ANNEX G:

ENVIRONMENTAL AND SOCIAL CONSIDERATIONS

Annex G: Environmental and Social Considerations

G.1 Supplementary Information on Environmental Conditions of the Study Area

G.1.1 Terms of Reference for Initial Environmental Examination

The subcontract for the initial environmental examination concerning the Study on Protection and Rehabilitation of the Southern Romanian Black Sea Shore was commissioned to the GeoEcoMar under the following terms of reference by the Study tea:

Terms of Reference

1. The work of the contract is to prepare a report on the initial environmental examination on the coastal protection plan (hereinafter referred to as "the Plan") to be prepared by the employer within the Study on Protection and Rehabilitation of the Southern Romanian Black Sea Shore.
2. The report shall consist of the following contents:

   Chapter 1: Introduction
   Chapter 2: Policy, legal aspects and administrative framework on environmental protection in Romania
   Chapter 3: Description of the Plan
   Chapter 4: Description of environmental conditions in the coastal units of the southern Romanian Black Sea shore
   Chapter 5: Environmental examination of the Plan as a whole
   Chapter 6: Environmental examination of the Plan with respect to pre-designated coastal sectors
   Chapter 7: Environmental management plan (EMP)
   Chapter 8: Consultation with stakeholders
   Chapter 9: Draft terms of reference for the environmental impact assessment for the priority projects

   The items and contents to be described in respective chapters are given in the attachment.
3. The report shall be prepared with the data and information available in the archive of the employee and in the public domain of Romania, except for the item 4 below.
4. A check shall be made to clarify the question if the sediment on the riverbed of the Danube may contain any harmful material for use of beach fill in the beach of Mamaia, based on the information supplied by the Employer.
5. The report shall be prepared in close collaboration with the specialist designated by the employer.
6. The report shall be written in English with the MS Word format.
7. An interim report with some parts written in Romanian and others in English shall be submitted to the employer by the twelfth (12th) day of December 2005, and the full report in three (3) copies together with a digital file shall be submitted to the

employer by the thirty-first (31st) of January 2006, which may be sent via courier service.

Attachment of TOR: Items to Be Described in the IEE Report

CHAPTER 1: Introduction

(i) Purpose of the initial environmental examination report, including
  (a) Identification of the Plan and its component;
  (b) Brief description of the nature, size, and location of the Plan and of its importance to the country; and
  (c) Any other pertinent background information;
  and

(ii) Extent of initial environmental examination: scope of examination, thoroughness of examination, and person or agency performing examination.

CHAPTER 2: Policy, Legal Aspects and Administrative Framework on Environmental Protection in Romania

1) Policy: Environmental policy in Romania and Constanța County

2) Legal aspects:

  a. Environmental quality criteria concerning water, air, soil, noise, and vibration

  b. Laws/guidelines related to the environmental impact assessment (hereinafter referred to as "EIA") such as EIA procedures, EIA review institution and time necessary for review, projects subject to EIA, information disclosure and public participation and others

3) Administrative framework: Ministries, local governments and NGOs related to environmental conservation.

CHAPTER 3: Description of the Plan

1) Type of project;
2) Category of project;
3) Need for the Plan;
4) Location (use maps showing general location, specific location, and site of the Plan);
5) Size or magnitude of operation;
6) Proposed schedule for implementation; and
7) Descriptions of the Plan, including drawings showing shore protection facility layout, and components of the Plan.

CHAPTER 4: Description of Environmental Conditions in the Coastal Units of the Southern Romanian Black Sea Shore

Description is to be made on the following environmental aspects likely to be significantly affected by the proposed Plan, including, in particular, population, fauna, flora, soil, water, air, climate factors, material assets, including architectural and archeological heritage, landscape and inter-relationship between the above factors (cf. G.D.918/2002, O 863/2002, etc.):

1) Environmental pollution (soil, water, air, noise, and vibration)
2) Ecosystem (officially protected areas, environmentally vulnerable areas, species of precious flora and fauna, vegetation)
3) Land use
4) Population and communities
5) Waste (solid waste collection/disposal system)
6) Traffic and social infrastructures
7) Water rights and rights of common access to the shore, including fishing right
8) Landscape
9) Architectural and archeological heritage

CHAPTER 5: Environmental Examination of the Plan as a Whole

The employee shall examine the following tables, which contain the initial review results to be provided by the employer, and revise them in compliance with Romanian EIA laws:

Table 1: Scoping check list based on the first stakeholder meeting
Table 2: Scoping check list based on the second stakeholder meetings
Table 3: Present situation of impact items
Table 4: Envisioned mitigation measures

These tables and descriptions of this chapter shall be rearranged based on the format described in Romanian EIA procedures.

CHAPTER 6: Environmental Examination of the Plan with Respect to Pre-designated Coastal Sectors

The employee shall carry out the initial environmental examination on the items specified in Romanian EIA or designated by the Japan International Cooperation Agency for each of the eight coastal sectors of the following:

(1) Năvodari and Mamaia,
(2) Tomis North and Tomis South (Cape Singol to Cape Constanța)
(3) Eforie Nord to Eforie Sud
(4) Tuzla North and Tuzla South
(5) Costineşti
(6) 23 August
(7) Mangalia
(8) Limanu

The initial environmental examination will be made in collaboration with the employer.

The employee shall attend the third stakeholder meeting to be held in Constanța in the later half of November, and the results of discussions on the plan of the priority projects shall be incorporated into the description of environmental examination on the relevant coastal units.

CHAPTER 7: Environmental Management Plan (EMP)

The environmental monitoring plan shall be presented with description of the items of impacts to be monitored, specification of the timing and locations of the monitoring

activities, and recommendation for the agency responsible for execution of the monitoring. The cost for the environmental management and monitoring should also be described.

CHAPTER 8: Consultation with Stakeholders

The process and progress of organizing the stakeholder meetings for the Plan shall be described by taking into account of the results obtained during the first, second, and third stakeholder meetings.

CHAPTER 9: Draft Terms of Reference for the Environment Impact Assessment

In collaboration with the employer, the employee shall compile a draft terms of reference for EIA concerning the two priority projects of the Plan at Mamaia South and Eforie Nord, for which a feasibility study will be carried out by the employer.

G.1.2 Flora and Fauna in the Romanian Coastal Zone

The ecosystem of the Romanian Coastal Zone is rich in the number of species prospering there. Table G.1.1 lists the taxa of the assemblage of diverse organisms identified in littoral shallow water on hard and sandy bottoms. Table G.1.2 lists the protected species from the marine natural reserve between Cape Midia – Vama Veche. The photo gallary after Table G.1.2 illustrates the mollusk and other marine organisms.

Table G.1.1: List of taxa identified in littoral shallow water biocoenoses associated to hard and sedimentary bottoms during the 2001-2004 period

No.	Abr.	Taxa	Hard bottom	Sandy bottom
1	FOR	*Amonia beccarii*		*
2	FOR	*Amonia tepida*		*
3	FOR	*Amonia pelucida*		*
4	FOR	*Elpidium incertum*		*
5	FOR	*Elpidium macellum*		*
6	FOR	*Cribroelphidium poeyanum*		*
7	FOR	*Quinqueloculina aspera*		*
8	FOR	*Trochammina inblata*		*
9	FOR	Foraminifera varia	*	*
10	CIL	*Foliculina sp.*	*	
11	SPO	*Dysidea fragilis*	*	
12	SPO	*Halichondria panicea*	*	
13	SPO	*Haliclona aquaeductus*	*	
14	SPO	*Haliclona palida*	*	
15	HYD	*Campanularia johnstoni (Clytia hemisphaerica)*	*	
16	HYD	*Campanulina hincksi*	*	
17	HYD	*Campanulina lacerata*	*	
18	HYD	*Cladonema radiatum*	*	
19	HYD	*Coryne tubulosa*	*	
20	HYD	*Eudendrium ramosum*	*	
21	HYD	*Obelia (Hartlaubella) gelatinosa*	*	
22	HYD	*Obelia longissima*	*	
23	HYD	*Obelia (Laomedea) loveni*	*	
24	HYD	*Ventroma (Plumularia) halecioides*	*	

No.	Abr.	Taxa	Hard bottom	Sandy bottom
25	HYD	*Plumularia linkoi*	*	
26	HYD	Hydrozoa varia	*	
27	ANT	*Actinia equina*	*	
28	ANT	*Actinothoe clavata*	*	
29	SCY	Scifopolips	*	
30	TUR	*Convoluta convoluta*	*	
31	TUR	*Leptoplana tremellaris*	*	*
32	TUR	*Monocelis sp.*	*	
33	TUR	*Plagiostomum ponticum*	*	
34	TUR	*Stylochoplana taurica*	*	
35	TUR	*Stylochus tauricus*	*	
36	TUR	Turbellaria varia	*	*
37	NMT	*Amphiporus sp.*	*	
38	NMT	*Emplectonema gracile*	*	
39	NMT	*Emplectonema neesi*	*	
40	NMT	*Tetrastemma sp.*	*	
41	NMT	Nemertini varia	*	*
42	NEM	*Axonolaimus ponticus*		*
43	NEM	*Axonolaimus setosus*		*
44	NEM	*Bathylaimus cobbi*		*
45	NEM	*Chromadora nudicopitata*		*
46	NEM	*Chromadorella myticola*		*
47	NEM	*Crhomadora cricophana*		*
48	NEM	*Cyatholaimus gracilis*		*
49	NEM	*Enoploides amphioxi*		*
50	NEM	*Enoplus quadridentatus*		*
51	NEM	*Metachromadora macroutera*		*
52	NEM	*Metancholainus demeni*		*
53	NEM	*Metaporocholaimus campylocercoides*		*
54	NEM	*Oncholaimus dujardini*		*
55	NEM	*Theristus latissimus*		*
56	NEM	*Theristus longicaudatus*		*
57	NEM	*Theristus maeoticus*		*
58	NEM	*Viscosia glabra*		*
59	NEM	Nematoda varia	*	*
60	POL	*Amphitrite gracilis*	*	
61	POL	*Aonides oxycephala*		*
62	POL	*Brania clavata*	*	*
63	POL	*Capitella capitata*	*	
64	POL	*Capitellides sp.*	*	
65	POL	*Capitomastus minimus*	*	*
66	POL	*Eteone picta*	*	*
67	POL	*Euchone rubrocincta*	*	
68	POL	*Eulalia limbata*	*	*
69	POL	*Eulalia viridis*	*	
70	POL	*Fabricia sabella*	*	*
71	POL	*Ficopomatus enigmaticus*	*	
72	POL	*Grubea (Grubeosyllis) clavata*	*	*
73	POL	*Grubea limbata*	*	*
74	POL	*Grubea tenuicirrata*	*	*
75	POL	*Grubea juv.*	*	
76	POL	*Harmothoe imbricata*	*	

No.	Abr.	Taxa	Hard bottom	Sandy bottom
77	POL	*Harmothoe reticulata (cf. impar)*	*	
78	POL	*Hediste diversicolor*	*	
79	POL	*Janua pagenstecheri*	*	
80	POL	*Laonice cirrata*	*	*
81	POL	*Magelona papilicornis*		*
82	POL	*Microspio mecznikowianus*	*	
83	POL	*Microspio sp.*		*
84	POL	*Namanereis pontica*	*	
85	POL	*Neanthes succinea*	*	*
86	POL	*Nereis pelagica*	*	*
87	POL	*Nereis rava*	*	*
88	POL	*Nereis zonata*	*	
89	POL	Nereididae juv.	*	*
90	POL	*Nerilla antennata*	*	*
91	POL	*Nerine cirratulus*	*	*
92	POL	*Nerine tridentata*	*	*
93	POL	*Notomastus lineatus*	*	*
94	POL	*Oridia armandi*	*	
95	POL	*Perinereis cultrifera*	*	*
96	POL	*Pholoe synophthalmica*	*	
97	POL	*Phylodoce lineata*	*	
98	POL	*Phylodoce tuberculata (Nereiphylla rubiginosa)*	*	
99	POL	*Platynereis dumerilii*	*	*
100	POL	*Polydora antennata*	*	*
101	POL	*Polydora ciliata*	*	*
102	POL	*Polydora cornuta*	*	
103	POL	Polydora juv	*	*
104	POL	*Polynoe scolopendrina*	*	
105	POL	*Prionospio cirrifera*	*	*
106	POL	*Pygospio elegans*	*	*
107	POL	*Scolelepis ciliata*	*	*
108	POL	*Serpula pusilla*	*	
109	POL	*Sphaerosyllis bulbosa*	*	*
110	POL	*Sphaerosyllis hystrix*	*	*
111	POL	*Spio filicornis*	*	*
112	POL	Spionidae larve	*	*
113	POL	*Syllis gracilis*	*	
114	POL	*Typosyllis (Syllis) hyalina*	*	*
115	POL	*Syllis prolifera*	*	*
116	POL	Syllydae juv.	*	*
117	POL	Polychaeta varia	*	*
118	OLI	Oligochaeta	*	*
119	PPL	*Middendorfia caprearum*	*	*
120	GAS	*Chrysalida incerta*	*	
121	GAS	*Cyclope donovani*	*	
122	GAS	*Hydrobia leneumicra (maritima)*	*	
123	GAS	*Odostomia rissoides*	*	
124	GAS	*Rissoa (Mohrensternia) lineolata*	*	
125	GAS	*Setia valvatoides*	*	
126	GAS	Gastropoda varia	*	
127	GAS	*Doridella obscura*	*	
128	GAS	*Limapontia capitata*	*	

No.	Abr.	Taxa	Hard bottom	Sandy bottom
129	GAS	*Tergipes tergipes*	*	
130	BIV	*Cardium edule*		*
131	BIV	*Corbula mediterranea*		*
132	BIV	*Mya arenaria*		*
133	BIV	*Mytilaster lineatus*	*	
134	BIV	*Mytilus galloprovincialis*	*	
135	BIV	Veliconcha Mytilus	*	
136	BRY	*Bowerbankia gracilis*	*	
137	BRY	*Bowerbankia imbricata*	*	
138	BRY	*Conopeum seurati*	*	
139	BRY	*Lepralia pallasiana*	*	
140	BRY	*Membranipora membranacea*	*	
141	BRY	Bryozoa varia	*	
142	HAL	*Hallacarelus basteri affinis*	*	
143	HAL	*Rhombognathus pascens*	*	*
144	HAL	Hallacarida varia	*	*
145	CIR	*Balanus improvisus*	*	
146	OST	*Callistocytheris dibbosa*		*
147	OST	*Cyprideis littoralis*	*	*
148	OST	*Cytheromorpha fuseata*		*
149	OST	*Cytherois valkanovi*	*	*
150	OST	*Heterocythereis amnicola*		*
151	OST	*Limnocythere inopinata*		*
152	OST	*Loxoconcha pontica*	*	*
153	OST	*Paracyterois agigensis*		*
154	OST	*Paradoxostoma intermedium*	*	*
155	OST	*Xestoleberis aurantia acutipenis*	*	*
156	OST	*Xestoleberis decipiens*	*	*
157	COP	Harpacticoida	*	*
158	AMP	*Ampelisca diadema*	*	*
159	AMP	*Amphitoe vaillanti*	*	*
160	AMP	*Apherusa bispinosa*	*	
161	AMP	*Caprella acanthifera ferox*	*	*
162	AMP	*Corophium acherusicum*	*	
163	AMP	*Corophium bonelli*	*	
164	AMP	*Corophium runcicorne*	*	
165	AMP	*Dexamine spinosa*	*	*
166	AMP	*Echinogammarus olivii*	*	
167	AMP	*Erichthonius difformis*	*	*
168	AMP	*Gammarellus carinatus*	*	
169	AMP	*Gammarus aequicauda*	*	*
170	AMP	*Gammarus olivii*		*
171	AMP	*Gammarus subtipicus*		*
172	AMP	*Grubia (Cymadusa) crassicornis*	*	
173	AMP	*Hyale perieri*	*	*
174	AMP	*Hyale pontica*	*	*
175	AMP	*Hyale prevostii*		*
176	AMP	*Jassa ocia*	*	*
177	AMP	*Melita palmata*	*	*
178	AMP	*Microdeutopus gryllotalpa*	*	*
179	AMP	*Nototropis guttatus*	*	*
180	AMP	*Phtisica marina*	*	

No.	Abr.	Taxa	Hard bottom	Sandy bottom
181	AMP	*Pontogammarus maeoticus*		*
182	AMP	*Stenothoe monoculoides*	*	*
183	AMP	Amphipoda juv.	*	
184	ISO	*Idotea baltica*	*	*
185	ISO	*Jaera nordmanni*	*	*
186	ISO	*Naesa bidentata*	*	*
187	ISO	*Sphaeroma pulchellum*	*	*
188	ISO	*Sphaeroma serratum*	*	
189	TAN	*Leptochelia savignyi*	*	*
190	TAN	*Tanais cavolini*	*	*
191	CUM	*Bodotria arenosa meiterranea*		*
192	CUM	*Cumella limicola*	*	*
193	CUM	*Cumella pygmaea euxinica*	*	
194	CUM	*Cumopsis goodsiri f. agigeana*		*
195	CUM	*Iphinoe elisae*	*	
196	CUM	*Iphinoie maeotica*		*
197	CUM	*Iphinoe tenella*	*	
198	CUM	*Pterocuma pectinata*		*
199	MYS	*Gastrosaccus sanctus*		*
200	MYS	*Leptomysis sardica pontica*		*
201	MYS	*Mesopodopsis slabberi*		*
202	MYS	*Paramysis intermedia*		*
203	MYS	*Paramysis kroyeri*	*	*
204	MYS	*Paramysis pontica*		*
205	MYS	*Siriella jaltensis jaltensis*	*	*
206	DEC	*Athanas nitescens*	*	
207	DEC	*Crangon crangon*		*
208	DEC	*Palaemon adspersus*	*	
209	DEC	*Palaemon elegans*	*	
210	DEC	*Eriphia verrucosa*	*	
211	DEC	*Diogenes pugilator*		*
212	DEC	*Pachygrapsus marmoratus*	*	
213	DEC	*Pilumnus hirtellus*	*	
214	DEC	*Pisidia longicornis*	*	
215	DEC	*Portunus holsatus*		*
216	DEC	*Rhithropanopeus harrisi tridentatus*	*	
217	DEC	*Upogebia pusilla*		*
218	DEC	*Xantho poressa*	*	
219	CRU	Larvae megalope	*	
220	CRU	Larvae crustacea (nauplii)	*	*
221	CRU	Larvae cypris	*	
222	CRU	Larvae zoe Pisidia	*	
223	INS	Larvae chironomida	*	*
224	TUN	*Botryllus shlosseri*	*	
225	TUN	Larvae tunicata	*	
Total		**225**	**172**	**126**
Common taxa			**71**	

Table G.1.2: List of protected species from the Romanian coastal zone between Cape Midia - Vama Veche

No.	Taxa	Common Name	IUCN Status							
			EX	CE	EN	VU	LR	DD	NE	AE
Plantae										
1	*Asparagus litoralis*	Coastal asparagus				*				
2	*Astrodaucus littoralis*				*					
3	*Cakile spicatum*					*				
4	*Crambe pontica (maritima)*	Sea-kale				*				
5	*Ecballium elaterium*					*				
6	*Elymus athericus*				*					
7	*Eryngium maritimum*				*					
8	*Euphorbia paralias*	Sea spurge			*					
9	*Medicago marina*	Sea alfalfa			*					
10	*Melilotus arenarius*					*				
11	*Silene borysthenica*				*					
12	*Silene thymifolia*				*					
13	*Stachys maritima*				*					
14	*Zostera marina*	Sea grass				*				
15	*Zostera noltii (nana)*	Sea grass				*				
Algae										
16	*Cystoseira barbata*				*					
17	*Cystoseira crinita (bosphorica)*				*					
18	*Phyllophora brodiaei*					*				
19	*Phyllophora nervosa*					*				
Porifera										
20	*Halichondria panicea*					*				
Coelenterata										
21	*Moerisia maeotica*				*					
Polychaeta										
22	*Arenicola marina*		?							
23	*Hesionides arenarius*					*				
24	*Ophelia bicornis*		?							
Mollusca										
25	*Donacilla cornea*				*					
26	*Solen vagina*	Grooved razor clam			*					
Crustacea										
27	*Anomalocera patersoni*				*					
28	*Apseudopsis ostroumovi*						*			
29	*Biancolina cuniculus*				*					
30	*Carcinus mediterraneus*	Green crab				*				
31	*Centropages kroyeri pontica*				*					
32	*Dikerogammarus vilosus*					*				
33	*Diogenes pugilator*	Hermit crab			*					
34	*Eriphia verrucosa*				*					
35	*Hemimysis anomala*				*					
36	*Hemimysis serrata*				*					
37	*Iphigenella andrussovi*						*			
38	*Macropipus arcuatus*					*				
39	*Oithona minuta*				*					
40	*Pachygrapsus marmoratus*					*				
41	*Pilumnus hirtellus*					*				
42	*Pontella mediterranea*				*					
43	*Upogebia pusilla*	Flat-browed mud shrimp			*					

No.	Taxa	Common Name	IUCN Status							
			EX	CE	EN	VU	LR	DD	NE	AE
44	*Xantho poressa*					*				
Insecta										
45	*Anax imperator*	Emperor dragonfly				*				
Pisces										
46	*Aidablennius sphinx*					*				
47	*Alosa maeotica*	Azov sea shad			*					
48	*Belone belone euxini*	Garfish			*					
49	*Clupeonnella cultriventris*	Tyulka sprat			*					
50	*Coryphoblennius galerita*	Montagu's blenny				*				
51	*Diplodus annularis*	Annular seabream				*				
52	*Gobius cobitis*	Giant goby			*					
53	*Hippocampus guttulatus microstephanus*	Sea horse			*					
54	*Lipophrys pavo*					*				
55	*Liza ramada*	Thin lip grey mullet				*				
56	*Mesogobius batrachocephalus*	Flat-head goby				*				
57	*Mullus barbatus ponticus*	Red mullet			*					
58	*Neogobius rattan*	Ratan goby				*				
59	*Neogobius syrman*				*					
60	*Nerophis ophidion*	Straight-nosed pipefish			*					
61	*Sarda sarda*	Atlantic bonito		*						
62	*Scomber scombrus*	Atlantic mackerel			*					
63	*Scorpaena porcus*	Scorpionfish				*				
64	*Solea nasuta*	Snouted sole				*				
65	*Spicara smaris*	Picarel						*		
66	*Symphodus ocellatus*					*				
67	*Symphodus tinca*	Peacock wrasse				*				
68	*Syngnathus typhle*	Deep-smoted pipefish				*				
69	*Thunnus thynnus*	Bluefin tuna			*					
70	*Trachinus draco*	Greater weever		*						
71	*Trigla lucerna*					*				
72	*Uranoscopus scaber*	Stargazer		*						
73	*Xiphias gladius*	Broadbill swordfish			*					
74	*Zosterisessor ophiocephalus*	Grass goby				*				
Amphibia										
75	*Bufo viridis*	Green toad								*
76	*Pelobates fuscus*	Common spadefoot				*				
77	*Pelobates syriacus*	Eastern spadefoot			*					
Reptilia										
78	*Coluber caspius*	European whip snake				*				
79	*Coronella austriaca*	Smooth snake				*				
80	*Emys orbicularis*	Swamp turtle				*				
81	*Eremias arguta*	Steppe-runner			*					
82	*Natrix tessellata*	Diced snake								*
83	*Podarcis muralis*	Common wall lizard				*				
84	*Podarcis taurica*	Crimean lizard								*
85	*Testudo graeca*	Spur-thighed tortoise			*					
Aves										
86	*Accipiter brevipes*	Levant sparrowhawk				*				
87	*Acrocephalus paludicola*	Aquatic warbler			*					
88	*Anser erythropus*	Pink-footed goose		*						
89	*Aquila clanga*	Spotted eagle		*						

No.	Taxa	Common Name	IUCN Status							
			EX	CE	EN	VU	LR	DD	NE	AE
90	*Aquila pomarina*	Lesser spotted eagle				*				
91	*Ardea purpurea*	Purple heron			*					
92	*Asio flammeus*	Short-eared owl				*				
93	*Aythya nyroca*	Ferruginous duck				*				
94	*Branta ruficollis*	Red-breasted goose			*					
95	*Bubo bubo*	Eagle owl				*				
96	*Bucephala clangula*	Goldeneye				*				
97	*Burhinus oedicnemus*	Stone-curlew			*					
98	*Buteo rufinus*	Long-legged buzzard				*				
99	*Charadrius alexandrinus*	Kentish plover				*				
100	*Ciconia ciconia*	White stork				*				
101	*Circus macrouros*	Pallid harrier			*					
102	*Circus pygargus*	Montagu's harrier			*					
103	*Egretta garzetta*	Little egret			*					
104	*Falco vespertinus*	Red-footed falcon				*				
105	*Glareola nordmanni*	Black-winged pratincole		*						
106	*Glareola pratincola*	Collared pratincole			*					
107	*Grus grus*	Crane				*				
108	*Haematopus ostralegus*	Oystercatcher				*				
109	*Himantopus himantopus*	Black-winged Stilt			*					
110	*Jynx torquilla*	Wryneck			*					
111	*Larus genei*	Slender-billed gull		*						
112	*Larus melanocephalus*	Mediterranean gull			*					
113	*Luscinia svecica*	Bluethroat			*					
114	*Mergus albellus*	Smew				*				
115	*Milvus milvus*	Red kite			*					
116	*Numenius tenuirostris*	Slender-billed curlew		*						
117	*Oenanthe pleschanka*	Pied wheatear				*				
118	*Oxyura leucocephala*	White-headed duck			*					
119	*Pandion haliaetus*	Osprey				*				
120	*Phalacrocorax pygmaeus*	Pygmy cormorant				*				
121	*Recurvirostra avosetta*	Avocet				*				
122	*Sterna albifrons*	Little tern			*					
123	*Streptopelia turtur*	Turtle dove				*				
124	*Sturnus roseus*	Rose-coloured starling				*				
125	*Tadorna tadorna*	Shelduck				*				
126	*Upupa epops*	Hoopoe				*				
		Mammalia								
127	*Crocidura suaveolens*	Lesser white-toothed shrew				*				
128	*Delphinus delphis*	Common dolphin			*					
129	*Mesocricetus newtoni*	Romanian hamster				*				
130	*Micromys minutus*	Harvest mouse				*				
131	*Monachus monachus*	Mediterranean monk seal		*						
132	*Mustela eversmannii*	Steppe polecat				*				
133	*Phocoena phocoena*	Harbour porpoise			*					
134	*Spermophilus citellus*	European souslik				*				
135	*Tursiops truncatus*	Bottlenose dolphin			*					
136	*Vormela peregusna*	Marbled polecat			*					

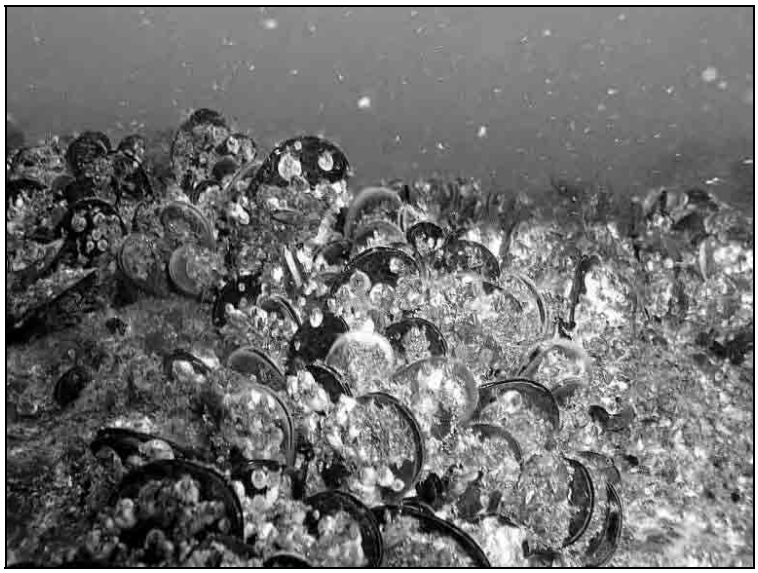
EX: Extinct
CE: Critically Endangered
EN: Endangered
VU: Vulnerable
LR: Lower Risk
DD: Data Deficient
NE: Not Evaluated
AE: Almost Endangered

Photo Gallery of Fauna and Flora in the Romanian Coastal Water

Agigea Digul Sud
Depth: 2 - 3 m

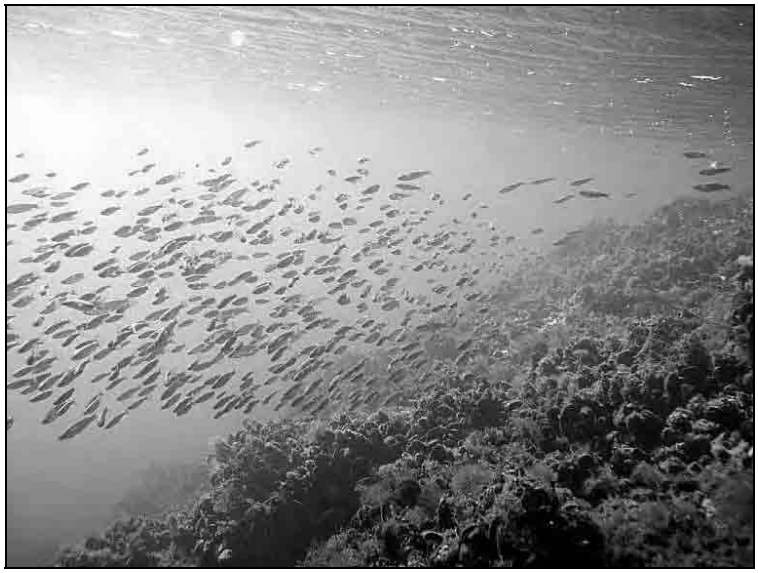
Agigea
“Lacul de argint”
Coca navei

Agigea
Depth: 6 m

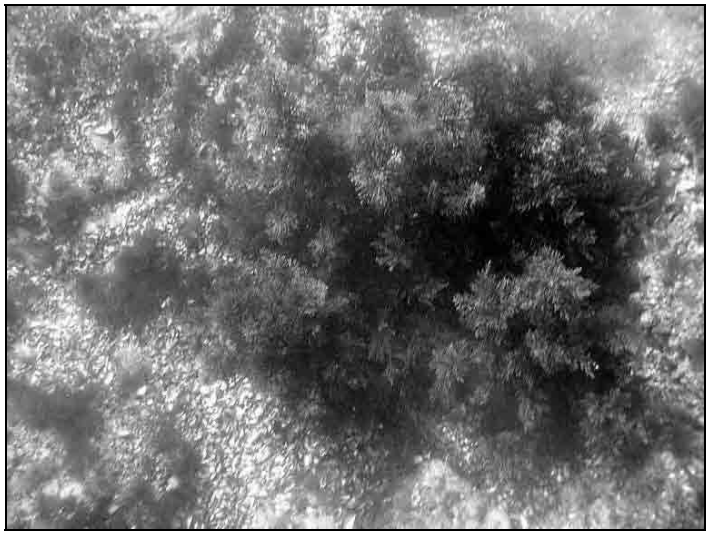


Eforie Sud
Depth: 2 m
2003 September

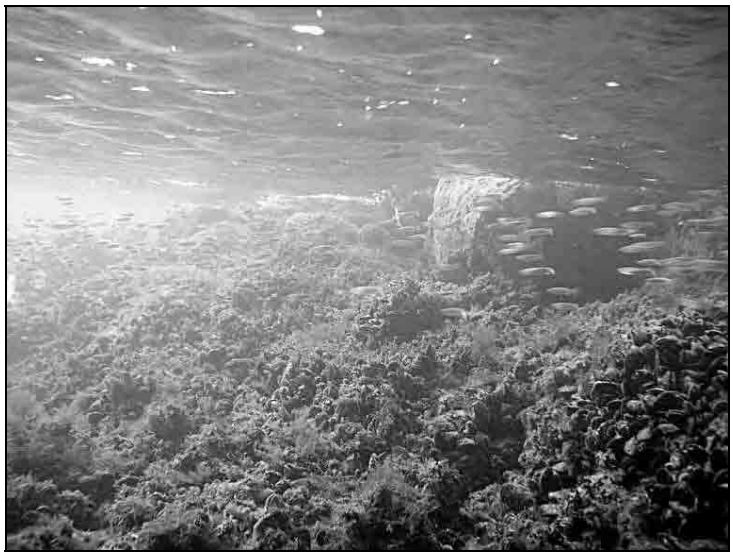
Vama Veche
Depth: 2 - 3 m
2003 September



Agigea
"Lacul de argint"



Vama Veche
Depth: 2 - 3 m
2003 September

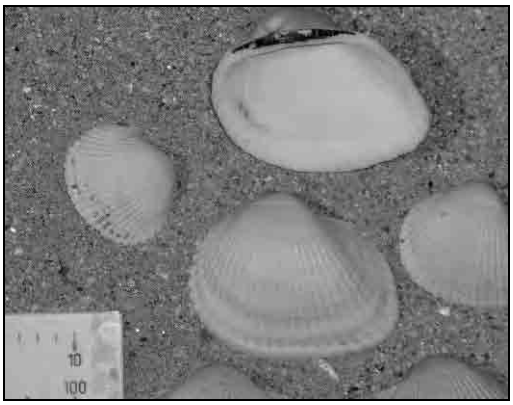


Agigea
"Lacul de argint"

Agigea
"Lacul de argint"

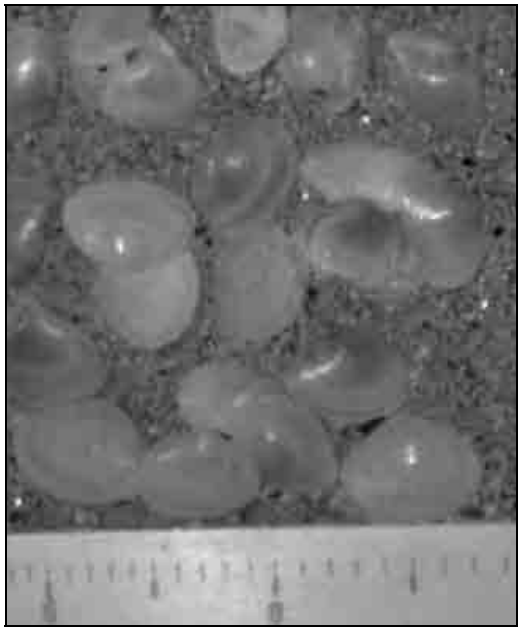
Cystoseira barbata
Mangalia
2005 November

