01.12.1 991 (E)
Convention on the Conservation of European Wildlife and Natural Habitats-Bern Convention		31.01.1 991 (Ac) 01.05.1 991 (E)				18.05.1 993 (Ac) 01.09.1 993 (E)			19.09. 1979	02.05.1 984 (R) 01.09.1 984 (E)	17.08. 1998	05.01.1 999 (R) 01.05.1 999 (E)
Bonn Convention on the Conservation of Migratory Species of Wild Animals		01.09.1 999 (E)		01.06.2 000 (E)		01.07.1 998 (E)						01.11.1 999 (E)
Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area-ACCOBAMS	16.09. 1999	23.09.1 999 (R)	24.11. 1996	31.03.2 001	28.09. 1998	13.06.2 000						
Cartagena Protocol on Biodiversity	24.05. 2000	13.10.2 000 (R)			11.10. 2000				24.05. 2000			
World Heritage Convention		07.03.1 974 (A)		04.11.1 992		16.05.1 990 (A)		12.10.1 988 (R)		16.03.1 983 (R)		12.10.1 988 (R)

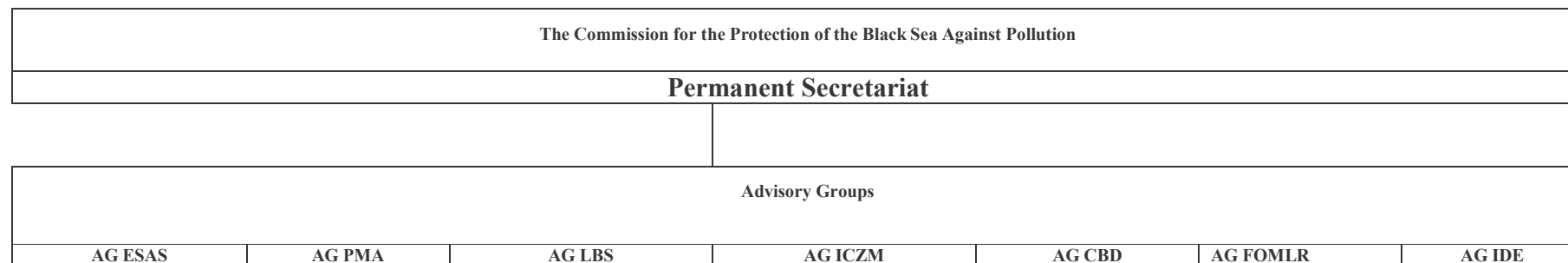
Country	BULGARIA		GEORGIA		ROMANIA		RUSSIA		TURKEY		UKRAINE	
	S	R/A	S	R/A	S	R/A	S	R/A	S	R/A	S	R/A
Convention on Environmental Impact Assessment	26.02.1991	12.05.1995 (R)			26.02.1991	29.03.2001 (R)	06.06.1991				26.02.1991	20.07.1999 (R)
BASEL Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal		16.02.1996 (A)		24.05.1999 (A)		27.02.1991 (A)		31.01.1995 (R)		22.06.1994 (R)		08.10.1999 (A)
Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters	25.06.1998		25.06.1998	11.04.2000 (R)	25.06.1998	11.07.2000 (R)					25.06.1998	18.11.1999 (R)

Table I.2. Multilateral and Bilateral Agreements Between the Black Sea Coastal States Relevant to the Protection and Rehabilitation of the Black Sea

Countries	Bulgaria	Georgia	Romania	Russian Federation	Turkey	Ukraine
Bulgaria			+		+	
Georgia					+	+
Romania						+
Russian Federation						
Turkey		+				
Ukraine		+	+	+		

Other International Agreements:

1. Governmental agreement between Georgia and Greece on cooperation in the spheres of development and environmental protection. Ratified in 16.09.97.

FIG. 1. ORGANIGRAM OF THE BLACK SEA COMMISSION








Environmental Safety Aspects of Shipping (AG ESAS)	Pollution Monitoring and Assessment	Control of Pollution from Land Based Sources	Development of the Common Methodologies for Integrated Coastal Zone Management	Conservation of Biological Diversity	Environmental Aspects of Management of Fisheries and Other Marine Living Resources Management	Information and Data Exchange
Regional Activity Centers						
Environmental Safety Aspects of Shipping (AC ESAS), Varna, Bulgaria 	Pollution Monitoring and Assessment (AC PMA), Odesa, Ukraine 	Control of Pollution from Land Based Sources (AC LBS), Istanbul, Turkey 	Development of the Common Methodologies for Integrated Coastal Zone Management (AG ICZM), Krasnodar, Russian Federation 	Conservation of Biological Diversity (AC CBD), Batumi, Georgia 	Environmental Aspects of Management of Fisheries and Other Marine Living Resources Management (AG FOMLR), Constanta, Romania 	Information and Data Exchange (AC IDE), Istanbul, Turkey 
National Focal Points						
Bg, Ge, Ro, Ru, Tr, Ua	Ua, Bg, Ge, Ro, Ru, Tr	Tr, Bg, Ge, Ro, Ru, Ua	Ru, Bg, Ge, Ro, Tr, Ua	Ge, Bg, Ro, Ru, Tr, Ua	Ro, Bg, Ge, Ru, Tr, Ua	Bg, Ge, Ro, Ru, Tr, Ua

Table II. 1 Major Regional Projects That Have Been or Are Being Implemented Between 1996 and 2001 in the Black Sea Region

THE GEF BLACK SEA ENVIRONMENTAL PROGRAMME

1. Umbrella programme for technical donor assistance
2. Interim mechanism for co-operation between the countries of the region since 1993
3. Pilot and bridging phase: 11 millions U.S. \$, GEF, 1993 - 1998
4. 7 million U.S. \$, parallel funding, EU (Phare and Tacis)
5. Additional support from UNDP, UNEP, Austria, Canada, France, Netherlands, Japan, Norway, UK
6. Cash contribution from Turkey and Bulgaria
7. Premises for headquarters provided by Turkey

STRATEGIC PARTNERSHIP

8. GEF Black Sea Regional project
9. GEF Danube River basin Regional project
10. The GEF Dnieper Basin Environment Programme (DBEP)
11. The World Bank-GEF Strategic Partnership: Investments (wetland restoration, WWTP, agricultural reform)
12. Georgia: World Bank GEF Agricultural Development Project II
13. GEF Biodiversity and Medium-Sized Projects in the Danube/Black Sea basin
14. Nutrient control and reduction Projects executed by European Bank for Reconstruction and Development (EBRD) under the new GEF 'Expanded Opportunities for Executing Agencies'
15. Accelerated implementation of environmental management programs for mining related "hot spots" identified by the Danube SAP and TDA.
16. European Union: Investment and Institutional Support
17. European Bank for Reconstruction and Development : Municipal and Industrial Investments
18. UNDP Country Cooperation Frameworks/Regional Cooperation Frameworks

Other Programs

19. World Wildlife Fund: Lower Danube Green Corridor
20. Integrated Management of the Carpathian River Basins
21. IOC- Black Sea GOOS etc..

Table IIIA.1 River –Basin Programs/ Project in the Black Sea Basin

River basin program/ project	Objectives	Duration	Donor funding	National funding
Bulgaria	In a process of preparing			
Development of the Strategic Action Plan for the Dnipro River Basin and the implementation mechanism (participants: Ukraine, Russian, Belarus)	Improvement of the environment and pollution reduction	2000-2002	GEF UNDP 7264 th. USD	Equivalent sum in roubles
Danube River Basin Environmental Program EPDRB I. Strategic Action Plan	Developing of: *Warning system	1994 - 1999	European Commission / Phare	Partly in funds Partly in kind contribution

River basin program/ project	Objectives	Duration	Donor funding	National funding
	*Monitoring system *Identification of hot points * Measures for pollution reduction, especially nutrients		UNDP/GEF	
ICPDR II.1. Danube Pollution Reduction Program II.2. Joint Action Programme of ICPDR	Nutrients reduction 36 actions; nine of them are dedicated for reduction of nutrients from point and spread sources	1996-2000 2001-2006	UNDP – GEF + national contributions Partial (Germany, Austria) for some projects	UNDP – GEF + national contributions Each country from its own funds for the area included in Danube hydrographic basin
Georgia	no river basin programs			
Turkey	No river basin program			
Ukraine				

Table IIIA.2. Emissions in the Black Sea Countries, 1996-2000 (thousand tons)

	Parameters	1996	1997	1998	1999	2000
	Green house gases:					
Bulgaria	NO _x					
Georgia	NO _x	49.56	54.51	51.46	50.48	49.15
Romania	NO _x					
Russian Federation	NO _x	191.30	175.80	170.3	193.20	188.8
Turkey	NO _x	14.47			3.69	
Ukraine*	NO _x		370.5	332.9	332.7	
Ukraine**			0.652	0.882	0.818	0.639
Bulgaria	CO ₂					
Georgia	CO ₂	8343.1	9176.3	10199.0	11151.0	11836.9