Mya arenaria

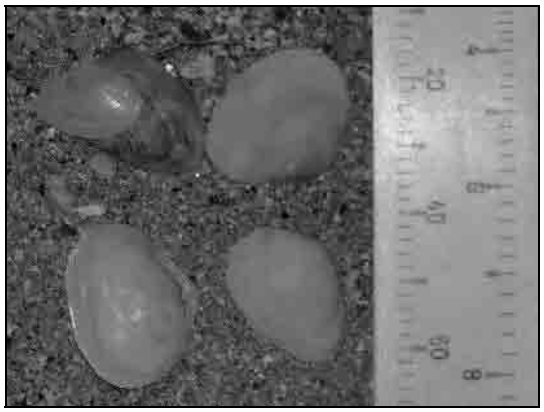


Scapharca inaequivalvis

Donax trunculus



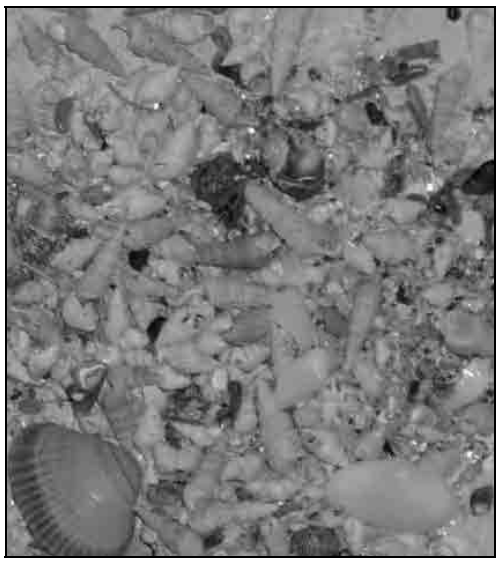
Tellina exigua



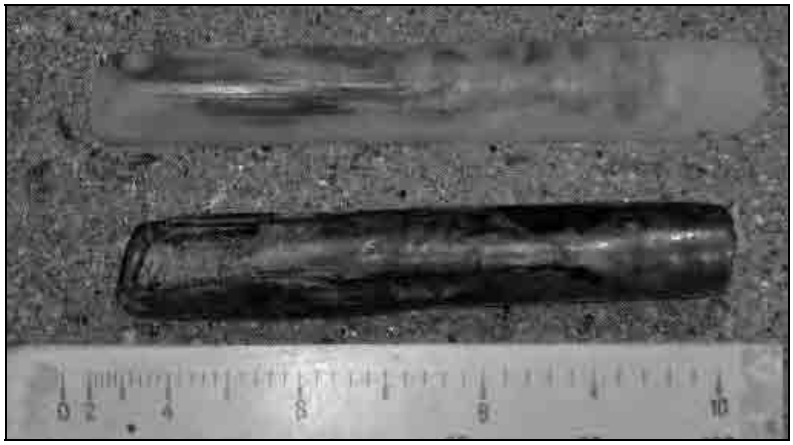
Gastrana fragilis

Rissoa splendida

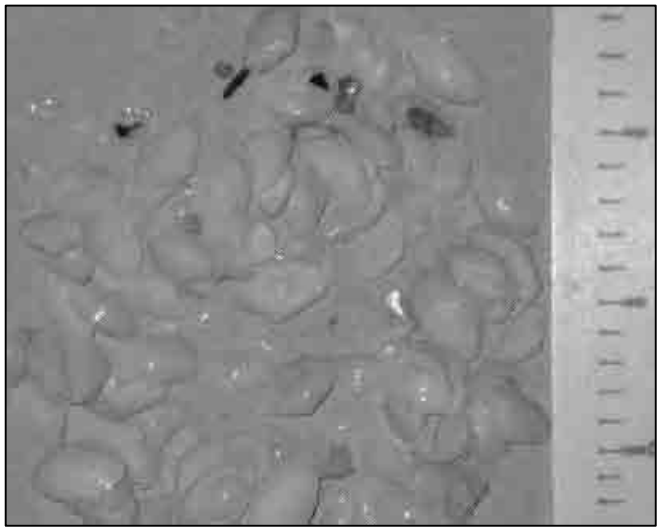
Cardium edule



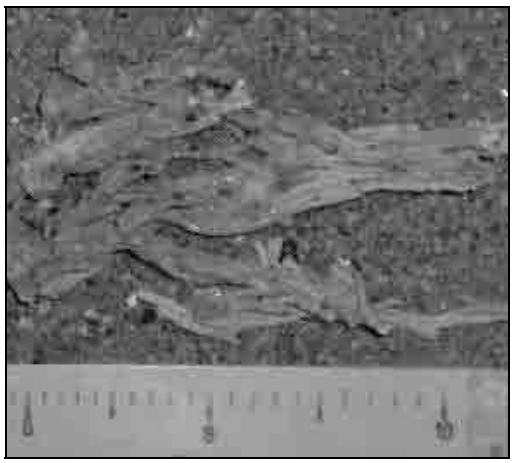
Bittium reticulatum
and
Rissoa splendida



Solen ensis

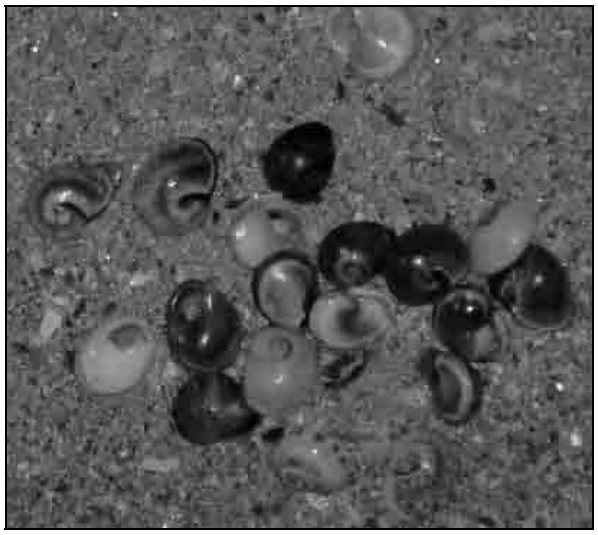


Corbula
mediterranea

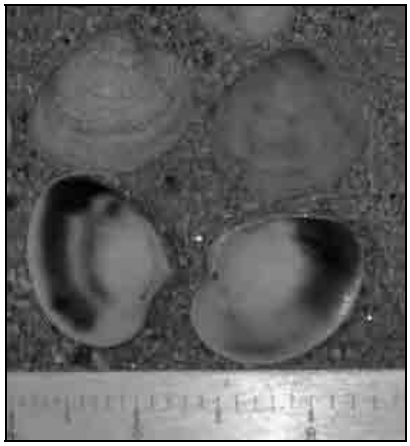


Mercierella enigmatica

Mytilus galloprovincialis

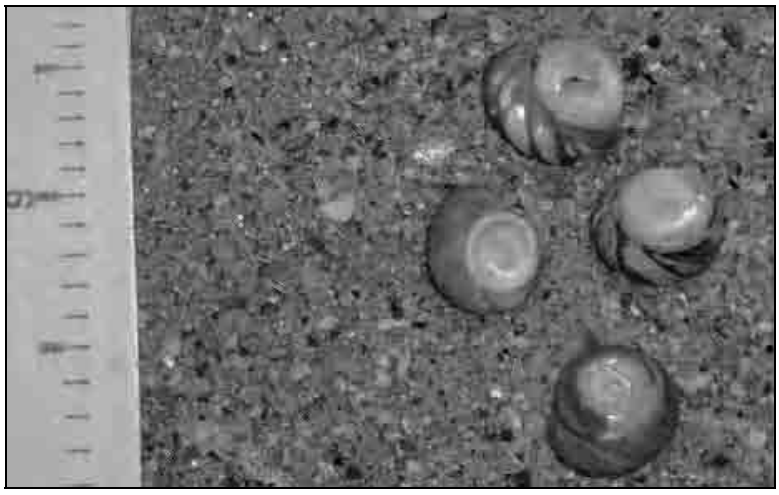


Cyclope neritea and *Cyclope donovani*

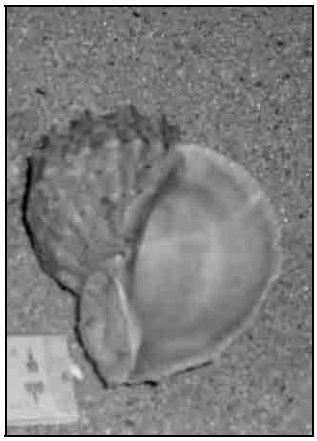


Venus galina

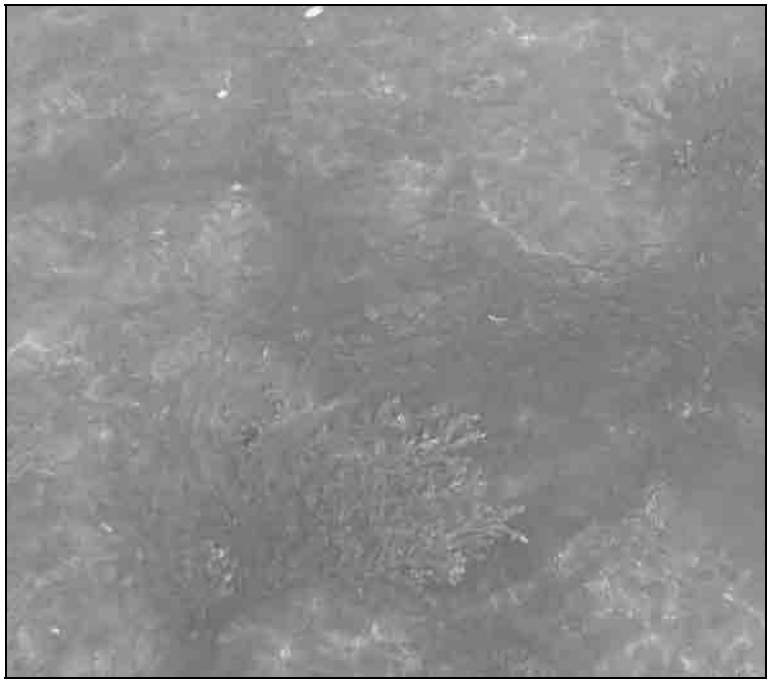
Nasa reticulata



Gibbula divaricata

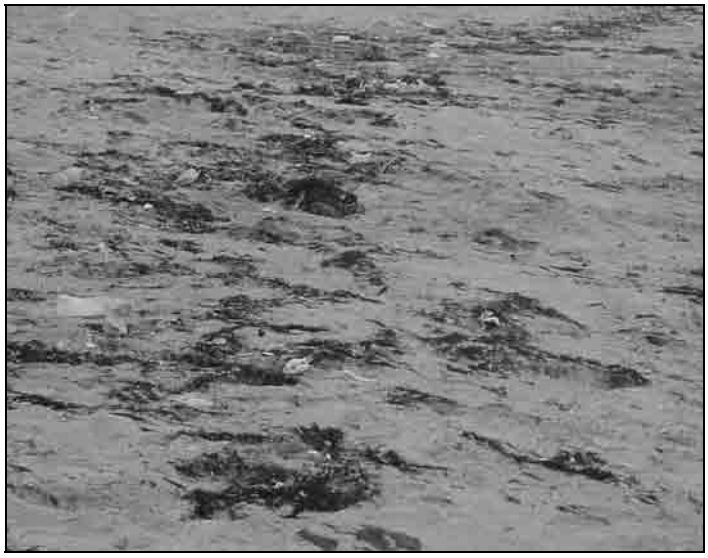


Rapana venosa



Cystoseira in front of Mangalia

Cystoseira barbata fixed on a mussel

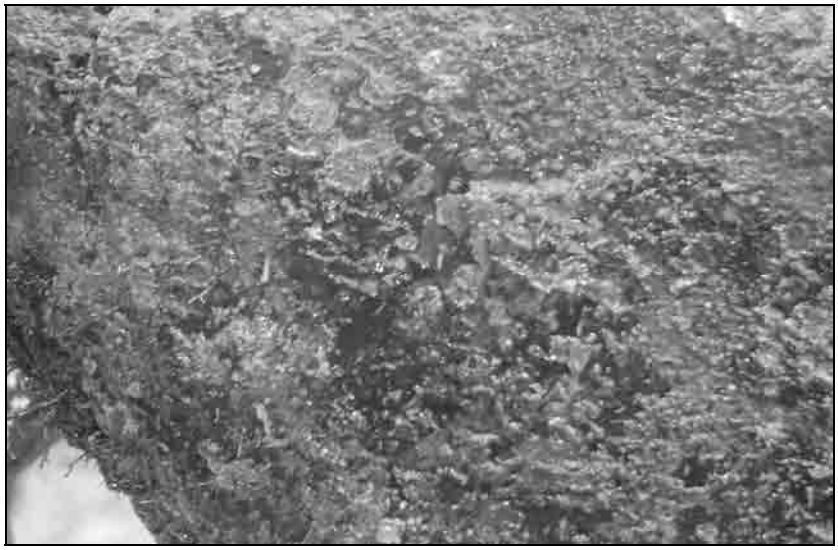


Cystoseira barbata washed up un the beach at Mangalia

Clliffs
in the southern part
of Romanian Coast

Mussels covered
by *Litothamnion*

Huge quantities of
shells – mussels,
Mya arenaria
and
Scapharca
inaequivalvis
on the north



Epibiosys on the hard substratum

Littoral rocks in front of Vama Veche cliff

Rocky and sand beach in 2 Mai – Vama Veche area

Rocks covered by green algae - *Enteromorpha* - in the southern part of littoral

Rocks covered with *Enteromorpha* Vama Veche – 2 Mai

Rocks with
Ceramium
and
Enteromorpha

Association with
Enteromorpha
and
Cladophora

The beach
at Vama Veche –
2 Mai

The beach
at Vama Veche –
2 Mai

Hard substratum at
the bottom of the
cliff
Vama Veche –
2 Mai

Mussel shells at
the beach
Vama Veche –
2 Mai

G.1.3 Photo Gallery of Archeological and Touristic Sites

CONSTANTA

Constanta is Romania's largest port and second largest city. In ancient times Constanta was the Greek controlled town of Tomis, which the Romans later renamed after emperor Constantine (ruled AD 306-37) who fortified and developed the city.

HISTORICAL VESTIGES

Roman building from the 2nd century

The Roman Mosaic, discovered in the years 1958-1999 is part of the structure of a public monumental building from the III-IV centuries. The wall faç covered with white and coloured marble was only fragmentarily kept. The floor of the building consists in an exceptional carpet of polychrome mosaic, decorated with geometric and vegetal subjects.

Callatis fortress (Mangalia) - the Dorians who came from Heracleea Pontica in the 6th century BC built the ancient fortress Callatis. Here you can find the oldest Latin document in the entire Southeastern part of Europe. Ancient Greek Callatis, now Mangalia, contains several minor archeological sites. It is a quiet town and attracts many tourists. Mangalia is the second most important harbour of Romania.

RELIGIOUS BUILDINGS

The Orthodox Cathedral was built between 1883-1885. A small archaeological site lies south of it, displaying walls of houses dating from the 4th to 6th centuries.

Mahmudia Mosque built in 1910, has a 140-step minaret. The Great Mosque from Constanta was built in a Moorish style, being an accutate copy of the Konia Mosque from Anatolia.

The Esmahan Sultan Mosque is located on a pretty garden, just south of the town centre. It is an elegant mosque with a single minaret and is surrounded by a Muslim graveyard.

CULTURAL BUILDINGS

The Archaeological Museum exhibits include twenty-four 2nd century Roman statues discovered under Constanta's old train station in 1962. Famous is the serpent Glykon carved from a single block of marble. Roman archaeological fragments spill over onto the surrounding square

The Museum of Art Constanța holds paintings of some Romanian painters among which: Nicolae Grigorescu, Theodor Aman, Ion Andreescu, Corneliu Baba, Dimitrie Paciurea, Theodor Pallady and others.

The Museum of the Romanian Navy is unique in the country; here are exposed the navigation means along the centuries.

Constanta - The Casino (1910)
The construction for the pavilion for Queen Elisabeta started in 1909.The style is French Baroque with rococo elements.
Now it is a restaurant with a large terrace overlooking the beach. Close by the Constanta Aquarium, display a collection of 4500 species of aquatic life from Delta, Black Sea and Dobrogean lakes.

Neptun
Neptun was built in 1960 between the Comorova forest and the sea, ensuring a lush setting for the artificial lakes and dispersed villas that makes this the most desirable of the Black Sea resorts. Shopping centers, discos, sports facilities, most modern hotels and terrific restaurants.

G.2 Supplementary Information on Stakeholder Meetings

G.2.1 List of Participants to the Stakeholder Meetings

Stakeholder meetings concerning the protection and rehabilitation of the southern Romanian Black Sea shore were held nine times during the period from June 2005 to March 2007 in Bucharest (three times) and Constanța (six times). Tables G.2.1 to G.2.10 lists the names, affiliations, occupations and contact addresses of all the participants in the alphabetical orders for each occupation (See the marginal remarks of Table G.2.1). The 5th meeting was held together with the JICA seminar which was held for two days. Therefore, the breakdown of the participants during the two-day meeting is given in Table G.2.7 and G.2.8.

Table G.2.1: List of participants to the stakeholder meeting (1st,Constanta, June 3rd 2005)

Name of participant	Affiliation	Occupation	Contact address
BABU Gheorghe Technical Manager	Water Directorate Dobrogea Littoral - DADL Constanta	A	gheorghe.babu@dadl.rowater.ro
DUMITRACHE Camelia, Manager	Water Directorate Dobrogea Littoral- DADL Constanta	A	camellia.dumitrache@dadl.rowater.ro 0241-673036
MANAFU Ionel, Director	Water Directorate Dobrogea Littoral- DADL Constanta	A	0746-249090
(Constanta Town Police)	National Environmental Guard	E	
DINISOV Mihaela, Deputy Manager	Constanta Public Health Administration	E	0241-396574
PETRESCU Traian, Manager	Environmental Protection Agency- Constanta	E	
(Representative)	National Administration of Ground Improvement, Constanta	G	
ALEXE Adrian Director	Romanian Naval Authority	G	0722-369280 0241-616124 rna@mrcc.ro
CONSTANTIN Aurel, Commander	Hydrographical and Marine Office	G	
MUNTEANU Nicolae, Captain. Commander.	The State-General of Military Marine	G	0241-800289, 021-3149702, badescuvasile@yahoo.com
GODA Yoshimi, Prof. Dr. JICA Team leader	ECOH Corporation - JICA Study Team	J	goda@ecoh.co.jp
HATAKEYAMA Yuji, Member of JICA study team	JICA Study Team	J	hatakeyama@icnet.co.jp
OCHI Yutaka, Member of study team	ECOH Corporation - JICA Study Team	J	ochiy@ecoh.co.jp
OZAKI Takao, Member of study team	JICA Study Team	J	minerva@sky.sannet.ne.jp
AVRAM Ghebeni Mayor	Tuzla Town Hall	L	
BRAILOIU Ovidiu, Mayor	Eforie Town Hall	L	
BUTOI Nicolae Engineer	Water Town Administration Constanta	L	
CALAPOD Tudorel, Mayor	Navodari Town Hall	L	
CRISTEA Traian, Mayor	Costinesti Town hall	L	
CULETU Dan, Prefect & President of Dobrogea Littoral	Constanta Prefecture	L	

Basin Committee			
IORGUS Zamfir, Mayor	Mangalia Town hall	L	
MAZARE Radu, Mayor	Constanta Town hall	L	
RAPOTAN Adrian, Representative	Town Police Institute Constanta	L	
URDEA Nicolae, Mayor	Limanu Town hall	L	
AGEAKI	Tourism Federation – Mamaia Hotel Aurora	N	
AMZARU Aurel Manager	National Company of Fishing Administration	N	
BUTNARIU Catalin, Manager	Antares Hotels Hotel Jupiter-Junona Mamaia	N	
Cristian Maria, Manager	Petroserv SA - Mamaia	N	
DARABAN Mihai, President	Chamber of Commerce Constanta	N	
DIDIER Rosas, Manager	Ana Hotels Eforie	N	
GHEORGHE Corina, Counselor	Constanta Town Prefecture (Tourism)	N	
POPESCU Razvan, President	NGO Oceanic Club	N	
SAMARGIU Manuela Preparatory	ONG Mare Nostrum, "Ovidius' University	N	
BUCSA Ioan, Manager	National Meteorological and Hydrological Institute, Constanta	R	
GOMOIU M. Traian, Prof. Dr., Deputy manager	National Institute of Marine Geology and Geo-ecology - GeoEcoMar	R	0241-690366
NICOLAEV Simion, General Director	National Institute for Marine Exploitation and Development "Grigorie Antipa" (INCDM)	R	0241-831274
PANIN Nicolae, Prof. Dr.,General Director	National Institute of Marine Geology and Geo-ecology - GeoEcoMar	R	panin@geoecomar.ro 021- 2522594

Remarks;
A: ANAR–National Administration of Romanian Waters (Bucharest and Constanța)
E: Env.–Institutions related to environmental protection
G: Gov.–Central public authorities and some naval offices
J: JICA–JICA study team and JICA office in Romania.
L: Loc.–Local authorities such as county, city hall, town hall etc.
N: NGO–NGOs on scientific and civil society, local people, hotel operators as well as journalists
O: Observers–University, College and High school students
R: Res.–Scientific research institutions, universities, and design institutes

Table G.2.2: List of participants to the stakeholder meeting (1st,Bucharest, June 17th 2005)

Name of participant	Affiliation	Occupation	Contact address
BABU Gheorghe Technical Manager	Water Directorate Dobrogea Littoral - DADL Constanta	A	gheorghe.babu@dadl.rowater.ro
BALDOVIN Ioana Engineer	National Administration Romanian Waters- Apele Romane	A	311.55.35/1196 ioana.baldovin@ rowater.ro
BOSCORNEA Corina	National Administration Romanian Waters- Apele Romane	A	0740-098065 corina.boscornea@rowater.ro
DUMITRACHE Camelia, Manager	Water Directorate Dobrogea Littoral- DADL Constanta	A	camellia.dumitrache@dadl.rowater.ro 0241-673036
DUMITRU Lucian, Engineer	National Administration Romanian Waters - Apele Romane	A	lucian.dumitru@rowater.ro, 021-3110146
PASCALE Stelian Engineer	Water Directorate Dobrogea Littoral- DADL Constanta	A	0241-673036 stelian.pascale@dadl.rowater.ro
POPESCU Victor, Director	National Administration Romanian Waters- Apele Romane	A	
SERBAN Petru, Director	National Administration Romanian Waters- Apele Romane	A	
GHINERARU Mariana Engineer	National Institute for Environmental Engineering - ICIM	E	0727-788424 Tel: 3182074 Fax: 3182001
POPOVICI Ioana Engineer	Environmental Protection Agency-Bucharest	E	
RUSU Iulian Engineer	National Institute for Environmental Engineering- ICIM	E	
SiMBOTIN Adrian Engineer	National Institute for Environmental Engineering- ICIM	E	Tel: 3182074 Fax: 3182001 simbotin@home.ro
SIMONA Catrina, Executive director	Regional Protection Agency-Bucharest	E	
GODA Yoshimi, Prof. Dr. JICA Team leader	ECOH Corporation - JICA Study Team	J	goda@ecoh.co.jp
HATAKEYAMA Yuji, Member of JICA study team	JICA Study Team	J	hatakeyama@icnet.co.jp
MORISHIMA Keiji, Environmental expert	JICA Romanian Office	J	0744-917783 kmorish@japan.email.ne.jp
OCHI Yutaka, Member of study team	ECOH Corporation - JICA Study Team	J	ochiy@ecoh.co.jp
OZAKI Takao, Member of study team	JICA Study Team	J	minerva@sky.sannet.ne.jp
CONSTANTINESCU Marian, Director adj. general	Design Institute for Road Water and Air Transport- IPTANA	R	0744-437847 Fax: 3121416 dgach@iptana.ro
DROBOT Radu, Professor	Technical University of Construction of Bucharest	R	
MARA Liliana, Director adjunct	Design Institute for Road Water and Air Transport- IPTANA	R	021-4101091 office@iptana.ro
MAXIMOV Gabriela Engineer	National Institute of Marine Geology and Geo-ecology - GeoEcoMar	R	
SEBASTIAN Dan Engineer	National Institute of Marine Geology and Geo-ecology - GeoEcoMar	R	
STANESCU Viorel Engineer	Romanian Association of Hydrographic Science	R	Tel: 333573/136, 0722-692809 stanescu@hidro.ro

Table G.2.3: List of participants to the stakeholder meeting (2nd,Constanta, Nov. 2nd 2005)

Name of participant	Affiliation	Occupation	Contact address
BABU Gheorghe Technical Manager	Water Directorate Dobrogea Littoral - DADL Constanta	A	gheorghe.babu@dadl.rowater.ro
CHERTESZ Laurentiu, Engineer	Water Directorate Dobrogea Littoral- DADL Constanta	A	0726-841015 nicmunteanu@yahoo.com
DUMITRACHE Camelia, Manager	Water Directorate Dobrogea Littoral- DADL Constanta	A	camellia.dumitrache@dadl.rowater.ro 0241-673036
DUMITRU Lucian, Engineer	National Administration Romanian Waters - Apele Romane	A	lucian.dumitru@rowater.ro, 021-3110146
MANAFU Ionel, Director	Water Directorate Dobrogea Littoral- DADL Constanta	A	0746-249090
MATEI Silviu, Engineer	Water Directorate Dobrogea Littoral- DADL Constanta	A	0241-673036
CARUCERU Luiza, Chief doctor	Department of Public Health Constanta- DSPJ Constanta	E	0788-308304 dimmih@yahoo.com
DINISOV Mihaela, Deputy Manager	Constanta Public Health Administration	E	0241-396574
PETRO Vasile, Chief Commissioner	National Guard of Environment Constanta	E	0241-690990 0241-698555
ALEXE Adrian Director	Romanian Naval Authority	G	0722-369280 0241-616124 rna@mrcc.ro
BADESCU Vasile Chief of Environment Expert Group	National Defense Ministry Inspectorate	G	021-3149702 astanica@geocomar.ro
DOROGAN Dumitru, Counselor	Ministry of Environment and Water Management	G	021-3192591 dorogan@email.com
MUNTEANU Nicolae, Captain. Commander.	The State-General of Military Marine	G	0241-800289, 021-3149702, badescuvasile@yahoo.com
SANDU Dumitru, Hydro-technical Depart. Chief	Maritime Hydrographic Administration	G	0744-141310
GODA Yoshimi, Prof. Dr. JICA Team leader	ECOH Corporation - JICA Study Team	J	goda@ecoh.co.jp
HATAKEYAMA Yuji, Member of JICA study team	JICA Study Team	J	hatakeyama@icnet.co.jp
OCHI Yutaka, Member of study team	ECOH Corporation - JICA Study Team	J	ochiy@ecoh.co.jp
OZAKI Takao, Member of study team	JICA Study Team	J	minerva@sky.sannet.ne.jp
CIOCAN Iulian, Engineer	Autonomous Administration of County Water - Constanta	L	0241-673036
CRACIUN Alina, Inspector at European Integration Department	Navodari City Hall- Primaria Navadari	L	0726-253511 talymaro@yahoo.com
CULETU Dan, Prefect & President of Dobrogea Littoral Basin Committee	Constanta Prefecture	L	
MANOLE Adrian, Director	Maritime Port Administration (APM) Constanta	L	0241-546596 0724-340560 director.executiv@mediu-constanta.ro
MIHAI Cristina, Program coordinator	NGO “Mare Nostrum”	N	0241-612422 0341-340560 mare-nostrum@cier.ro
SERBANESCU Mariana, Economist	National Association of Professional Divers and Life Saving - Romania	N	0723-274099
(Representative)	National Institute of Marine Geology and Geo-ecology -	R	

Name of participant	Affiliation	Occupation	Contact address
	GeoEcoMar		
NICOLAEV Simion, General Director	National Institute for Marine Exploitation and Development "Grigorie Antipa" (INCDM)	R	0241-831274
PANIN Nicolae, Prof. Dr.,General Director	National Institute of Marine Geology and Geo-ecology - GeoEcoMar	R	panin@geoecomar.ro 021- 2522594
SARAFU Dumitru, DIRECTOR	Dobrogea Regional Meteorological Center	R	0724-288239
STANICA Adrian, CP III	National Institute of Marine Geology and Geo-ecology - GeoEcoMar	R	astanica@geoecomar.ro 021- 2525512

Table G.2.4: List of participants to the stakeholder meeting (3rd,Constanta, Nov.24th 2005)

Name of participant	Affiliation	Occupation	Contact address
BABU Gheorghe Technical Manager	Water Directorate Dobrogea Littoral - DADL Constanta	A	gheorghe.babu@dadl.rowater.ro
DUMITRACHE Camelia, Manager	Water Directorate Dobrogea Littoral- DADL Constanta	A	camellia.dumitrache@dadl.rowater.ro 0241-673036
MANAFU Ionel, Director	Water Directorate Dobrogea Littoral- DADL Constanta	A	0746-249090
CARUCERU Luiza, Chief doctor	Department of Public Health Constanta- DSPJ Constanta	E	0788-308304 dimmih@yahoo.com
CHIRIAC Adrian, Technical Manager	German Agency for Technical Cooperation- GTZ	E	0742-550770
DINISOV Mihaela, Deputy Manager	Constanta Public Health Administration	E	0241-396574
PETRO Vasile, Chief Commissioner	National Guard of Environment Constanta	E	0241-690990 0241-698555
VASILE Liviu Alin Engineer	Environmental Protection Agency- Constanta	E	0721-755762
BUCURESTEANU, Dumitru, Chief Depart. SAR	Romanian Naval Authority- A.N.R	G	0721-300280
MUNTEANU Nicolae, Captain. Commander.	The State-General of Military Marine	G	0241-800289, 021-3149702, badescuvasile@yahoo.com
SANDU Dumitru, Hydro-technical Depart. Chief	Maritime Hydrographic Administration	G	0744-141310
GODA Yoshimi, Prof. Dr. JICA Team leader	ECOH Corporation - JICA Study Team	J	goda@ecoh.co.jp
HATAKEYAMA Yuji, Member of JICA study team	JICA Study Team	J	hatakeyama@icnet.co.jp
OCHI Yutaka, Member of study team	ECOH Corporation - JICA Study Team	J	ochiy@ecoh.co.jp
OZAKI Takao, Member of study team	JICA Study Team	J	minerva@sky.sannet.ne.jp
CIOCAN Iulian, Engineer	Autonomous Administration of County Water - Constanta	L	0241-673036
GOMOIU M. Traian, Prof. Dr., Deputy manager	National Institute of Marine Geology and Geo-ecology - GeoEcoMar	R	0241-690366
OPREANU Gicu, Laboratory Chief	National Institute of Marine Geology and Geo-ecology - GeoEcoMar	R	0241-510115
SECRIERU Dan Laboratory chief	National institute of Marine Geology and Geo-ecology "GEOECOMAR"	R	0241- 510115,0744-163576 dsecrieru@yahoo.com

Table G.2.5: List of participants to the stakeholder meeting (2nd,Bucharest, Nov.25th 2005)

Name of participant	Affiliation	Occupation	Contact address
BABU Gheorghe Technical Manager	Water Directorate Dobrogea Littoral - DADL Constanta	A	gheorghe.babu@dadl.rowater.ro
DUMITRACHE Camelia, Manager	Water Directorate Dobrogea Littoral- DADL Constanta	A	camellia.dumitrache@dadl.rowater.ro 0241-673036
DUMITRU Lucian, Engineer	National Administration Romanian Waters - Apele Romane	A	lucian.dumitru@rowater.ro, 021-3110146
MANOLESCU Mihai Engineer	National Administration Romanian Waters- Apele Romane	A	mihai.manolescu@rowater.ro
NICULESCU Teodor Engineer	National Administration Romanian Waters- Apele Romane	A	021- 3155535
SERBEU Petru Engineer	National Administration Romanian Waters- Apele Romane	A	021-3155535
POPESCU Liviu Engineer	National Institute for Environmental Engineering-ICIM	E	lipopesc@icim.ro
CAZACU Cristian Engineer	Ministry of Transport, Construction and Tourism	G	cazacu@mt.ro 0722 –143571 Fax 2126106
GODA Yoshimi, Prof. Dr. JICA Team leader	ECOH Corporation - JICA Study Team	J	goda@ecoh.co.jp
HATAKEYAMA Yuji, Member of JICA study team	JICA Study Team	J	hatakeyama@icnet.co.jp
OCHI Yutaka, Member of study team	ECOH Corporation - JICA Study Team	J	ochiy@ecoh.co.jp
OZAKI Takao, Member of study team	JICA Study Team	J	minerva@sky.sannet.ne.jp
CRISTESCU S. Engtineer	ICPECOM Bucharest	R	0721- 282661
PANIN Nicolae, Prof. Dr.,General Director	National Institute of Marine Geology and Geo-ecology - GeoEcoMar	R	panin@geoecomar.ro 021- 2522594
SIMESCU Doina Engineer	Design Institute for Road Water and Air Transport-IPTANA	R	Simescu.doina@ iptana.ro 0722- 266786
STANESCU Viorel Engineer	Romanian Association of Hydrographic Science	R	Tel: 333573/136, 0722-692809 stanescu@hidro.ro
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Table G.2.6: List of participants to the stakeholder meeting (4th,Constanta, March 10th 2006)

Name of participant	Affiliation	Occupation	Contact address
ANTOHI Andrei Counselor	Dobrogea Littoral – Water Directorate	A	0744- 384186
BABU Gheorghe Technical Manager	Water Directorate Dobrogea Littoral - DADL Constanta	A	gheorghe.babu@dadl.rowater.ro
DUMITRACHE Camelia, Manager	Water Directorate Dobrogea Littoral- DADL Constanta	A	camellia.dumitrache@dadl.rowater.ro 0241-673036
TOMPOS Catiusa Depart chief	Constanta Environmental Protection Agency	E	0241- 546696
DOROGAN Dumitru, Counselor	Ministry of Environment and Water Management	G	021-3192591 dorogan@email.com
POCNETZ Catalin Counselor	Maritime Hydrographic Directorate	G	0241-651040
SAVU Rodica	National Administration of Land Improvement	G	0241- 654010 0729-290056
GODA Yoshimi, Prof. Dr. JICA Team leader	ECOH Corporation - JICA Study Team	J	goda@ecoh.co.jp
HATAKEYAMA Yuji, Member of JICA study team	JICA Study Team	J	hatakeyama@icnet.co.jp
OCHI Yutaka, Member of study team	ECOH Corporation - JICA Study Team	J	ochiy@ecoh.co.jp
OZAKI Takao, Member of study team	JICA Study Team	J	minerva@sky.sannet.ne.jp
MERLA Ani Manager	Constanta City Hall	L	0241- 708143 mediu@primaria-constanta
AMZARU Aurel Manager	National Company of Fishing Administration	N	
CHIVARAN Ion Reporter	“Telegraf” journal	N	0241- 488340 0788- 352322
GHEORGHITA Marilena Reporter	“Neptun” local television	N	0788- 352261
GHIRCA Elena MQ agent	Black Sea – Tourism, Hotels, Restaurants	N	0241- 741402 elenaghirca@efonet.ro
JALBA Nona County correspondent	“Rompres” national Press Agency	N	0723 -297989 Mona_jalba@yahoo.com
JUGANARU Ion Vice president	Chamber of Commerce, Industry, Navigation and Agriculture	N	0722- 569164 0241- 619854 fax 0241- 629454
LAZAR Cristina Reporter	“Neptun” Television	N	0746-291859
OMER Iuksel Vice president	Eco Dobrogea	N	0740-368440 Omer_iuksel@yahoo.com
OPREA Mihaela Counselor	Constanta Prefecture	N	0241 – 617788 Extension 107
SICLITARU Lavinia Journalist	“Ziua” journal	N	0788- 437600 Lavinia_siclitaru@yahoo.com
STEFAN Elena Economist	Black Sea – Tourism, Hotels, Restaurants	N	0241- 741841 mk@efonet.ro
TRANDAFIR iulia Reporter	Radio Constanta	N	0740 -319631
BOLOGA Alexandru Scientific manager	National Institute of Marine Research and Development “Grigore Antipa’	R	0241- 543288 abologa@alpha.rmri.ro
NITA Mirela	Regional Meteorological Center	R	0723-176025
SECRIERU Dan Laboratory chief	National institute of Marine Geology and Geo-ecology “GEOECOMAR”	R	0241- 510115,0744-163576 dsecrieru@yahoo.com