Romania	CO ₂					
Russian Federation	CO ₂					
Turkey	CO ₂		174060	186555.00	186040	195517
Ukraine*	CO ₂		1366.1	1275.9	1237.1	
Ukraine**						
Bulgaria	SO ₂					
Georgia	SO ₂	36.06	40.48	22.64	8.96	8.71
Romania	SO ₂					
Russian Federation	SO ₂	165.0	124.6	109.5	111.2	14.18
Turkey	SO ₂	92.21	95.50			
Ukraine*	SO ₂		1136.4	1923.3	1028.7	
Ukraine**			0.929	1.110	1.105	1.177
Russian Federation	CO	1222.7	1154.9	1066.7	1436.4	
Russian Federation	Particulate matter	96.2	86.9	74.3	65.7	96.29
Turkey	Particulate matter		5387.00			7943.00 ⁽¹⁾
Ukraine*	Particulate matter		785.9	749.1	782.6	
Ukraine**	Particulate matter		0.729	0.852	0.838	0.920

- Total Stationary Sources in Ukraine

** - all sources in coastal zone, Ukraine

Table IIIA.3 National Institutions Responsible for Control and Management of Emissions in the Black Sea Coastal States

Country	Institutions responsible for monitoring, assessment and control of air emissions
Bulgaria	Ministry of Environment and Water; its inspectorates. Executive Agency for Environment
Georgia	Ministry of Environment approves limit values for air emissions for Industrial facilities. Ministry of Environment does not control air pollution from mobile sources. This is under the responsibility of Ministry of Internal Affairs.
Romania	Not answered
Russia	In Russia permanent network for air pollution monitoring in cities/towns was established in 1975 (Roshydromet) and inspections for emissions control have been functioning since 1980 (Ministry of Natural Resources).

Turkey	<p>The main institution responsible for air quality management is the Ministry of Environment and its provincial offices. The Ministry of Health grants industrial emission licenses. The State Planning Organization deals with overall planning as well as programming public investment initiative relating to air management including those for energy sector. The State Institute of Statistics is a focal point for collection and publication of air- related data.</p> <p>Ambient air quality standards exist for a range of pollutants. Warning levels have been established for SO₂ and particulates. Turkey has also developed limit values for ambient air concentrations of chlorine, hydrogen chloride, hydrogen fluoride, gaseous inorganic fluoride, hydrocarbons and hydrogen sulfide, and for the lead, cadmium and thallium content of dust deposits. According tot the Regulation on Air Quality Protection, places where limit values are exceeded, action plans should be prepared locally.</p> <p>Vehicle emission standards currently in force are similar to those of the EU. Regular pollution checks of all motor vehicles, mandatory since 1992, are carried out in all provinces.</p> <p>There are studies for improving air quality by raising solid (coal) and liquid (diesel fuel and unleaded gasoline) fuel qualities.</p>
Ukraine	<p>Ministry of Environment of Ukraine and its Hydrometeorological Service control emissions of mobile and stationary sources, additional control is implemented by the sanitary and hygienic centers of the Ministry of Health Care. The air pollution from mobile sources, presumably vehicles, is control by the ecological police.</p>

Table IIIA. 4. Major Laws and Regulation for Prevention Pollution of Marine Waters from Vessels

Country	Laws	Regulations / procedures/rules
Bulgaria	Republic of Bulgaria Sea Spaces Act. Inland Navigation Farwaters and Ports of Republic of Bulgaria "	The Flag State Control and Port State Control procedures settled. Rules of the harbor masters are under preparation
	Directive 2000/59/EC of the EU Parliament and Council on port reception facilities for ship-generated waste and cargo residues.	
Georgia	Georgian Law on Water. Georgian Law on Environmental Protection.	NOSCP. Ballast Waters Management

Romania	Law 426/2000 (waste management) provisions and penalties.	-Port State Control/ Flag State Control. stated by the Government Order no. 38/2000 and the
	Law no.137/1995. completed by the Law no.159/1999 in port areas and Danube.	
Russian Federation	On Internal Marine Waters. Territorial Sea and Adjacent Zone of the Russian Federation" (1998).	Governmental Decrees as well as provisions of marine inspections regulate these matters.
	On Exclusive Economic Zone of the Russian Federation" (1998).	
Turkey		Regulation on Determination of Crime Regarding the Fines to be Levied To Ships and Other Marine Vehicles and Methods To Charge Fines and Receipts To Be Used
		Regulation on Water Pollution Control
Ukraine	Water Code of Ukraine. revised 2000	Rules for Protection of Inner. Territorial Sea. and Exclusive (Economic) Zone from Pollution and Littering. 2002

Table IIIA.5. Garbage Reception Facilities in the Black Sea Coastal Zone

Country	Total Capacity	Capacity needed	Investments needed
Bulgaria	None		
Georgia	None		500 000 USD
Romania	12 ha Constant Port dump site		
Russian Federation	Total capacity is unknown. but garbage received without limitation according to the needs of ship	no inf.	no inf.
Turkey	None		
Ukraine	Total capacity is unknown. but garbage received without limitation according to the needs of ship. Have incinerators for garbage in : Odessa port Kerch port	150 kg/hour 50 kg/hour 65	

	Izmail port	kg/hour	
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Table IIIA.6. Harbor Oil Reception Facilities in the Black Sea Coastal Zone

Country	Name and location	Capacity. M ³ per day	Financing Institution/ donor	Capacity needed
Bulgaria				
Georgia		30000	Terminal	
Romania				
Russian Federation		82 000	port authorities. shipping companies	Enough capacity
Turkey				
Ukraine.	Marine oil terminal. port Uzhnyi	9.000.000	State Budget. Ukrnaina company	

Table IIIA.7 Harbor Chemical Reception Facilities in the Black Sea Coastal Zone

Country	Total Capacity	Financing Institution/ donor
Bulgaria	none	
Georgia	none	
Romania	NA Hydroxid pelets-10 t. Methanol- 9000t. Octanol. TCE-Triclorethyle-C ₂ CL ₃ H. PCE-Perclorethyle TetraclorC-CCl ₄	Government: Oil Terminal Constanta
Russian Federation	no chemical reception facilities.	
Turkey		
Ukraine	Propane-butane CCl ₄ Toluene Acetyl acid Sterol NH ₃	Odessa. Illichivsk. Kerch. Reni Illichivsk Illichivsk Illichivsk Illichivsk Yznyi

Table IIIA.8. Biomass of Exotic Species (Romania. Russian Federation), g per m²

Country	Exotic Species	1996	1997	1998	1999	2000	2001
Romania	Mnemiopsis Leidyi	0.546	0.503	1.163	No records	Drastically reduced	
Romania	Beroye ovata		identified	no statistics	no statistics	no statistics	
Russian Federation	Mnemiopsis Leidyi			252.1	21.0	144.5	106.3
Russian Federation	Beroye Ovara				31.0	175.9	109.0

Table IIIA.9. Major Laws and Regulations on Dumping Operations in the Black Sea Coastal States

Countries	Main Legislative Acts on Dumping Operations
Bulgaria	YES. by the national legislation. There is a number of laws dealing with this matter.
Georgia	Georgian Law on Water. Georgian Law on Environmental Protection
Romania	Environmental Protection Law 137/1995 Water Law 107/ 1996 and Waste Management Law 426/2000.
Russian Federation	The Federal Law "Internal Marine Waters. Territorial Sea and Adjacent Zone of the Russian Federation "(1998) imposed a total ban on dumping of wastes and other materials and on discharges of harmful substances in the internal marine waters and in the territorial sea (Article 37).
Turkey	According to the regulation on the Control of Solid Waste which was published in the Official Gazette No 20814 and dated 14th March 1991, it is prohibited to dispose the municipal garbage directly or indirectly to receptive areas in a harmful way to the environment, without prevention of water supplies, soil, air and natural resources.
Ukraine	Rules on the Protection of the Inner waters, territorial sea, and exclusive economic zone from Pollution and Littering . 2002

Table IIIA. 10. Municipal Garbage Produced in the Coastal Zone of the Black Sea, thousand T

Country	1996	1997	1998	1999	2000	2005
Bulgaria						

Georgia						
Romania	114	117	118	129	124	
Russian Federation					2.5 th.m ³	
Turkey					202	
Ukraine						

Table III A. 11. Major Legislative and Regulatory Tools for Solid Waste Management in the Black Sea Coastal States

Country	Legal Act	Description
Bulgaria	Solid Waste Management Law (in parliament)	Has a set of rules and regulations for controlling emissions
Georgia	Law on Water. Law on the Environmental Protection. Law on Maritime Areas	Regulate the waste management in the responsible zone of Georgia
Romania	Waste Management Law no. 426/2001	According to this Law a National Plan for waste management has to be developed and approved by the Government by July 2002. Plan based on each County local plan.
Romania	Industrial recyclable waste management Law 465/2001	
Romania	Transboundary hazardous waste control-Basel Convention ratification by Law 6/1991;	
Romania	Gov. Order No. 155/1999 regarding the European waste catalog adoption	
Romania	Gov. Order No.437/1992 regarding import permitted waste;	Gov. Order draft regarding the waste transport (transposition of CE rules 253/93). In development
Romania	Gov. Order No.662/2001 regarding waste lubrication oil management;	Gov. Order draft regarding dangerous waste packaging in development
Romania	Gov. Order No. 173/2000 regarding the management of PCB/PCT compounds;	Gov. Order draft regarding waste incineration in development
Romania	Urgent Gov Order No. 200/2000 regarding labeling of dangerous substances;	Gov. Order draft regarding waste storage in development

Turkey	Regulation on the Control of Solid Waste	sets up the principles of transportation. recovery. recycling. minimization and disposal of the municipal waste. Also with this regulation; the duties of producers. municipalities and other related governmental / corporate bodies are determined and defined.
Ukraine	Rules on the Protection of the Marine Environment from Pollution and Littering . 2002	

Table IIIA.12. Dredged Spoils Dumped into the Black Sea Between 1996-2000. th. m³

Country	1996	1997	1998	1999	2000	2001
Bulgaria						
Georgia						
Romania	148	123	26	23	138	161
Russian Federation	325 th. m ³	325	325	525 th.m ³	No info	
Turkey						
Ukraine	1000	1080	2580	1900	2650	2120

Table IIIA.12a. Dumping Sites in the Black Sea

Country	Site name and Coordinates	Average Volume of dumped dredged spoils Th.m3 / year	Type of dumped dredged spoils
Romania	Constanta South Port	85	harbor sediments
Romania	Artificial island in the Constanța Port	100	harbor sediments
Russian Federation	44° 37' 37" 54' N Novorossiysk	435 *	Harbor sediments
Russian Federation	43° 58' 39" 03' N Tuapse	90*	Harbor sediments
Ukraine	Odesa Port 46° 24' 00" N 31° 00' 00" E	129.5**	Harbor sediments
Ukraine	Delta of Danube 45° 29' 15" N 29° 48' 03" E		Harbor sediments

Country	Site name and Coordinates	Average Volume of dumped dredged spoils Th.m3 / year	Type of dumped dredged spoils
Ukraine	Uzhnyi Port 46°25'23" N 31°01'30" E	1287.4**	Harbor sediments
Ukraine	Illichivsk commercial port 44°01'00" N 35°24'12" E	106.17**	Harbor sediments
Ukraine	Kerch commercial port 44°51'00" N 36°24'00" E	496.93**	Harbor sediments
Ukraine	Feodosia commercial port 45°01'36 N 35°24'12" E		Harbor sediments
Ukraine	Sevastopol 44°32'00" N 33°05'00" E		Harbor sediments
	* Data in th. T for 1999 ** Data for 2001		

Table IIIA.13 . Number (n) and volume (t) of oil spills between 1996-2001 in the Black Sea

Country	1996		1997		1998		1999		2000		2001	
	n	t	n	t	n	t	n	t	n	t	n	t
Bulgaria	0	0	0	0	0	0	0	0	0	0	0	0
Georgia												
Romania	6	18	17	40	11	32	19	56	17	42	6	9
Russian Federation	5	15.3	6	176.1	5	13.4	4	4.9	3	29.8		
Turkey	0	0	0	0	0	0	0	0	0	0	0	0
Ukraine	4	6.0	6	50.7	6	8.1	8	4.3	9	9.1	19	3.5
Total	15	42	29	267.7	22	57.1	31	73.3	54	88.1	19	3.5
total	N 170											
Total	537.7											

Table IIIA.14. Offshore Installations in Romania

Type of offshore installation	Location of offshore installation	Environmental threat of offshore installations	Volume of discharged liquid wastes	Volume of dumped solid wastes	Capacity for emergency response	Reliability of Communication System
Main rigg	100 km N-E of Constanta	Damaged oil pipeline	Produced water Q _{med} =328500 m ³ /year discharged into the sea after separation and treatment		Good	Very high
Drilling riggs	100 Km N-E of Constanta	Blow –out		Debris Q=1440 m ³ /2000 Drilling mud is recuperated	Good	Very high
All riggs			Sewage waters Q med=22320 m ³ year dumped after treatment			

Table IIIA.15. Major Laws and Regulations on Waste Management in the Black Sea Countries

Country	Laws and Regulations
Bulgaria	Related EU legislation.
Georgia	Law on Water. Law on the Environmental Protection. Law on Maritime Areas
Romania	Waste Management Law no. 426/2001. penalties and sanctions;
Romania	Industrial recyclable waste management Law 465/2001;
Romania	Transboundary hazardous waste control-Basel Convention ratification by Law 6/1991;
Romania	Gov. Order No. 155/1999 regarding the European waste catalog adoption;
Romania	Governmental Order No.437/1992 regarding import permitted waste;
Romania	Governmental. Order No.662/2001 regarding waste lubrication oil management Gov. Order No. 173/2000 regarding the management of PCB/PCT compounds
Romania	Urgent Gov. Order No. 200/2000 regarding labeling of dangerous substances.
Russian Federation	Federal Law "Wastes of Production and Consumption" 1998
Turkey	Regulation on the Control of Solid Waste (came into force on 14.03.1991)
	Regulation on the Control of Hazardous Waste (came into force on 27.08.1995)
Turkey	Regulation on the Control of Clinical Waste (came into force on 20.05.1993)
Ukraine	Law of Ukraine "On Wastes". 1998 that regulates solid waste management

Table IIIA. 16. National Agencies involved in the salvage and rescue operation in the Black Sea States.

Country	Agencies involved in the Salvage and Rescue Operations
Bulgaria	Maritime Administration.
Bulgaria	Civil Defense.
Bulgaria	Port Administration.
Bulgaria	Regional bodies of the Ministry of Environment and Water

Country	Agencies involved in the Salvage and Rescue Operations
Bulgaria	Police.
Georgia	Not responded
Romania	Harbor master 's Office (control & penalties) from Civil Navigation Inspectorate
Romania	Maritime Operations On-Scene Commander) and Maritime Salvage and Intervention Group (maritime interventions).
Romania	in coordination of the Ministry of Public Works. Transport and Housing;
Romania	National Company "Romanian Waters" Dobrogea Littoral Branch (Coastal Operations On- Scene Commander & coastal interventions)
Romania	Environmental Protection Inspectorate (control & penalties). in coordination of the Ministry of Waters and Environment Protection;
Romania	Civil Protection Command (Deputy Coordinator) presently subordinated to the Ministry of the Interior. latter to the Ministry of Public Administration;
Romania	Frontier Police. Navy (observations. control) subordinated to the Ministry of the Interior and respectively to the Ministry of National Defense;
Romania	County Prefect (General Coordinator) subordinated to the Ministry of Public Administration.
Russian Federation	Ministry of Emergency Situations (on land)
Russian Federation	State Marine Salvage and Rescue Administration (at sea)
Russian Federation	Ministry of Natural Resources
Turkey	Ministry of Environment
Turkey	Undersecretariat for Maritime Affairs
Turkey	Turkish Coast Guard Command
Turkey	General Directorate of Coastal Safety and Ship Salvage
Turkey	National On-Scene Commander: Provincial Governors of each city along the Black Sea
Turkey	Undersecretariat for Customs
Ukraine	Ministry of Extraordinary Situations and Protection of the Population from the Consequences of the Chernobyl Accident
Ukraine	Ministry of Environment and Natural Resources
Ukraine	Local authorities

Annex IIIB. Policy Actions: Living Resources Management

Table IIIB.1. Major Institutions Responsible for the Fisheries and Other Living Marine Resources in the Black Sea Coastal States

Country	Institution	
Bulgaria	The Minister of the Ministry of Agriculture and Forests The Executive Agency for Fishery and Aquaculture (EAFA).	Scientific-Technical Council for Fishery and Aquaculture” (STCFA) adopts the National Program for Fishery and Aquaculture on tender of the Ministry of Agriculture and Forests. Ministry of Transport and Communication and Ministry of Environment and Waters. The STCFA propose to the Ministry of Agriculture and Forests the establishing of quotas within the framework of the TAC’s for different fish species and other marine living resources.
Georgia	Ministry of Environment and Nature Resources Protection.	There is a strong inter sectoral links in this field. In accordance with the article 61 of the mentioned law an Inter institutional Scientific Council of Experts has been created which includes representatives of different Ministries. Scientific institutions and NGOs. On the scientific basis this Council manages all fishery rules and establishes annual quotas for different fish species intended for commercial fisheries. Within the established annual quotas Ministry of Environment and Nature Resources Protection is authorized for issuing of fishery permits.
Romania	Ministry of Agriculture, Alimentation and Forests, through the Public Authority for agriculture, alimentation and silviculture – National Company for Administration of the Fishing Fund; Ministry of Waters and Environmental Protection, through the Central Public Authority for environmental protection.	These are the organizations responsible for fishing activity management Relationship between Authority for fishing and Authority on Environmental Protection is institutionalized only in the case of Biosphere Reserve Danube Delta, for the rest of fields, this relationship shall be defined by specific structure.