Table G.2.7: List of participants to the stakeholder meeting (5th,Constanta, June 5th&6th 2006)

Name of participant	Affiliation	Occupation	Contact address
BABU Gheorghe Technical Manager	Water Directorate Dobrogea Littoral - DADL Constanta	A	gheorghe.babu@dadl.rowater.ro
CAZAN Dragos Representative	ANAR	A	
CHERTESZ Laurentiu, Engineer	Water Directorate Dobrogea Littoral- DADL Constanta	A	0726-841015 nicmunteanu@yahoo.com
DOBRE Bogdan Engineer	Dobrogea Littoral - Water Directorate (DADL)	A	
DUMITRACHE Camelia, Manager	Water Directorate Dobrogea Littoral- DADL Constanta	A	camellia.dumitrache@dadl.rowater.ro 0241-673036
DUMITRU Lucian, Engineer	National Administration Romanian Waters - Apele Romane	A	lucian.dumitru@rowater.ro, 021-3110146
MATEI Silviu, Engineer	Water Directorate Dobrogea Littoral- DADL Constanta	A	0241-673036
CHIRIAC Adrian, Technical Manager	German Agency for Technical Cooperation- GTZ	E	0742-550770
DOROGAN Liliana Expert	Environment Protection Agency	E	
DUDAU Antonia Environment expert	Environment departs. Of Transports Ministry	E	
PETRESCU Traian, Manager	Environmental Protection Agency- Constanta	E	
BERESCU Serban Engineer	Romanian Naval Authority	G	
BOSNEAGU Romeo Representative	Maritime Hydrographic Directorate	G	
DOROGAN Dumitru, Counselor	Ministry of Environment and Water Management	G	021-3192591 dorogan@email.com
MUNTEANU Nicolae, Captain. Commander.	The State-General of Military Marine	G	0241-800289, 021-3149702, badescuvasile@yahoo.com
ORPISCAN Nicolae Engineer	Maritime Ports Administration	G	
POPESCU Ileana Engineer	Maritime Ports Administration	G	
PORUMB Ion Manager	Romanian Naval League	G	
GODA Yoshimi, Prof. Dr. JICA Team leader	ECOH Corporation - JICA Study Team	J	goda@ecoh.co.jp
HATAKEYAMA Yuji, Member of JICA study team	JICA Study Team	J	hatakeyama@icnet.co.jp
IOANA Mirela Claudia Program Coordinator	JICA/JOCV Romania Office	J	kikaku@jica.ro
KUROKI Keiji , Dr., Member of study team	JICA Study Team	J	k-kuroki@ecoh.co.jp
NAMATAME Makoto, Member of study team	JICA Study Team	J	namatame@ecoh.co.jp
OCHI Yutaka, Member of study team	ECOH Corporation - JICA Study Team	J	ochiy@ecoh.co.jp
OZAKI Takao, Member of study team	JICA Study Team	J	minerva@sky.sannet.ne.jp
UNO Yoshiyuki, Member of study team	JICA Study Team	J	yoshiyuki_uno@ecoh.co.jp
BRAILOIU Ovidiu, Mayor	Eforie Town Hall	L	
GHEBENEI Aurel Mayor	Tuzla City Hall	L	

Name of participant	Affiliation	Occupation	Contact address
ALEXIU Tudor Counselor	Tuzla City Hall	N	
ALI Ghiuve Ainur Manager	Tuzla – Fishing Company	N	
ANEFI Ersun Representative	Constanta Prefecture	N	
ARDELEAN Marian Manager	ECO farm	N	
ARDELEAN Morica Manager		N	
BABANICA Adrian Counselor	Eforie City Hall	N	
BADUICA Marian Counselor	Costinesti City Hall	N	
BARDASU Octavia Counselor	Constanta City Hall	N	
BARZAN Cosmin Engineer	APC-ABC	N	
BORTEA Marian Counselor	Costinesti City Hall	N	
CINCU Tudor Counselor	Eforie City Hall	N	
CIUCEANU Gina Resident	Constanta resident	N	
Constantin Bogdan Counselor	Tuzla City Hall	N	
CONSTANTIN Catalin Journalist	"Replica" journal	N	
CRUCEANU Monica Reporter	Radio Constanta	N	
FILCA Catalin Journalist	"Replica' Journal	N	
FILOTE Florentin Counselor	Mangalia City Hall	N	
GHEORGHE Florin Journalist	"Cuget Liber' journal	N	
GHITA Liliana Counselor	Mangalia City Hall	N	
GIURGIU Dan Counselor	Costinesti – Local Counsel	N	
HANU Florin Engineer	IPC	N	
IORGA Tatian Journalist	"Telegraf' Journal	N	
JUGANARU Ion Vice president	Chamber of Commerce, Industry, Navigation and Agriculture	N	0722- 569164 0241- 619854 fax 0241- 629454
MIHAILESCU Razvan Journalist	"Cuget Liber' journal	N	
MIHAILESCU Sandu Counselor	Costinesti – Local Counsel	N	
MIRON Ghiulgian Manager	"Lafarge' Medgidia ciment company	N	
NITAN Iordan Counselor	Costinesti City hall	N	
OMER Iuksel Vice president	Eco Dobrogea	N	0740-368440 Omer_iuksel@yahoo.com
PANDURU Ana Engineer		N	
PANTELIMON Damie Counselor	Eforie City Hall	N	
RAZVAN Matusu Engineer		N	
SAMARGIU Manuela Preparatory	ONG Mare Nostrum, "Ovidius' University	N	
SARBU Petre Counselor	Costinesti resident	N	

Name of participant	Affiliation	Occupation	Contact address
SITOIU Ion Counselor	Tuzla City Hall	N	
STANA Grigore Journalist	"INDEPENDENT" Newspaper	N	
STERCU Stelian Counselor	Eforie City Hall	N	
SUPARU Dan Counselor	Eforie City Hall	N	
TARINA Ion Counselor	Costinesti City Hall	N	
URSACHE Iulian Representative	“Daneel Comexim’ Company	N	
ADAM Geanina Preparatory	“Ovidius’ University	O	
ARSENIE Dumitru Prepararory	“Ovidius’ University	O	
BADEA Gabriela Preparatory	“Ovidius’ University	O	
BUTA constantin Preparatory	“Ovidius’ University	O	
CARP Doina Preparatory	Maritime University Constanta	O	
CIUREA Cornel Preparatory	“Ovidius’ University	O	
CONSTANTIN Anca Preparatory	“Ovidius’ University	O	
DOBOS Gheorghe Preparatory	“Ovidius’ University	O	
DRAGULIN Octavian Preparatory	“Ovidius’ University	O	
EFREM Valentina Preparatory	“Ovidius’ University	O	
FILIP Cosmin Preparatory	“Ovidius’ University	O	
FLOREA Mihai Preparatory	“Ovidius’ University	O	
GEAMAMBET Sunai Preparatory	“Ovidius’ University	O	
GHERGHINA Cristina Preparatory	“Ovidius’ University	O	
HINCU Dan Preparatory	“Ovidius’ University	O	
MATEI Carmen Preparatory	“Ovidius’ University	O	
MILICA Ana Student	‘Ovidius” University	O	
NITESCU Claudiu Preparatory	“Ovidius’ University	O	
OMER Ikinur Preparatory	‘Ovidius’ University	O	
PADURARU George Preparatory	“Ovidius’ University	O	
PANDURU Ana Maria Preparatory	Geo-technical University Bucharest	O	
POPA Mirela Preparatory	“Ovidius’ University	O	
ROSU Lucica Preparatory	“Ovidius’ University	O	
STANCIOIU Maria Preparatory	“Ovidius’ University	O	
STANESCU Madalina Preparatory	“Ovidius’ University	O	
TENEA Diana Preparartory	“Ovidius’ University	O	
TEPES Florin Preparatory	“Ovidius’ University	O	
TUDOSE Claudiu	“Ovidius’ University	O	

Name of participant	Affiliation	Occupation	Contact address
Preparatory			
VINTILA Dragos Preparatory	"Ovidius' University	O	
VLADIMIR Alina Preparatory	"Ovidius' University	O	
27 Students	High School	O	
59 Students	College	O	
MATEESCU Razvan Engineer	National Institute of Marine Research and Development "Grigore Antipa'	R	
BREBAN Virgil Lector	"Ovidius' University	R	
DIACONEASA Ilie Representative	INCDM	R	
HANCU Corneliu Professor	'Ovidius' University	R	
MATEESCU Razvan Engineer	National Institute of Marine Research and Development "Grigore Antipa"	R	
TORICA V Engineer	Meteorological Institute	R	

Table G.2.8: List of participants to the stakeholder meeting (5th,Constanta, June 5th 2006)

Name of participant	Affiliation	Occupation	Contact address
BABU Gheorghe Technical Manager	Water Directorate Dobrogea Littoral - DADL Constanta	A	gheorghe.babu@dadl.rowater.ro
CAZAN Dragos Representative	ANAR	A	
DOBRE Bogdan Engineer	Dobrogea Littoral - Water Directorate (DADL)	A	
DUMITRACHE Camelia, Manager	Water Directorate Dobrogea Littoral- DADL Constanta	A	camellia.dumitrache@dadl.rowater.ro 0241-673036
DUMITRU Lucian, Engineer	National Administration Romanian Waters - Apele Romane	A	lucian.dumitru@rowater.ro, 021-3110146
CHIRIAC Adrian, Technical Manager	German Agency for Technical Cooperation- GTZ	E	0742-550770
DOROGAN Liliana Expert	Environment Protection Agency	E	
DUDAU Antonia Environment expert	Environment departs. Of Transports Ministry	E	
PETRESCU Traian, Manager	Environmental Protection Agency- Constanta	E	
BERESCU Serban Engineer	Romanian Naval Authority	G	
BOSNEAGU Romeo Representative	Maritime Hydrographic Directorate	G	
DOROGAN Dumitru, Counselor	Ministry of Environment and Water Management	G	021-3192591 dorogan@email.com
MUNTEANU Nicolae, Captain. Commander.	The State-General of Military Marine	G	0241-800289, 021-3149702, badescuvasile@yahoo.com
ORPISCAN Nicolae Engineer	Maritime Ports Administration	G	
POPESCU Ileana Engineer	Maritime Ports Administration	G	
PORUMB Ion Manager	Romanian Naval League	G	
GODA Yoshimi, Prof. Dr. JICA Team leader	ECOH Corporation - JICA Study Team	J	goda@ecoh.co.jp
HATAKEYAMA Yuji, Member of JICA study team	JICA Study Team	J	hatakeyama@icnet.co.jp
KUROKI Keiji , Dr., Member of study team	JICA Study Team	J	k-kuroki@ecoh.co.jp
NAMATAME Makoto,	JICA Study Team	J	namatame@ecoh.co.jp

Name of participant	Affiliation	Occupation	Contact address
Member of study team			
OCHI Yutaka, Member of study team	ECOH Corporation - JICA Study Team	J	ochiy@ecoh.co.jp
OZAKI Takao, Member of study team	JICA Study Team	J	minerva@sky.sannet.ne.jp
UNO Yoshiyuki, Member of study team	JICA Study Team	J	yoshiyuki_uno@ecoh.co.jp
GHEBENEI Aurel Mayor	Tuzla City Hall	L	
ALEXIU Tudor Counselor	Tuzla City Hall	N	
ALI Ghiuve Ainur Manager	Tuzla – Fishing Company	N	
ANEFI Ersun Representative	Constanta Prefecture	N	
ARDELEAN Marian Manager	ECO farm	N	
BADUICA Marian Counselor	Costinesti City Hall	N	
BARDASU Octavia Counselor	Constanta City Hall	N	
BARZAN Cosmin Engineer	APC-ABC	N	
BORTEA Marian Counselor	Costinesti City Hall	N	
CIUCEANU Gina Resident	Constanta resident	N	
Constantin Bogdan Counselor	Tuzla City Hall	N	
CONSTANTIN Catalin Journalist	“Replica” journal	N	
CRUCEANU Monica Reporter	Radio Constanta	N	
FILCA Catalin Journalist	“Replica’ Journal	N	
FILOTE Florentin Counselor	Mangalia City Hall	N	
GHEORGHE Florin Journalist	“Cuget Liber’ journal	N	
GHITA Liliana Counselor	Mangalia City Hall	N	
GIURGIU Dan Counselor	Costinesti – Local Counsel	N	
HANU Florin Engineer	IPC	N	
IORGA Tatian Journalist	“Telegraf’ Journal	N	
JUGANARU Ion Vice president	Chamber of Commerce, Industry, Navigation and Agriculture	N	0722- 569164 0241- 619854 fax 0241- 629454
MIHAILESCU Razvan Journalist	“Cuget Liber’ journal	N	
MIHAILESCU Sandu Counselor	Costinesti – Local Counsel	N	
MIRON Ghiulgian Manager	“Lafarge’ Medgidia ciment company	N	
NITAN Iordan Counselor	Costinesti City hall	N	
OMER Iuksel Vice president	Eco Dobrogea	N	0740-368440 Omer_iuksel@yahoo.com
SAMARGIU Manuela Preparatory	ONG Mare Nostrum, “Ovidius’ University	N	
SARBU Petre Counselor	Costinesti resident	N	
SITOIU Ion Counselor	Tuzla City Hall	N	
STANA Grigore	"INDEPENDENT" Newspaper	N	

Name of participant	Affiliation	Occupation	Contact address
Journalist			
TARINA Ion Counselor	Costinesti City Hall	N	
ADAM Geanina Preparatory	"Ovidius' University	O	
ARSENIE Dumitru Prepararory	"Ovidius' University	O	
BADEA Gabriela Preparatory	"Ovidius' University	O	
BUTA constantin Preparatory	"Ovidius' University	O	
CARP Doina Preparatory	Maritime University Constanta	O	
CIUREA Cornel Preparatory	"Ovidius' University	O	
CONSTANTIN Anca Preparatory	"Ovidius' University	O	
DOBOS Gheorghe Preparatory	"Ovidius' University	O	
DRAGULIN Octavian Preparatory	"Ovidius' University	O	
EFREM Valentina Preparatory	"Ovidius' University	O	
FILIP Cosmin Preparatory	"Ovidius' University	O	
FLOREA Mihai Preparatory	"Ovidius' University	O	
GEAMAMBET Sunai Preparatory	"Ovidius' University	O	
GHERGHINA Cristina Preparatory	"Ovidius' University	O	
HINCU Dan Preparatory	"Ovidius' University	O	
MATEI Carmen Preparatory	"Ovidius' University	O	
NITESCU Claudiu Preparatory	"Ovidius' University	O	
PADURARU George Preparatory	"Ovidius' University	O	
PANDURU Ana Maria Preparatory	Geo-technical University Bucharest	O	
POPA Mirela Preparatory	"Ovidius' University	O	
ROSU Lucica Preparatory	"Ovidius' University	O	
STANCIOIU Maria Preparatory	"Ovidius' University	O	
STANESCU Madalina Preparatory	"Ovidius' University	O	
TENEA Diana Preparartory	"Ovidius' University	O	
TEPES Florin Preparatory	"Ovidius' University	O	
TUDOSE Claudiu Preparatory	"Ovidius' University	O	
VINTILA Dragos Preparatory	"Ovidius' University	O	
13 Students	High School	O	
BREBAN Virgil Lector	"Ovidius' University	R	
DIACONEASA Ilie Representative	INCDM	R	
MATEESCU Razvan Engineer	National Institute of Marine Research and Development "Grigore Antipa"	R	

Table G.2.9: List of participants to the stakeholder meeting (6th,Constanta, March 9th 2007)

Name of participant	Affiliation	Occupation	Contact address
ANTON Catalin	Dobrogea Littoral – Water Directorate	A	
BABU Gheorghe Technical Manager	Water Directorate Dobrogea Littoral - DADL Constanta	A	gheorghe.babu@dadl.rowater.ro
DOBRE Bogdan Engineer	Dobrogea Littoral - Water Directorate (DADL)	A	
DUMITRACHE Camelia, Manager	Water Directorate Dobrogea Littoral- DADL Constanta	A	camellia.dumitrache@dadl.rowater.ro 0241-673036
MANAFU Ionel, Director	Water Directorate Dobrogea Littoral- DADL Constanta	A	0746-249090
MATEI Silviu, Engineer	Water Directorate Dobrogea Littoral- DADL Constanta	A	0241-673036
CARMEN Sandu	Galati REPA	E	
CHIRIAC Adrian, Technical Manager	German Agency for Technical Cooperation- GTZ	E	0742-550770
CIUBOTARU Vasilica	Galati REPA	E	
BISCOVEANU Constantin	Military Institution	G	
BOSNEAGU Romeo Representative	Maritime Hydrographic Directorate	G	
BOSTAN Iulian	Fleet Headquarters	G	
BUZESCU Dorin	Constanta Port Administration	G	
CASIADE Irina	Romanian Naval Authority- A.N.R	G	
CONSTANTIN Mihai	National Defense Ministry	G	
DAMIAN Alin	Military Institution	G	
DOROGAN Dumitru, Counselor	Ministry of Environment and Water Management	G	021-3192591 dorogan@email.com
IULIAN Panite	Major State of Naval Force	G	
NEAGU Catalin	Military Institution	G	
OCESEL Cosmin	Military Institution	G	
PETCU Virgil	National Defense Ministry	G	
POPA Gheorghe	Maritime Hydrographic Directorate	G	
ANDREEA Ionescu	USAID	I	
IONESCU Liviu	USAID	I	
GODA Yoshimi, Prof. Dr. JICA Team leader	ECOH Corporation - JICA Study Team	J	goda@ecoh.co.jp
HATAKEYAMA Yuji, Member of JICA study team	JICA Study Team	J	hatakeyama@icnet.co.jp
IOANA Mirela Claudia Program Coordinator	JICA/JOCV Romania Office	J	kikaku@jica.ro
OCHI Yutaka, Member of study team	ECOH Corporation - JICA Study Team	J	ochiy@ecoh.co.jp
ONO Kenta	JICA Headquarters	J	
OZAKI Takao, Member of study team	JICA Study Team	J	minerva@sky.sannet.ne.jp
UNO Yoshiyuki, Member of study team	JICA Study Team	J	yoshiyuki_uno@ecoh.co.jp
CULETU Dan, Prefect & President of Dobrogea Littoral Basin Committee	Constanta Prefecture	L	
NOANI Nicolae	Constanta City Hall	L	
ABDULA Sinan	Freelancer	N	
CAUSCHI Manuel	Realitatea TV	N	
CONSTANTIN Catalin Journalist	“Replica” journal	N	
CRISTINA Iliuta	Constanta Radio	N	
FEDELES Anamaria	“Satul” Newspaper	N	
GHEORGHIU Ileana	Local Television “Neptun”	N	

Name of participant	Affiliation	Occupation	Contact address
JUGANARU Ion Vice president	Chamber of Commerce, Industry, Navigation and Agriculture	N	0722- 569164 0241- 619854 fax 0241- 629454
MARINESCU George	"Observator" Newspaper	N	
MOLDOVEANU Maria	NGO	N	
MUNTEANU Nicolae	NGO	N	
POPA Simona	"Telegraf" Newspaper	N	
RACOARE Cristina	"Ziua" Newspaper	N	
ROBERT Costel	"News in" Agency	N	
URECHE Camelia	Realitatea TV	N	
CARP Ionela	"Ovidius' University	O	
DESPAN Mihai	"Ovidius' University	O	
ENCICA Ciprian	"Ovidius' University	O	
FUNARU Ioana	"Ovidius' University	O	
GEAMAMBET Sunai Preparatory	"Ovidius' University	O	
GHERASE Valentina	"Ovidius' University	O	
MARIAN Gabriel	"Ovidius' University	O	
MARINESCU Simona	"Ovidius' University	O	
OCU Alexandra	'Ovidius' University	O	
ONCIU Teodora	'Ovidius' University	O	
PADURARU George Preparatory	"Ovidius' University	O	
PETRE Bogdan	"Ovidius' University	O	
PETROF Mihaela	"Ovidius' University	O	
TUDOSE Claudiu Preparatory	"Ovidius' University	O	
VELICAN Razvan	"Ovidius' University	O	
VINTILA Alexandra	"Ovidius' University	O	
BARBULESCU Mariana	ANSP	R	
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BONDAR Constantin, Dr.	National Institute of Marine Geology and Geo-ecology - GeoEcoMar	R	
BLENDEA Viorel	INHGA Bucharest	R	
GALBINASU Aurel	IPTANA	R	
GATU Valeria	Transproiect	R	
GOMOIU M. Traian, Prof. Dr., Deputy manager	National Institute of Marine Geology and Geo-ecology - GeoEcoMar	R	0241-690366
MATEESCU Razvan Engineer	National Institute of Marine Research and Development "Grigore Antipa"	R	
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OPREANU Gicu, Laboratory Chief	National Institute of Marine Geology and Geo-ecology - GeoEcoMar	R	0241-510115
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UNGUREANU Magdalena	IPTANA	R	

Table G.2.10: List of participants to the stakeholder meeting (3rd, Bucharest, March 12th 2007)

Name of participant	Affiliation	Occupation	Contact address
CHINTEA Camelia	NEPA	E	
VARTOPEANU Cristina	NEPA	E	
CONSTANTIN Gheorghe, Director	Ministry of Environment and Water Management	G	
DOROGAN Dumitru, Counselor	Ministry of Environment and Water Management	G	021-3192591 dorogan@email.com
IONESCU Iuliana, Councilor	Ministry of Environment and Water Management	G	
VARGA Lucia Ana, Secretary of State	Ministry of Environment and Water Management	G	
AGACHI Faure	JICA/JOCV Romania Office	J	
BABA, Secretary	Japanese Embassy	J	
BUZATU Adrian	JICA/JOCV Romania Office	J	
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TOMA Florentina, Secretary	Japanese Embassy	J	_
TSUSHIMA Kanji, Ambasadar	Japanese Embassy	J	_
UNO Yoshiyuki, Member of study team	JICA Study Team	J	yoshiyuki_uno@ecoh.co.jp
YOKOKURA Junji	JICA Headquarters	J	
ALEXANDRA Pop	National TV	N	
BADALAN Alina	GANDUL' NEWSPAPER	N	
BUCUREASA Cristina	NEWS IN' AGENCY	N	
BURUIANA Maria	Tv News	N	
CICERONE Mandru	Business Magazin	N	
CIOBOATA C-tin	ROMPRESS Agency	N	
GARICI Nicolina	Business Newspaper	N	
IONESCU Lucian	R.E.C	N	
LAZAR Petru Dan	FREDD	N	
MANDRU Valentin	BUSSINESS MAGAZIN	N	
MOROIANU Luminita	ZIUA' Newspaper	N	
NICA Mariana	ROMPRES AGENCY	N	
ODORHEAN Simona	ATAC' NEWSPAER	N	
PORUMBEL Catalina	REALITATEA TV	N	
SENICA Nicu	"Gardianul" Newspaper	N	
SERBANESCU Radu	PRIMA TV	N	
TUDOSE Adriana	RADIO ROMANIA ACTUALITATI	N	
VANGHELE Ovidiu	MediaFax Agency	N	
VOINEA Oana	"AZI" Newspaer	N	
BORCEA Constantin	HYDROLOGIC INSTITUTE	R	
CIORTAN Romeo	IPTANA	R	
GATU Valeria	Transproiect	R	
PANIN Nicolae, Prof. Dr.,General Director	National Institute of Marine Geology and Geo-ecology - GeoEcoMar	R	panin@geoecomar.ro 021-2522594
SEBASTIAN Dan Engineer	National Institute of Marine Geology and Geo-ecology -	R	

Name of participant	Affiliation	Occupation	Contact address
	GeoEcoMar		
STANESCU Rodica, Dr. Prof.	Politeknica University of Bucharest	R	
STUBE Mircea	AQUA PROJECT	R	
VESPRENEANU Emil	Bucharest University	R	

G.2.2 Photo Gallery of the Stakeholder Meetings

The following photo gallery presents snap shots taken at the seven stakeholder meetings held in Bucharest and Constanța.

1st Stakeholder Meeting ,Constanta ,June 3rd 2005

1st Stakeholder Meeting, Bucharest, June 17th 2005




2nd Stakeholder Meeting, Constanta, Nov. 2nd 2005




3rd Stakeholder Meeting, Constanta, Nov. 24th 2005


2nd Stakeholder Meeting, Bucharest, Nov. 25th 2005


4th Stakeholder Meeting, Constanta, March 10th 2006




5th Stakeholder Meeting, Constanta, June 6th & 5th 2006




6th Stakeholder Meeting, Constanta, March 9th 2007




3rd Stakeholder Meeting, Bucharest, March 12th 2007




G.2.3 Minutes of the Meeting

(1) Minutes of the first stakeholder meeting in Constanța on June 16th, 2005

The stakeholders meeting was opened by the General Manager of Dobrogea Littoral Water Directorate.

Mr. Manafu Ionel presented the agreement between the Romanian Government and Japanese Government, concerning the implementation of the technical cooperation program of the Japanese Government and the necessity of the project, the beneficiaries being:

> The Romanian Ministry of Environment and Water Management, National Administration Romanian Waters – Dobrogea Littoral Water Directorate – Constanta.
>
> The financial assistance is supported by Japan International Cooperation Agency (JICA) and the Department of Environment, Tokyo, Japan.
>
> The technical study team appointed by JICA is ECOH Corporation, Japan.
>
> The Romanian consultants are The National Institute for Marine Research and Development "Grigore Antipa" (NIMRD), Constantza, The National Institute for Marine Geology and Geo-Ecology "GeoEcoMar"(NIMGG) and S.C.IPTANA SA Bucharest.

The Prefect of Constanta County, Mr. Danut Culetu, focused his speech on coastal erosion phenomena and he expressed his concern regarding the fact that all the responsible parties should unify their efforts to find a solution especially for the southern part of the Black

Sea coast. Also, he referred to the fact that a feasible solution must be found out as quickly as possible.

The Water Works Manager (DADL), Mr. Eng. Gheorghe Babu, presented the project to the stakeholders:

Study for Protection and Rehabilitation of the Southern Romanian Black Sea Shore where the following objectives are: establishing the coastal protection plan for the Southern part of Romanian Black Sea shore, between Capul Midia and Vama Veche, drawing up of a feasibility study and provide assistance for the implementation of the solutions. The project has been developed beginning in March 2005 and the final term is September 2006.

Regarding the methodology, Mr. Babu said we would have to analyze the existing data concerning waves, sea level, coastal erosion, depths, sediments deposits, integrity of existing facilities, diagnosis regarding shore protection, for instance dykes to control currents, breakwaters and artificial beaches, estimation of negative effects over the shoreline if the rehabilitation measures will not be applied, protection planning in the future, estimation of costs, initial environmental examination and beach monitoring.

Another topic refers to public participation in taking decisions.

JICA takes into consideration the social and environmental impact. The aim of a proper process for making decisions is important for stakeholders' involvement, information transparency.

Main principles of the study regarding the social and environmental aspects are:
Creating a study concerning the impact of the proposed study, measures regarding the social and environmental aspects which have to be implemented in the initial stage of the project, activities that have to be initiated after the end of the study, indication of interested stakeholders to participate in the project, and contribution of the consultant.

The scope of the study is to promote, sustain and assure the public and stakeholders participation in the information, consulting, negotiating, delegating and taking decisions processes regarding the environment and society, including investment projects promoting.

Objectives of this study are:

- the necessity that the involved parts to formulate opinions and to have an important role in taking decisions in the future, and also the local inhabitants knowledge to find their way and to be transmitted to decisional factors;
- practical opportunities and methods of implication in different levels and phases of planning;
- stakeholders involvement is a new process and a new partnership method, which involves patience and trust.

The levels of public involvement in the decisional process:

- Level 1 : Public is informed whenever a decision is taken ;
- Level 2 : Procedural public participation – the public is informed about the taken decision;
- Level 3 : Public participation for obtaining their consent – the public may influence the taken decision;
- Level 4: Negotiating / decisional debate – the public should take decisions for the optimum alternative of its interests.

The main stakeholders involved in the decisional process are:

- Inter-ministerial Committee of Waters is made up of representatives from:
  - ✓ Romanian Ministry of Environment and Water Management
  - ✓ Ministry of Health
  - ✓ Ministry of Agriculture, Forests and Rural Development
  - ✓ Ministry of Economy and Commerce
  - ✓ Ministry of Administration and Interior
  - ✓ Ministry of European Integration
- National Administration Romanian Waters with its eleven Water Directorates
- Basin Committee includes fifteen representatives from local authorities, water management, water users, NGO's and provide the public participation in taking decisions and efficient cooperation among teritorial structures regarding the water management.

Eng. Babu Gheorghe asked the stakeholders about other information about the existence of other impact activities, beside the questionnaire received from JICA.

Mr. Danut Culetu, the Prefect of Constanța, assuming himself the fact that he is not a specialist in the water and coastal problems, expressed his opinion that the time frame to come with feasible solutions is too large, referring to the feasibility study that the Japanese team will draw up by the end of 2006 and he asked if there were any other possibilities to find solutions earlier so that the coastal zone conditions shouldn't get worse in the near future. He asked the specialists opinion to sort out this situation.

Eng. Gheorghe Babu:

The main target is to achieve the good status of the coastal zone by 2020. However, after having the study completed, we are able to estimate the costs, we also could make a plan for works to begin and also we will know how much time it will take. We are now in this situation because in the last fifteen years the coastal zone protection was totally neglected.

The Prefect:

It is possible that the Japanese team to recommend us what types of restorations could we make this year in order that next year the coastal erosion process start being diminished? Can we do something else for the very next years?

Eng. Babu Gheorghe: "When I referred to the year 2020, I meant to say that this is just the scoping year of the project. The development of the project will be shorter."

The Prefect: "Regarding the evaluation of the project, which are the predicted costs?"

Eng. Babu Gheorghe: "After we will collect all necessary information and data, a feasibility study will be possible and also, a detailed planning of the project."

The Prefect: "It means that we need another three or four years. I know that in the past ten years we continuously lost beaches".

Eng.Babu Gheorghe: "It is true. In the last years the protection of beaches was totally neglected".

Dr. Simion Nicolaev, the Director of The National Institute for Marine Research and Development "Grigore Antipa" (NIMRD):

"We discussed with ECOH study team regarding the terms of the project. It is true that project development term will be very long and for this reason I am satisfied that we also focus on the question of diagnosis, which has to indicate the real situations of existing dikes in this moment and if these constructions proved the reason for which they were built. A selection of these constructions with positive effects should be verified during the development of the project. We should also find out the Japanese team opinion, eventually if this diagnosis will be analyzed faster".

JICA: "In this moment we are in the stage of collecting data in order to create a complete database. The elaboration of a feasibility study was not yet discussed, but until the end of October such a situation could be presented."

Mr.Juganaru – Director of Chamber of Commerce, Industry, Navigation and Agriculture Constanța: "What can we do to eradicate the coastal erosion? How can we find appropriate solutions for these very difficult problems? (For instance the narrowness of beaches).The effects of coastal erosion are destructive for Romania. In the past fifty years we have lost 2,250 ha and we can not afford to lose more."

Eng. Babu Gheorghe: "The study made by ECOH Corporation is very necessary and it will be very good for us to find out another solution, excepting the solution that the Dutch team proposed it to us. It is very good for us to have two opinions."

JICA: "We saw the ICZM study made by the Dutch study team. The specification of the study is a preliminary one. The Dutch study team also recommended development of other studies; we will also evaluate the appropriate causes of coastal erosion and where nothing is done we can make a proper analysis."

Representative of the National Administration Romanian Waters: "The law does not have a pre-memorandum. The law was not adopted and no one could certainly tell us which the coastal zone between Vama Veche and Sulina is. We noticed that many constructions were raised at almost 30 meters near water. Until the law is adopted, nobody would have any responsibilities. There are many problems concerning delimitation of the coastal zone, which are in the possession of both public and private patrimony. For instance, in the southern area of the village 2 Mai, the land owners have measured their properties which go very close to the seashore line, although before the existence of the law concerning the protection of coastal zone, there was another law which stipulated that the zone of 50 meters from the seashore is intangible and no one should have the right to initiate any construction. But land owners sold their properties. And now is it possible that these new owners do not agree with us and not give up 30 meters of their lands!?

If we do not take action rapidly regarding the implementation of the existing law, people will go on and will be much more difficult to expropriate them; after the finishing of new constructions, it will be harder to evacuate them from their properties.

If the delimitation of coastal zone was properly established, according with the existing law, now these lands should be in public administration. According to the law, the distance between water and land is not sufficient for the executions of protection and rehabilitation works. Now the owners of these lands should pretend payments off."

Eng.Babu Gheorghe: "I would like to make a remark. The National Committee of the Coastal Zone (NCCZ) was set up precisely for this purpose, in order to identify these particular problems. In the next meeting we will discuss all these aspects."

Commander Munteanu Nicolae: "It would be better if public and private properties were separated. The NCCZ activates since 2002; we are in 2005 and we do not solve anything".

Representative of Romanian Waters: "This problem should have been solved till now. They should have established which the funds are, and which the involved institutions are."

Dr. Simion Nicolaev: "We don't have to refer to all these unsolved questions in this meeting. The scope of this meeting is the implementation of JICA project. I agree with the above mentioned problems, but these items have to be debated in a separate meeting .The purpose of NCCZ meeting, -established for next week- is to clarify the modality of coastal zone delimitation".

Representative of Ana Hotels: "What coastal erosion phenomena consists of, there is on the one hand a coastal erosion due to the sea and on the other hand a coastal erosion, I mean landslides in the coastal zone, for instance in Eforie, where sewerages are very old, and an improper processing of fluvial waters that has a special impact so, this old sewages systems contribute to the degrading process of the shores."

Commander Munteanu Nicolae: "An identification of such zones should be accomplished and we have to act there first."

In the end of the meeting, the Manager of the Dobrogea Litoral Water Directorate, Eng. Manafu Ionel, requested to all participants to have confidence and patience. Also, he mentioned that the questionnaires proposed by the Japanese study team are not at chance and the questions concerning social and environmental aspects are related and interactive.

(2) Minutes of the first stakeholder meeting in Bucharest on June 17th, 2005

The meeting has started with the presentation of Romanian and Japanese work teams. The project coordinators are:

The Environment and Water Management Ministry represented by Directorate of Water Resources Management by: Mr. George Constantin and Tudor Gologan - Ministry representatives – and Japanese work team, Mr. Professor Yoshimi Goda – team leader, the ECOH Corporation, the technical implementation team of the project, Mr. Keiji Morishima – the official representative of Romanian JICA Office, Mr. Yuji Hatakeyama, economical analyses, social and environment problems consultant, the rest of the team components being sundries consultants.

The beneficiary Romanian teams: Romanian Waters National Administration – the local beneficiary of the project, Directorate of Dobrogea Littoral Waters, Directorate of Management Plans and Hydrographic Basins Organization represented by Petru Serban and Corina Boscornean, Integrated Directorate of Water Resource represented by Mr. Victor Popescu and Mr. Lucian Dumitru and local beneficiary, DADL, Mr. Stelian Pascalu European Integration economist and Mrs. Camelia Dumitrache, international project coordinator.

From Bucharest: Ministry of Transportation represented by Mr. Cristian Cazacu, Technical Administration of Construction Bucharest – Mr. Dragu, Bucharest University, Biological Faculty represented by Mr. Professor Gradinaru, IPTANA, represented by Mrs. Gradinaru and Mr. Constantinescu – general manager adjunct, Mr. Cezar Niculescu member of ISPA development program of UETB, Mrs. Kogalniceanu, Hydrologic Science Association, nongovernmental organization represented by Constantin Viorel,

from ICIM Bucharest Mrs. Simona Catrina. There are a lot of other local members from Constanta because this is a priority project of local interest, Basins Committees, mayors, prefectures, nongovernmental organizations, Military Navy, piscicultural organization and also hotels associations.

Discussion regarding the necessity of the project:

Ministry of Environment and Waters Administration have initiated the project; the project needs also the implementation of UE recommendation regarding integrated management of the coast zone. This strategy should have a perspective vision regarding a durable development of the Romanian coast zone and because of this, the Urgent Order no. 202/2002 regarding integrated management of the coast zone, has been adopted and the main responsibilities of Ministry of Environment and Water Administration, national committee of coast zone and work group of integrate management of coast zone, central agencies, ministers, nongovernmental organization, public local administrations, town councils, town halls are to promote, sustain, approve this strategy and to include it into governmental strategy policies.

The strategy of integrated management of the coast zone has three principal parties: delimitation of the coast zone and protection matters of this zone, to divide the coast zone into territory impact zones, the project plans delimitation and Black Sea impact and management zone. There will be also evaluated perspective situation of 2020 and projects regarding integrity of coast zone. The interest will be in solving the principal's coast zone problems regarding coast erosion, pollution, and terrain evaluation. Cape Midia – Vama Veche zone is the critical erosion pollution zone – the most hotels populated zone, chemical combined Midia Navodari.

This project will consider also to the assurance strategy of the coast zone, because of its contribution to the maintenance and protection of the coast zone, beaches infrastructure and also the hotels zone. The intervention should not affect the actual structure.

The object of the meeting is *to establish the priorities regarding the places, the construction works and the environmental aspects.*

The activities of this project will be consist of technical investigations, engineering investigations, projections, feasibility tests, activities that will be taken place in 2006. The steps of the project will be: integral documentation, implementation and in the final maintenance and monitoring strategy.

Japan International Corporation Agency has responded to Romanian Government demands through Ministry of Environment and Waters Administration to realize the study of the coast zone. The auction of this project has been earned by ECOH Corporation. This will be the ones that will insure technical assistance and project evaluation.

The beneficiaries of the project are the Ministry of Environmental and Waters Administration, Directorate of Dobrogea Littoral Waters. The project will be financed by JICA and the environmental department of Tokyo, Japan and the technical work team of ECOH Corporation. Romanian consultancy of the project: IRCM Constanta, GeoEcoMar and IPTANA.

The first objectives of the projects are to establish a coast protection plan, Capul Midia – Vama Veche zone, to elaborate a feasibility study until the end of the year, September 2006 and to ensure an administrative assistance for project implementation. The project will last a year and a half.

Details regarding the planning:

> the analyses of the existing dates regarding the waves, changing the sea level, diagnostic of the integrity of existing facilities regarding protection of the shore, embankments and also to anticipate the changes of the shores. In case there will be not considering to the rehabilitation prognosis for 2020, starting with this evaluation and anticipation, there will be made an environmental initial examination and monitoring of the beaches. After the project implementation the impact zone will have monitoring program after rehabilitation and protection works.

The Japanese has experience in beach protection based 100% on aquatic works. Constanta team and ECOH Corporation team will make the feasibility study. The project activities: technical evaluation, projection, technical assistance for the evaluation of the impact to the environment, if is necessary, implementation and monitoring plans and economic analyses.

Now we are having the first of the 6 meeting that will take place in Constanta and Bucharest (3 meetings).

The scope of the meeting is to respect the JICA guideline stipulation, to observe the development of countries where they are implementing projects and to consider to the social aspects and environment, to consult the parties of the project regarding decisions, to be correct and proper to the country and also to insure the transparency of the decisions. The scope of the meeting is also to insure the responsibility of the both parties. Ministry of Environment and Waters Administration should be concerned properly into this project and also the responsibility of the others interested parts. The objective of this guidelines and Japanese government strategy is to encourage the governments of countries from this zone to become interested in environmental and social aspects, to help these governments and to be responsible.

The principles of JICA guidelines on the measure regarding environment and social aspects should be implemented from the beginning of the project. The JICA guidelines tries to implement the strategic evaluation of the environment witch is the base of the study planning and acting together with the government of the countries. After the final of the project there will be the monitoring and evaluation of project impacts faze, the information to the parts and taken part to the improvement of organization capacity by system implementation.

In Romania there is not exist a national guide, standard strategy – there are a lot of instruments promote, sustain and insure the access to the information for the public regarding the information, promoting, negotiation, delegation process for environment and social decisions.

This is a new partnerships form, very good detailed and implemented. This is a strategy of including the public into this project for decisions. There are more levels of implications, informing, and participations to decisions, for obtaining the negotiations consensus, for deciding.

Regarding the environment protection there are a lot of directions regarding the public implications and interested parts in the same time with the foundation of the National Committee of the Coast Zone that has the public and interested parts implication in making the strategy of management for the coast zone.

There are lows regarding these matters. The committees ensure the participation of all those who are interested (15 representatives of public and interested parts), waters administrations, local authorities, water users. There have been elaborated methodological instructions according to European guides and demands.

According to JICA guidelines there are some specific elements regarding the environment and social aspects that should be discussed. Regarding juridical aspects, the Japanese experts have concluded that using the implementation of protection works there could be some impacts, moving the houses and replaced into others zones – "colonized" or there are private lands that should be purchased – what this could mean and what is the impact.

(3) Minutes of the second stakeholder meeting in Constanța on November 2nd, 2005

The meeting was opened by Mr. Manafu, Manager of Water Directorate Dobrogea – Litoral (DADL). The following is the comments and discussions given the attendees of the meeting:

Mr. Culetu, Constanta Prefect, said that he is very pleased about the collaboration with JICA team and is considering the project very important for Constanta. Taking into consideration the future economic potential of tourism in this area, he is hoping that the project will start as soon as possible.

Mr. Babu, Technical Manager of DADL, presented the outline of the basic study and the coastal protection plan made by the JICA Study Team with power point slides. He made a comment "we gain something?!" about the Belona beach and the erosion in front of Petromar (between Belona Lake and Black Sea).

Mr. Culetu asked if the erosion calculation was per year and was very surprised that in Costinesti areas there was not erosion and a dramatic erosion was taking place in Mamaia South, i.e. 2 m/year. He commented about the erosion estimation over years by 2025 that the area around Hotel Parc & Perla Mamaia would disappear (in case that nothing will be done). Further comments by him about the New Road construction (promenade) along the shore proposed by the City Hall of Constanța was that it was a good proposal from his personal point of view (excluding the idea of beach disappearance) but he didn't agree with the City Hall's proposal to build the road to be built nearby the beach; instead the road should be built on the shore not on the beach.

Ms. Camelia Dumitrache of DADL said that JICA team did not support a road construction on beaches, in principle, because the international tendencies were looking for the protection and conservation of littoral area.

Mr. Culetu mentioned that the total cost of 420 million Euros looked to be very too high and he was hoping that the cost would be reduced by about 40% at minimum, and so it became somewhere between 200-300 million Euros even though the amount was still high.

This ended the presentation by Mr. Babu. Then Mr. Culetu asked the opinions of Romanian experts.

Prof. PANIN Nicolae responded to Mr. Culete's request by giving the following comments:

From his international experience, the cost of beach maintenance by nourishment is about 3,000 to 10,000 Euros with supplementary nourishment in every 3 to 4 years with the volume of 10 cubic meters per linear meter of a beach, according to the cost in EU countries.

As for the beach fill sand, the area north of Midia Port can be a good source of sand for Mamaia. However, Bara Sulina cannot be taken it into consideration, because the sand there is supposed to be used for the Danube Delta area, where the shoreline is retreating

with the rate of about 20 m/year and is in urgent need of sand supply. The riverbed of the Danube is a good source of grained sand but it needs an equilibrium study first (the cost looks to be expensive, because of transport). The continental shelf floor of the Black Sea looks to be a good source of beach fill sand, but unfortunately the sand is covered by very fine sediments such as mud and sand mining there seems to be very difficult and requires some study first.

The Belona area looks to have an abnormal sand circuit from the south to the north (need huge quantity of sand)

Prof. Goda commented that he agreed with Prof. Panin's view and made no additional comments

Dr. NICOLAEV Simion then replied to Mr. Culetu's request as follows.

I am pleased to observe the professionalism of analyses and the realism of solutions, especially knowing that the NIMRD's data have served well for the JICA Study. With regard to sediment transport along the Romanian Black Sea shore, the jetties at the navigation channel of Sulina are stopping the alongshore sediment transport to the south and there should be some means to remedy it. For the coastal protection project, we should establish first the priority project sites as a minimal action, because of lack of finance. Regarding the nourishment around the Romanian littoral, we should be very careful about the sand grain size because we may destroy the habitats if they are covered by silt and mud.

Consensus was made among the attendees on the priority projects that the areas of Mamaia South and Eforie Nord are most suitable.

Mr. Laurentiu of DADL proposed to take into account a new project of dredging submerged sand bars around Izvoarele (Danube old area) and Cernavoda area, being promoted by the River Administration of the Lower Danube Galati, for another good source of beach fill sand.

Ms. Camelia told the attendees that the Steering Committee would be held on November 4th, 2005 at Bucharest and asked Mr. Ozaki for his assistance for finding the fund necessary for the coastal protection project.

Prof. PANIN Nicolae called the attention of the attendees that there were at least 3 project(s) from National Program of Exploitation regarding the littoral situation and diverse solutions:

1. Danube Delta between Sulina & Sfintu Gheorghe, regarding the littoral protection
2. Mamaia beach, regarding the sand sources
3. South of littoral

The results will be very positive and can be a good source of study and collaboration for other project(s)

Cpt. Cdor. Nicolae Munteanu raised the question of necessity to protect the cliff in front of the Tuzla light-tower from erosion, but it was concluded that the cliff erosion there was out of this project.

Presentation and discussions on the results of the JICA Study were thus concluded, and then Ms. Camelia asked all the attendees to fill the scoping table by giving their rating for the 30 items listed. The copies of the scoping tables were collected at the end of the Stakeholder

meeting and were to be tabulated and analyzed by DADL.

(4) Minutes of the third Stakeholder Meeting in Constanta on November 24th, 2005

Mr. BABU Gheorghe – Technical Manager of Dobrogea – Litoral Water Directorate (DADL) opened the meeting, then he requested the meeting attendees to introduce themselves stating the names of the company that are representing; after that Mr. BABU Gheorghe presented the outlines of the basic study and the coastal protection plan made by JICA Study Team, with Power Point slides.

The presentation ends and Prof. GOMOIU Marian-Traian Deputy Manager of GEOECOMAR presented his opinion regarding the impact study.

Prof. GOMOIU Marian-Traian – Deputy Manager of GEOECOMAR:

> As everybody knows the last year's legislation made impossible any intervation into the surrounding environment without an evaluation of the impact the various human activities (of any nature) have on the surrounding environment i.e. the natural environment, the ensemble of the natural capital of the environmental elements air, water, soil; flora and fauna, as well as the socio-economic environment.
>
> Nowadays, it was established that the wild natural and the socio-human environments couldn't be separated anymore, a single specie being responsible for all the disorders on earth. As Mr. Babu Gheorghe said in his presentation, the problem of littoral erosion has many human implications.
>
> So far, the coastal erosion, as everybody knows, especially the people along the shore, is not a new problem, it has already been tackled, but without a general consultation: the specialists treated it as an emergency situation and the adopted solutions temporarily delayed partially the erosion process but with greater losses in the end. Therefore an impact study is compulsory.
>
> Now we have a team – personally I would like to call it a 'modern team'–- with an ample experience in the field of coastal environment protection, as the Japanese team, which has proved that is possible to build a country along a littoral, confronted not only with erosions problem, but also with the hostility of the marine energies, with storms, tsunamis and earthquakes, has; therefore we should consider ourselves lucky to collaborate for this project with the Japanese team.
>
> All along the evolution of the project regarding the Romanian shore protection, the Japanese team has periodically organized consultations with all the people interested, because beyond some personal materialist interests, the shore erosion problem is general, concerning all of us who benefit either of the sea resources or of the services offered by the coastal zone.
>
> Consequently, at this stage, after the problems were judiciously approached, on the basis of scientific documentations using information and data accumulated at DADL or others research institutions involved in the study of the marine environment we selected these two-priority zones, not by chance but according to specific criteria such as: coastal protection, beach utilization, feasibility study and regional development.
>
> We should admit that Mamaia-South has the best quotation for regional development, being an international beach that attracts a large number of tourists. The importance must be seen also from any other significant holder viewpoint; therefore, the current questionnaires, should be completed not on a general basis but from the specific point of view of the interest each of you is representing.
>
> The following phase will be the study of the environmental impact. The impact study,

taking into consideration all the stakeholders requests, the existing situation completed with, I would say, everything moving in the respective area will be made step by step.

1st step – to establish if the project development will influence or not the surrounding environment, major importance having the negative, not the positive effects, (although they should also be mentioned) and the imposed measures.

2nd step – the impact of protection works is positive, of stopping and limitating the erosion and improving the Romanian littoral.

Prof. GOMOIU Marian-Train wanted to continue, to express his personal point of view and asks for the discussion to be translated for the Japanese team.

The questionnaires are according to the book and applied everywhere in the world, but in a certain phase should be more detailed, according to each zone specific, because the works are special, that are not going to the core of the socio-economical system but serve as support for activities of great economical and social importance.

Therefore, the interested parts should…I will give one example. Somebody asked 'how many hotels and bars are in the zone?"- I don't know how 'chopped' is the economy, but I know the pressure on one beach meter length resulted from everything that are exiting around, from the littoral 'slice' with all the hotels there, on bigger or smaller portions. The presented slide was very conclusive, showing how crowded is the beach in summer time and the beach width, the sand nourishment effort are depending on the tourist numbers given by the hotels in the respective area, plus at least as many more, I me be mistaken but I'm referring to the residents and to the peoples from other cities, because a facility such as the Aqua magic attracts many visitors. We have to keep in mind that if for three month in summertime the beach is very crowded, with peaks during weekends and holidays there is no crowding now. The beach should be protected at any time.

Therefore, next time the questionnaires should be more specific and furthermore it is good to pass through them because more than anything they are representing an exercise of the participation of public, of interested persons that are making efforts militating against gas stations and are not taken into consideration. Next to the people having interests in the coastal area, the non-governmental organizations, other institutions or hotels holders should participate too in the stakeholders meetings.

Prof. GODA's reply to Prof. GOMOIU:

The questionnaires were prepared by JICA and are applied anywhere in the world, in any project, not only to the coastal constructions, but also to airports, highway or port constructions. The question regarding the people transposition necessity are applicable also in other projects situations and our study team follows the JICA directions. The questionnaires reason is to make an initial environmental examination and not an environmental impact assessment.

The second meeting questionnaire was referring to the evaluation of the entire coastal plan , from Midia to Vama-Veche; this time the questionnaire is referring to the two priority sites, Mamaia South and Eforie-North. After that the questionnaires will be sent to JICA, which will decide if the two-priority sites will require an environmental impact assessment or not.

As Prof. Gomoiu pointed out, more detailed information about hotels numbers, percentage of Romanian or foreign tourists are needed, information that are necessary for the project financial evaluation, and this kind of studies will be made until May 2006. The purpose and reason of this questionnaire rating is to give pertinent data for JICA documentation to decide if the environmental impact assessments are necessary or not

from JICA's point of view. The Regional Agency of Environment Protection – Galati, will review the necessity of environmental impact assessment for these two priority projects and JICA will take into consideration their opinion. In case that the environmental impact assessment is requested, JICA team will organize a meeting of a special commission at Tokyo, because JICA wishes to be sure that all their studies are compatible to the world standards from environmental point of view so that is why JICA needs the results of this questionnaires.

Prof. GOMOIU Marian-Traian agreed with Prof. Goda explanations and JICA's questionnaires and considered the project a necessity because there is no other choice and declared Mamaia South and Eforie North as the two priority sites.

Prof. GODA once again asked for confirmation of the two priority sites for the realization of feasibility studies i.e. Mamaia South and Eforie North.

Mr. BABU Gheorghe asked if there were others opinions on the choice of the priority zones? Comments like "we have no choice"

Mr. CHIRIAC Adrian – Technical Manager of Deutsche Geseeschaft fur Technische Zusammenarbeit (GTZ)

– I started from the sense of the term "stakeholders" meaning interested part and as Prof. Gomoiu said there are three elements to be taken it into consideration i.e. the social, economic and environmental aspects (with no doubts one without another is not possible), however I imagine that the importance given to this rehabilitation is firstly the result of the social and financial aspects continuation because for a period of three months there are in the zone intense economic activities and I can say that the "king or queen of the ball" are the tourists or the ones taking care of them, because they are the one that supports all the consequences, agreeable or not.

The question is: if these reparations or restorations will be made and will have some negative effects during the work progress or positive effects at the end, probably the effects will be differently interpreted by these "kings or queens" or by the tourism operators so I am thinking that it is indicated, if you have not already done it and we do not know, to consult the persons that have interests in zone? At a certain moment these elements can create some kind of frustrations.

Dr. SECRIERU Dan – Laboratory chief GEOECOMAR:

The littoral improvements works might compromise the summer season at the most for one or two years. The disadvantages are on short time and although the advantages will appear after the end of the works they will be great and on a very long term, especially for the area stakeholders.

Prof. GOMOIU Marian-Traian – Deputy manager GEOECOMAR:

We are learning the democracy very hard; there was a public advertisement for the meeting on the local newspapers and everyone is welcomed, the doors are open for everybody.

Mr. CHIRIAC Adrian – Technical Manager of Deutsche Geseeschaft fur Technische Zusammenarbeit (GTZ)

– I hope I made myself understood, I wanted to say that when you publish a policy and you have the accept of the people you are working with you accomplish your goals much more easier.

Mass media representative:

Complain that the press has no access at the meeting – non-sense comments on this subject.

Mr. BABU Gheorghe - replied to mass media:

The meeting was thought as a presentation of the works where the viewpoints should be freely expressed. The journalist's access at the meeting can alter the spirit of the meeting and after DADL will get same conclusions, we will inform the mass media.

Mass media representative

– Why you do not organize an after-meeting press conference?

Mr. BABU Gheorghe

– we will make a press communiqué after the meeting.

Prof. GODA – replied about the problem of works in summer time

We agree with you and we will make until next May or June feasibility studies financed by JICA, that means preliminary execution plan. Once DADL will get the project funds, it will have estimates of the costs for each work i.e. jetty's extension or sand nourishments and of the necessary time.

JICA excludes the works during the summer season starting from middle of June to September and respect the attendees' opinions.

Mr. BABU Gheorghe–

– As you know no works on the littoral are allowed during the summer season. The works of the project will be executed outside the summer season and will be stopped at its beginning. Where the works have already begun, the beaches will be temporarily arranged for tourist's use.

Dr. SECRIERU Dan

– from hotels or restaurants owner's point of view, if the works will not begin, the beach will disappear and the interests for the littoral will end in about 2 or 3 years.

Mr. CHIRIAC Adrian

– This is in fact a part of the answer to my question. However, I want to mention that, if a zone, no matter how or which one, is chosen, the local stakeholders will preferentially benefit. Due to this questionnaire subsequently nobody can make comments or claim about the chosen zones.

Mr. PETRO Vasile – chief commissar at ENVIRONMENT NATIONAL AGENCY

I believe that at a certain moment we all have to choose and establish something. What we have now to establish is: do we want to protect the beach or not? Is the beach a national interest objective or a private one? If we conclude that the beach - unique in the country – is a national interest objective we will find the best solutions to protect and

even to work during the summer season as it happens in other parts of the world.

We live under the empire of the fear provoked by some government decisions stating that the summer season is starting at May 15th and every work on the littoral should end on this date. That is not possible; we should find applicable solutions to work day-by-day and hour-by-hour, inclusively in the summer season. Regarding the questionnaire I saw these many questions and, - as a pragmatic spirit –I know that to protect the littoral we should act at a certain distance from the shore, in places where there is nohotels and no tourists, so questions as " what happens if we should displace some people" are not necessary. I believe it is not the case and we should not talk about it. It is clear that after we will accomplish this littoral protection works, all of us will benefit and then we can talk about economic utilities and other things.

Prof. GOMOIU Marian-Traian

- joke – "You cannot make an omelet without breaking eggs".

Then he addressed to Mr. PETRO V and said he believes that from the numerous zones, hot spots on the Romanian littoral – the two priorities projects were selected both on the base of scientific reality measured by gram/second/centimeter as well as on the base of general utilizations. The most important area for the development of the entire littoral is Mamaia.

The question is: all of us at this meeting should concentrate on Mamaia South and Eforie North needs or we should leave them and look for others, such as Jupiter?:

Mr. CHIRIAC Adrian

– as everybody knows even the human respiration is polluting so I won't comment on the utility of the questionnaire. In this case Mamaia South is doubtlessly on the first place but considering the circumstances of the last months, with floods and torrent forming at Costinesti I am thinking that this area should be also considered besides Eforie North. There are or should be same explications in favor of one or the other area.

Prof. GOMOIU Marian-Traian

– Eforie North has priority because its involvement in the health of the people from the entire country due to the Techirghiol Lake protection.

Dr. SECRIERU Dan:

– the purpose of this project is not the flooding and from his personal point of view Eforie North should be on first place if we take into consideration the ratting table about shore protection 9.4.1, beach utilization 1.12.3, feasibility study 3.10.5 and regional development 1.6.1, the score difference between the two zones is not very big, but both of them are clearly evidenced by the score analysis as priority areas.

Mr. MUNTEANU Nicolae – captain commander

– raised again the question of Tuzla lighthouse protection and accentuated that its maintenance was an international obligation of our country, but everybody agreed that for the time beeing the lighthouse is out of this project purposes, then he presented a CD with a cliff portion that collapsed two weeks ago at 2 Mai.

General discussion about the cliffs' problem.

Prof. GOMOIU Traian

– addressed to the stakeholders asking them to concentrate on the meeting subject, each one being free to express his opinion.

Mrs. DUMITRACHE Camelia

– asked all the attendees to fill the scoping table by giving they're rating for the appointed questions and also their comments if an "A" rating was given.

Comments and whispers about the question and its answers. It was pointed out again that the works should be done continuously, i.e. including the summer season, but the legal regulations, if any, should be taken into consideration.

(5) Minutes of the 2nd Stakeholder Meeting in Bucharest on November 25th, 2005

Mr. BABU Gheorghe – Technical Manager of Dobrogea Littoral Water Directorate (DADL) Constanta opened the meeting and presented the Rehabilitation and Coastal Protection Project of Southern Black Sea zone regarding the Touristic Romanian Littoral from Midia to the Bulgarian border.

The presentation contains the two priorities projects proposal motivation, selection of implementation elements, and beach utilization conditions during the summer season, shoreline position changes and their causes, and JICA's proposed solutions regarding the erosion and pollution mitigation and the estimation coasts.

Mr.Şerban:

As a project beneficiary from his point of view, he wants to draw the attention regarding the two erosion causes effects, i.e.: micro and macro scales effects, that in my opinion until now he heard no explanations in this presentation regarding this matter.

Studies agreed on by the Danube's countries (already mentioned at Ministry) mention that the erosion process is due to a macro scale process with two principal causes:

- the sediment quantity diminution already demonstrated by Prof. Panin, Mr. Bonda and Dr. Nicolaev
- the Danube river waters deterioration between 1959 and 1989 and the Black Sea organisms diminution

He insists that the JICA team and the Romanian colleagues should take it very seriously into consideration this matter, insisting for pertinent explications of its causes, because scientifically should have an explanation, even if it is not the subject of the meeting. What kind of effects can have the two priority projects works and the socio-economic impact?

Prof. Goda replied:

The project objective study is the Southern Romanian Black Sea Shore and he believes that the effects of many dams along the Danube are limited to the northern units. Even if Mr. Babu today did not present the JICA's study regarding the northern shore erosion record, it is clear that the erosion is the effect of the construction of many dams. He then asked more specifications about 'micro scale' beach erosions.

Mr. Şerban agreed with Prof. Goda's explanations about the hydro-technical structures regarding the erosions.

Prof. Goda:

– the hydro-technical structures particularly referred to are the north breakwater of Midia Port that stops the supply of sand from the northern shore to Navodari-Mamaia beach. The breakwater was started to extend to the depths of minus 10 meters in 1975. Since then the Mamaia beach suffers from great erosions and the previous government started to build the six detached breakwaters and supply sand from Lake Siutghiol. It was successful for the moment but it proved that the sand grains were too small in diameter, it had little stability, and gradually the shoreline began to retreat.

According to the recent bathymetric survey it becomes clear that there is a lot of sand deposit behind the breakwaters. Originally the breakwaters were built at minus 5 meters depth but now breakwaters depth looks to be only 3 meters.

Prof. Goda excused himself and mentioned that the JICA study was still ongoing and at Mamaia the sand deposit quantity should be also examined and the effect of Midia Port was very clear. More attention should be paid to the new constructions works taking into consideration the abrupt changes of beach topography around Belona Marina.

Mr. Şerband – agreed with Prof. Goda's explanations

Mr. Babu Gh.:

– Certainly, same real causes may need more detailed explanations and are very well known, but from his point of view the essential is to find the solutions to stop this phenomenon on the basis of the existing studies, because the problems should be enclosed and not let to be extended.

Mr. Y;X comments:

- "The world is opened" and make comments about Brussels regulations – because if some one makes a mistake, he should pay for it. It is a study that is going 'around' / 'everywhere' and should reflect the scientific part and not be minimized at all.

- The presentation it was mostly about the local works in his opinion.

- Are already approved documents by researchers and ministers, so even the cause is important not only the solution, when we talk about money.

Mrs. Dumitrache – suggested an appointment with other specialists to be held at Constanţ:a.

Mr. Stanescu:

Regarding the sand nourishment dredged from the Danube an impact study is suggested. Prof. Panin already made such kind of pilot study at Macin because the old Danube is clogged-up and a parallel study should be made taken it into consideration that a huge sand quantity is need.

Prof. Goda:

He wants to be sure that the requested impact is referring to the impact stability of Danube riverbed, because no studies until now was made but JICA has collected information about how much sand and gravel are dredged per year and utilized for the construction works like manufacturing concrete. JICA is calculating the sand amount needed for the two priority projects nourishment, i.e., Mamaia South and Eforie North, which will be less than the previous estimate, and the project of beach nourishment will take two years instead of one year, though this is depending also on the finances. Prof. Goda does not exclude that further studies may be required also, but at this moment this is

the opinion of the JICA team.

Prof. Panin:

– an impact study is needed, that is, a study of the Danube dredging place that can have positive results for navigation on the navigation channel and Cernavoda Power Plant water supply. Already his institute has made detailed studies for about 15 Danube sections in preparation of navigation improvement map plus the bathymetric maps of different sections that can be use as good sources of studies.

In his opinion the Danube sand has a good grading and can be as a good source for Eforie North nourishment. But, a comparison between Mamaia South and Eforie North cannot be made because from any point of view, i.e., water circulation, sand supply, wave energy and sediments are totally different. Eforie North should be considered the site that requires the beaches fully supplied by fill sand and of course a permanently sand supply would be necessary.

Concerning Mamaia South beach, Midia can be a good source of sand but the water circulation in this area looks to be very difficult and should be taken it into consideration the sediment and shells accumulations.

Mr. Babu Gh.:

– the Regional Environment Protection Agencies at Galati and Constanta suggested that an environment impact assessment would be necessary.

Prof. Panin:

– suggested that it was not absolutely necessary to have very long jetties and a part of it was to be submersed.

Prof. Goda:

– Mamaia beach is supposed to have short submersed groins, but their construction is not easy and looks very expensive. Underwater structures are twice expensive, but the JICA team will study the proposals.

Mrs. Dumitrache – asked the attendees to fill the scoping table.

(6) Minutes of the fourth stakeholder meeting at Constanța on March 10th, 2006

Mr. Dorogan Dumitru, Counselor at Water Resource Management Department Sections of Environment and Water Management Ministry

He opened the meeting and started with the first part of the presentation regarding the "Prognosis and Mitigation of Environmental and Social Impacts Possible Induced by the Coastal Protection Plan for the Southern Romanian Black Sea Shore", prepared by JICA Study Team in collaboration with the Romanian specialists.

The two (2) potential sand sources i.e. Danube bed and Black Sea - Midia/Sulina and the afferent costs including the constructions works for Mamaia and Eforie North were pointed out.

At the end of presentation Mr. DOROGAN Dumitru has informed the audience interested to study more thoroughly the project and the slides presentation, the detailed documentation of which may be found on the Environment and Water Ministry WebPages and also informed the attendance about the necessity to complete the Consent Form at the end of the meeting.

Dr. Secrieru Dan – GeoEcoMar Chief laboratory:

He continued the presentation with the second part of presentation regarding the "Evaluation of Possible Environmental Impacts" – Examination of thirty (30) items by JICA Guidelines starting with the first 13 items supposed to have impact.

Mr. Dorogan Dumitru – Counselor at Water Resource Management Department Sections of Environment and Water Management Ministry:

(because a rumor was heard at the item. no. 17 presentation i.e. Coastal Zone – Mangroves, Coral reefs, Tidal flats, etc) - "of course we don't have mangroves, tidal flats and coral reefs, but this is the methodology form, so even if our case is not relevant, we should accept it".

Mrs. MERLA Ani – Constanta City Hall – Environment Manager:

– requested, "Why there is nothing regarding the Constanta City coastal zone – accentuated that all the information are regarding Mamaia and Eforie Nord coastal zones.

Mr. DOROGAN DUMITRU - counselor at Water Resource Management Department Sections of Environment and Water Management Ministry:

He explained and insisted, that this Project is about the entire Coastal Zone Erosion.

Mrs. Dumitrache Camelia – Dobrogea – Littoral Water Directorate (DADL) – Water Resources Manager:

She explained that the study is about the entire coastal zone from Midia to Vama Veche; the evaluation was made by Japanese team, DADL team and Environment Ministry team and the priorities zones were decided by the mutual agreement, the feasibility study being supported by the Japanese Government up to 2010 and Constanta shore zone include fives (5) erosions critical zones covering the entire Constanta shore.

Mr. Juganaru Ion Danut – Vice-president – CCINA Constanța:

He complained that the study cost is too high taking into consideration that the estimative cost of the previous study prepared by the Royal Haskoning team was less than half of the actual cost.

Mrs. DUMITRACHE Camelia – Dobrogea – Littoral Water Directorate (DADL) – Water Resources Manager:

She explained that Prof. Goda had studied the Royal Haskoning documentation and found it incomplete i.e., actually it was not about the entire coastal zone, and without any information about erosion, sand exploitation, etc.

Mr. Omer Iuksel – (ECO Dobrogea) engineer representative - a nongovernmental agency:

He requested if the local residents were invited to assist at the meeting? In his opinion, their opinions can be very important for this project development and should be taken into consideration, too.

Dr. Secrieru Dan – GeoEcoMar Chief laboratory;

He explained that the Japanese team (Mr. Hatakeyama) personally requested DADL to invite as many local residents as possible to participate at the next meeting in May, because JICA is very interested in the local residents' opinions.

Mr. Amzaru Aurel - National Department of Piscicultural Fund – department chief:

He complained about the rating of Item no. 10 - Water Usage or Water Rights and Rights of Common –- Minimal Impact, i.e. considering that the Impact will not be minimal.

Mr. Dorogan Dumitru – Counselor at Water Resource Management Department Sections of Environment and Water Management Ministry:

He stated that the announcement of the meeting was made in the newspaper "ROMANIA LIBERA" dated March 10th, 2006:

> "The Water & Environment Management Ministry, as Authority Management for the Plan "Study Regarding the Protection and Rehabilitation of the Southern Part of Romanian Littoral" are informing the interested parties about the elaboration of the first version of the Plan "Study regarding the Protection and Rehabilitation" for which the screening stage has been initiated to decide if the program should be subject to the SEA procedure, according to Government Decision no. 1076/2004"

The program is available for public consultation on the Ministry of Environment and Water Management website and at the DADL office; everybody is free to convey his opinion within 18 days from the date of announcement.

Mrs. MERLA Ani:

– has complained that the documents are not explicit enough and requested that, for a better documentation and to avoid ineffective discussions, the attendees invited to take part at the meeting should receive the documents 2 or 3 days before; she mentioned she tried a couple of times to receive more information about the project, without any positive results and complained that the discussion is only about a limited number of items.

Dr. Secrieru Dan:

– from a total of 30 analyzed items, the JICA and others teams, have found 13 items with certain impact; no impact is expected for the other 17 items which will be analyzed in detail later on.

Discussions and comments continued between City Hall representatives and DADL representatives.

Mr. Chertes Laurentiu – DADL engineer:

– has explained that the project is about the reconditioning of what the human being has destroyed.

Dr. Secrieru Dan continued his presentation of the other 17 items without impact.