Russian Federation	The State Committee of Fisheries of the Russian Federation is responsible for fishing activities management..	Its functions are monitoring of marine biological resources. norms setting for their use. their protection and conservation. assessment of habitat conditions. regulation of fishery activities. including international aspects of the problem
	The Federal Frontier Service of the Russian Federation	also participates in the protection of biological resources in the Azov-Black Area. in the prevention and elimination of poaching.
	The Ministry of Natural Resources of the Russian Federation	MNR controls the state of the environment. conducts expertise/environmental impact assessment. approves norm-setting for biological resources use (total allowable catches –TOC).
	The Scientific Research Institute of Azov Sea Fisheries Problems(AzNIIRKH)	Subordinated to the State Committee of Fisheries. conducts monitoring of marine biological resources and the environment. estimates allowable catches. In the Azop and Black Sea basin
Turkey	The Ministry of Agriculture and Rural Affairs (MARA)	the main state organization responsible for fisheries (including aquaculture) administration. regulation. protection. promotion and technical assistance through four General Directorates. The fisheries laws give the major responsibility of fisheries to the MARA. a significant part of legislation prepared during 1980's deal with protection and conservation issues. These include laws on environmental protection. national parks and protection of cultural and national wealth. which may limit some fisheries and aquaculture activities.
Ukraine	State Department of Fishery of the Ministry of Agricultural Policy.	There is sectoral link to the Ministry of the Environment

Table IIIB.2 Major Legislative and Regulatory Instruments for Environmental Aspects of Fisheries Management

Country	Law	Enforcement Status
Bulgaria	The new act of the Bulgarian Parliament (11.04.2001) for Fishery and Agriculture	This act of the Bulgarian Parliament arrange the relations connected with the organization. management. utilization and protection of the fishery resources in Bulgaria. the trade with fish and other marine living resources – Article 1.The Act is harmonized with EU regulations on fish and agriculture. At the end of the pointed act of the Bulgarian Parliament are given additional norms that explain some definitions as “sustainable fishery”. “sustainable development”. “fish population”. “by-catch”. etc.
Georgia	Law on Animal Kingdom	This law governs all rules and regulations for fisheries were established including period. quantity. annual quotas. fishing gears. prohibitions
Romania	Law on the Constitution of the Biosphere Reserve "Danube Delta" No. 82/20.11.1993;	legislation entered into force create the framework for implementing the general measures for durable management of living resources in compliance with the EU Regulations. There are necessary some specific regulations especially for marine environment. such as those for protection of the marine resources and habitats.
Romania	Law on Environmental Protection No. 137/1995;	
Romania	Urgent Ordinance on the Regime of the protected natural areas. conservation of natural habitats. wild flora and fauna;	
Romania	Law on . Fishery and Aquaculture No. 192/2001;	
Romania	Annual Order on the Fishing Prohibition	
Russian Federation	The Presidential Decree "On Measures to Ensure Protection of Marine Biological Resources and the State Control in This Field" was adopted in August 1997.	These documents are not linked directly to the BSSAP. but their provisions totally correlate with the BSSAP principles and serve as a good basis for sustainable fishery development.

Russian Federation	The Federal Law "Internal Marine Waters. Territorial Sea and Adjacent Zone of the Russian Federation" was adopted in June 1998.	
Russian Federation	In 1997-2001 the Federal Bill on conservation of sturgeons has been under elaboration and its last version underwent examination in July 2001.	
Turkey	The fisheries Law no: 1380. enacted in 1971.	All activities in fisheries and aquaculture are based on these legislative acts
Turkey	The fisheries Law No: 1380 of 1971 as amended by law 3288 of 1986	
Ukraine	Law of Ukraine "On Licensing of certain kinds of economic activity". It determines fishery in the waters of Ukraine is carried out on the basis of special permissions (licenses)	Efficiency of the legislation is satisfactory.
Ukraine	Interim procedure for fish farming and fishery. adopted by Decree of the Cabinet of Ministries No 1192 of 29 September 1996	
Ukraine	Instruction on the order of special use of aquatic living resources No 34/13 (Joint Order of the Ministry of the Environment and Nuclear Safety and State Committee for Fishery) of 10.02.2000.	
Ukraine	Regulations of fishery in the Black Sea basin (Order of the State Committee for Fisheries of Ukraine of 08.12.98 No 164)	

Annex IIIB.3 Annual Catches in the Black Sea as Reported by the Contracting Parties. 1996-2000 (by fish species)

Country	Fish catches (ton/year)	1996	1997	1998	1999	2000
Bulgaria	Anchovy	23	44	48	210	No data
Bulgaria	Sprat	3535	3646	3275	5800	
Bulgaria	Turbot	62	60	64	54	
Bulgaria	Shad	233	165	171	73	
Bulgaria	Gobies	477	424	381	437	
Bulgaria	Grey mullet	26	28	11	14	
Bulgaria	Fam. Mugilidae	3	2	2	2	
Bulgaria	Picked dogfish	64	40	28	25	
Bulgaria	Garfish	2	2	4	4	
Bulgaria	Sea snails	3260	4900	4300	3800	
Bulgaria	Decapods nei	1	3	2	2	
Bulgaria	Marine fish nei	49	51	107	231	
Bulgaria	Bluefish	10	12	10	8	
Bulgaria	Med. Horse mackerel	68	36	40	195	
Bulgaria	Bonito	33	16	51	20	
Bulgaria	Total	7848	9429	8494	10875	
Georgia	Anchovy European	6000	6500	6700	7000	
Georgia	Sprat					
Georgia	Whiting					
Georgia	Fam. mullet					
Georgia	Spiny dogfish Katran					
Georgia	Total	6000	6500	6700	7000	8000
Romania	Anchovies (Engraulis encrasicolus)	140	45	146	155	204
Romania	Sprat (Sprattus sprattus)	201	3318	3293	1933	1803
Romania	Whiting (Merlangius merlangus euxinus)	389	441	640	272	275
Romania	Turbot (Psetta)	4	1	-	2	2

Country	Fish catches (ton/year)	1996	1997	1998	1999	2000
	maeotica)					
Romania	Red mullet (Mullus barbatus ponticus) barabulia	1	3	3	1	2
Romania	Bluefish (Pomatomus saltatrix)	-	-	12	3	4
Romania	Horse mackerel (Trachurus mediterraneus ponticus) stavrida	10	1	15	3	8
Romania	Sturgeons (Acipenseridae)	2	2	6	1	1
Romania Seledka	Caspian shad (Alosa caspia nordmanni)	111	43	111	60	76
Romania	Pontic shad (Alosa pontica pontica)	-	2	68	4	5
Romania	Snouted sole (Solea nasuta)	-	-	4	5	6
Romania Bychki	Gobies (Gobiidae)	10	2	6	30	42
Romania	Kilca (Clupeonella cultrivintris)	3	2	52	4	5
Romania	Atherina (Atherina boyeri)	3	10	73	33	42
Romania	Others	8	2	2	1	1
Romania	TOTAL	2682	3872	4431	2507	2476
Russian federation	Sprat	1320	706	1243	4341	5543
Russian federation	Whiting	11	3	118	123	341
Russian federation	B.S.turbot.	17	11	14	15	4
Russian federation	Dogfish	15	9	4	8	12
Russian federation	Rays	21	16	17	26	13
Russian federation	Red mullet	67	67	118	86	126
Russian federation	Scad	0	0	2	2	2
Russian federation	A.-B.Sea	1	0	0	35	26

Country	Fish catches (ton/year)	1996	1997	1998	1999	2000
	mulletts					
Russian federation	Flounder	0	0	0	0	0
Russian federation	Others	22	1	4	0	9
Russian Federation	Total	1474	813	1520	4636	6157
Turkey	Anchovies	273239	213780	195996	310801	
Turkey	Horse mackerel	11382	8084	6534	5412	
Turkey	Whiting	20236	12725	11863	12459	
Turkey	Palamut	6523	3808	20480	15233	
Turkey	Turbot	1924	911	1468	1804	
Turkey	Red mullet	2249	1173	1423	1853	
Turkey	Mullet	12901	8680	8198	9887	
Turkey	Bluefish	2207	1615	1636	1602	
Turkey Skumbria	Horse mackerel	1045	2203	2376	422	
Turkey	Total	331706	252979	249974	359473	
Ukraine	Horse Mackerel	-	5	0	1	1
Ukraine	Atherina	218	367	308	219	289
Ukraine	Other fish species	2	0	-	3	-
Ukraine	Sprat	20720	20208	30282	30661	33021
Ukraine	Philophora	820	-	4**	3**	-
Ukraine	Rapana (Rapana)	376	476	369	615	913
Ukraine	Gobbies	46	73	28	45	63
Ukraine	Turbot	39	42	44	91	87
Ukraine	Grey Mulletts	3	0	2	9	19
Ukraine	Whiting	3	29	55	18	19
Ukraine	Haarder	8	118	63	15	18
Ukraine	Mussels	74	159	159	162	114
Ukraine	Flounder	0	2	2	2	2
Ukraine	Shad Danubian	5	9	6	3	-
Ukraine	Shad Black Sea	1	-	-	-	-
Ukraine	Anchovy	-	0	3	1	0
Ukraine	Red Mullet	...	18	26	26	7
Ukraine	Garfish	-	-	0	-	-
Ukraine	Anchovies Black Sea	596	596	1039	784	3095
Ukraine	Spiny dogfish	44	20	38	100	72
Ukraine	Ray	17	10	24	31	27
Ukraine	Shrimps	-	-	-	1	1
Ukraine	Total marine living	25275	29231	34785	32789	37752

Country	Fish catches (ton/year)	1996	1997	1998	1999	2000
	resources					
Ukraine	Total fish catches	24005	28596	34253	32011	36724

Table IIB.4. Total Fish Catches in the Black Sea, tons

	1996	1997	1998	1999	2000
Bulgaria	7848	9429	8494	10875	10875*
Georgia	6000	6500	6700	7000	8000
Romania	2682	3872	4431	2507	2476
Russian Federation	1474	813	1520	4636	6157
Turkey	331706	252979	249974	359473	359473
Ukraine	24005	28596	34253	32011	36724
Total	373715	302189	305372	416502	423705