(Discussions and comments about mangroves, tidal flats and coral reefs rating and existence and almost everybody agreed that this item is not relevant and should have "no impact" instead of "minim impact" taking into consideration that the mentioned features do not exist at the Romanian littoral.)

Mrs. Merla Ani:

– requested, "Minimal Impact" instead of "no impact" for item no. 3 - Land use and utilization of local resources.

(Other rumors and comments at the Item no. 11 "Sanitation" and the item no. 12 "Hazards (risks) and infections disease such as HIV/AIDS" {interpretation matter}- Dr. Secrieru Dan made a confusion at the item no. 11 "Sanitation," by translating it as Public Health instead of Sanitation, which created a lot of discussions)

Mrs. Dumitrache Camelia – explained that this is the JICA procedure.

Mrs. Merla Ani – requested why the "positive impacts" are not mentioned?

Dr. Secrieru Dan – explained that the positive impacts are not taken into consideration in the environmental impact assessment; only the negative impacts must be analyzed.

Mrs. Tompos Catiusa – requested if the Romanian procedure for systems and plans, would be taken into consideration?

Mr. Dorogan Dumitru – at this phase of project we should consider only the JICA procedure. After SEA & EIA will be initiated, only the Romanian regulations are going to be respected. This is the first project in Romania which will have a SEA study, also requested for the financing with European funds.

Mrs. Tompos Catiusa – insisted for a better explanation of the choice of the two priority zones!!

Mr. Dorogan Dumitru – explained once again that the two priority critical zones are: Mamaia & Eforie North, chosen by the common agreement as having the worst situation; the Japanese Government supports the cost of the feasibility and impact studies for these two critical zones. But we should take into consideration that the feasibility study is about the coastal erosions zones except the cliffs, which are requesting additional funds.

Mrs. Merla Ani – comments and discussions about the state public domains and City Hall domains (Trei Papuci, Zorelelor, Patriei). Further, she requested who is going to approve the Environmental Agreement?

Dr. Secrieru Dan – The Regional Environment Protection Agency - Galati

Mrs. MERLA Ani – According to the Government Decision 1076/2004 – Local, national and regional experts groups should be constituted regarding Constanta City Port Urbanism Plan analyses in purpose of Chamber Commerce, residents, fisherman and other institutes point of view, opinions about this project study and works (in case that problems are going to emerge).

Prof. Goda was invited to such a meeting held at the vice mayor office, regarding the coastal road projects feasibility study, with no answer until now; she request an answer if it is possible, regarding Constanța beaches and cliffs.

Mrs. Dumitrache Camelia – communicated Prof. Goda's answer: after a technical evaluation of the five zones - including Constanta, in November at the Steering Committee, held at the Ministry of Environment and Water Management in Bucharest, decided that only the critical zones will be taken into consideration; they are Mamaia South and Eforie North; Constanța is considered to be a priority zone but is not included in the present feasibility study, because of the lack of funds.

Mr. Dorogan Dumitru:

– It is possible that other National Units will be included in the feasibility study, step by step.

Regarding the Fisherman Association protests, Mr. Dorogan Dumitru recommended Mr.

Amzaru Aurel to contact Dr. Nicolaev, who is more qualified and able to give more pertinent information and helps and who rated the impact on fishing as minimal.

Mrs. DUMITRACHE CAMELIA– communicated Prof. GODA's comments in case of Ministry WebPages project study: the chapter 6.1 and 6.2 are concerned with the selection of the priority zones and there were no objections for the selection of the Mamaia and Eforie Nord zones as the most important.

Mrs. MERLA Ani – complained that no representatives from City Hall were invited at the Bucharest meeting. Discussions regarding the item no. 24 "Soil contamination," the item no. 28 "Offensive odor," the item no. 22 "Air Pollution," and the item no. 30 "Accidents," some impacts may occur and "No impact" is not correct. She requests more information about what "further study" means! – As for the item no. 18 "Flora, Fauna and Biodiversity" marked as "further study"?

Dr. Secrieru Dan – the "further study" will be ready before the works will begin and yes indeed we can mark of as 'minimal impact" taking into consideration that some modifications can occur.

Mr. Dorogan Dumitru – the priority zones were acknowledged at the stakeholders meetings in late November 2005 at both Constanta and Bucharest.

Mr. Chertes Laurentiu – the cliffs falls are produced by sewage system deficiencies (unintelligible comments).

Mr. OMER Iuksel – Non-governmental Agency – very satisfied with the JICA study and offers his help for further study regarding this project. He insists that the Black Sea zone is a total ecological disaster and needs supplementary study.

(7) Minutes of the fifth stakeholder meeting at Constanța– 6 June 2006

Professor Goda - has started the discussion by referring to the selection of the two priority sites, i.e. Mamaia South and Eforie North and invited the attendees to express their objections, questions or comments related to this subject.

Professor Breban Virgil – Professor at Ovidius University

"Considering the priorities regarding the design of protection works to control the beach erosion as well as the erosion of the cliffs, it is my belief that the analysis made within the feasibility study is correct. At first sight, without analyzing in detail the system that introduces an importance scale for the various involved factors, as JICA experts have done, it is obvious that the areas: Mamaia, Navodari-Constanta harbor or from Eforie to Costinesti have a big touristic interest and the areas while the beaches from the cliff zones are less important , but the cliffs stability in these areas is important because they are built-up areas (in the North of Tomis harbor) or areas that are going to be built soon (the area between Eforie Sud and Tuzla). In my opinion it is fair that these areas are considered important.

It seems to me that the choice of Mamaia and Eforie as priority zones is correct.

The next problem is to establish the technical details of the works that are going to be executed. At first sight the things look simple: insertion of new jetties with variable lengths and some breakwaters parallel to the shore, or the repair of the existent ones.

But in every sub area the details and the geometric elements of the constructions, the

precise orientation to the dominant elements of the storm-waves and their indication for the adjacent areas must be studied.

So the conception work is just starting.

The case of the Naton harbor building on the Morocco coast, which ensued great modifications of the coast (southward from the harbor) and to the sanding up of the harbor entrances existing Southward from the Naton harbor is well known in the literature. Similar phenomena occurred here as well, as a result of the construction of the harbors from Midia, Constanta and Mangalia.

That is why the technical studies for the solutions analysis will be very important. Surely, the project constructions will have a smaller importance for the nearby areas , but still they may negatively influence the areas that are going to be analyzed in the ulterior stages over a few years or decades.

Prof. Goda – very pleased about Prof. Breban V comments and appreciates his consent for the two priorities sites i.e. Mamaia South and Eforie North.

Concerning the cliffs collapse studies, unfortunately JICA didn't make any study, because the agreement between JICA and the Romanian Government does not include the subject. JICA has already noticed that the cliffs collapse represents a critical problem for the northern part of Constanta, and JICA has already proposed widening of the beaches by nourishment, hoping that at a later stage the Local or the National Government will take care of the cliffs by authorizing widening of the beaches.

Prof. Arsenie - Professor at 'Ovidius' University

I noted some ideas because we have to appreciate the seriousness of the JICA Study Team approach of the problems and also we have to appreciate the fact that the study is a multilateral one because it includes all the aspects: technical, economical, ecological etc. Generally the presented solutions were classic and they proved their efficiency.

The problem of the submersed reefs was also studied at the Ovidius University, in the construction laboratories, and we proposed also some submersed box-shaped dykes made from reinforced concrete; the advantage of the solution consisted in the possibility to modify the boxes and use them in another location if no results were obtained in the original one.

Obviously no results were to be expected from the solution you talked about (the sanding up of the beaches made in the past), because just adding sand to the beach will not solve the problem, unless adjuvant measures are also taken..

I also have a few observations: the sustained solution of longer jetties was also motivated by the elimination of the water bad smell in the area. It is possible that in Japan, where the tides are stronger, they create currents favoring the refreshing of the water in the areas between the jetties. But here the tides are less important and I do not think that this kind of solution will be good.

As we know the jetties could have also some negative effects, they will probably protect certain areas but they will produce erosion in other zones. Also maybe this quantic calculus model is not 100% conclusive for the further evolution of the erosion at the Romanian littoral. Also when the improvement of the Mamaia area was presented I couldn't understand the mechanism of the breakwater appearing at the beginning of the area.

This is all I had to say and I congratulate the JICA Study Team.

Prof. Goda - explained that the "Japanese and the Romanian Black Sea coasts are similar, the west-north side of the Japanese islands facing the Japan Sea as in the case of the

Romanian littoral and there are all the reasons for the recommended solutions to be adequate.

At this moment JICA is considering that a big Japanese city requires some ample protections works and Mr. Ochi had already given details with a big long jetty and a big submerse breakwater.

In my next presentation I will explain more about the Mamaia breakwater necessity"

Prof. Dragulin – "Ovidius" University:

"I would like to ask Prof. Goda why a more importance was given to the Danube dredged sand over the sand dredged from the Black Sea as filling material for the beaches?"

Prof. Goda – "the question is related to June 5th, 2006 - first day of the Seminar, the sand dredged from Midia area has a gradding mean size of 0.1 mm or less (in this case the sand being very fine, more quantities will be required) instead of the one dredged from Danube which has a gradding mean size of 0.3 - 0.6 mm and it is a purely economically point of view but the comparison cost is not over yet"

Mr. Brailoiu Ion Ovidiu – Eforie Mayor:

Have you made an expertise in Eforie Sud to see the cause of the cliffs collapse?

Prof. Goda – has explained that the cliffs collapse phenomena at Eforie North and South is the result of heavy rains because the collapse is starting from the top of the cliffs. The JICA scope of works is to examine any seaward danger and not landward, but of course JICA have noticed it. The rehabilitation of Eforie is included in the second phase of JICA master plan.

Mr. Brailoiu Ion Ovidiu – Eforie Mayor:

Many visit our areas but unfortunately the cliffs collapse and we get only the visits. What about the littoral cordon?

Prof. Goda – "At Eforie JICA is proposing large nourishment with long jetties".

Mr. Brailoiu Ion Ovidiu – Eforie Mayor:

I think the beach administrator DADL should stop the illegal removal of beach sand.

Mr. Silviu Matei – "Can you be more specific, please?"

Mr. Brailoiu Ion Ovidiu – "To be more specific I will send you some videotapes showing how the sand is stolen from the beaches. For those who do not know it, the sand is used as filling material for paving and in building. And taking into account that when I received the invitation I was asked to bring some economic agents from the area, we have here a few that have some questions about the beach erosion.

Mr. Cincu Tudor – Economic agent Eforie:

"As an economic agent I should admit that I'm not very familiar with the study but as the first beneficiary I appreciate it very much and we consider it very appropriate and I would like to congratulate the JICA team for their job.

I cannot go into technical details but I can tell you a few things:

Has the human erosion been taken into consideration? Because as the mayor was saying, the people erode beaches very much.

I understood that you made the study in collaboration with DADL and I have one question: Beside DADL's brilliant strategy of leasing the beaches to people that have no

connection with the beaches or tourism that brought them a lot of money, does DADL have another strategy to keep the sand on the beaches?

I have some examples: companies like CONSAL TRADE are stealing the sand from the beaches with trucks and afterwards we have to pay to bring sand from other places.

Therefore I'm asking my self if bringing here dredged sand from other zones it is not likely to create some kind of ecological disequilibrium.

Prof. Goda – looks shocked about this information i.e. - "stealing of the sand from Eforie or anyplace should be prohibited and I hope that the authorities would take care about this negative actions"

Mr. Kerkes Laurentiu – Dobrogea Littoral - Water Management:

I want to mention something. We are in 2006 and our cultural level is well known, and DADL has very few employees who can control these events as we also have under our control the lower part of the Danube, the Central Dobrogea and the Black Sea continental circle. We are technical people and beside the fact that we have to make all these controls the local authorities must notice us if they see such things. Abroad, a big contribution is brought by voluntary actions that help the authorities to take measures.

Mr. Cincu Tudor – Economic agent Eforie:

I am very sorry for you but this is no excuse. If you cannot handle please let the projects to another administration.

Mr. Kerkes Laurentiu – Dobrogea Littoral - Water Management:

This is no excuse, these are normal things.

Mr. Cincu Tudor – Economic agent Eforie:

I am sorry to inform you but you seem awkward

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Prof. Goda – has asked to come back to the Seminar subject, because it has easily sloped to another side.

Mr. Marian Ardelean – ECO Ferma

"I would like to draw your attention to the sand dredged from Midia port and ask for more information"

Prof. Goda – JICA is already asking several Romanian institutions to take sand samples and make the analyses regarding the quality of Midia sand.

Mr. Barzan Cosmin – APC_APBC

I want to insist on the question about the dredged sand. A big quantity of sand dredged from the Danube bed will create a water discharge very similar to the one forecasted for Bistroe channel. But the presented arguments sustain that the quantity of dredged sand will not influence the discharge and will not affect the ecosystem. taking into account that we are talking about a long area Ostrov and Cernavoda.(just an opinion)

Prof. Goda – "I would like to conclude the Seminar with your agreement for the two priority sites selections and I thank you very much for your cooperation"

(8) Minutes of the sixth stakeholder meeting at Constanța– 9 March 2007

Before the start of the stakeholder meeting, the Seminar on the Priority Project at Mamaia South and Eforie North was held. It was opened by Mr. Gh. Babu – Technical Manager of Dobrogea Littoral Water Directorate, who made a short introductory speech expressing his appreciation for the work done by the JICA team and the quality of the project. Mr. Gh. Babu ended his speech introducing Professor Goda – JICA Team Leader, who presented the Preliminary Design of the Priority Project at Mamaia South and Eforie North. After the end of Professor Goda's presentation Mr. Babu introduced the second speaker of the first session of the seminar, Mr. Ozaki – JICA Team Member, who presented the Economic Analysis and Management of the Priority Project at Mamaia South and Eforie North.

After a short coffee break, the sixth stakeholder meeting at Constanța took place. The following is the comments and discussions during the stakeholder meeting:

Mr. Culetu, Constanta Prefect – 'I'm very grateful to JICA Team for their support and feasibility study, I can say that I have seen such a complete study for the first time. Finally, we are doing something for the Romanian Littoral because since 1989 nobody took action. I just hope that we will "become Japanese" too regarding this project and next year, in 2008, the project will begin; we should not have any doubts about the financing, because as I have discussed with the Environment Ministry representatives there are financing sources. As I understand from Professor Goda's presentation, the Eforie Yacht Harbor was very well built, in such a way that is protecting the beach from erosion. We have already approved at Mangalia a new project regarding one new marina and we are thinking for new projects at Ovidiu-Constanta, Navodari, but I would like to know if your study had already included such an idea'.

Professor Goda – 'I'm sorry to say but we didn't do anything concerning the possibility of marinas development, because when the Romanian Government appealed to the Japanese Government for this project, there was no such request. Anyway it's a quite risky project, because when a tourist harbor is built, the beach will change. As an example we have the Belona beach, which has already suffered a lot of modifications. Before building a tourist harbor you should ask the consultant what kind of modifications will occur and maybe with a good study you will succeed.

Mr. I. Juganaru – 'First, regarding the jetties at Mamaia North: Is there any technical possibility to convert these jetties, with some supplementary works, into a mooring facility for tourists' boats? Or is there any possibility to be built in the future? This will solve the lack of such a facility, much needed in Mamaia. Second, if the sand is dredged from Danube River, can it be transported through Danube channel i.e. Poarta Alba-Midia Channel in order to avoid the road transport with trucks?'

Professor Goda – 'At this moment this structure is not intended for any use for the boats. If you want to have this type of facilities, you need an extension of a few meters. Regarding the sand dredged from Danube River, we first considered using barges to bring the sand up to the sanding point, but as I understood later you have no license for barges transport outside the harbor. We also considered the alternative of bringing the sand to the Ovidiu Harbor but the Ovidiu Harbor is too small and it is difficult to use it. What we prepared is a feasibility study presenting one idea. When the project will be finalized and if you will have a budget for that – you can have more design details and you will have the possibility to compare several alternatives. Our proposal is not final, is one of the alternatives. The selection was necessary in order to prepare the cost estimate.'

Ms. Ionescu – 'For the project to be approved in order to be financed, everything should be

done according to a feasibility study prepared according to the Romanian methodology. This methodology requires among other things an analysis of different alternatives, including the operational costs. This is why you are asked to present several alternatives, with their individual costs.

Professor Goda – 'The environmental impact assessment is the responsibility of project owner and it will consider several alternatives. Besides we have studied several alternatives for the arrangement of facilities but I am sorry to say we didn't make such a detailed analysis of how to bring sand to the beaches. If necessary more further studies i.e. detailed analyses will be made'

Mr. Gh. Babu –I would like to elaborate on the question regarding the mooring point and I think it is not feasible because the water is very shallow there and the boats should have the possibility to moor regardless of the weather. There is an intention to build several small marinas for tourists' boats allowing the mooring of passenger boats. Regarding the beach nourishment from the seaside, it can be done only by using dredges and dredges cannot work at water depths smaller than 2.5 m..

Mr. I. Juganaru – 'If you remember, 2 – 3 years before the Dutch Team project had such a solution. They had equipment pushing the sand from the sea to the beach'.

Mr. I. Manafu – 'This solution was proposed for sea sand. This time several solutions were analyzed to identify sand with better qualities. Considering the costs, I have to remind you that this project is developed through the Environment Ministry which is not building harbors. But we have to take into consideration the future littoral development and we have in view such facilities'.

Professor Gomoiu– 'I propose to concentrate on this project because otherwise we will get lost in sterile discussions, outside the objectives of the project'.

Professor Goda – 'The Dutch proposal was a very general idea. They never studied the quality of the sand available from the sea. The sand around Midia is too small and is not good'.

Mr. I. Manafu – "The use of Midia sand may mean higher exploitation costs, a big problem, and the technical solutions may be different".

Mr. A. Galbenasu – 'I would like to know if the presented solutions can be improved or modified during subsequent stages. For instance, a continuous construction instead of the segmented one could be a better solution?!!

Professor Goda – 'If we make a continuous construction, there will be a problem with water quality because you don't have a big astronomical tide. We have to be very careful to maintain a good water circulation.

Mr. A. Galbenasu – "And what if we lower the crests of the submerged structures?"

Professor Goda – If the crests are lowered, then the efficiency to dissipate the wave energy becomes smaller. It's a kind of trade-off – one aspect good, one aspect bad – we should make a compromise'.

Mr. I. Juganaru – 'From a technical viewpoint there is one more problem: we should be more than sure that the works will be stopped during the summer period'.

Professor Goda – 'For Mamaia the works will be stopped during the summer i.e. June, July and August but the breakwaters rehabilitation can continue because they are 500 meters away from the beach, if you agree with me. In our report there is more detailed information on the work schedule".

Mr. I. Juganaru – 'What will happen with all the equipment during the tourist season?'

Professor Goda – 'All the equipment will be stationed in proper places, the boats in harbor; the crane barges may be put behind the breakwaters and I hope will not disturb the people enjoying the beach area. If we will not work on breakwaters during the summer time the construction works will be extended from 1.5 year to maybe 2.5 years. It is up to you if you allow the summer works to go on or not.'

Dr. Bondar – 'Professor Goda has explained the sand nourishment process i.e. 250,000 cubic meters at Mamaia and 450,000 cubic meters at Eforie. Such a solution was applied before to the Mamaia beach, which was nourished with app. 500,000 cubic meters of sand which was removed after the summer season. I would like to know what the durability of the new sand nourishment is'.

Professor Goda – 'Between 1989 - 1990 the sand nourishment was made with sand from Siutghiol Lake - this sand was too fine and was easily removed from the beach and transported offshore. Our report recommends the use of Danube River sand with a proper grain size and quite similar to the actual sand of the beach. Even if we use Danube sand, the sand will be removed offshore and the shoreline will retreat but we estimate that it will take 20 years for the shoreline to reach the actual position. However the most important thing is the selection of proper size of sand'.

Mr. Gh. Babu – 'Is it true that, if we use river sand instead of sea sand, the necessary volumes are much smaller?'

Professor Goda – "The necessary quantities are specified in our report. Generally the required quantity of sea sand is twice the quantity of river sand".

Mr. Gh. Babu – "The costs of using sea sand are much smaller than the costs of using river sand. Also, the environmental impact of using sea sand might be smaller. And a third element: our data state that the Danube can supply 1 million cubic meters of sand per year, mostly used in building. If the building activity will increase it is possible that the sand extracted from the Danube River will not be enough."

Professor Goda –'If we use river sand, the cost is about 44 millions, but if we use only sea sand for Mamaia, the cost will become quite large.
Concerning the Danube river sand capacity, the National Agency of the Mineral Resources authorized about 1 million c.m. but the actual extraction amounts 100,000-200,000 c.m. so there are 800,000 c.m. of sand authorized but not extracted.; We propose for Mamaia and Eforie a total of 600,000 cm over 3 years, meaning less than one quarter of the authorized yearly extraction. So, unless there is a huge increase of the demand, I think there is enough sand for the works.

Mr. Gh. Babu – "This is valid only for Mamaia and Eforie. What if the works will take place on a much larger scale?"

Professor Goda –'In our Master Plan the total volume of sand fill is over 3 million c.m. but it will require 20 to 30 years because of the financial limitations. The annual required quantity of

sand will be around 200,000 - 400,000 c.m./year; of course this depends on how fast you can get financial sources'.

Mr. I Manafu – 'We should realize that this is a priority project and I believe we can take sand from other sources too. There are hundreds of sand quarries in our country'.

Professor Goda - 'Well the sand from other areas is not so easy to find and in case that this sand is available - like cutting down hills, will involve a lot of environmental impacts; the river sand is below the waters and the Danube river sand is refilled by natural process and is not producing so much impact instead of cutting down the hills sand, but I don't think you can get approval from the Environmental Protection Agency - if there is any sand or not'.

Mr. Chiriac – 'There are also reserves at Ostrov'.

Professor Breaban? – 'Because I was from the beginning nearby Mr. Goda – and that is a very big honor for me, I would like to make a few comments: This project has a very big advantage, being the first general project focused on shore erosion proposing new solutions. Previously there were several Romanian studies but none was a general one and the littoral protection cannot be realized through local projects. Sure we can criticize some aspects of the project or of the adopted solutions but I think that any future project regarding the shore erosion must start from the results of this study. I do not consider myself a specialist but 30 years before I had already proposed almost the same solution for Mamaia, which unfortunately was not accepted.

Professor Gomoiu – 'This study should be considered as a textbook. I appreciated very much the interview with the common people taking into consideration their opinions which are very important. Year after year we are losing the beaches helplessly, and the affected ones are not only the tourists. I don't know how it is in Japan – because up to now I have not yet had the pleasure to take a bath there, but I have seen many European beaches. We should find a time-efficiency because this project is very important and costs a lot. As a recommendation for DADL a brochure with all the details should be written so that everybody could understand and learn more about this project'.

Mr. I. Juganaru – 'I don't think there are many Romanians who doubt the opportunity of this project or to ask if we can afford this project. We must do it because we are late already. We don't afford to lose other beaches and if we are losing the tourists, many categories of business are losing. So we have to do something but we should find the best solutions, not necessarily the most expensive, but I don't believe that the tourists are so well informed about all these problems to ask their opinion about the opportunity of the project or how much they are willing to pay for its realization'.

Mr. T. Ozaki – I explain the cost cover. We asked the locals and tourists about the beach value just to be sure that there is not any misunderstanding regarding their opinions concerning the project.

(9) Minutes of the third stakeholder meeting at Bucharest– 12 March 2007

Before the start of the stakeholder meeting, the Seminar on Coastal Protection Plan of the Southern Romanian Black Sea Shore and Stakeholder meeting organized by Ministry of Environment and Water Management was opened by the address of Ms. Varga – Environment Ministry State Secretary, then by the address of H.E. Mr. K. Tsushima – Japanese Ambassador. Afterwards, Professor Goda, JICA Team Leader, firstly presented the Geophysical Conditions and Beach Erosion Problems, secondly the Overall Plan of Coastal Protection and Rehabilitation and finally the Feasibility Study for Priority Sites at Mamaia South and Eforie

North.

After a short coffee break, the third stakeholder meeting at Bucharest took place. The following is the comments and discussions during the stakeholder meeting:

Mr. Constantin – 'I would like to know why you estimated that the project for Mamaia and Eforie will need 4 years to be realized, because I think the intention is to realize the project as soon as possible?'

Professor Goda – 'First because of the sand transport and second because of the construction companies capacity; also because during the summer vacation i.e. June, July and August, the works will be stopped. However, it is possible to shorten the time by arranging simultaneous transport of sand to the Mamaia South and Eforie North areas. I suggest you to examine this idea when they will work at the project details. This is a feasibility study and not the final technical design of the works.

Mr. Constantin – 'I think the interest is not too large, I'm asking myself what could be the explanation there are so few people in the room, especially from the other ministries. I understood that JICA has sent invitations to all the stakeholders. Probably the people appreciate everything, I understood that in Constanta there were not any kind of problems, and everybody seems to be very happy about the project. Only on the corridor people are not very happy, everybody made different kind of comments. This is not a good sign because some people accuse us we are not trying to find the best solution.
In two years we had a lot of discussions and now we are pushing to have the project presented for financing as soon as possible. The only problem is with the Environment Legislation and we cannot speed the process. These are the rules. At this moment I think we are just waiting for the feasibility study to be presented from your side as soon as possible and to start the next stages in order for the project to start on next year spring and not in the late summer next year. Tomorrow at the Environment Ministry the two feasibility studies will be discussed and going to be or not to be approved, and I would like everybody to freely express their opinions pro or against'.

Professor Panin – 'From the project presentation at the National Committee and the local discussions we know there are some questions regarding the sea sand quality versus river sand quality. It was already proved through analyses and other determinations that the Danube River sand has a better quality than the one from Midia.
Another problem is the transport of the sand. For Mamaia the feasibility study propose the transport by barges to Basarabi Port and then by trucks to Mamaia and for Eforie – barges to Constanta Agigea South Port and by trucks from there to the sanding area. The reticence of the local authorities concerning the transport methods is well known. Both SEA and EIA Studies have taken into consideration other transport solutions. Among these solutions one considered a sand point discharge for Mamaia somewhere on the Poarta Alba – Midia canal, followed by pumping to the working zone. There are at least two potential discharging points. A similar thing was proposed for Eforie. Probably the tomorrow discussion will have as one of the subjects the transport method alternatives. There is one aspect that has to be taken into consideration. For a better economical cost evaluation we should take into consideration also the dredging program for the improvement of navigation between Braila and Calarasi. On this section there are at least 11 sectors where important dredging is necessary and the cost of this obligatory dredging should be considered in the overall cost of the sand for Mamaia and Eforie.
The opinion of many Romanian Institutions regarding the construction and the technical solutions of the Feasibility Studies is favorable and are considered to be the only ones able to solve the problem of the littoral erosion in these sectors. There are at least several Romanian

Experts asking questions about the lifetime of the newly created beaches – i.e. the 20 years estimation may be too optimistic. It should be taken into consideration from the beginning – as Professor Goda has already presented - the possibility of a supplementary sand reserves to be used for periodical re-sanding.

Professor Goda – "I understand that you have raised three questions, first the sand transportation from Midia to Mamaia, second the availability of navigation improvement around Braila – Calarasi channel and third the 20 years lifetime estimate for the beaches which looks to be very optimistic.
I would like to start with the second subject. We have visited Mr. M. Ochialbescu, Manager at AFDJ - Galati in May, last year and we have discussed the possibility of using dredged material for beaches and he has explained to us that the material consists mostly in silt and clay and probably no sand. At our second visit last August we have found downstream from Cernavoda some dredging equipment working. After we analyzed the material we found that this material could be used.
The cost of 20 euros/m^3 can be reduced with 6 or 7 euros, of course with a good negotiation.
Regarding the first subject, the barges should come at Midia Port and discharge the sand into the sea in some area, because to transport the sand by pipeline first the sand must be mixed with water, but we are not sure if there is any place to be used and first of all the pumps should be very strong, several hundreds kW, to transport 200,000 c.m. of sand and I'm afraid that Romania does not have this kind of equipment. Next question is how many days will be required to transport all this sand by pipelines. If the pumps will transport 50 c.m./hour, that is 1200 c.m./day, about 200 days will be necessary for the entire quantity of sand. And you will have to stop the pumping during summer and to remove the pipes then, after the summer, to bring them back. We are taking into consideration this method but we should make a cost estimation first to be sure that this method is advantageous from economical point of view. Regarding Mamaia we should first see if the people from Constanta accept the transport by trucks, because I don't think the Mayor has the power to decide by himself.
- Regarding the third subject i.e. – 20 years survival life estimation of the beaches, the estimation is based on analyses of all the areas and so far our method of analysis has been successful. Unless very severe conditions occur our estimate is valid. Of course it is just an estimate and it is very difficult to say what the real lifetime of the beaches will be: 10, 20, 30 or 40 years.'

Mr. Ciortan – 'As the first stage has been already discussed, regarding the second stage I insist that will be much better if for some more affected areas such as Mamaia North the design will start earlier'

Professor Goda – "In the general plan we have proposed the general layout of the beach fill areas and of the jetties but we did not make any preliminary design for other areas yet'

Dr. Stanica – It is a proposal for the meeting tomorrow also to plan the future projects carefully in order to give to the specialists more time to work.

Mr. Constantin – 'It is already done, except for the money, the government has approved another 50 millions euros which should be borrowed by the Ministry of Finance for other projects in the coastal area. We are already asking institutes and design companies to start to think about this. We have to speed up things because we are loosing a lot of land which is national territory'

Professor Goda – 'When we started our JICA Study nearly 2 years ago, the financial prospect of the Coastal Protection at Romania was very low and not many Romanian officials were eager to spend money for coastal protection. So we have started from rather a conservative

style and as realistic as possible. When we came back this time we have found that you have changed quite lot, and are ready to invest (spend money) for coastal protection. The coastal protection has priority compared to any other projects. Any project proposal must present a good economical evidence. Otherwise I don't know how the Finance Ministry will approve the project if you will not provide the estimation of the benefits. This feasibility study will be presented to the Finance Ministry for information and technically speaking the feasibility study is recommended. All depends on who and how the project costs will be financed."

G.3 Environmental Examination at the Basic Study Stage [1]

G.3.1 Scoping Results at the Basic Study Stage

The study team discussed on the impacts of the project that may be induced on the environment and the society, and the team filled the scoping checklist table based on the results of discussions. Then the team revised the table by taking the results of stakeholder meetings into consideration. The twenty three items in total were classified into two groups; 10 items as "B" (some impact expected) and the remaining 13 items as "D" that indicate no necessity of IEE or EIA (no expected impact), as listed in Table G.3.1.

Table G.3.1: Initial scoping of environmental impact items

Environmental Items		Evaluation	Reason for evaluation
1	Resettlement	D	No impact is expected.
2	Economic Activities	D	No impact is expected since the fishing ground is located offshore from the project site.
3	Traffic and social infrastructures	B	Possibility of impact on traffic according to the site of barrow pits or transportation method of sand and rocks.
4	Split of Communities	D	No impact is expected.
5	Cultural Property	D	No impact is expected since historical ports such as Tomis and Mangalia are not included in the Project.
6	Water Rights and Rights of Common	B	Fishing rights might be respected by custom, although they are not guaranteed by law.
7	Public Health Condition	D	No impact is expected since construction workers will be local residents.
8	Waste	B	Generation of construction waste and debris.
9	Hazards (Risk)	D	Positive impact is expected since erosion risk will be reduced by implementing the projects.
10	Topography and geology	B	Change of coastal features.
11	Soil erosion	D	No impact is expected because no borrow pits of soil is planned..
12	Groundwater	D	No impact is expected.
13	Lake/River	D	No impact is expected.
14	Sea/Coastal zone	B	Sand mining by dredging and beach fill project may cause some changes on coast.
15	Flora and Fauna	B	There exists a nature reserve in part of the project site. Possibility of impact of dredging work on benthic organism such as seaweeds and shells.
16	Climate	D	No impact is expected.
17	Landscape	B	Possibility of deterioration of aesthetic harmony by the appearance of jetties and offshore breakwaters.
18	Air pollution	B	Possibility of dust from dump trucks.
19	Water contamination	B	Possibility of turbidity when dredging sand from the seabed for beach nourishment and installing jetties and breakwater.

[1] When the Study team carried out the basic study at the Phase I stage during May to September 2005, the team collected and analyzed the data and information regarding the environmental and social considerations based on the environmental impact items listed in the previous guidelines by JICA. Because of the different version of the guidelines is employed in the present interim report, the results of the earlier study were not listed in Chapter 7 but are summarized in this Annex G for reference.

Environmental Items		Evaluation	Reason for evaluation
20	Soil contamination	D	No impact is expected.
21	Noise and vibration	B	Possibility of noise and vibration caused by operation of construction equipment and moving of dump trucks.
22	Ground subsidence	D	No impact is expected.
23	Offensive odor	D	No impact is expected.

Note: Evaluation classification
A: Serious impact expected
B: Some impact expected
C: Not clear
D: IEE or EIA is not necessary (no expected impact)

G.3.2 Present Situation of Impact Items

The ten items having been evaluated as "B" in Table G.3.1 were examined for the situation prevalent at the time of the basic study as listed in Table G.3.2.

Table G.3.2: Present situation of impact items

Environmental Items		Evaluation	Present Situation
3	Traffic and social infrastructures	B	● The target area is at the distance of three-hour car drive or train ride from Bucharest. A traffic infrastructure is comparatively good. The traffic jam only happens in the beach resort area in summer.
6	Water Rights and Rights of Common	B	● Fishing rights might have been respected by custom, although they are not guaranteed by law. ● Stationary fishing exists, using passive gears in thirty fishery locations along the littoral between Sulina and Vama Veche, in the coastal waters of 5 to 10 m depth.
8	Waste	B	● The solid waste collection and transportation to the final disposal site (a sanitary landfill site is located at Ovidue 8 km away from Constanta) is outsourced to a private company by the local government of Constanta. ● Waste disposal problems are generated by a sudden influx of additional population in summer. This short-term pressure may exceed the capability of sewage system and rubbish collection system. Tourism activities may contribute to the pollution on beaches, not only with the usual food, paper and cigarette butts, but also occasionally with dangerous items such as broken bottles.
10	Topography and geology	B	● The southern Romanian Black Sea shore from Cape Midia to Vama Veche is divided into the northern and southern sectors in the present study. The northern sector is defined to cover the area from Cape Midia to Cape Constanța, which is a coast of sandy beach. The southern sector extends from Cape Constanța to Vama Veche, which is a combination of barrier beaches and sea cliff coasts with narrow beaches.
14	Sea/Coastal zone	B	● Currently the coastal zone of Romania is eroded on beaches and cliffs. Some protection works have been done but not effective enough.
15	Flora and Fauna	B	● Presently, there are 27 protected areas in the Constantza County, divided in floristic, faunistic and mixed reserves, geological and marine points. ● In the south of the Constantza County there can be found a series of forestry reserves, very important from the floristic and faunistic point of view. ● There exists a nature reserve (Vama Veche - 2Mai Marine aquatorium) in the south of the project site. ● Techrghiol Lake will be included in the Ramsar Convention site. ● On the Romanian coast there are estimated 9 endangered species, 6 vulnerable species and 5 species threatened by extinction.
17	Landscape	B	● There are visually significant historical buildings on the hill behind Tomis Port. ● A lot of tourists spend the summer vacation enjoying sunbathing and sea bathing on beaches.