- no data for 2000, taken as previous year

Table IIIB.5. Spawning and Nursery Grounds of the Regional Importance in the Black Sea

Country		Reasons for conservation measures
Bulgaria	Sand bank "Cocketrice" Sea coast. " –	the highest bio-diversity of the soft bottom sublittoral along the Bulgarian Black coast
Bulgaria	Reserve "Kaliakra"	high bio-diversity and habitat for the monk seal (<i>Monachus monachus</i>) – the most endangered of extinction marine mammal.
Georgia	Poti-Ochamchire region of the Black sea shelf there is a sturgeon ecosystem.	. This ecosystem is the main region of anchovy catches during the winter period
	Supsa. Batumi and Gonio regions.	
Romania	The "Danube Delta" Biosphere Reserve - marine zone;	a traditional zone for spawning and feeding for transboundary species as well as a passage route for anadromous species (sturgeons. <i>scrumbia de Dunre</i>)
Romania	The Marine Reserve 2 Mai - Vama Veche.	an area with a high diversity of the biotops and biocoenosis. being settled on the migration routes of the main pelagic and benthic fish and marine mammals.
Russian Federation	The most important part of the Black Sea shelf for the Russian fishery sector is located between the Kerch Straits and Adler (river Psou mouth), its area is about 4.2 thous. sq. km;	The most dense accumulations of commercial fish species are observed in these areas: anchovy, sprat, whiting, mullets, red mullet, dogfish, rays, turbot, shad and some others.
Russian Federation	the Kerch-Taman region – its width ranges from 20 to 50 km;	
Russian Federation	in the Caucasus region – from 2 km near Adler to 18 km near Sochi.	

Turkey	No information available	
Ukraine	Mouth of the Danube	spawning of sturgeons and Clupeidae
Ukraine	Mouths of the Dniester. Dnieper and Bug.	
Ukraine	Dnieper-Bug estuary (foraging area).	
Ukraine	the Black Sea Reserve Sivash	
Ukraine	Zepnov's Phyllophora field.	
Ukraine	North-Western part of the Black Sea.	

Annex IIIB.6 Coastal Lagoons and Spawning Ground Intended for Restoration in the Years 2001-2005.

Country	Lagoons and Spawning Grounds Intended for Restoration
Bulgaria	Project for protection an area of about 6 500 ha along the northern part of the Bulgarian Black Sea coast by means of so called “cold mines” – protectors against illegal bottom trawling. which destroy the spawning and nursery grounds, mainly for Gobies and Turbot.
Georgia	Poti – Ochamchiri
Romania	The Danube Biosperic Biological Reserve and Marine Reserve 2 Mai - Vama Veche
Russian Federation	The Russian Government and the State Duma elaborate a new Bill on sturgeons conservation that envisages measures for protection of these areas.
Turkey	No information is available
Ukraine	During the spawning period fishery activities on spawning grounds not allowed.

Table IIIB.7 Size Limits and Status of Conservation of the Commercial Fish Species

Species	Minimum length for catching (cm)					
	Bulgaria	Georgia	Romania	Russian Federation	Turkey	Ukraine
Anchovy			Anchovy	6.5	9	
Turbot				35	40	
Stripped mullet				8.5	13	
Chum mackerel					18	
Atlantic bonito					25	
Sturgeons				Total ban	Total ban	Total ban
Horse mackerel.			Horse Mackerel	10		
Dogfish			Dogfish	85		

Table IIIB.8. Quality Standards for Substances Used in Aquaculture. Turkey

Compound	Active concentration/time
Cooper sulphate	500 ppm/1 min
Formalin (=37% formaldehyde)	150-200 ppm/1 hr
Malchite green	1-2 ppm/1 hr or 67 ppm/1 min
Oxytetracycline	75 ppm/kg fish/day
Benzalkonium Cl-	1-4 ppm/1 hr
Potassium permanganate	5 ppm/1 hr or 500 ppm/5 min
Sodium Hypochlorite	1-2%/20 min
Furazolidone	50 mg/kg fish/day

Table IIIB.9. Release of Young Commercial Fishes into the Natural Water Bodies of the Azov and Black Sea Basin

(Enterprises of the Russian Federation)

Fish species	1995		1996		1997		1998		1999		2000		2001	
	1	2	1	2	1	2	1	2	1	2	1	2	1	2
Sturgeon	15.8	1.0-19.2	14.0	1.0-2.6	14.6	1.6-2.9	19.6	2.0-2.7	14.1	2.0-2.6	17.4	1.0-3.1	19.4	1.2-4.9
St.sturgeon	15.3	1.6-14.2	14.3	1.0-1.7	14.2	1.1-1.7	12.0	1.7-18	17.8	1.5-1.8	13.0	0.2-2.0	7.6	2.1-3.7
Great sturgeon	-	-	0.2	1.0	0.13	3.1	0.2	4.5	0.59	3.7-7.7	-	-	0.13	7.0
Pike perch	260.3	0.6-4.0	222.4	0.6-1.8	314.4	0.5-2.2	13.5	0.8-5.8	320.6	0.3-0.6	351.6	0.5	387.3	0.5
Bream	257.9	0.3-0.5	160.0	0.3-0.6	248.4	0.3	302.7	0.3-0.4	332.9	0.3	338.1	0.3	288.7	0.3
Roach	2792.4	0.4-0.5	2852.6	0.3-1.2	2924.8	0.3	2748.4	0.3-5.8	2869.2	0.3	3002.3	0.3	2880.7	0.3
Vimba	7.8	0.2-1.0	1.6	0.3-1.0	0.5	0.2	5.1	0.2-1.1	0.35	0.2	8.4	0.3	9.7	0.3
Shemaya	0.05	0.2	0.22	0.13	0.34	0.3	0.1	0.1	0.11	0.6	0.22	0.3	-	-
Carp	0.4	2.5	-	-	-	-	-	-	-	-	-	-	-	-
Planteating species	0.14	223.0	0.51	0.5-235.0	0.65	80.0-148.6	1.53	116-270	46.5	11.0-142.5	80.2	25.3-139.0		
Mullet	-	-	-	-	-	-	-	-	2.6	2.2	-	-	-	-
Others	-	-	12.9	-	-	-	-	-	-	-	-	-	-	-
Sterlet	-	-	-	-	-	-	0.1	3.3	0.16	6.9	0.013	6.7	0.35	
Polyodon	-	-	-	-	-	-					0.011	4.0	-	-
Total	3350.1		3533.4		3518.0		3103.2		3605.0		3811.2		3594.3	

Note: 1 – amount. millions of specimens; 2 – average wet weight of fish released by different hatchery plants (g)

IIIB.10. Stocks, Total Admissible Catches (TAC) of Main Commercial Species in the Azov and Black Sea Basin. th.t

Fish species	1996				1997				1998			
	Stocks I	TAC II	Catches III	Including. RF IV	Stocks	TAC	Catches	Including. RF	Stocks	TAC	Catches	Including. RF
The Azov Sea. Marine Fish Species												
Azov anchovy	61.0	10.0	4.66	0.93	65.0	10.0	10.0	3.3	68.0	10.0	5.4	1.3
Kilka sprat	150.0	15.0	1.44	0.37	75.0	15.0	1.0	0.1	95.0	15.0	3.6	1.0
Mullet	-	5.0	1.2	0.2	30.0	5.0	3.3	0.7	42.8	8.7	4.9	1.3
Gobies	1.45	-	0.02	-	0.8	-	0.016	-	3.56	-	0.26	0.001
Azov Turbot	0.78	0.07	0.14	0.03	0.56	0.07	0.074	0.033	0.93	0.07	0.054	0.02
Others	-	1.00	-	0.02	-	-	0.4	-	-	-	0.53	0.49
The Azov Sea. Migratory and Semi-Migratory Fish Species												
Sturgeons	5.75	1.50	0.60	0.44	5.12	1.50	0.62	0.44	3.27	0.90	0.40	0.28
Pike perch	16.3	3.3	3.1	2.6	18.7	3.8	3.3	2.7	20.6	3.8	3.2	2.4
Bream	3.5	1.2	0.8	0.8	1.1	0.75	0.7	0.7	3.2	0.89	0.86	0.84
Roach	2.1	0.2	0.244	0.243	1.1	0.3+0.3	0.595	0.595	1.9	0.5	0.092	0.091
The Black Sea												
Sprat	150.0	10.00	22.23	1.32	205.0	10.0	20.999	0.706	150.0	10.0	31.549	1.243
Whiting	8.0	0.50	0.24	0.011	9.0	0.5	0.09	0.003	5.6	0.5	0.226	0.118
Bl.Sea turbot	1.75	0.10	0.056	0.017	1.13	0.1	0.052	0.011	1.35	0.1	0.058	0.014
Dogfish	20.0	0.7	0.13	0.015	5.8	0.7	0.031	0.009	20.0	0.7	0.592	0.004
Rays	2.0	0.1	0.038	0.021	0.77	0.1	0.026	0.016	1.0	0.1	0.041	0.017
Red mullet	0.54	0.1	0.067	0.067	0.60	0.1	0.099	0.067	0.90	0.1	0.156	0.118
Scad	0.097	-	-	-	0.19	0.005	0.022	0.00	0.42	0.005	0.015	0.002
Az.-Bl.Sea mullets	-	-	-	0.001	-	-	-	-	-	-	-	-
Flounder	0.45	-	-	-	0.60	-	-	-	0.60	-	-	-
Others	-	1.00	-	0.022	-	-	-	0.001	-	0.1	0.004	0.004

Note: in columns I, II, IV (the Black Sea) data are given for the Russian part of the water body. data for the Commonwealth Independent States (CIS) are summarized in column III.

Table IIIB.10 (continued)

Fish species рыб	1999				2000				2001			
	Stocks	TAC	Catches	Includ. RF	Stocks	TAC	Catches	Includ. RF	Stocks	TAC	Catches	Includ. RF
The Azov Sea. marine fish species												
Azov anchovy	47.0	5.0	2.94	2.28	65.0	25.0	12.9	4.22	90.0	23.5	15.2	7.30
Kilka sprat	90.0	15.0	12.27	2.28	125.0	4.0	12.0	4.9	160.0	40.0	25.5	9.68
Mullet	28.5	10.0	7.5	2.3	28.0	8.0	7.8	2.4	25.0	6.5	3.6	1.3
Gobies	2.0	-	0.56	-	5.0	0.05	0.747	0.001	26.0	0.05	-	0.007
Az.turbot	0.7	0.05	-	0.016	1.3	0.05	0.071	0.027	1.0	0.05	-	0.014
Others	-	-	0.08	0.02	-	-	0.07	0.05	-	-	-	0.085
The Azov Sea. Migratory and Semi-Migratory Fish Species												
Sturgeons	2.10	0.30	0.22	0.17	1.41	0.15	0.07	0.05	0.66	0.15	0.022	0.018
Pike-perch	27.9	3.8	2.7	1.9	31.6	4.0	3.3	2.3	31.3	5.8	3.5	1.9
Bream	1.9	0.6	0.35	0.7	1.7	0.6	0.4	0.6	0.76	0.4	0.16	0.16
Roach	1.5	0.4	0.167	0.167	2.6	0.5	0.408	0.408	2.2	0.4	0.255	0.255
The Black Sea												
Sprat	150.0	50.0	33.623	4.341	150.0	10.0	38.198	5.543	170.0	40.0	-	11.12
Whiting	6.0	1.2	0.182	0.123	9.0	2.0	0.361	0.341	7.0	2.0	-	0.545
B.S.turbot.	1.4	0.1	0.095	0.015	1.0	0.1	0.095	0.004	1.0	0.1	-	0.012
Dogfish	0.65	0.7	0.12	0.008	10.0	0.7	0.104	0.012	10.0	0.7	-	0.032
Rays	0.8	0.1	0.057	0.026	0.8	0.1	0.040	0.013	0.8	0.1	-	0.024
Red mullet	1.2	0.02	0.124	0.086	1.2	0.2	0.141	0.126	0.96	0.2	-	0.118
Scad	0.4	0.005	0.003	0.002	0.5	0.006	0.038	0.002	2.3	0.006	-	0.006
A.-B.Sea mullets	-	0.01	0.047	0.035	-	-	0.056	0.026	1.0	0.25	-	0.006
Flounder	0.55	0.1	-	-	0.6	0.1	-	-	-	0.1	-	-
Others	-	-	-	-	-	-	-	0.09	-	-	-	0.15

Note: in columns I. II. IV (the Black Sea) data are given for the Russian part of the water body. data on CIS are summarized in column III.

Table IIIB.11. Major National Legislative and Regulatory Tools for Protection and Conservation of Biological and Landscape Diversity in the Black Sea Coastal States

Country	Laws	Regulations
Bulgaria	Protected Area Law. 2001;	
Bulgaria	Biodiversity Conservation Law under Approval	
Georgia	Decrees of Parliament of Georgia:	

Georgia	“About the Convention on Protection of the Black Sea Against Pollution”	
Georgia	“About the Biodiversity Convention”	
Georgia	About joining to the “Convention on wetlands of international importance”	
Georgia	Law “On the protected territories system”	
Georgia	Law “State environmental Expertise”	
Georgia	Law “On Environmental Protection”	
Georgia	Law “Establishment and Management of Kolkheti Protected Areas”	
Romania	Law on Environmental Protection (107/1996)	
Romania	Law 5/2000 regarding the planning of the territory	
Romania	Law 192/2001 on fishing resources. fishery and aquaculture	
Romania	Order 125/1996 of the Minister of Waters and Environmental Protection regarding the procedure for regulation of the economic and social activities with impact on environment.	
Romania	Order 699/1999 of the Minister of Waters and Environmental Protection for approval of procedures and competencies for issuing the permits and authorizations for water management	
Russian Federation	Law on Special Protected Natural Areas. 1995.	35 laws. 3 decrees of law status. 23 regulations. and 10 circulars
Russian Federation	Law on Fauna" 1995	
Russian Federation	Forestry Code of the Russian Federation" 1997	
Russian	A List of Special Protected Natural Areas" 1996	

Federation		
Russian Federation	Strengthening of Protection of Fauna and its Habitat in the Forestry Area of the Russian Federation" 1997	
Russian Federation	Payment and its limits for Fauna Use. 1997	
Turkey	Law for Environment	
Turkey	Law on the Conservation of the Cultural and Natural Heritage	
Turkey	National Parks Law 1983	
Turkey	Hunting Law passed in 1937	
Ukraine	Law on Fauna and Flora	
Ukraine	Law on Environmental Protection	A variety of regulations and rules xconcerning the conservation issues
Ukraine	Law on the State Program for Establishing the National Ecological Network. 21.09.2000	
Ukraine	Law on the State Program for Development of Protected Territories. 22.09.1994	

Table IIIB.12. Major National Authorities Involved in the Protection and Conservation of Biological and Landscape Diversity

Bulgaria	Institution	Responsibilities
Bulgaria	Ministry of Environment and Water	Legislation and control of protected areas
Bulgaria	Ministry of Agriculture and Forestry	Management of natural parks
Bulgaria	National Forestry Board	Management of forests and national parks on local level
Georgia	Ministry of Environment and its regional offices	Implementation of the state policy, coordination of activities and control of establishment, functioning and management of conservation areas.
Georgia	State Department of Protected areas. Nature reserves and Hunting reserves.	Management of conservation areas
Georgia	Administration of Protected Area	The local bodies for management of conservation areas
Romania	Ministry of Waters and Environmental Protection.	
	Environmental Protection Inspectorate Constanta.	control
	Environmental Protection Inspectorate Tulcea.	control
	National Company “ Romanian Waters”- Direction of Waters “Dobrogea Litoral”	management
	Danube Delta Biosphere Reserve Authority Tulcea	Conservation. management
	Commission for Protection of Natural Monuments of Romanian Academy.	control
Russian Federation	Ministry of Natural Resources	Policy, legislation, environmental management
	responsible governmental agency. directorates of conservation areas	
	responsible management authorities for protection of conservation areas	
Turkey	Ministry of the Environment	Policies, planning and co-ordination for environmental protection
	Ministry of Forestry	

Bulgaria	Institution	Responsibilities
	Ministry of Agriculture and Rural Affairs	
	ASPA	
Ukraine	Ministry of Environment and Natural Resources of Ukraine and its regional departments and its regional bodies	Environmental policy development.
	State Administration for National Parks and Protected Areas Development	
	Black Sea Environmental Inspection	Control and regulation
	State Committee on Fisheries	Fisheries quotas
	Azov Sea Environmental Inspection	Control and regulation
	State Committee on Forestry	

Table IIIB.13. Black Sea Facilities Keeping Marine Mammals in Captivity (Dolphinaria)

Country	Locality of dolphinaria	Affiliation of dolphinaria	Captive dolphins	Activities of dolphinaria
Bulgaria	Varna	non-governmental	Caribbean bottlenose dolphins	Show
Georgia	Batumi	Research Institute of Marine Ecology and Fisheries	No cetaceans at present (they were exported to Malta)	No local activities at present. the dolphinarium is shut-down
Romania	Constantza	Natural Sciences Museum	Black Sea bottlenose dolphins	Show. lecturing. research in captivity
Russia	Anapa (Bolshoi Utrish)	non-governmental	Black Sea bottlenose dolphins	Show. sometimes rescue operations
	Novorossiysk (Malyi Utrish)	Institute of Ecology and Evolution (Russian Academy of Science)	Black Sea bottlenose dolphins (during warm season only)	Research in captivity. recording of cetacean strandings
	Gelendzhik	Utrishsky Dolphinarium Ltd.	Black Sea bottlenose dolphins	Show, lecturing. participant and sponsor of conservation projects
	Sochi	Utrishsky Dolphinarium Ltd.	Black Sea bottlenose dolphins	
Turkey	no	no	no	no
Ukraine	Evpatoria (incl. Donuzlav lake)	Nazaret Ltd.	Black Sea bottlenose dolphins	Show. swimming with dolphins. sometimes rescue operations