Environmental Items		Evaluation	Present Situation
			● Natural and man-made landscape have deteriorated significantly in the southern coast of Romanian due to the natural process of beach erosion and wave actions.
18	Air pollution	B	● Some factories in Constanta are included in the list of the industrial units that release frequently materials in excess of the maximum admissible concentrations of air quality parameters. For Bucharest and Constanta a special regulation prescribes the use of fuel oil with a sulfur content of less than 1%.
19	Water contamination	B	● The pollutant loads of the Danube River have led to the increase of the nutrients, heavy metals and pesticides concentrations in marine sediments. The general trend of these concentrations along the Romanian sea-shore of the Black Sea is the decrease from the north toward the south. Another category of pollution sources is human activities in the southern area of the littoral (industrial and municipal waste water, port activities, and fishery). ● The studies by the National Institute for Marine Research and Development "Grigore Antipa" show that the most important changes over the last two decades have been the increase of eutrophication, particularly in the littoral zones. Black Sea fisheries have been seriously damaged as a result of eutrophication, over-fishing and the unintentional introduction of alien species. ● There are five main treatment plants, of which four plants are municipal waste water ones (Constanța Nord and Sud, Eforie Sud and Mangalia) and one industrial one of Petromidia (Năvodari). The first project approved by EU-ISPA Management Committee with EBRD co-financing is the Rehabilitation of the Waste Water facilities in Constanta. (Main Report)
21	Noise and vibration	B	● Noise pollution can be generated by many sources (vehicles, halyards on yacht masts, visitors themselves, certain activities such as motor boating, water skiing, disco).

G.3.3 Envisioned Mitigation Measures

The Study team evaluated the severity of impacts for the ten items with the rating of "B" and envisaged the mitigation measures as listed in Table G.3.3.

Table G.3.3: Impact severity and envisaged mitigation measures

Likely Impacts	**Rating**	**Impact severity** (e.g. magnitude, area extent, duration, frequency, reversibility, likelihood of occurrence)	**Envisaged mitigation measures**
3. Traffic and social infrastructures	B	● Possibility of impact on traffic according to the site of borrow pits or transportation method of sand and rocks. ● There are any risks of traffic accidents which could affect human health.	● Proper signal control and information dissemination ● Rearrangement of the transport system, e.g., route selection considering traffic congestion. ● -No use of borrow pits for soil on land
6. Water Rights and Rights of Common	B	● Fishing rights might be respected by custom, although they are not guaranteed by law. ● Impacts on the fishery through the restriction fishing rights for occupancy of the fishing grounds. ● Impacts on the existing water use, such as bathing and fishing.	● An available resolution will be discussed by the consultation with the stakeholders. ● Adoption of turbid water prevention method. ● -Sea bathing will not be affected at all, because any construction will be conducted off season.

Likely Impacts	**Rating**	**Impact severity** (e.g. magnitude, area extent, duration, frequency, reversibility, likelihood of occurrence)	**Envisaged mitigation measures**
8. Waste	B	● Generation of construction waste and debris. ● Aquatic life and birds would be affected by polluted water when the waste flows into the sea. ● Degradation of value of fishery products polluted by odor from spilled oil.	● The intended construction plan makes use of all the materials of existing facilities to be recycled into new facilities. Therefore the generation of construction material will be kept as minimal. ● No waste will be thrown away into the sea. ● -Every care will be taken to minimize to oil spill from working vessels.
10. Topography and geology	B	● Change of land features at borrow pits. ● Change of the coast lines due to coastal erosion or sedimentation.	● There will be no borrow sites on the land. New beach fill and jetties will be designed as not deteriorate land features.
14. Sea/Coastal zone	B	● Sand mining by dredging may take place. ● Decrease or extinction of benthos due to dredging.	● Effect on benthos etc. by sand mining is expected as temporarily because the fauna will soon return to the dredged area from the neighboring area after the completion of construction as proved in many experiences. ● The same will be applied to the area where new beach fill will be carried out.
15. Flora and Fauna	B	● There exists a nature reserve in part of the project site. ● Possibility of impact of dredging work on benthic organism such as seaweeds and shells.	● No project will be undertaken in the nature reserve area. ● The effect of sand mining and beach fill will be temporarily and will not be persistent. ● Monitoring before and after operation will be carried out.
17. Landscape	B	● Possibility of deterioration of aesthetic harmony by the appearance of new jetties and offshore breakwaters.	● Design of new facilities will be made with full consideration to aesthetic aspects of the beaches seen from the shore.
18. Air Pollution	B	● Possibility of dust from borrow pits and dump trucks. ● Air pollutants emitted from various sources, such as construction machines and vehicle traffic will affect ambient air quality.	● Proper maintenance of construction equipment such as dump trucks.
19. Water contamination	B	● Possibility of turbidity when dredging sand from the seabed for beach nourishment and installing jetties and breakwater. ● Soil runoff from the bare lands resulting from earthmoving activities. ● Effluents from various facilities.	● Adoption of turbid water prevention method if the Romanian regulations so requires because the effect is temporarily. . ● No countermeasures will be required for soil conservation because the project will not involve any soil removing works.
21. Noise and vibration	B	● Possibility of noise and vibration caused by operation of construction equipment and traffics of dump trucks.	● No construction activities during the nighttime ● Adequate instructions for truck drivers for safe and noise-free traffics

Note: Rating Criteria:
A: Serious impact is expected.
B: Some impact is expected.

G.3.4 Alternatives Including "Do-nothing" Option

The alternatives of this development scenario in the project area, which includes "do-nothing option," were prepared in the basic study as listed in Table 4.2.1 of the Progress Report. The project area has been divided into 20 sub-sectors as presented in Fig. 5.2.1 in **5.2**. For each sub-sector, preliminary evaluation for the need of coastal protection, the state of beach utilization, the requirement of environmental protection etc. was made as listed in Table G.1.1 of Annex G of the Progress Report.

The coastal protection plan for the southern Romanian Black Sea shore is to provide the project planning for all the sub-sectors that require protection and rehabilitation of shore area. The sub-sector of 2 Mai to Vama Veche, however, has been deleted from the site of possible project implementation, because of the presence of the marine natural reserve. In the present study, the word “alternative” does not include any implication of site selection, because all the sub-sectors have to be given the shore protection and rehabilitation plans even though the timing of implementation will differ from one area to another. The word “alternative” is used in the Study to indicate various combinations of shore protection facilities for a given area to obtain the most efficient and reasonable solution. Table 5.6.2 in 5.6 has been prepared with this meaning of “alternatives.”

ANNEX H:

ANALYTICAL FRAMEWORKS FOR FINANCIAL AND ECONOMIC ANALYSES OF DEVELOPMENT PROJECTS

ANNEX H: Analytical Frameworks for Financial and Economic Analyses of Development Projects

H.1 Proposition

Economic and financial analyses represent complementary yet distinctive ways to estimate the net benefits of an investment project based on the difference between the with-project and without-project situations. In this light, financial analysis in two categories, vis-à-vis, Cash-flow analysis and Accounting analysis, is undertaken with the objectives for the former to estimate profitability attributable to the implementation of the concerned project, whereas the latter to evaluate financial sustainability and soundness of ANAR – DADL financial position.

Economic analysis of the investment project is carried out while using benefits and costs as measured in terms of scarcity of resources and allocative efficiency in the national economy as a whole. Economic analysis estimates the net benefits in the eyes of the economy as a whole. Financial cost and benefit will be measured in terms of market prices that explicitly reveal in the market. On the other hand, the economic cost and benefit are revalued from the financial costs while excluding the incorporated imperfections due to non-competitive pricing, externality of the economy, and fiscal distortions (transfer payments) such as taxes and duties levied on goods and services or subsidies (fiscal transfers) granted by the government. A transfer payment, by definition, is a shift of claims on real resources from one member or sector of society to another without any change in national income (GNP minus indirect taxes and transfers).

In practice, shadow pricing to convert all of the non-tradable goods and services procured under the Project will be applied in valuing those scarce resources expressed in terms of border currency units. In so doing, Standard Conversion Factor (*SCF*) is considered to readily provide a numerical benchmark for conversion. While SCF requires, in calculation, information on the ratios of border prices to market prices for a variety of commodities, it is approximated by the use of data on foreign trade and net border taxes of general commodities, with the numerical expression of border value formula in the following.

$$SCF = (M+X) / \{(M+t_m)*(X+t_x)\},$$

where M and X are the value of imports and exports in border prices, respectively, while t_m and t_x are import and export duties net of subsidies, respectively.

In valuation of project sustainability and profitability (Financial analysis) as well as economic feasibility (Economic analysis), assessment will be made for the quantitative impact which is represented by the measurement indicators of internal rate of return (IRR) and Net Present Value (NPV), both in financial and economic analyses, and debt-service coverage ratio (DSCR) in accounting analysis. In principle, economic benefits accrued will mostly be in the form of incremental supply of wastewater treatment service in the project area. Please note that IRR is preferable in prioritizing mutually exclusive investment programs, while avoiding intuitiveness of selecting social discount rate (SDR) to which NPV is applied as a parameter.

While some of the indirectly attributable benefits might be considered in the analysis, these benefits depend on further assumptions and hypothetical logics, and so they will not be included in the analysis. It would be noteworthy that seemingly attributable *benefits*, notably, employment opportunities during construction and for operation and maintenance are definitely treated as *costs accrued* to the very implementation of the project.

Mathematical expression of the internal rate of return (IRR) is as follows.

$$\text{IRR}\ (r) = \Sigma\{(B - C)_t * (1+\text{r})^{-t}\} = 0, \quad \text{where}\ (t = 1, 2, \ldots, n)$$

Further assuming that a number of development alternatives are prioritized in terms of numerical supremacy of time-discounted benefit over the breakeven point of zero, NPV will be applied by discounting future benefits and costs streams to their "present worth". With the summation of time-discounted net benefit emanating from project implementation, NPV as positive figures will be considered acceptable and prioritized in the order of that "surplus amount". Numerical definition of NPV is given below.

$$\text{NPV} = \Sigma\{(B - C)_t / (1+\text{r})^{-t}\} \quad \text{where}\ (t = 1, 2, \ldots, n, \text{and } r \text{ as social discount rate})$$

H.2 Theoretical Background of Public Service Pricing and Economic Benefits

H.2.1 OUTLINE VIEW

Inadequate pricing, investment and regulatory policies, which are likely to lead the public services undertakings to relatively distressed financial performance, have been a chronicle disease in the environment protection sector. Among others, almost-none existing tariff policies are casting an immediate problem to most of the environment management public service undertakings in many countries regardless of the stage of economic size and the stage of development, while enabling entities to earn a sufficiently high rate of return to attract private debt or equity investment. The problems become increasingly difficult when the need to address the issue of environment and water management services at a higher quality and reliability became more and more pressing, while requesting the government and public service undertaking in concern a larger scale demand for investible resources.

In Romania, public investments to the whole and/or a part of operation and maintenance needs for the environment and water sector have been, and will be, financed by the central government through the annual fiscal transfer to ANAR-DADL. Nonetheless, with the moderating government revenue and associated fall in investment to the environment protection sector including coastal protection sub-sector, financing through traditional sources have often been falling short of demand. This likely leads political decision-makers and international aid practitioners to look for alternatives to finance investment needs. Mobilization of domestic and external resources through people's financial contribution and capital markets wherever possible, in tandem with implementing sector/organization reform by the government and ANAR-DADL, is now urgently called for.

Viewed in this light, associated with a number of government experiences of severe budget constraints, an appropriate framework for domestic urban environment management sector pricing is therefore required not only to achieve an efficient allocation of scarce resources, but

also to maintain the long-term financial sustainability (affordability) of environment and water management service undertakings by the agency such as DADL, and to attract investments by the private sector, to the extent possible. Generally in pricing, there stand two key objectives:

(i) Self-generating revenue, or more adequately *Income* in cash-flow statement, should be sufficient to provide for the financial viability of the environment management services undertaking and generate a sufficient surplus to allow for their financing operation and maintenance (OM) costs and a significant part of their own investment programs in the years to come, and
(ii) Revenue should be as par, at least, to encourage efficient use of service capacity and avoids neglected maintenance of natural environment including beaches.

How could we find out such an "optimum price" for, say coastal protection service, in Constanța, and what's its rationale? To partly answer these questions, one of the theoretical background and the state-of-art estimation methodology, which has been applied in the financing experiences by in international financing institutions including the World Bank, the European Union, and others of relevance, will be provided in the subsequent sub-sections. They will also provide a theoretical rationale for the methodology being envisaged to be applied in an estimation of the economic benefit attributable to the proposed investment programs in Constanța.

In the light of the foregoing, this section briefly reviews the microeconomics principles of pricing to achieve the policy objectives of the environment and water management, as well as other public services in general, thus making it possible to review an allocative efficiency-oriented budgeting and possible tariff structures to be elaborated for the environment management sector in Romania in the days to come.

H.2.2 PARETO Optimality (Allocative Efficiency Criterion)

The purpose of an economic system is to allocate the scarce resources of an economy to the production of goods and services for the use of individuals in the society. In a mixed economy, such as that of Dominica, two primary mechanisms are relied upon to fulfill the said task, vis-à-vis,

(i) the market pricing system by which private sector business undertakings respond to prices determined by the demand and supply levels in individual markets and undertake that level of economic activities in their own self-interest, and
(ii) the public sector decisions through which a significant share of the resources of the economy will be directly and indirectly allocated by government expenditures, taxes, regulations and any other measures relevant.

While a rationale for public sector activities has been well recognized and stressed by a number of economists and policy decision makers, particularly after the days of the Great Depression in the United States in the early 1930s with the epoch making works in economics by J. M. Kaynes, this sub-section will confine the discussions to the effectiveness of the market pricing mechanism in resource allocation in society.

Ever since Adam Smith's time, the virtue of the competitive market system as a mechanism for the allocation of scarce resources has generally been perceived. In competitive markets

where self-interested individuals and firms would freely buy and sell at given prices, all participants will be better off from tedious endeavors of voluntary trading and the aggregate value of outputs produced from society's resources will be maximized. Much of the fields of welfare economics haves been devoted to refining these concepts of social gains from trade, comparative advantage, and welfare maximization under the general axiom of economic efficiency. Central to an understanding of this modern welfare economics is Pareto Optimality, with a Pareto Optimum being defined as a state of affairs such that no one can be made better off without, at the same time, making at least one other person worse off1 This notion is depicted as follows:

Let general social welfare function be

$W=W(y_1, y_2, \ldots, y_n)$, where y_i denotes individual's welfare (well-being) in a society.

Pareto condition is that $W^A > W^B$

if $y_1^A > y_1^B, \ldots\ldots, y_n^A > y_n^E$ for $\forall_i$

and $y_1^A > y_1^B, \ldots\ldots, y_n^A > y_n^E$ for $\exists_i$

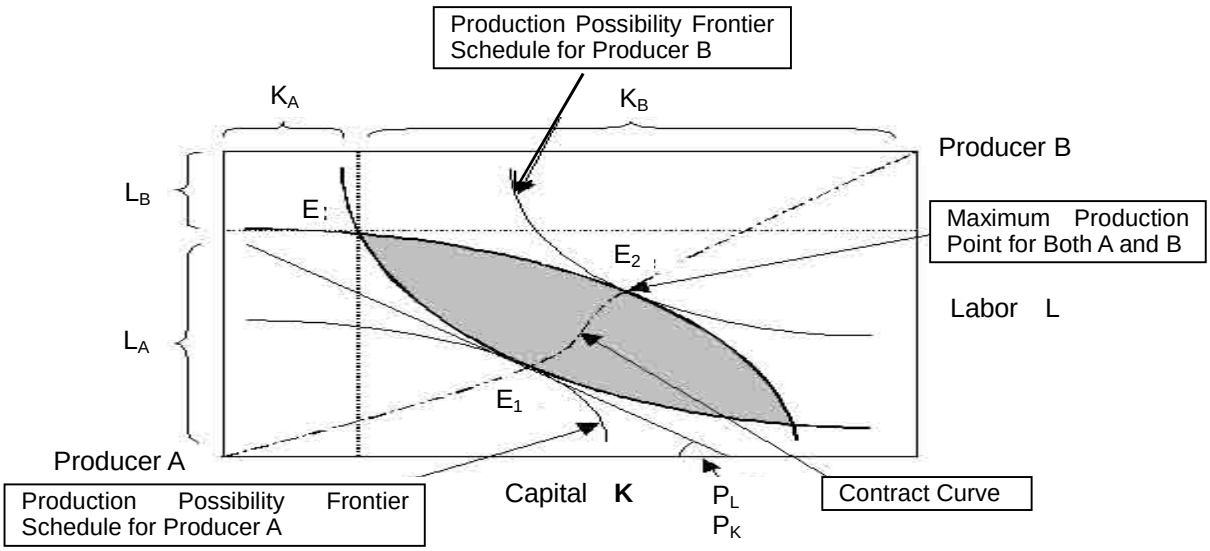


Fig. H.2.1: Edgeworth Box Diagram for Pareto Optimality and Contract Curve

In the context of the economy, a Pareto Optimal allocation among the multiple uses considered does exist under the condition that it is not possible to allocate reallocate resources so as to improve utility (well being) of one person/entity without at least reducing utility level of one other person/entity. Further, a change in resource allocation is said to constitute a Pareto Improvement if at least one person/entity is made better off as a result of the change and no one is worse off. With this, a change in resource allocation among arbitrary uses will be judged by economists as "good" or "bad" depending on whether a situation of economy under a certain set of resource allocation is improved or worsened2. In other words, an

[1]The concept is named after the Italian economist Vilfredo Pareto who pioneered the theory of economic welfare. Reference: V. Pareto, *Manuel D'Economie Politique*, 1909, chap.VII, and the Mathematical Appendix para.89. Also, see P. R. G. Layers and R. B. Walters, Micro Economic Theory, McGraw Hill, 1978, pp. 7-8.

[2]As noted, the concept of Pareto Optimality is the normative basis according to which the allocation of resources is to be judged. Therefore, it shall be accepted as a basic value judgment that any Pareto-improving change constitutes an improvement in social welfare.

efficient allocation of resources is defined as a Pareto-Optimum one; i.e. it is not possible to make anyone better off without at a same time making someone else worse off. Similarly, a gain in economic efficiency is equivalent to a Pareto Improvement. The underlying theorem here is that Pareto optimum is a "necessary and sufficient condition" of the equilibrium point in perfectly competitive markets, thereby providing a rational for marginal cost pricing.3 Pareto Optimality is depicted in Fig. H.2.1.

H.2.3 Marginal Opportunity Cost Pricing for Economic Benefit

With the standard allocative efficiency considerations in view, it is useful to obtain an indication of the benchmark level at which the price should be set. A number of papers have been written on the efficient ways to set prices on different goods and services and production factors. In this section, a bird's eye view of the concept of marginal cost pricing and the current state-of-the-art to approximate it when financial sustainability and economic viability of development projects are to be evaluated.

Marginal cost (MC) as well as marginal opportunity cost (MOC), defined as the change in total cost induced by a one-unit change in outputs ($\partial C/\partial Q$), are the same economics concept and used differently depending on the context. Generally, economic analysis of development projects discuss more the notion of "opportunity cost" rather than "cost", because when a project employs scarce resources that can be used elsewhere, opportunity cost for the society will accrue that project4.

It would be noteworthy to delineate the concepts of "marginal opportunity cost (MOC) pricing" and "marginal cost (MC) pricing" used here. As mentioned immediately above, MOC pricing emphasizes the cost of consuming scarce resources in the light of the opportunity foregone by that consumption. On the measurement side, MOC denotes the shadow price of supply with a good deal of distortions in most of the economies worldwide, whereas MC pricing is used in lieu of the annuitized cost5 accrued to an investment project, that is, construction costs and recurrent costs. In this context, MOC pricing is most relevant to the economic analysis of development projects whereas MC pricing to the financial analysis therein.

A crucial distinction here is between marginal cost within a given capacity of the system, and that allowing for capacity expansion. For small additions of supply in a certain period requiring no additional capital investment, the marginal cost is defined as short-run marginal (opportunity) cost (SRMOC), while a large amount of capital investment takes place intermittently over the long period, say 30 to 50 years, it is circumscribed as long run

[3]One of the most important problems in welfare economics arises when judgment as to whether the change improves society's economic welfare involves interpersonal comparisons between the gainers and losers. That is, given that society's welfare consists of the aggregate welfare of individual members, it would be imperative to attach quantifiable weights to the gains and losses of welfare to individuals from a change in resource allocation. See, A. Bergson," A Reformulation of Certain Aspects of Welfare Economics", *Quarterly Journal of Economics*, Feb. 1938, O. Lange, *The Foundations of Welfare Economics, Econometrica*, July-Oct 1942, and P. Samuelson, *Foundations of Economic Analysis*, Chap. VIII, 1948. As regards the issues of economic welfare, optimum allocation of resources, interpersonal comparisons of utility, and others, see, for example, A.C. Pigou, *Wealth and Welfare*, 4th ed.,1932, L. Robbins, *An Essay on the Natural and Significance of Economic Science*, 2nd ed., 1935

[4] W. Nicholson, *Microeconomic Theory*, The Dryden Press, 1978, p.635

[5] This concept is defined as "present value (discounted value) of cost allocated annually in a same amount over the project period". Undiscounted value of the aggregate of the annual costs is theoretically the total project (construction) cost.

marginal (opportunity) cost (LRMOC). In practice, a smoothing of short-run fluctuation of incremental investments can be obtained by calculating LRMOCs and averaging them over time. This average can be defined as the incremental cost of all adjustments in the system expansion plan and operations, attributable to an incremental increase in demand.

When looked more closely,

LRMOC = MC of construction + Recurrent Cost

The origins of marginal cost pricing theory date back as far as the works of P. Dupuit and subsequently H. Hotelling, in the 1930's6. N. Ruggles provided a comprehensive review of work in this area up to the next decade, and the theory developed, especially for the application of in the electric power sector, with contributions from the works of M. Boiteux, P. Steiner and others from the 1950s and onwards7. More recently, the academic interest has led to more sophisticated investment models which permit determination of marginal costs, consideration of uncertainty, developments in peak load pricing, and so forth. On the practitioner's side, a number of contributions have been made by the economists of the international lending agencies, namely, M. Munasinghe, J. Warford, Y. Albouy, and others8. Backed up with these and others, the rationale for setting price equal to marginal cost to consequently attain the maximum economic welfare level will be clarified in this sub-section.9

The rational for setting price equal to marginal cost may be clarified in mathematical terms as follows:

Net Benefit (NB) = Total Revenue (TR) – Total Cost (TC)

That is,

$$NB(Q) = TR(Q) - TC(Q) = p(Q)*Q - TC(Q)$$

Where p and Q denote the price (the equation of demand schedule) and quantity of supply (the equation of supply schedule), respectively.

The necessary first order condition for maximizing net social benefits is to set the derivative of the net benefit function at zero, which is mathematically derived as follows:

[6]P. Dupuit, "De l'Utilite et de sa Mesure", *La Reforma Soziale*, Turin, 1932, H. Hotelling, "The General Welfare in Relation to Problems of Railway and Utility Rates", Econometrica vol 6, 1938, pp. 242-269

[7]N. Ruggles, "The Welfare basis of the Marginal Cost Pricing Principle", *Review of Economic Studies* vol.17 (1949/50), pp. 29-46, and "Recent Developments in the Theory of Marginal Cost Pricing", *Review of Economic Studies*, vol.27(1949-50), pp.107-126. See for example: M. Boiteux, "La Tariffication of des Demandes en Pointe, Revenue Generale de l'Electricite", vol. 58, 1949, P. Steiner, "Peak Loads and Efficient Pricing", *Quarterly Journal of Economics*, 1957, R. Turvey and D. Anderson, *Electricity Economics*, Johns Hopkins University Press, 1977

[8]For example, see M. Munasinghe, *Guidelines for Marginal-Cost Analysis of Power System*, WB, 1984, M. Munasinghe and J. Warford, *Shadow Pricing and Power Tariff Policy*, WB, 1978, J. Warford, *Marginal Opportunity Cost Pricing: Municipal Water Supply* (Early Draft), 1994, Y. Albouy, *Marginal Cost Analysis and Pricing of Water and Electric Power*, Inter-American Development Bank, 1983, and many others.

[9]In economics, LRMOC is defined as the amount by which aggregate costs are changed if the volume of output is increased or decreased by one unit. Frequently in accounting, marginal cost is used when strictly one should refer to average variable cost, which are not incurred if production does not take place. Ref: W. Hingley *Accounting*, Made Simple Book, 1989, p. 302

$$\frac{d}{dQ}NB = \frac{\partial p}{\partial Q}Q + p - \frac{\partial TC}{\partial Q} = 0$$

$$\frac{\partial p}{\partial Q}\left(\frac{Q}{p}\right)p + p - \frac{\partial TC}{\partial Q} = 0$$

$$p\left[\frac{\partial p}{\partial Q}\left(\frac{Q}{p}\right)+1\right] - \frac{\partial TC}{\partial Q} = 0$$

Now, the price elasticity of supply denoted as ε is introduced hereby, which is defined by $\varepsilon = (\partial Q / \partial p) \times (p / Q)$. Then the above equation is rewritten as below.

$$\frac{1}{(\partial Q / \partial p) \times (p / Q)}\, p + p = \frac{\partial TC}{\partial Q}$$

$$p\left(\frac{1}{\varepsilon}+1\right) = \frac{\partial TC}{\partial Q}$$

Provided that $\varepsilon = \infty$ under the assumption of *perfectly competitive market*,

$$p = \frac{\partial TC}{\partial Q} = \text{Marginal Opportunity Cost}$$

It is one of the basic axioms of economics that at the price *p* and supply (demand) *Q*, the total net benefit of consumption attributed to society is maximized with the optimum market clearing point (*p*, *Q*).

In a simple and static model of pricing, an economically efficient equilibrium price has the three invariable characteristics as such that

(i) It will clear the market in terms of demand and supply,
(ii) It will encourage additional production or exploitation whenever the expected costs are less than the expected value of incremental supplies, and
(iii) It discourages "wasteful" consumption on the demand side.[10]

[10]In theory, after having computed the basic shadow priced marginal costs as the benchmark for tariff setting, decision would be made to deviate from such "strict LRMC values" while reflecting decision makers' value judgment concerning other policy objectives, *vis-à-vis*, equity, financial sustainability, and preferential deployment of resources to specific sectors/regions. In addition, a "second best" departure from the "first best" LRMC pricing policy would be required where prices elsewhere in the economy do not reflect marginal social opportunity costs. Nonetheless, the discussions on this "optimal departures from marginal cost pricing" specifically for the Project has not been included largely due to the hypothetical nature of the issue, and the lack of information and time.

ANNEX I:

ECONOMIC ANALYSIS OF PRIORITY PROJECTS AND WILLING-TO-PAY (WTP) STUDY

Annex I: Economic Analysis of Priority Projects and Willing-to-Pay (WTP) Study

I.1 Initiating Remarks

Eliciting costs and benefits in economic analysis may differ from that for financial analysis depending on the viewpoint from which the project in concern is appraised on the-efficiency front of national resource use. As may well be aware, the economic costs accrued and benefits attributable to development projects reflect the scarcity of resources thus being estimated in real (social) terms, whereas financial costs and benefits measured in terms of market price. In many cases project alternatives themselves may not be clearly defined, as such the comparison would relate to hypothetically set-up marginal projects which might be undertaken in lieu of the project under evaluation. This is the purpose of applying what is known as "Social Discount Rate (SDR)", a minimum social return to represent what invested capital might earn in alternative marginal use. Provided that the economic return of the proposed project exceeds SDR in the country at the time of project appraisal, the concerned project would likely to be the best investment opportunity at a margin.

Viewed in this light, economic analysis of the prospective Priority Project(s) on the Romanian Southern Black Sea Shore will quantitatively take place in systematic and globally acceptable framework for analysis and methodology for handling economic feasibility of the prospective investment program in due course of the study[1]. The analytical framework, model configuration and variables with some of the specific parameters that would be applied in evaluation processing are set forth herewith in a bid to delineate the underlying assumptions for economic analysis of the forthcoming project and alternative(s) as well.

I.2 Analytical Framework

I.2.1 Baseline Principle

(1) Economic Pricing

Economic analysis of the prospective seashore protection and rehabilitation project will be undertaken while quantifying benefits and costs as measured in terms of scarcity of resources and allocative efficiency in the national economy as a whole. In the meantime, financial analysis, which is not considered under the current study due presumably to a lack of monetary income for the project, normally comes in place to measure profitability for project entity, while considering costs and benefit in terms of market value. Economic analysis takes place on the same basic data as financial analysis with the modifications to convert market value to border prices as reflected by, *notably*, CIF (Cost of Insurance and Fleet) and FOB (Fare on Board) prices for importable and exportable goods and services, respectively.

The use of conversion factors for economic analysis will be considered to convert market value of the Project components to its value in shadow prices as expressed in terms of border currency units (specifically in US$ term). In so doing, Standard Conversion Factor (SCF) will

[1] The discounted cash flow (DCF) method of computing returns which will be used in this study needs no detailed justification to date as long as this has since the 1960's been generally accepted and applied most competently by many others. (Reference: for example, the World Bank, *The Economic Choice Between Hydroelectric and Thermal Power Development*, 1966, p.4, and others more)

be applied to all of the non-tradable goods and services employed. Likewise, the specific conversion factors for some of the construction materials, machinery and equipment, wherever applicable, and skilled and unskilled labor would be assumed in due course of analysis, while taking other economic analysis under the auspices of the World Bank (WB), the European Bank for Reconstruction and Development (EBRD), and others of relevance, as necessary.

(2) Transfer Payments and Indicator of Economic Feasibility

Transfer payment means a shift of claims on real resources from one member or sector of society to another without causing any depletion of scarce resources in the society. This includes interest payments, domestic taxes and duties, and subsidies such as the government compensation to re-settlers. With this in view and as commonly applied economic analysis of development projects, transfer payment is to be excluded from financial costs in the estimation of economic costs. As regards the index in the evaluation of economic feasibility, Economic Internal Rate of Return (EIRR), a discount rate equalizing the present value of the streams of costs and benefits associated with the project in concern, will be taken up and quantitatively estimated. An elicited EIRR will sequentially be compared with "social discount rate (SDR)" thus revealing its numerical supremacy. SDR is intuitively set at around 8-10 percent at minimum for environment sector projects.

(3) Economic Internal Rate of Return (EIRR)

In the light of EIRR estimation, the cost stream as par constant 2005 price level includes (i) capital cost of investment and (ii) associated operating and maintenance (OM) costs for the life of constructed facilities (project life)[2]. The benefit stream pertains to (i) people's Willingness to Pay (WTP) for incremental coastal ambiancy, and (ii) avoidable damage (social loss) owing to the project (Cost-saved). In estimation of the latter benefit component, this refers to the estimated rehabilitation/reconstruction expenses of existing facilities, *vis-à-vis*, residential housings, industrial units and facilities, and public institutions that people and the government would incur in the case of a future coastal erosion and associated cliff collapsing. In a bid to avoid arbitrariness in analysis, intangible (indirect) benefits possibly attributable to the project will be excluded, thus resulting somewhat lower bound of the benefits. Meanwhile, it would be possible to consider increasing return to the project in line with the increase of population, upgrading of quality of beaches and surrounding land areas, and improvement of living standard of people, while the project's annual benefit brought about is in principle assumed to be constant in real term throughout the project period in compliance with generally accepted guiding principles for economic analysis. In such a case, growth in Gross Regional Products (GRP) for Constanta in real term would constitute one of the key variables to elicit the cascading annual benefits that come. This issue is somewhat sensitive, and accordingly depends on further analysis on the economic factors of and discussions with officials of close relevance to the concerned projects.

I.2.2 Least Cost Analysis

It is presumably considered that the priority projects as recommended by the Study team are

[2] Costs associated with the relocation of the housing units/business entities is assumed to be the sunk costs, thereby leading no addition of economic cost accrued to this project. Likewise, land use enhancement that may include land loss prevention and land use restoration is not imputed on the project because nearly non-existence of agricultural lands within the concerned area.

the least-cost means of coastal protection and rehabilitation, while constituting an integral part of the comprehensive coastal protection program of the Government of Romania.

I.2.3 Processing in Analysis of Economic Feasibility

(1) Analytical Procedure

In carrying out the study, step-by step procedure for economic analysis of the project will be followed. That includes;

(1) Taking a bird's eye view of public finance at the local administrative authority, inclusive of income/profit/property tax collections,

(2) Collecting financial and engineering data/information for the conversion of costs and benefits valued at market price to those assessed in economic terms,

(3) Undertaking economic analysis to investigate economic feasibility of the project, with the measurement index of Economic Internal Rate of Return (EIRR), and

(4) Sensitivity analysis for variation in relevant parameters, *vis-à-vis*, (i) lower benefit by 10 percent, (ii) capital cost over-run by 10 percent, and (iii) one year delay in project commissioning (delay in benefit generation).

(2) Assumptive Variables and Parameters

(a) Proposition

With the incremental supply of physical and social infrastructure for coastal protection and rehabilitation in the region, the proposed project will be the least-cost and environmentally sound solution to mitigate coastal erosions experienced thus far. The project is also to enhance the tourism, commercial, and residential basis conducive to an increased growth of regional products and people's welfare.

Economic analysis of the Projects under the study will be quantitatively carried out wherever possible, with a number of economic, social and environmental benefits possibly attributable to the project in consideration. In line with the generally accepted principle and methodology of cost benefit analysis (CBA) in socioeconomic development projects in the transition as well as developing economies, the concerned analysis will be undertaken with the modifications and exceptions discussed as follows:

(b) Transfer payment

Transfer payment, which is a shift of claims on real resources from one member or sector of society to another without any change in the national income, are to be excluded in the EIRR estimation. As regards the project in concern, value added tax, excise tax, income tax, customs duties, taxes on sand/gravel/quarry resources will be enumerated with 10-19 percent in weighed average of the local currency cost components, and another 5 percent of import duties on foreign cost components to be deducted. Nonetheless, the rates of transfer payment as specified immediately above are duly subject to further investigation and elaboration.