	Sevastopol (Kazachya Bay)	Research Center “State Oceanarium of Ukraine” (Ministry of Defence and National Academy of Science)	Black Sea bottlenose dolphins	Research in captivity. show. lecturing. swimming with dolphins. nature reservation area
	Sevastopol (Artillery Bay)	Biological Station Ltd.	Black Sea bottlenose dolphins	Show. lecturing. participation in DOLPHIN-program
	Yalta	Aqua-Studio Ltd.	Black Sea bottlenose dolphins	Show. lecturing. participation in DOLPHIN-program. swimming with dolphins
	Alushta (Partenit)	Aqua-Studio Ltd.	Black Sea bottlenose dolphins	
	Feodosia (Kurortnoye)	Karadagsky Nature Reserve (National Academy of Science)	Black Sea bottlenose dolphins	Research in captivity. show. lecturing. natural reserve. sponsor of conservation projects

Table IIIB. 13a. Numbers of Black Sea Bottlenose Dolphins (*Tursiops truncatus ponticus*) maintained in captivity in the Black Sea Coastal Dolphinarium

Country	Locality of dolphinarium	Number	Notes
Bulgaria	Varna	None	All dolphins are initially from the Caribbean Sea (Cuba)
Georgia	Batumi	None	Dolphins were exported to Malta
Romania	Constantza	3	in December 2001
Russia	Anapa (Bolshoi Utrish)	few individuals	
	Novorossiysk (Malyi Utrish)	None	There were no dolphins in May 2002. This is seasonal dolphinarium.
	Gelendzhik	few individuals	
	Sochi	few individuals	
Turkey	none	Not applicable	Not applicable
Ukraine	Evpatoria (incl. Donuzlav lake)	4	in March 2002

	Sevastopol (Kazachya Bay)	few tens of animals	
	Sevastopol (Artillery Bay)	3	in summer 2001
	Yalta	2	in March 2002
	Alushta (Partenit)	2	in March 2002
	Feodosia (Kurortnoye)	5	in March 2002

Table IIIB.14. Protected Area in the Black Sea Coastal States. th.km²

Country		1996	1997	1998	1999	2000	2005 planned	Comments
Bulgaria	Total conservation areas. th.km2							
Georgia			0.34	0.34	0.34	0.64		
Romania						500		The marine littoral area Vama Veche- 2 Mai ⁷⁷ (whose area is mentioned in the Table 26) was declared reserve conforming with the Law 5/2000 regarding the planing of the territory and of the Urgency Order 236/2000 regarding the protected areas. conservation of natural habitat. wild flora and fauna.
Russia		4798	4833	4837	4862	6146	no inf.	
Turkey								
Ukraine		19.700	23.700	25.140	26.590	27.040	27.300	

Country		1996	1997	1998	1999	2000	2005 planned	Comments
Ukraine	Total protected areas (nature reserves fund)	16.650	20.650	22.090	23.540	23.990	26.000	
Bulgaria	Total Marine conservation areas. th.km2					0.30		
Georgia						500		
Romania								
Russia								
Turkey								
Ukraine	4.390	4.390	4.390	4.540	4.670	5.000		
Bulgaria	Of regional importance					0.3		
Georgia								
Romania						500		
Russia								
Turkey								
Ukraine		0.200	0.200	0.200	0.200	0.310	0.320	
Bulgaria	Total Wetlands							
Georgia		2.2	2.2	2.2	2.2	2.2	2.4	Wetland rehabilitation
Romania								

Country		1996	1997	1998	1999	2000	2005 planned	Comments
Russia								
Turkey						1.60		
Ukraine		5.320	5.320	5.320	5.320	5.320	5.500	
Bulgaria	Of regional importance	-	-	-	-	-	-	
Georgia								
Romania			0.34	0.34	0.34			
Russia								
Turkey								
Ukraine								
Bulgaria	Total coastal							
Georgia								
Romania		0.96	0.96	0.96	0.96	0.96	1.2	
Russia		4798	4833	4837	4862	6146	no inf.	Rostov Oblast and Krasnodar Kraj
Turkey		2.260	2.260	2.260	2.450	2.450	2.710	
Ukraine								
Bulgaria								
Georgia	Of regional importance				0.54	0.64		
Romania								
Russia								
Turkey								
Ukraine		0.230	0.230	0.230	0.240	0.240	0.250	

IIIB.15 National Programs/Projects for Conservation/ Protection of Marine and Coastal Areas in the Black Sea Countries. 1996-2001 and Planned for 2001-2005

Country	Program/ project	Financing institution/ donor	Duration	Costs. USD
Bulgaria	Development of Management Plan for Wetlands along the Black Sea Coast	Swiss Government		
Bulgaria	Estuaries of Rezovska River and Veleka River	Monaco and Swiss Government		
Georgia	Creation of Kolkheti National Park and Kobuleti Reserve.	GEF. WWF	2001-2005	
Georgia	Georgian Black Sea Coastal Zone Integrated Management Project	GEF. WWF	2001-2005	
Georgia	Establishment of Kolkheti Protected area and development of management plan		2000-2003	
Romania	Inventory of the marine and coastal habitats from the Vadu - Vama Veche sector.	Ministry of Waters and Environmental Protection/MWEP	2001	200.000.000 lei
Romania	Inventory of marine and coastal habitats from the Vadu - Chituc sector.	MWEP	2001	500.000.000 lei
Romania	Informational support for implementing the EMERALD Project in Romania; case study for a relevant marine area.	Balcanic Environmental Association/B.EN.A	2001	45.000.000 lei
Russia	Federal Program "Ecology and Natural Resources"; subprog-ram "Support to Special Protected Natural Areas"	federal budget. budgets of the Russian Federation subjects. non-budgetary sources	2002-2010	30450
Russian Federation	The Federal Program "Ecology and Natural Resources of the Russian Federation for the	federal budget. budgets of the subjects of the Russian		

Country	Program/ project	Financing institution/ donor	Duration	Costs. USD
	period 2002-2010" adopted by the Government on August 23.2001 includes the sub-programs "Support to Special Protected Natural Areas". "Forests". "Water Resources and Water Bodies". "Marine Biological Resources and Aquaculture". "Conservation of Rare and Disappearing Species of Fauna and Flora".	Federation. non-budgetary sources		
Turkey	The strategic actions determined under the NBSAP.			
Ukraine	National Program on Protection and Rehabilitation of the Azov and Black Seas	State budget. enterprises. local budgets. international funds	2001-2010	
Ukraine	Scientific program "Dolphin" aimed at activities to study and conserve marine mammals in Ukraine	Self-financing of executive institutions and enterprises	1999-2005	7500 (in 1999-2002)
Ukraine	State Program on Ecological Corridors	State budget; local budgets; enterprises; international funds		
Ukraine	Odesa Regional Environmental Program	Oblast funds	5 years	

Annex IIIC. Policy Actions: Sustainable Human Development

Table IIIC.1. Number of Aquaculture Enterprises/ Firms in the Black Sea Countries

Year	1996	1997	1998	1999	2000
Romania					
Private aquaculture enterprises		1	1	1	1
Russian Federation					
Number of aquaculture enterprises	2	2	2	3	3
Number of private aquaculture enterprises/farms	1	1	1	2	2
Turkey					
Private enterprises	61	49	72	50	55
Number of aquaculture enterprises					15
Private enterprises					10

Table IIIC.2. Yields of Raw Products of Aquaculture Enterprises. 1996-2000

Year	1996	1997	1998	1999	2000
Romania					
Mussels . t/year			4	4	4
Russian Federation					
Overall yield. t/year	50	275	550	650	950
Oysters. t/year	-	-	10 000 pieces	12 000 pieces	12 000 pieces
Mussels . t/year	50	275	550	650	950
Overall yield. t/year	32709	30000	28332	33816	30969
Oysters. t/year					
Mussels	250	37		10	4
Cyprinus carpio	20000	18000	18000	20000	20000
Hypophthalmichthys	10000	10000	10000	10800	10500
Ctenopharyngodon	100	100	100	100	100
Carassius spp.			132	190	188
Osteichthyes	2000	1613		600	19
Mugil soiyu	150	150			
Oncorhynchus mikiss	100	100	100	100	100

Turkey					
Common carp	125	90	50	60	88
Rainbow trout (Ponds and Cages)	3450	5225	5950	7650	8500
Trout (marine & cages)	1455	2117	2550	1760	1981
Atlantic salmon	185	20	10	0	0
Sea bass	20	183	250	360	411
Sea bream	0	0	0	0	0
Mussels	1380	0	0	0	0
Shrimp	0	0	0	0	0
Oyster	0	0	0	0	0
Total	6615	7635	8810	9830	10980

..Table IIIC.3. Number of Tourists Visited the Black Sea Coast Between 1996 – 2000. mln. persons

Country	1996	1997	1998	1999	2000	2005
Bulgaria						
Georgia					0.75	
Romania	0.965	0.85	0.9	0.77		
Russian Federation	4.4	4.6	3.6	4.2	4.8	5.2
Turkey						
Ukraine*	10.1	13.3	11.9	10.6	11.6	

*total in Ukraine

Table IIIC.4. Environmental Impact Assessment (EIA) for Big Energy Projects in the Black Sea Countries. 1996-2000 and Planned for 2001-2005

Project	Company	EIA	Results of EIA in Brief
Bulgaria Burgas Alexandropolis – gas pipeline	Vodocanal Engineering	2002	positive
Georgia			
Design of the Poti Port railway ferry berth construction.	Poti Port	1996	
Western Rout Oil Pipeline (WREP). rehabilitation of Georgian section of the	Georgia International Oil Corporation	Georgia Pipeline Company	

Project	Company	EIA	Results of EIA in Brief
pipeline. marine terminal and oil handling facility construction. (2) EIA reports	#41. 24.03.97	(GPC) – – Pipeline EIA: Dames and Moore. UK; Terminal and Loading Facility: DNV. Norway	
Poti Reconstruction and Development Master Plan.	“SakKalakMshen Proekti”	1997	
Container handling terminal. Preliminary EIA. Poti Port	A&E Consultants. Georgia	1999	
Oil handling terminal facility. Preliminary EIA. Poti Port		1999	
Railway Ferry Berth. EIA report. Poti Port		1999	
Oil product and liquid chemical loading facility and temporary floating reservoir. EIA report. Poti Port 16.12.99	Zenith Gamma Consulting. Georgia	2000	
Construction of new oil and oil product handling terminal near Kulevi. Khobi river mouth. Preliminary EIA. “Terminal 2000” Ltd. 27.01.2000		2000	
Two groundwater wells for the supply of water to Kulevi “Terminal 2000” Ltd. 6.03.2000		2000	
village and terminal facility			
Technical condition of the Khashuri -Batumi oil pipeline. EIA report.	Geoengineering” Ltd. 1.04.2000		
De-oiling of Samgori-Khashuri main oil pipeline (Khashuri-Supsa section)	Georgia Pipeline Company 24.04.2000		
River crossing restoration	Georgia Pipeline		

Project	Company	EIA	Results of EIA in Brief
works on "Kvirila-2" "Khanistskali"	Company 2.07.2000		
Deepening and bed cleaning of Poti military port basin. reinstatement of the port area	"Megafлот" 20.07.2000		
Geophysical seismic works in the Black Sea shelf.	Oil and Gas Regulating Agency of Georgia 14.08.2000		
Coastal protection works. border guard facility near village Grigoleti	Research Institute "Sandi" ("SakNapirDatsva ") 22.09.2000		
Tengiz crude oil shipment by Georgian Railways. storage. transporting and handling in the port of Batumi	"Caspian TransCo" Inc. 29.09.2000 Institute of Hydrometeorolog y. Georgia		
Oil product handling and storage facility in the Poti port. EIA report	Channel energy (Poti) limited Georgia 2.11.2000		
Coastal protection works. Georgia Pipeline Company marine base facility near village Grigoleti	Georgia Pipeline Company 5.12.2000		
Irrigation and Drainage Community Development Project.	World Bank Irrigation and Drainage Project Implementation Unit 2.04.2001	2001	
Construction of new oil and oil product handling terminal near Kulevi. Khobi river mouth. SEE conclusion.	Black Sea Terminal" Ltd. 10.09.2001	2001	
Oil product handling and storage facility in the Poti port. oily water treatment facility.	Channel energy (Poti) limited Georgia 11.07.2001		
Construction of new oil and	"Black Sea		

Project	Company	EIA	Results of EIA in Brief
oil product handling terminal near Kulevi. Khobi river mouth. EIA report.	Terminal” Ltd. 10.09.2001 Zenith Gamma Consulting. Georgia		
Construction of sporting. health. recreation and tourist complex near the mouth of River Natanebi.	Loko” Ltd. 24.10.2001		
Romania			
Ro. Producing Nuclear Energy	CNE Cernavoda	ICIM Bucuresti	Environmenta l accord
Ru.	Not planned for the near future		
Turkey			
Karadeniz Ereğlisi Natural Gas Combine Power Plant (260mk MW)	Atam Alaplı Elektrik Ltd.Şti.	19.10.1999	Positive Decision.
Afşin-Elbistan B. Thermic Power Plant 1400 MW – Kömür	TEAŞ	19.10.1999	Positive Decision.
Bayram Dam ve Hidro Electric Plant	DSİ Genel Md.	21.02.2001	Positive Decision.
Çan Thermic Power Plant	TEAŞ	13.08.1999	Positive Decision
İzmir Natural Gas Combine Power Plant	İzmir Elektrik Üretim Ltd.Şti.	27.06.2001	Positive Decision
Ukraine			
Uzhnyi oil terminal	Ministry of Environment and Natural Resources	Yes	Positive Decision
Crude oil transit pipeline Odesa- Brody	Ministry Ukrinvestexpertiz	Yes	Positive Decision

Project	Company	EIA	Results of EIA in Brief
	a 6-s		
Trans European oil transit corridor	Decree of President measures – environmental measures to be done additionally		

Table IIC.5. Financing of Environmental Impact Assessment in Turkey

Project	Finance Situation
Karadeniz Ereğlisi Natural Gas Combine Power Plant (260 MW)	%20 Firm %80 ABD EXİM BANK 19 Milyon USA \$
Afşin-Elbistan B. Thermic Power Plant 1400 MW – Coal (Lignite)	%16.5 National Budget %83.5 Foreign Credit 2239 Milyon \$
Bayram Dam ve Hidro Electric Plant 133 Million m ³ and 3.4 km ² . 80 MW.	%24 Firm %76 Foreign Credit 200 Milyon ABD \$
Çan Thermic Power Plant 2x160 MW	%100 Foreign Credit 400 Milyon ABD \$
İzmir Natural Gas Combine Power Plant 1540 MW	%25 Firm %75 Foreign Credit

Table IIC.6. . Total forest area in the Black Sea countries. th.km²

Country	1996	1997	1998	1999	2000	2005 planned
Bulgaria						
Georgia						
Romania	1200				1234	
Russian Federation	4.569	4.569	4.569	4.569	4.569	4.569
Turkey		1.842.395				
Ukraine						

Table III.C. 7. Main Projects for Tourist Sector Implemented in the Black Sea Coastal Zone

Country	Main projects /Programs
Bulgaria	Blue Flag Program projects in Sunny Beach. Burgas;
Georgia	
Romania	<p>During 1996 –2000. the following programs have been implemented in Constanta :</p> <p>1. “Promotion the eco tourism in Constanta County” projects implemented by FPIPMM Constanta, Tourist Information Center INFOLITORAL Partners: County Council of Constanta (CCC) si Chamber of Trading. Industry. Navigation and Agriculture Constanta (CTINAC). with a financial support from Agency for Development 2 Sud Est Braila.</p> <p>The project objectives :</p> <ul style="list-style-type: none"> -to develop a touristic cultural guide of Dobrogea (in Romanian and English language) -to develop a booklet with the museums and historical - cultural objectives from the Constanta County (Histria . Adamclisi) - to develop advertising posters for the museums and Tourist Information Center ”Infolitoral” <p>2. “Romanian Littoral: Classic Tourism and Alternative”. consisting in developing of booklets with five themes : entertainment. balneal. Business, gastronomies. and cultural tourism) in English. French and German version .</p> <p>Initiators: FPIPMM Constanta. Touristic Information Center INFOLITORAL Partners: CCC and CTINAC</p> <p>3. “Littoral Map”. Initiators: FPIPMM Constanta, Tourist Information Center INFOLITORAL . Partners: CCC and Mayoralty of Mangalia</p>
Russian Federation	1999 – 2000 – TACIS pilot project “Sustainable Tourism Development for Gelendzhik Resort”
Turkey	
Ukraine	
Bulgaria	

Georgia	
Romania	<p>During 1996 –2000. the following programs have been implemented in Constanta :</p> <p>1. “Promotion the eco tourism in Constanta County” projects implemented by FPIPMM Constanta. Tourist Information Center INFOLITORAL Partners: County Council of Constanta (CCC) si Chamber of Trading. Industry. Navigation and Agriculture Constanta (CTINAC). with a financial support from Agency for Development 2 Sud Est Braila. The project objectives :</p> <ul style="list-style-type: none"> -to develop a tourist cultural guide of Dobrogea (in Romanian and English language) -to develop a booklet with the museums and historical - cultural objectives from the Constanta County (Histria . Adamclisi) - to develop advertising posters for the museums and Touristic Information Center”Infolitoral” <p>2. “Romanian Littoral: Classic Tourism and Alternative”. consisting in developing of booklets with five themes : entertainment. balneal. business. gastronomies. and cultural tourism) in English. French and German version .</p> <p>Initiators: FPIPMM Constanta. Tourist Information Center INFOLITORAL Partners: CCC and CTINAC</p> <p>3. “Littoral Map”. Initiators: FPIPMM Constanta, Tourist Information Center INFOLITORAL, Partners: CCC and Mayoralty of Mangalia</p>
Russian Federation	1999 – 2000 – TACIS pilot project “Sustainable tourism development for Gelendzhik resort”
Turkey	
Ukraine	

Table IIIC.8. Environmental Education Materials That May Be Used for the Black Sea Region

Country	Type and Title of Educational Material	Authors
Bulgaria		
Georgia		
Romania	Atlas of environmental problem on the Romanian coast. In Romanian	
Romania	Dolphins from the Back Sea. A Brochure. In Romanian	
Romania	Endangered species. A Brochure. In Romania	
Russian Federation		
Turkey		
Ukraine	The Bluest in the World. A brochure . In	Prof. Zaitsev

	Russian	
Ukraine.	Mammals of the Black Sea. A book. In Russian	A.Birkun, Jr. and S.Krivokhizhin

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