(c) Shadow pricing and conversion factors

The use of conversion factors will be considered to convert the market value of the Project components to its value in shadow prices expressed in terms of border currency units. Standard Conversion Factor (SCF) will be applied to the costs of all non-tradable goods and services employed other than some of the construction materials, machinery and equipment, and skilled and unskilled labor for the Project. While SCF requires, in calculation, information on the ratios of border prices to market prices for a variety of commodities, it can be approximated by the use of data on foreign trade and net border taxes of general commodities. The approximation is provided by the border value formula as follows.

$$SCF = (M+X) / \{(M+t_m)*(X+t_x)\}$$

where M and X denote the value of imports and exports in border prices, respectively, where t_m is import duties net of subsidies and t_x is export duties net of subsidies.

The elicitation of SCF will take place in due course of feasibility study upon discussions on the issue with project processing/administration officials at the World Bank, the European Union, the Government of Romania and/or others, as necessary. Economic prices currently in place in the country are almost equivalent to financial prices[3].

(d) Measurement index – economic internal rate of return (EIRR)

With due recognition of the economic viability of the Project to be analyzed from a broader national perspective, the quantitative impact represented by EIRR would duly be assessed to the extent possible. Mathematical expression of IRR is shown as follows.

$$r: \sum_{i=1}^{n} \{(B-C)_t \times (1+r)^{-t}\} = 0$$

where $(B-C)_t$ represents net benefit in the year t (t = 1,2,…,n)

(2) Model Configuration

Subject to technical and other most relevant and best available data/information, the model configured and numerical assumptions set out for the economic analysis comprise the followings. That is,

(i) project life,
(ii) willingness to pay (WTP),
(iii) indirect coastal erosion,
(iv) growth rate of annual coastal erosion,
(v) willingness to Pay and Consumer's surplus,
(vi) foreign exchange quotation,
(vii) conversion factors and shadow exchange rate,
(viii) cost estimation (base cost),
(ix) physical contingency factor, and
(x) operation and maintenance (recurrence) costs with the assumptive parameters specific to each of the categories as follows:

[3] For instance, refer to the World Bank, *Hazard Risk Mitigation and Emergency Preparedness Project*, Project Appraisal Document, April 2004

(a) Project life

Project period is normally set in accordance with the prospective economic life of the proposed investment and anticipated construction/commissioning schedules. In the analysis accrued to this investment program, the total project life has been set at 34 years with the year 2007 to commence the 4-year construction works up to 2010 and the subsequent 30-year service period from 2011 on to the year 2040.

(b) Project benefits

Project Benefits attributable to the project comprises two portions, that is, (1) Incremental Benefit by Upgrading of Beach Quality and Quantity as Measured by WTP, and (ii) direct cost avoided. To visualize the structure, see Fig. I.2.1.

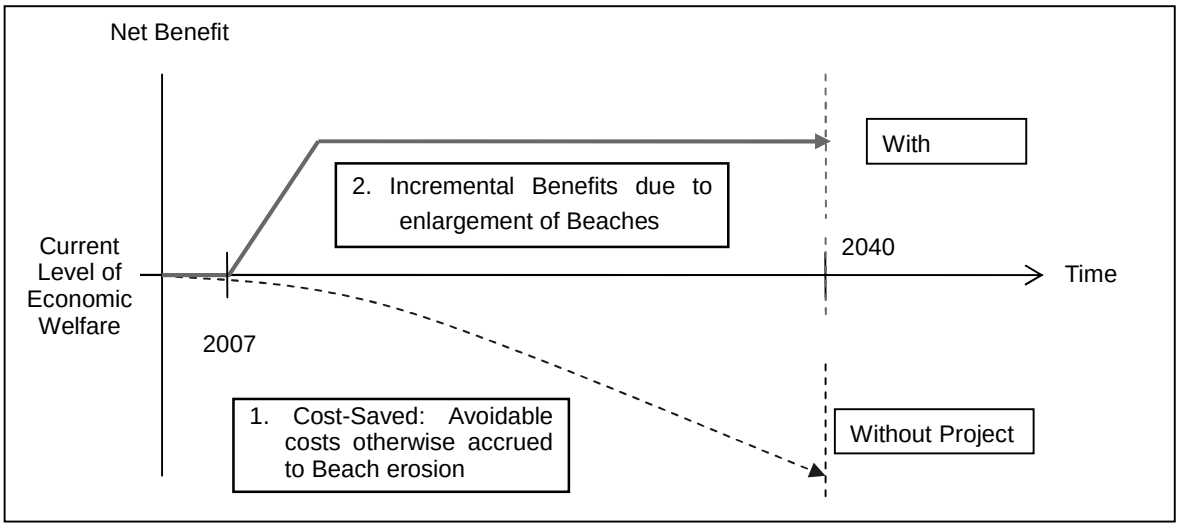


Fig. I.2.1: Definition of project benefits

(c) Willingness to pay (economic benefit)

In general, the most complex problems could arise from the elicitation of willingness to pay for public service in concern due to the nature of coastal protection and environment preservation as “pure public goods” and associated lack of substitute services (which means there is no “apparent market” for particular services). Consumers (beneficiaries) could be free riders enjoying those public services without paying for costs of environment.

As regards the prospective priority project, the willingness to pay (WTP) as a stated (revealed) preference for the use- and non use-values will be set at RON 6.4 (median value of 50 percent acceptance schedule) per month per household, based on the interview survey and subsequent analytical works. The meaning of Consumer Surplus in economics and a simplified method of CS estimation are given in Figure I.2.2 and I.2.3.

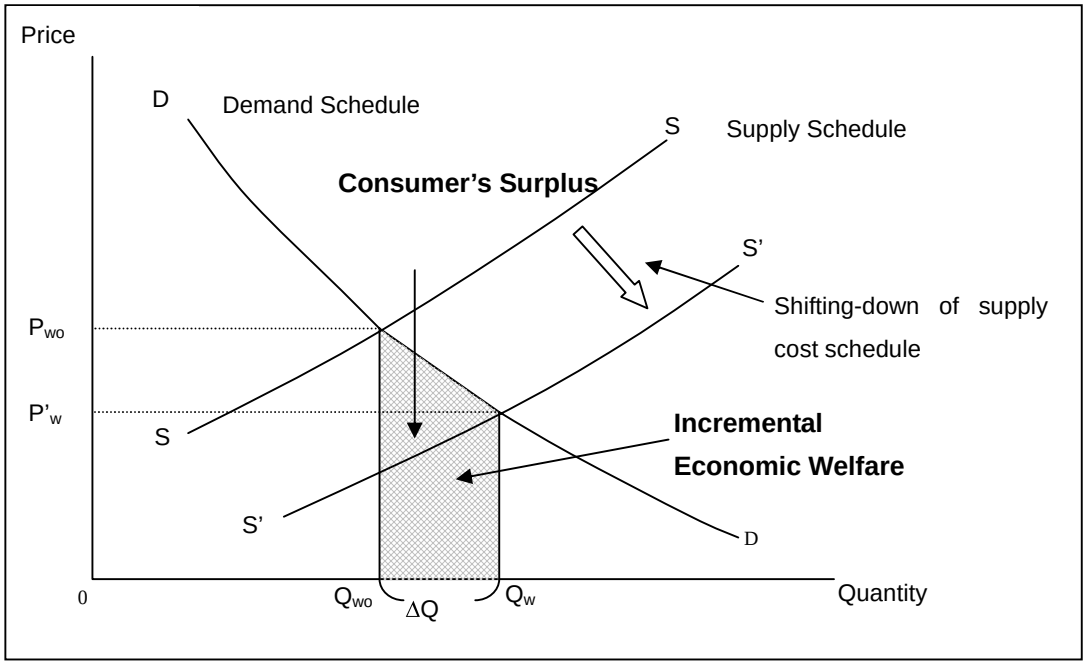


Fig. I.2.2: Consumer surplus

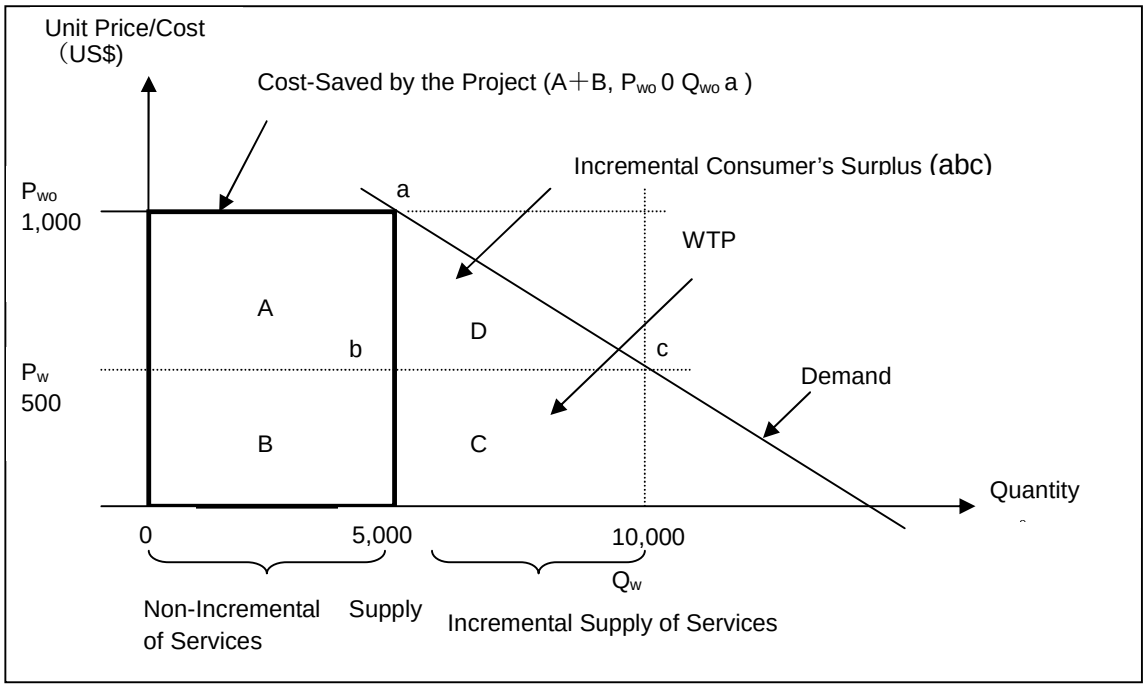


Fig. I.2.3: Simplified method of CS estimation

(d) Avoidable damage (economic benefit)

Benefits will be estimated as the direct "avoided damage cost" of future floods. Those direct costs refer only to the estimated rehabilitation costs of existing facilities and infrastructure, inclusive of roads, houses, and so forth calculated from data on coastal erosion and cliff collapsing. Since it is impossible to precisely predict the timing and magnitude of future floods, analysis of the flood control benefit was undertaken based on (i) deriving an expected annual damage under present conditions, and then (ii) indexing this value by way of analyzing the dispersion rate of annual coastal erosion.

Expected annual damage, or levelized damage avoidable by the prospective design works, in

both the with- and without-Project cases will be obtained by estimating damage from the past trend of coastal erosion in the area, while assessing the recurrence frequencies of such damage for the project area in concern. Specifically, the direct coastal erosion by area will be estimated as the aggregation of economic value of various kinds of damaged properties multiplied by the damage rates associated with the degree of erosion and cliff collapsing. Lastly, the with-project damage will be deducted to derive the expected annual coastal protection benefit, which will be then multiplied by an estimated damage dispersion rate to determine its value (cost-saved) under future conditions.

(e) Annual rate of coastal erosion damage dispersion

Annual rate of coastal erosion damage dispersion will be estimated and accordingly incorporated into economic analysis, with the estimation of economic benefits (Cost-saved) in view. This part of analysis directly relates with assessed value of real property as proxy of avoidable damage in the study area. In this connection, property tax collection by category in the concerned cities and communities will also be investigated.

(f) Base cost and physical contingencies

In deriving the project cost, all of the incremental investment and operating costs incurred are included in the analysis. While the precise estimates applied in the quantitative analyses duly depend on engineering study and discussions with officials involved, base cost of the prospective project by currency (foreign exchange and local currency) and by cost item will be devised. Based on the estimated bas cost, physical contingency allowances would be set at around 3.0-5.0 percent of the base cost, while reflecting expected increases in the base cost estimates of the Project due to changes in quantities and methods of implementation. Nonetheless, percentage rate of contingency assumption will be subject to technical uncertainty and engineering study that come during the feasibility study.

(g) Price contingencies

In anticipation of increases in base cost of the project that might arise from changes in unit prices for the various project components/parts, price contingency is considered in association with the estimation of aggregate financial costs of the project in concern. Meanwhile, it would be noted that price contingency is considered only for the financial cost estimation, and not incorporated into EIRR estimation.

(h) Operation and maintenance (O/M) costs

Being subject to the guidance from and discussions with the engineering experts, annual O/M cost would assumingly be set at around somewhere in between one (1) to five (5) percent of the aggregate capital investment disbursed during the construction period.

(i) Foreign exchange quotation

This rate well represents the maximum values that Romania currency (RON) could be worth under the market conditions to come.

(j) Sensitivity Analysis

Sensitivity analysis for variation in relevant parameters will be undertake, while focusing on (i) lower benefit by 10 percent, (ii) capital cost overrun by 10 percent, and (iii) one year delay

in generating benefit. Sensitivity analysis will indicate the resiliency of the project against the risks as specified above.

1.3 Interview Survey of WTP

I.3.1. Introductory Remarks (Objective and Rationale)

Following the finalizing stage of Master Planning currently in place, economic analysis of the prospective priority projects at Mamaia South and Eforie Nord will be undertaken in due course of the Feasibility Study period in May-June this year. As part of this, and for the preposition of the numerical analysis of economic benefits attributable to each of the priority projects, an interview survey for the estimation of people's willingness to pay for environment protection took place last summer in Constanta. The study population, the 10 coastal cities and communities on the Black Seashore area in Constanta County, has presumably been set at around 421,000 out of the total 715,000 residents in the county. Random sampling took place in the preparation of interview survey, with 449 interviewees having the same probability of being selected.

The overall objective of this survey was to quantitatively measure people's advocating perception associated with the protection of the two beaches by *Willingness to Pay (WTP)* as a monetary proxy for a part of the economic benefits attributable to the shore protection and rehabilitation measures (public interventions) in the days that come. In so doing, *Contingent Valuation Method (CVM)* with specifically a "Double-bound Dichotomous Choice Method" was taken up as an analytical tool to elicit *WTP*. The outputs of the survey will eventually be incorporated into the estimation of the economic feasibility of the proposed projects as measured by the index of Economic Internal Rate of Return (EIRR). Policy recommendation, together with some risk analysis, will be provided in the wake of an overall economic analysis of the projects, while taking other factors of environmental conservation, tourism, and any other social and economic activities of relevance in view. In the meantime, *WTP* for healthy condition was in tandem incorporated in the questionnaire in a bid for interviewees, particularly non-users of beaches, to understand the effects of "intangible benefits" inclusive of "environment protection" and "health", as such helping people bid on those values in monetary terms. While little number of study experiences on people's willingness to pay for environment protection have taken place thus far either in this region or in the country, this study as an experimental forerunner would help understand people's general perception and behaviors in association with environment protection in Romania.

In view of the above, the sections provide the schematic framework for designing and implementation as well as the consequential WTP values for seashore protection. Last but not least, it would be noteworthy that that the survey had jointly been undertaken by the JICA study team and the operational group from the University of Constanta "Ovidiu" with Dr. Virgil G. Breaban and Mr. Claudiu Taduse as leaders of the team, while providing a precious opportunity of sharing skills and experiences of quantified economic analysis of development projects through interviews on sites, discussions on the process and the results, and the statistical analysis that followed. In the meantime, while an Informed Consent was not obtained on a document basis, interviewees fully understood as explained by the study team and agreed upon that they had the right to stop being questioned any time they wish, or reject answering to any or all of the questions they don't answer.

For reference, the Questionnaire Sheet used in the survey (English) and Answer Sheet with coding (English) are given as *Attachments 1*, and *2*, respectively.

I.3.2. Schematic Framework for Interview Survey and WTP (Methodology)

(1) Overall Framework for Analysis

Major characteristics of the WTP study include the followings.

(1) Sample size of interview survey was in aggregate set at 449 as the minimum threshold for study on *willingness to pay (WTP)* for public services delivery in connection with environment protection and coastal zone protection on the southern area of the Romanian Black Seashore[4]. The number of the sample of round 450 at maximum was calculated while using the statistical software of *EPIINFO version 6* with the parameters of (i) population size of 750,000, (ii) Non-previous study alike, (iii) statistical confidential level of five (5) percent, and (iv) analytical precision level of 95 percent.

(2) Survey applied stratified random sampling method to choose interviewees out of the population in the municipality, cities and communities in concern, while referring to the *Telephone Book (The Romanian Yellow Pages)*, wherever available, that includes households, commercial and industrial entities, and public institutions. *The Directory of Business Entities in Constanta* by the county's Chamber of Commerce and Industry's was also used for the purpose. Meanwhile, where these guiding materials are of no avail, maps with a certain "formula" were used to identify interview units on sites.

(3) Expatriates and domestic tourists from the areas other than the concerned administrative units on the Black Sea shore were randomly picked up and interviewed on site by the survey team during the survey.

(4) *CVM 2002* was used as software for statistical analysis of WTP estimation, while compiling and subsequently incorporating raw data on *Microsoft EXCEL*. In tandem, works also took place while utilizing *Microsoft EXCEL*[5] in a bid to undertake double-folded analysis.

(2) Sequency of Activities in the Study

(a) Initiating works – a questionnaire, joint study team, and focus group meeting

Designing of an overall research work and associated devising a questionnaire, as well as cautiously prepared training program for inexperienced interviewers would be the most care-oriented and important part of activities sequentially taken during the initial stage and analytical works that follow. Reliability of analytical deliverables largely depends on this part of initial works. With this in view, the following activities sequentially took place since the beginning of the Study.

[4] Mailing survey method was considered to find it would not be conducive to estimate *WTP* and a multi-regression equation with enough accuracy and robustness due to a paucity of understanding of mail correspondents on the gadget of the study and likeliness of up-ward bias on *WTP* as stated in the format.

[5] Hearty gratitude is due to Professor K. Kuriyama at Waseda University, Japan, for his free software of *CVM by EXCEL, version 2* downloaded from the site: *www. kkuri-mn.waseda.ac.jp*

(a). Designing draft Questionnaire by the JICA Study Team (the study team);

(b). Contracting with Romanian counterpart Professor Dr. Virgil G. Breaban and his teaching assistant in the chair, Mr. Claudiu Taduse, at the University of Constanta as a joint study team in carrying out the interview survey and the subsequent auxiliary works for analysis with the study team;

(c). In consultation with the Romanian study team, selecting four (4) members of the interview team, namely, Mr. Mihai, Ms. Helen, Ms. Anna-Marie, and Ms. Laviania, all of these from the University of Constatnta;

(d). Transferring and sharing knowledge on and working plan for the concerned interview and *CVM* survey to and with the joint study team, while identifying, specifying, and visualizing the project benefits for the betterment of interviewers as well as interviewees' understanding;

(e). Selection and undertaking a "Focus Group (pre-test) meeting" of 20 people selected on a random basis, and preliminary meetings in August to explain/ exchange views on the study purpose and question items, to help making it possible to set out the preliminary bidding prices for coastal protection (*CVM* questionnaire), work volume of interview survey, and category of beneficiaries; and

(f). Modification of the draft questionnaire to add/delete questions on *WTP*, while reflecting the perception of the Focus Group interviewees to facilitate the personal bidding for coastal protection that is an intangible benefits.

(b) Sampling and full-sale interview survey

i) General remarks

Sampling is a process of selecting a part of an aggregate of material to represent the whole population. Unlike those studied in the fields of natural science, sampling units in social science, such as concerned Contingent Valuation study for *Willingness to Pay (WTP)* for coastal protection, objective units (individual persons) are dissimilar among themselves. In this light, sampling process is to be guided by statistical techniques such as adequate and effective stratification and the use of more efficient sampling designs coupled with the appropriate choice of the estimation procedures. Further, a sampling method is to be such that the all of the characteristics and attributes of the population are reflected in the sample as closely as the size of the sample permits, thus leading to reliable estimates of the population characteristics could be formed from the samples.

With the above in view, the major activities of the *CVM* Interview Survey that took place in 2005 during the second fielding of the Study in Constanta included the followings.

a. General panning including sampling design;
b. Devising, developing, and preparation of Questionnaire and instruction;
c. Personnel selection and training;
d. Pre-testing in the interview survey team with the sampling of five;
e. Focus Group survey with the sampling of 20;
f. Second Focus Group survey with the sample size of 55;
g. Data collection on a full-scale level with the samples of 500;
h. Data processing using *CVM 2002* and Microsoft *EXCEL XP*;
i. Drafting a paper (report) on survey results and discussions.

The study population was around 421,000 out of the total 715,000 residents in the 10 coastal cities and communities on the Black Seashore area in Constanta County, notably, with the cities of Constanta, Mangalia, Navodari, and Eforie, together with the communities of Corbu, Agigea, Tuzla, Costinesti, 23 August, and Limanu. In August 2005, JICA study team and Joint Survey team duly worked on the on-site, full-scale interview survey on coastal protection. Methodology applied for random sampling and the full-scale survey are elucidated and given in the followings

.

ii) Sampling methodology specifically applied in the Study

Sampling methodology specifically applied in the case of Constanta study is described in the following. In aggregate 449 interviewees (samples) were selected from the three categories of (i) households, (ii) business entities (commercial, industrial, and services), and (iii) beach resort visitors (expatriates and domestic travelers/residents), with the random selection procedure as elucidated in Table I.3.1. It would be stressed that the sampling methodology as detailed in the table below aimed to take account of both of the people perceiving Use-Value (come and enjoying coziness at the beaches) and Non Use-Value (not necessary come and enjoy beaches, but psychologically been satisfied with the existence of "beaches" on the southern area of Romanian Black Seashore).

Table I.3.1: Sampling methodology

Category	Sampling Methodology	Tools
Households in Constanta City	By using street index in the *Romanian Yellow Pages* and selecting 1(one) unit from each 3rd street that is listed in the index. The basic rule for unit selection on the street is to pick up the one that stands on the right hand side of the street while facing north, locating in the middle of the street/path. If not available, select just right-hand side adjacent to that house.	The *Romanian Yellow Pages (2005),* The City Map
Households in Other Cities	Selecting the units by using the quadrant rule (1 unit from each quadrant if the number of units is small), and by using the same street index rule when the number of the sample is large enough	The City Map
Business entities in Constanta City	By selecting one entity on each 2(two) pages in the Romanian Yellow Pages, on the far-right column, and by choosing the one in the middle of that column.	The *Romanian Yellow Page (2005)s, Business Directory in Constatnta County (Constanta Chamber of Commerce and Industry, 2004)*
Business entities in other cities and communities	Selecting the units by using the quadrant rule (1 unit from each quadrant if the number of units is small), and by using the same street index rule when the number of the sample is large enough	The City Map, *Business Directory in Constatnta County (Constanta Chamber of Commerce and Industry, 2004)*
Beach Resort Visitors	Very random basis counting on the interviewer's selection, while selecting almost the same number of samples amongst younger/middle/senior by each of the genders (male and female)	the interviewer's observation

(c) Allocation of sample size amongst the target cities and communities

The cities and the communities (*Comuna*) that lie on the Southern Romanian Black Seashore are selected as the survey-target area, with four (4) cities and six (6) communities. These include the cities of Constatnta, Mangalia, Navodari, and Eforie (North and South), and the

communities of Corbu, Agigea, Tuzla, Costinesti, 23 August, and Limanu. Sample size is initially set at around 450 to 500 at maximum, while utilizing the statistical software of *EPIINFO Version 6*. Of this, the shares of the number of interviewees for households, beach resort visitors, and business entities are 55 percent, 30 percent, and 15 percent in that order, while taking the number of the units in the Constanta County in view. With this, the actual numbers of the sample come in place with 250, 140, and 70 (all figures somewhat rounded) in the same order. Subsequently, all these sample figures are allocated to each of the four cities and six communities in proportion to the number of population therein. Population distribution and the sample size for each of the target cities and communities are summarized and depicted in the table below (Table I.3.2) and figures (Figures I.3.1 and I.3.2), respectively.

Table I.3.2: Population and sampling size by administrative unit, 2005

		Population	Share	Households	Beach	Entities
Share				55%	30%	15%
Sample #				*250*	*140*	*70*
Cities	Constanta	306,860	73%	182	103	51
	Mangalia	40,805	10%	24	15	7
	Navodari	34,224	8%	20	12	6
	Eforie	9,525	2%	6	4	2
Comuna	Corbu	5,480	1%	3		1
	Agigea	5,800	1%	3	3	1
	Tuzla	6,322	1%	4		1
	Costinesti	2,396	1%	1	2	0
	23-Aug	5,201	1%	3		1
	Limanu	4,856	1%	3	2	1
Total		421,469	100%	250	140	70

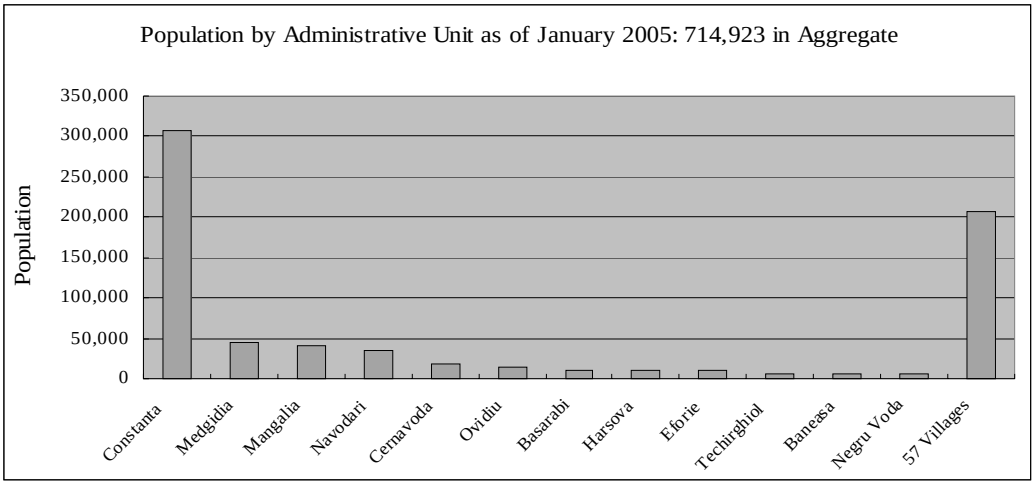


Fig. I.3.1: Population by administrative unit as of January 2005 in Constanța County

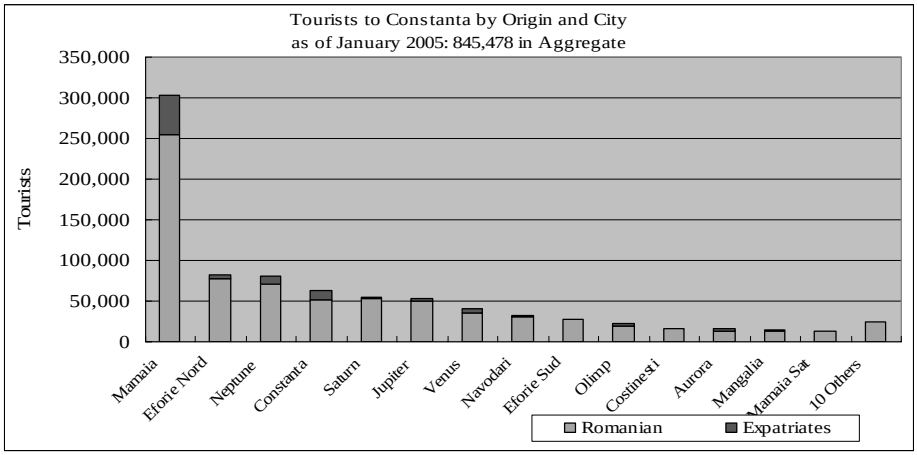


Fig. I.3.2: Tourists to Constanta County by origin and administrative unit

(d) Time framework for overall survey and conclusion

An overall interview and *WTP* survey took around three quarters of a year, with an intensive work of around one and a half quarters during summer. This part mostly comprises (i) devising the final questionnaire in the wake of cumbersome works at the initial stages of the *WTP* study, as well as (ii) the ensuing field interview works and data collection/input to the computer system carried out by sub-groups of the joint study team. As reflected in the foregoing, discussions on the survey results and the member's finding took place ore and more intensively as time goes by, as such the experiences, the sense of motivation and devotion to the study, and knowledge on statistical analysis in the economics view became more and more shared amongst the members. This knowledge on survey methodology and analytical processing acquired by the team members had consecutively been defused to the DADL officials. In summary, a bird's eye view of the sequential flow of activities in due course of CVM survey will be summarized and given in Table I.3.3.

Table I.3.3: Sequential flow of study activities

Sequency of Survey	Actions Taken and that Come	Time Framework
Designing A Questionnaire	Devising specific question items, while incorporating the current Romanian perception	March-May 2005
Preparation of Interview Survey	Contracting the Joint Survey Team, Sharing a study objectives and Methodology	May-June 2005
Pilot Survey	Trial-basis interview survey with Joint study team	July 2005
Focus Group Meeting	Random sampling and trial-basis interview survey with 20 randomly selected	August 2005
Preliminary and Full-Scale Interview Survey	Efforie Nord (Preliminary basis, 54 interviewees), Constanta City (25 interviewees), Mamaia (24), Vama Beche 20), Neptune (27)	September 2005
Full-Scale Survey	The rest of the Cities and Communities, and Inputting data into *EXCEL* files	September 2005
Analysis and Reporting	Inputting data to *CVM 2002,* and analysis/drafting	September-December 2005

(e) Design of questionnaire

Inline with the generally accepted methodology to devise questionnaire, the bidding games in the two-stage dichotomous method currently applied in the study give the five-version-cascading structure, with the middle bidding price of RON 4.8 per household per month (0.8 percent of household disposable income in Romania in 2005. This empirically assumes (a kind of rule-of-thumb) that the willingness to pay of people for environment protection in general would stand at around 0.6-0.8 percent, at maximum, of disposable income. The neighboring bidding rates are from the lowest share of disposable income 0.3 percent (RON 1.8), 0.5 percent (RON 3.0), 0.8 percent (RON 4.8), 1.0 percent (RON 6.0), and 1.3 percent (RON 9.0), in the ascending order.

(f) Profile of Interviewees

As given in the foregoing, 449 interviewees in total are picked up on sites (in the city area and on the beach) while being asked for answering the questions to eventually reveal their preference for intangible benefits in monetary term. Of the 24 questions enlisted in the questionnaire, 18 were of those enveloping bio-data (gender, age), socio-economic status (marital status, job, household members, income), and awareness of and actions for environment conditions and protection, while balancing six (6) specific questions concerning respondents' willingness to pay (refer to Attachments 1 and 2). Disaggregating this sample cohort, almost there quarters of the respondents (72.4 percent) emanated from Constanta County, while the remaining coming from Bucharest (about 20 percent) followed by other European countries inclusive of Germany, Denmark, and Greece. Most of the respondents were aware of degradation of beaches to full or some extent in the recent past (90.2 percent), and responded in favor of environment protection (94.6 percent). As regards environmental conditions at the beaches on the Black Seashore, a large chunk of people evaluated affirmatively to full or some extent (78.2 percent). Meanwhile, an average disposable income of the respondents RON 686.2 per month coincided with the national average household (disposable) income that stands at RON 690 (US$210.6) as par December 2004 level[6]. A bunch of summarized answer sheets providing all of the responses given by the interviewees is in *Attachment I.6*. A profile of interviewees as reflected by some of the respondents' attributes is given by site in the following Table I.3.4.

Table I.3.4: Profile of 449 interviewees (excerpt)

	CT residents (%)	Gender (Male %)	Age (years)	Interest (Yes %)	Awareness (yes %)	Evaluation (OK %)	Income (net, RON)
Aggregate	72.4	41.2	34.8	94.6	90.2	78.2	686.2
Constanta City	98.7	39.9	34.1	56.5	90.8	82.5	367.9
Mamaia	34.7	44.6	35.2	54.2	90.1	77.7	353.3
Jupiter/Costinesti	37.0	55.6	34.6	92.6	98.9	55.6	741.9
Vama Veche	20.0	45.0	35.6	95.0	95.0	60.0	622.0
Mangalia	100.0	33.3	30.7	72.2	66.7	61.1	520.8
Navodari	100.0	26.6	36.9	97.1	97.1	88.6	188.9

[6] Source: Romania National Institute of Statistics, Press Release, No.3 of January 2005

I.3.3. Results- Estimated Willingness to Pay for Coastal Protection 2005

(1) Distribution of Responses

In line with the methodology as given in the foregoing, YES-NO distribution for each of the bidding versions (five) was figured out in such a way that a large portion of the 449 interviewees responded in favor of "a monthly environment contribution" regardless of the first bidding prices (38.9 percent). Following this, YES-NO, NO-NO, and NO-YES came in the descending order while each of these accounting for 30.0 percent, 22.0 percent, and 9.1 percent, in that order. This distribution of responses by first bidding with a large proportion of YES-YES (very affirmative to payments) and a very small portion of NO-YES (a bit moderate to payments) would have reflected somewhat people's disguised "show-off" in a sense trying to "please interviewers" while answering in favor of monetary devotion to environment protection.

Summary of distribution o responses by bidding version is in Table I.3.5 as given below.

Table I.3.5: Distribution of responses by bidding version

Version (% of Household Income)	First Amount (RON)	Second Amount (YES)	Second Amount (NO)	Yes-Yes	Yes-No	No-Yes	No-No	Total
1 (0.3%)	1.8	3.0	0.9	69	21	3	4	97
2 (0.5%)	3.0	4.8	1.8	37	41	6	8	92
3 (0.8%)	4.8	6.0	3.0	30	36	15	13	94
4 (1.0%)	6.0	9.0	4.8	18	25	13	30	86
5 (1.3%)	9.0	13.5	6.0	21	v12	12	35	80
Total				175	135	49	99	449

(2) WTP estimated

The Willingness to Pay (WTP) as a stated (revealed) preference for the use- and non use-values attached to coastal protection and health turned out to be respective of RON 6.4 (median value of 50 percent acceptance schedule, assuming Turnbull distribution model) and RON49.7 per month per household (median value of 50 percent acceptance schedule, assuming logarithmic linear logit distribution model), while accounting for 0.9 percent and 7.2 percent of disposable income in that order. To note that WTP estimates reflecting all of the 449 respondents were a bit lower than those of the provisional figures of RON 8.2 and RON 55.5 at the time of Progress Report. This would be because the interviewees by the time of Progress Report were mostly beach users (perceived as Use-value) who enjoy beach recreation thereby usually bidding higher value on environment than those who don't. With the average monthly income of households in Romania is officially estimated at RON 970 and RON 690 in respective of gross and net, this estimation is intuitively perceived a bit high, due partly because that monthly income in the private sector is allegedly considered to be 30 to 40 percent higher than the figure in the official statistical documents.

Summary of WTP revealed by the interviewees is given in Table I.3.6 below. Following the the results as summarized in the table, responses of a double-stage dichotomous choice method at each of the sampling sites are also summarized, as Table I.3.6.

Table I.3.6: WTP estimates for environment protection and referential health by site

Survey Sites	Sample Numbers	WTP-CVM2002	WTP-EXCEL	WTP-Health EXCEL
Constanta City	228	60,974 (T) 62.580 (W)	67,089 (Logit) 62,852 (W)	473,620 (Log)
Mamaia	121	72,737 (T) 79,123(W)	96,135 (Log)	529,824 (Log) 524,416 (T)
Navodari	35	46,246 (T) 44,894 (W)	46,809 (Log)	457,079 (Log)
Jupiter/Costinesti	27	70,434 (T) 70,855 (W)	74,039 (Log)	620,648 (Log)
Vama Veche	20	109,000 (T) 102,419 (W)	86,162 (Log) 85,945 (W)	664,992 (Log) 666,771 (T)
Mangalia	18	46,666 (T) 47,279 (W)	48,442 (Log)	469,884 (Log)
Aggregate	449	64,060 (T)	67,975 (Logit)	497,404 (Log) 487,221 (T)

Table I.3.7: Tabulation of questionnaires

Constanta

ID 1-228

	Environment summary					**Health summary**					
Version	YY	YN	NY	NN		YY	YN	NY	NN	DK	
1	39	9	1	4	**53**	22	23	1	7		**53**
2	18	27	2	2	**49**	12	18	5	14		**49**
3	10	19	9	6	**44**	4	18	3	17	2	**44**
4	6	13	9	16	**44**	2	14	9	18	1	**44**
5	11	6	4	17	**38**	3	8	7	20		**38**
	84	**74**	**25**	**45**	**228**	**43**	**81**	**25**	**76**	**3**	**228**

Mamaia

ID 228-348

	Environment summary					**Health summary**					
Version	YY	YN	NY	NN		YY	YN	NY	NN	DK	
1	19	8	0	0	**27**	11	9	2	4	1	**27**
2	12	9	1	4	**26**	6	12	2	6		**26**
3	11	10	3	4	**28**	5	3	4	12	4	**28**
4	7	7	1	5	**20**	6	5	2	7		**20**
5	8	3	4	5	**20**	3	4	6	7		**20**
	57	**37**	**9**	**18**	**121**	**31**	**33**	**16**	**36**	**5**	**121**

Vama Veche

ID 349-368

	Environment summary					**Health summary**					
Version	YY	YN	NY	NN		YY	YN	NY	NN		
1	4				**4**	3			1		**4**
2	3			1	**4**			1	3		**4**
3	3			2	**5**	2	1		2		**5**
4	3	1			**4**	2			2		**4**
5	2			1	**3**	2		1			**3**
	15	**1**	**0**	**4**	**20**	**9**	**1**	**2**	**8**		**20**

Jupiter, Costinesti **Environment summary** **Health summary**

ID 369-395

Version	YY	YN	NY	NN		YY	YN	NY	NN	DK	
1	5		1		**6**	4	1	1			**6**
2	3	1	1	1	**6**	2	2	2			**6**
3	4	1			**5**	1	2	1	1		**5**
4	1	3		1	**5**	3	1		1		**5**
5		2	1	2	**5**	1		1	3		**5**
	13	**7**	**3**	**4**	**27**	**11**	**6**	**5**	**5**	**0**	**27**

Mangalia **Environment summary** **Health summary**

ID 396-413

Version	YY	YN	NY	NN		YY	YN	NY	NN	DK	
1					**0**						**0**
2					**0**						**0**
3	2	2	2		**6**	1	2	3			**6**
4			2	4	**6**			2	4		**6**
5				6	**6**				6		**6**
	2	**2**	**4**	**10**	**18**	**1**	**2**	**5**	**10**	**0**	**18**

Navodari **Environment summary** **Health summary**

ID 414-448

Version	YY	YN	NY	NN		YY	YN	NY	NN	DK	
1	2	4	1		**7**	2	4	1			**7**
2	1	4	2		**7**	1	4	2			**7**
3		4	1	1	**6**		4	1	1		**6**
4	1	1	1	4	**7**	1	1	1	4		**7**
5		1	3	4	**8**		1	3	4		**8**
	4	**14**	**8**	**9**	**35**	**4**	**14**	**8**	**9**	**0**	**35**

TOTAL

Version	**YY**	**YN**	**NY**	**NN**		**YY**	**YN**	**NY**	**NN**	**DK**	
1	69	21	3	4	**97**	42	37	5	12	1	**97**
2	37	41	6	8	**92**	21	36	12	23	0	**92**
3	30	36	15	13	**94**	13	30	12	33	6	**94**
4	18	25	13	30	**86**	14	21	14	36	1	**86**
5	21	12	12	35	**80**	9	13	18	40	0	**80**
	175	**135**	**49**	**90**	**449**	**99**	**137**	**61**	**144**	**8**	**449**

Attachment 1: CVM Questionnaire Survey
QUESTIONNAIRE FULL TEST

QUESTIONNAIRE FULL TEST

Sample Number:

Interviewee's Category: Households Commercial Industrial
Tourist

Tourist/Resident: from where did you come?
Country( )
County ( ),
City( )

How long are you going to stay in Romania? days, and in Constanta days

---

Introduction:

My name is _____ ; I am here to interview you under the authorization of the National Administration of Romanian Water in cooperation with the Japan International Cooperation Agency under the Government of Japan and the University of Constanta. This is my identification card.

The overall objectives of this Romania-Japan joint study include the followings.

i) Formulating a master plan for the protection and rehabilitation of Southern Romanian Black Sea Shore;

ii) Undertaking a preliminary designing of the priority project; and

iii) Transferring skills and technology of coastal protection and management to the counterpart officials at the Ministry of Environment and Water Management (MEWM) and other authorities concerned in due course of the Study.

To this end, the Team sets forth the additional objectives, one of which is to quantitatively estimate the project benefit attributable to the prospective shore protection and rehabilitation measures as provided during the Study, while taking environmental conservation and tourism/other social and economic activities in the concerned coastal area in view. With this, this Concept Paper provides the frameworks for designing and implementation of quantitative analysis of environment protection by way of interview survey. Sequentially, a Contingent Valuation Method (CVM) will be applied as an analytical tool in a bid to estimate people's advocating perception in monetary term, that is, Willingness to Pay (WTP). In this connection,

The objective of this interview is to assess the population's needs on the protection and rehabilitation of the southern seashore of the Black Sea here in Constatnta. Information you kindly provide will be of great help to us in the formulation of the future plan for of the enhancement of your safety and improvement of coastal environment in Constatnta.

The results of the interview will only be utilized for this objective, and your name will not be specified in the answer sheet in order to protect your personal information. Further, if you feel uncomfortable to the questions, you reserve the right to reject answering and stop interviewing. I will pose 25 questions, and it will take approximately 15 to 20 minutes to complete this interview. I would appreciate your patience and cooperation.

Before we start the interview, I would like to brief how the prospective seashore protection and rehabilitation project would mitigate hazardous risks in terms of safety of your house, facilities (shops, restaurants, hotels, and other physical structure) and sceneries (ambience) of the beach. (showing the photocopies of seashore erosion and houses on the vulnerable cliff to visualize the project benefits)

Now, I would like to begin the interview. Now, can I proceed with the interview survey to you? If Yes, let me begin the questionnaire.

Q1: Gender

☐ **Male** ☐ **Female**

Q2 : Age:

- ☐ **16-35 years of age**
- ☐ **36-45 years of age**
- ☐ **46-60 years of age**
- ☐ **more than 60 years of age**

Q3 : Marital Status:

- ☐ **Single**
- ☐ **Married**
- ☐ **divorced**

Q4: BASIC PROFILES OF FAMILY

1) ***How many family members do you have in your family?***

_____ **persons**

2) ***Does your family have multiple income sources?***

☐ **Yes** ☐ **No**

Q5 : Type of Jobs

1) What is your business?

- ☐ **Self-Employed**
- ☐ **Employee (The Public or private sector)**
- ☐ **Students**
- ☐ **None (Housewife, Retired, or others)**

2) If Self-Employed, how many employees work in your business?_____ employees.

Q6 : Is beach your source of income?

- ☐ **Yes, Fully (specify the type of business _____)**
- ☐ **Yes, Partially (specify the type of business _____)**
- ☐ **No**

Q7: Use of the beaches: How frequent do you use the beaches (various purposes)?

- ☐ **Very Often**
- ☐ **Often**
- ☐ **Sometimes**
- ☐ **Rarely**
- ☐ **Never**

Q8: Interest in environment protection and conservation

☐ **Yes** ☐ **No** ☐ **Don't know**

Q9.1 : Did you take part in environment protection projects?

☐ **Yes** ☐ **No**

Q9.2 : If you took part, what was your position during the project frame?

☐ **Project Leader/Coordinator**
☐ **Project Member**
☐ **Financial Supporter**
☐ **Others (Specify _____)**

Q10: Are you aware of beach erosion?

☐ **Yes** ☐ **No**

Q11 : Evaluation of the beach and sand conditions

1) How do you evaluate the present seashore (beach) conditions?

- ☐ **Very Satisfactory**
- ☐ **Relatively Satisfactory**
- ☐ **Average**
- ☐ **Relatively Unsatisfactory**
- ☐ **Very Unsatisfactory**

2) If the answer is not very satisfactory, what are the reasons? *Multiple answers are ok.)*

- ☐ **Poor Ambience (☐bad odor, ☐ poor scenery, ☐poor beach facility, ☐turbidity ☐insects)**
- ☐ **Risks to House (Facility etc.) safety**
- ☐ **Insufficient quality and/or space of sand beach**
- ☐ **Expensive cost to stay for vacation**
- ☐ **Other reasons (_____)**

Q12: Value of Life (Injuries)

In the last year, have any of your family members been injured and disabled for normal life (hospitalized, couldn't work, schooling)? *(Please check with x in box.)*

☐ **Yes** ☐ **No**

*(If the answer is **(Yes)**, please check with x if applicable and fill out the following table to specify frequency and seriousness of diseases. Multiple answers are ok.)*

Check *(Please check with x if applicable.)*	Injuries due to	Number of deaths due to accidents in the past 1 year, if any
	Mechanical	
	Thermal	
	Chemical	
	Electrical	
	Radiant	

(**Injury** is defined as "damage to a person or to a tissues/organs caused by a transfer of energy, namely on or multiple of the five forms of physical energy in the above table")

A. Who was the injured? _____

B. How old was the injured?_____

C. How much did you(your family) pay for medical care of that injury? _____ROL

D. Who paid the bill of medical care? Your family ( ) , the state insurance ( ), private insurance company( ), others(specify_____)

E. Where did you seek medical care? Government hospital( ), Private Hospital. Clinic( ), Traditional Healer( ), Other(specify_____)

F. For how long did he/she stay at the med-care facility? ( )hours, ( )Days;

G. For how long did the injured person stay away from his/her routine work/duty due to the injury? ( )Days, ( )Months, ( )Years

I. If the answer for H. question is No, then how less compared to the time when he/she was in a sound situation?

( )10%, ( )20%, ( )30%, ( )40%, ( )50%, ( )80%, ( )100%;

Q13: Value of Life (Diseases)

In the past year, have you or has any of your family members been sick due to the lack of water, inconvenient water storage or low water quality?. *(Please check with x in box.)*

☐ **Yes** ☐ **No**

*(If the answer is **(Yes)**, please check with x if applicable and fill out the following table to specify frequency and seriousness of diseases. Multiple answers are ok.)*

Check *(Please check with x if applicable.)*	**Disease**	**Number of deaths in the past 1 year, if any**
	Parasitism	
	Malaria	
	Cholera	
	Typhoid/Paratyphoid	
	Dengue Fever	
	Chronic Diarrhea/ Dysentery	
	Others	

A. Who was the diseased person? _____

B. How old was the diseased person?_____

C. How much did you(your family) pay for medical care of that disease? _____ROL

D. Who paid the bill of medical care? Your family ( ) , the state insurance ( ), private insurance company( ), others(specify_____)

E. Where did you seek medical care? Government hospital( ), Private Hospital.Clinic( ), Traditional Healer( ), Other(specify_____)

F. For how long did he/she stay at the med-care facility? ( )hours, ( )Days;

G. For how long did the diseased person stay away from his/her routine work/duty due to the disease? ( )Days, ( )Months, ( )Years

H. Does the diseased person now performs his/her routine work/duties exactly in the same manner as before? ( )Yes, ( )No;

I. If the answer for H. question is No, then how less compared to the time when he/she was in a sound situation?

( )10%, ( )20%, ( )30%, ( )40%, ( )50%, ( )80%, ( )100%;

J. How do you evaluate the quality of health care? ( ) Excellent, ( ) Good, ( ) Fair, ( ) Poor, ( ) Not Acceptable

K. If Poor or not Acceptable, Why?

(Specify:

)

Q14-Q17: WILLINGNESS TO PAY for Seashore Protection

From now on, I would like to focus in the willingness to pay for seashore protection only. Please remember the conditions of "satisfactory seashore environment". Those include:

1) ***Safety to your life and assets;***
2) ***Ambient condition of the seashore that attracts people and tourists; and***
3) ***Generating income opportunities from natural asset.***

Version 1 (VLW)			Version 2 (LW)			Version 3 (Base)			Version 4 (HG)			Version 5 (VHG)		
T1	TU	TL	T1	TU	TL	T1	TU	TL	T1	TU	TL	T1	TU	TL
0.3%	0.5%	0.15%	0.5%	0.8%	0.3%	0.8%	1.0%	0.5%	1.0%	1.5%	0.8%	1.5%	2.25%	1.0%
18,000	30,000	9,000	30,000	48,000	18,000	48,000	60,000	30,000	60,000	90,000	48,000	90,000	135,000	60,000

Q14-1 Are you currently paying any tax , contribution, or any other else for seashore (beach) protection and/or conservatin

☐ Yes ☐ No

Q14:
If you can have "the satisfactory seashore environment" as I explained above, are you newly willing to pay 18,000 ROL per month?

<<If the answer is (Yes) go to Q15A. If the answer is (No) go to Q 16A.>>

☐ Yes ☐ No

Q15 : Then, are you willing to pay ROL 30,000 per month?

☐ Yes ☐ No

Q16 : Then, are you willing to pay ROL 9,000 per month? *(If the answer is (Yes), please go to Q18. If the answer is (No), please go to Q17.)*

☐ Yes ☐ No

***Q17**: **What is the reason why you answered "No" to both Q14A and Q16A?** (Please check with x in box. Please let him/her select a single answer.)*

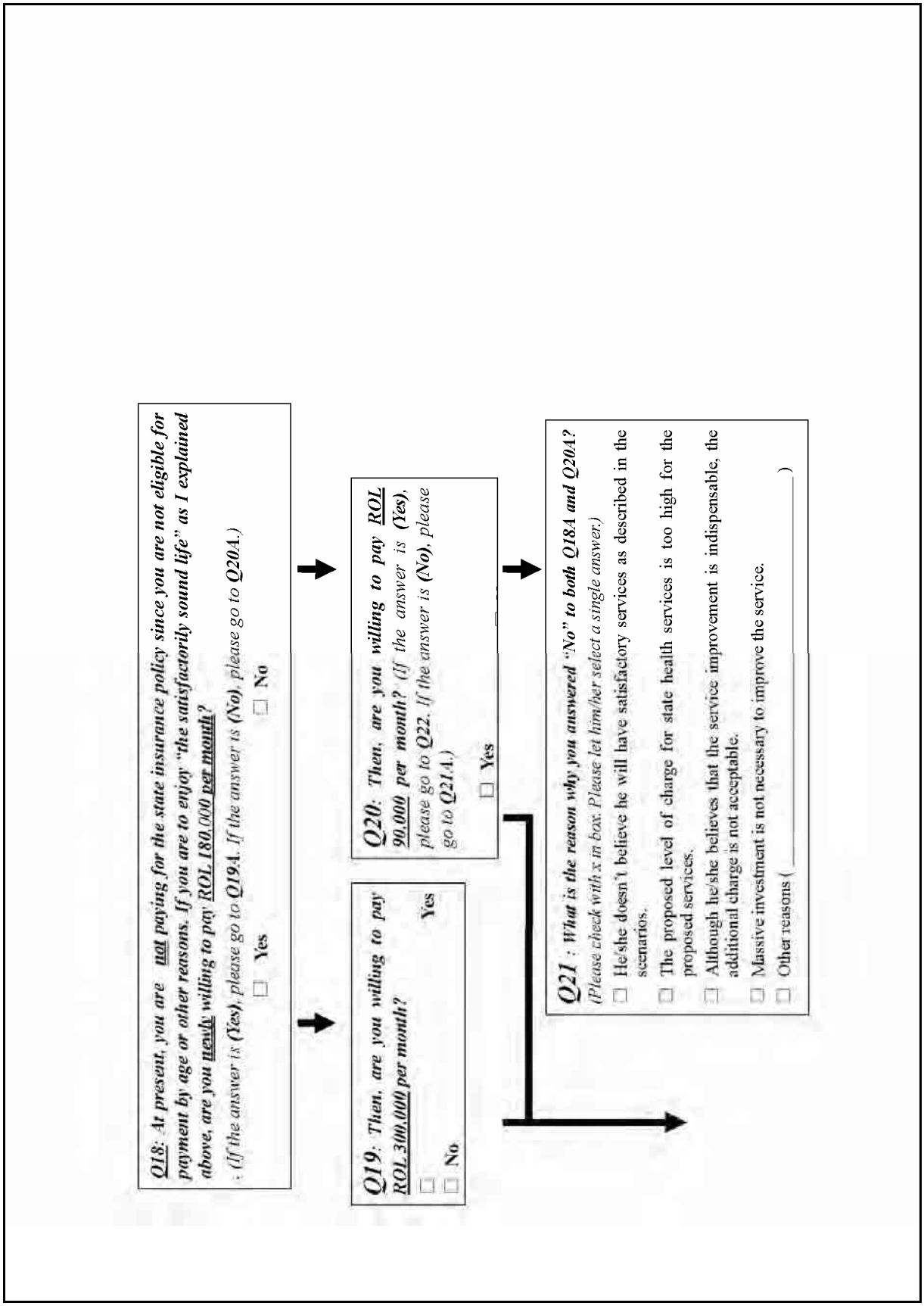
- ☐ He/she doesn't believe he will have satisfactory services as described in the scenarios.
- ☐ The proposed level of seashore protection is too high for the proposed services.
- ☐ Although he/she believes that the service improvement is indispensable, the additional tax payment is not acceptable.
- ☐ Government investment is not necessary to improve the service.
- ☐ Other reasons. (_____)

Q18-Q21: WILLINGNESS TO PAY for Value of Healthy Life

From now on, I would like to focus on your value of life. Please remember the satisfactory conditions of sound live". Those are:

1. ***Free from diseases and injuries;***
2. ***Sound daily life without medicines and hospitalization, and***
3. ***Free from medical bills.***

	Version 1 (VLW)			Version 2 (LW)			Version 3 (Base)			Version 4 (HG)			Version 5 (VHG)		
	T1	*TU*	*TL*	*T1*	*TU*	*TL*	*T1*	*TU*	*TL*	*T1*	*TU*	*TL*	*T1*	*TU*	*TL*
	3.0%	5.0%	1.5%	5.0%	8.0%	3.0%	8.0%	10.0%	5.0%	10.0%	15.0%	8.0%	15.0%	22.5%	10.0%
Unit : '000	180	300	90	300	480	180	480	600	300	600	900	480	900	1,350	600


Q18: At present, you are not paying for the state insurance policy since you are not eligible for payment by age or other reasons. If you are to enjoy "the satisfactorily sound life" as I explained above, are you newly willing to pay ROL 180,000 per month?
: (If the answer is (Yes), please go to Q19A. If the answer is (No), please go to Q20A.)
☐ Yes
☐ No
Q19: Then, are you willing to pay ROL 300,000 per month?
☐ Yes
☐ No
Q20: Then, are you willing to pay ROL 90,000 per month? (If the answer is (Yes), please go to Q22. If the answer is (No), please go to Q21A.)
☐ Yes
Q21 : What is the reason why you answered "No" to both Q18A and Q20A?
(Please check with x in box. Please let him/her select a single answer.)
☐ He/she doesn't believe he will have satisfactory services as described in the scenarios.
☐ The proposed level of charge for state health services is too high for the proposed services.
☐ Although he/she believes that the service improvement is indispensable, the additional charge is not acceptable.
☐ Massive investment is not necessary to improve the service.
☐ Other reasons ( )

Q22: UNDERSTANDING OF SCENARIOS

Did you understand the explanation on future improvements in shore protection and rehabilitation? *(Please check with x in box.)*

☐ **Yes** ☐ **No** ☐ **To some extent**

Q23: TOTAL MONTHLY FAMILY INCOME

1)Could you tell us how much is the total monthly income of your family?

_____ **ROL per month in gross (including taxes, insurances, and other mandatory expenses, if any)**

_____ **ROL per month in net (disposable income)**

2*) Does your total family income allow you to save?* *(Please check with x in box. If the answer is **(Yes)**, please go to 3**)**. If the answer is **(No)**, the questionnaire is over.)*

☐ Yes ☐ No

3) How much can you save from your total family income per month? _____ ROL per month

Q24 : Incremental benefits due to the environment protection and rehabilitation project

1) Do you think you can get more income due to the Project?

- ☐ **Very Much**
- ☐ **Much**
- ☐ **Fair**
- ☐ **Not very much**
- ☐ **Not At All**

Thank you very much for your kind cooperation!

Attachment 2:Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
1 2 3 4 5

Questionnaire #

Month/Date

Interviewer

Site

Sample details		Coding
Category:		Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident		Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers		
Q1		**Gender**: Male **1**; Female **2**
Q2		**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3		**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1		**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2		**Number of Income Sources**: Yes **1**; No **2**
Q5.1		**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6		**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7		**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	ers	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1		**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10		**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1		**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2		**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12		**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13		**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1		**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14		**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15		**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1		**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2		**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18		**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22		**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL
Q23.2		**Saving**? Yes **1**; No **2**, DK **3**
Q23.3		**Saving**: ROL
Q24		**Incremental Benefits**:VeryMuch **1**; Much **2** Fair **3**; NotVeryMuch **4**;NotAtAll **5**

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
2

Questionnaire #
2

Month/Date
2005/8/24

Interviewer
Elena

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Bucharest	
Stay in CT	6	Days
Cost of Visit	400 RON	RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	3	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	2	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	2	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	1	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b	15,000,000	**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
3

Questionnaire #
3

Month/Date
2005/8/24

Interviewer
Elena

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Iasi	
Stay in CT	10	Days
Cost of Visit	500 RON	RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	2	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	3	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	2	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	3	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	2	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	2	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15		**Second High**: Yes **1**; No **2**; No Answer **3**
Q16	2	**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	1	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	2	**SL**: Yes **1**;No **2**; NA **3**
Q21	1	**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b	10,000,000	**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
4

Questionnaire #
4

Date
2005/8/24

Interviewer
Elena

Site
Mamaia

Sample details		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers		
Q1	1	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	1	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	2	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	2	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	2	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b	9,000,000	**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
5

Questionnaire #
5

Month/Date
2005/8/24

Interviewer
Elena

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	2	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	2	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	2	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	1	**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b	20,000,000	**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
1

Questionnaire #
6

Month/Date
2005/8/24

Interviewer
Elena

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Iasi	
Stay in CT	7	Days
Cost of Visit	1000 RON	RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	2	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	2	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	2	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	2	**SL**: Yes **1**;No **2**; NA **3**
Q21	1	**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
2

Questionnaire #
7

Month/Date
2005/8/24

Interviewer
Elena

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Braila	
Stay in CT	5	Days
Cost of Visit	1000 RON	RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	3	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	2	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	2	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**; ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Value of Life (Injuries)		
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	1	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	2	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b	25,000,000	**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
3

Questionnaire #
8

Month/Date
2005/8/24

Interviewer
Elena

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	3	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	1	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	2	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15		**Second High**: Yes **1**; No **2**; No Answer **3**
Q16	1	**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	2	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	3	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	2	**SL**: Yes **1**;No **2**; NA **3**
Q21	1	**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
4

Questionnaire #
9

Month/Date
2005/8/24

Interviewer
Elena

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	2	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	2	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	2	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	1	**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b	35,000,000	**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
5

Questionnaire #
10

Month/Date
2005/8/24

Interviewer
Elena

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Bucharest	
Stay in CT	10	Days
Cost of Visit	1000 RON	RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	2	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	3	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	2	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15		**Second High**: Yes **1**; No **2**; No Answer **3**
Q16	1	**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	1	**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b	25,000,000	**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
1

Questionnaire #
11

Month/Date
2005/8/24

Interviewer
Elena

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Bucharest	
Stay in CT	3	Days
Cost of Visit	500 RON	RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	3	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	3	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2		**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	1	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	2	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	3	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	1	**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
1

Questionnaire #
1

Month/Date
2005/8/24

Interviewer
Lavinia

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Germany	
County		
City		
Stay in CT	21	Days
Cost of Visit	1600 EURO	RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	3	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	4	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	2	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	1	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2	1	**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	2	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	1	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2		**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;

Value of Life (Injuries)

ExpensiveCost **4**; Others **5** (Specify) mltpl answ

Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)

Value of Life (Diseases)

Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**

Bidding to Environment

Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	1	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ

Bidding to Health

Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	1	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	3	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	3	**SH**: Yes **1**;No **2**; NA **3**
Q20	3	**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ

Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
2

Questionnaire #
2

Month/Date
2005/8/24

Interviewer
Lavinia

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Bucharest	
Stay in CT	3	Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	2	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	2	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;

Value of Life (Injuries)

ExpensiveCost **4**; Others **5** (Specify) mltpl answ

Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)

Value of Life (Diseases)

Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**

Bidding to Environment

Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	2	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15		**Second High**: Yes **1**; No **2**; No Answer **3**
Q16	1	**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ

Bidding to Health

Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3	you need to pay a	**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	2	**SL**: Yes **1**;No **2**; NA **3**
Q21	we have no servic	**If NoNo, Why**?: a;b;c;d;e sgle answ

Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
3

Questionnaire #
3

Month/Date
2005/8/24

Interviewer
Lavinia

Site
Mamaia

Sample details		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Buzau	
Stay in CT	14	Days
Cost of Visit		RON, Euro, US$

Answers		
Q1	2	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	4	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	3	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	2	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	3	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	3, 4	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp**ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	1	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	2	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3	low service quality	**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	1	**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
4

Questionnaire #
4

Month/Date
2005/8/24

Interviewer
Lavinia

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	2	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	2	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	2	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	2	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1, 3	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;

Value of Life (Injuries)

ExpensiveCost **4**; Others **5** (Specify) mltpl answ

Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)

Value of Life (Diseases)

Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**

Bidding to Environment

Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	1	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ

Bidding to Health

Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3	poor sevices, too r	**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	1	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ

Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b	20,000,000	**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
5

Questionnaire #
5

Month/Date
2005/8/24

Interviewer
Lavinia

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Italy	
County		
City		
Stay in CT	15	Days
Cost of Visit		RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	4	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	2	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participation to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	2	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	2	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	2	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15		**Second High**: Yes **1**; No **2**; No Answer **3**
Q16	2	**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	1	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	1	**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
1

Questionnaire #
6

Month/Date
2005/8/24

Interviewer
Lavinia

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Bucharest	
Stay in CT	2	Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	3	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	2	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	4	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;

Value of Life (Injuries)

ExpensiveCost **4**; Others **5** (Specify) mltpl answ

Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)

Value of Life (Diseases)

Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**

Bidding to Environment

Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	1	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ

Bidding to Health

Q18-1	2	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3	indifference, dirtine	**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	1	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ

Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b	18,000,000	**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
2

Questionnaire #
7

Month/Date
2005/8/24

Interviewer
Lavinia

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Italy	
County		
City		
Stay in CT	15	Days
Cost of Visit		RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	3	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	2	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	2	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	2	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	1	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	2	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	1	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	1	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b	2500 Euro/87000000 r	**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
3

Questionnaire #
8

Month/Date
2005/8/24

Interviewer
Lavinia

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Brasov	
Stay in CT	24	Days
Cost of Visit		RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	3	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	2	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	2	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15		**Second High**: Yes **1**; No **2**; No Answer **3**
Q16	2	**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3	lack of professiona	**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	2	**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
4

Questionnaire #
9

Month/Date
2005/8/24

Interviewer
Lavinia

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Roamania	
County		
City	Sfantu Gheorghe	
Stay in CT	7	Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	3	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	4	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	2	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15		**Second High**: Yes **1**; No **2**; No Answer **3**
Q16	2	**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	1	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	2	**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
5

Questionnaire #
10

Month/Date
2005/8/24

Interviewer
Lavinia

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Targu Mures	
Stay in CT	14	Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	2	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	3	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	4	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;

Value of Life (Injuries)

ExpensiveCost **4**; Others **5** (Specify) mltpl answ

Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)

Value of Life (Diseases)

Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**

Bidding to Environment

Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	2	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15		**Second High**: Yes **1**; No **2**; No Answer **3**
Q16	3	**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ

Bidding to Health

Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3	poor conditions, nc	**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	2	**SL**: Yes **1**;No **2**; NA **3**
Q21	too much	**If NoNo, Why**?: a;b;c;d;e sgle answ

Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b	30,000,000	**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
1

Questionnaire #
11

Month/Date
2005/8/24

Interviewer
Lavinia

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Bucharest	
Stay in CT	7	Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	3	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	4	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	5	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1, 4	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;

Value of Life (Injuries)

ExpensiveCost **4**; Others **5** (Specify) mltpl answ

Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)

Value of Life (Diseases)

Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**

Bidding to Environment

Q14-1	1 (tax to enter Mar	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	1	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ

Bidding to Health

Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3	poor services, que	**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	1	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ

Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a		**Total Family Income**: GrossROL
Q23.2.b	17,000,000	**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
2

Questionnaire #
1

Month/Date
2005/8/24

Interviewer
Ana-Maria

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	2	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	3	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	2	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;

Value of Life (Injuries)

ExpensiveCost **4**; Others **5** (Specify) mltpl answ

Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)

Value of Life (Diseases)

Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**

Bidding to Environment

Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	2	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ

Bidding to Health

Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	1	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ

Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a	20,000,000	**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
2

Questionnaire #
2

Month/Date
2005/8/24

Interviewer
Ana-Maria

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	3	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	1	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	2	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	2	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	1	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	2	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a	30,000,000	**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
3

Questionnaire #
3

Month/Date
2005/8/24

Interviewer
Ana-Maria

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	3	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	1	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	2	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	2	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	1	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	2	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a	30,000,000	**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
3

Questionnaire #
4

Month/Date
2005/8/24

Interviewer
Ana-Maria

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	3	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	1	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	4	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	2	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	2	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	1	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	1	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a	25,000,000	**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
4

Questionnaire #
5

Month/Date
2005/8/24

Interviewer
Ana-Maria

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Bucuresti	
Stay in CT	10	Days
Cost of Visit	1000 RON	RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	3	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	3	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	2	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15		**Second High**: Yes **1**; No **2**; No Answer **3**
Q16	2	**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17	1	**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	1	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	2	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a	100000000	**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
5

Questionnaire #
6

Month/Date
2005/8/24

Interviewer
Ana-Maria

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	2	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	3	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	2	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15		**Second High**: Yes **1**; No **2**; No Answer **3**
Q16	2	**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17	1	**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	2	**SL**: Yes **1**;No **2**; NA **3**
Q21	1	**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a	15000000	**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
1

Questionnaire #
7

Month/Date
2005/8/24

Interviewer
Ana-Maria

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	3	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	2	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	4	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	4	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	1	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	1	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	1	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a	12000000	**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
2

Questionnaire #
8

Month/Date
2005/8/24

Interviewer
Ana-Maria

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	2	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	3	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	4	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	3	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;

Value of Life (Injuries)

ExpensiveCost **4**; Others **5** (Specify) mltpl answ

Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)

Value of Life (Diseases)

Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**

Bidding to Environment

Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	2	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ

Bidding to Health

Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	2	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ

Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a	22000000	**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
4

Questionnaire #
9

Month/Date
2005/8/24

Interviewer
Ana-Maria

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	4	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	3 retired	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	5	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	2	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;

Value of Life (Injuries)

ExpensiveCost **4**; Others **5** (Specify) mltpl answ

Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)

Value of Life (Diseases)

Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**

Bidding to Environment

Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	1	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ

Bidding to Health

Q18-1	2	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	3	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	1	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ

Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a	15,000,000	**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
5

Questionnaire #
10

Month/Date
2005/8/24

Interviewer
Ana-Maria

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	3	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	1	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	2	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;

Value of Life (Injuries)

ExpensiveCost **4**; Others **5** (Specify) mltpl answ

Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)

Value of Life (Diseases)

Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**

Bidding to Environment

Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	1	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ

Bidding to Health

Q18-1	2	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2		**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	2	**SL**: Yes **1**;No **2**; NA **3**
Q21	3	**If NoNo, Why**?: a;b;c;d;e sgle answ

Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a	30,000,000	**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
1

Questionnaire #
11

Month/Date
2005/8/24

Interviewer
Ana-Maria

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Iasi	
Stay in CT	7	Days
Cost of Visit	7-800 RON	RON, Euro, US$

Answers

Q1	1	**Gender**: Male **1**; Female **2**
Q2	2	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	2	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	3	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	1	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	1	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a	45000000	**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
2

Questionnaire #
12

Month/Date
2005/8/24

Interviewer
Ana-Maria

Site
Mamaia

Sample details

		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	1	Residents 1; Tourists 2
Country		
County		
City		
Stay in CT		Days
Cost of Visit		RON, Euro, US$

Answers

Q1	2	**Gender**: Male **1**; Female **2**
Q2	1	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	1	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	4	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	1	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2	1	**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;

Value of Life (Injuries)

ExpensiveCost **4**; Others **5** (Specify) mltpl answ

Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)

Value of Life (Diseases)

Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**

Bidding to Environment

Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	1	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ

Bidding to Health

Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	1	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19	2	**SH**: Yes **1**;No **2**; NA **3**
Q20		**SL**: Yes **1**;No **2**; NA **3**
Q21		**If NoNo, Why**?: a;b;c;d;e sgle answ

Q22	1	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a	30000000	**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL

Questionnaire Answer Sheet

Tick appropriate version

Bidding Version
1

Questionnaire #
13

Month/Date
2005/8/24

Interviewer
Ana-Maria

Site
Mamaia

Sample details		Coding
Category:	3	Households 1; Commercial/Industrial 2; Beach 3;
Tourist/Resident	2	Residents 1; Tourists 2
Country	Romania	
County		
City	Bucharest	
Stay in CT	6	Days
Cost of Visit	600 RON	RON, Euro, US$

Answers		
Q1	1	**Gender**: Male **1**; Female **2**
Q2	2	**Age**: 16-35/ **1**; 36-45/ **2**; 46-60/ **3**; >60/ **4;** NA **5**
Q3	2	**Marital Status**: Single/ **1**; Married/ **2**; Divorced/ **3;** NA **4**
Q4.1	3	**Number of Family Members**: 1/ **1**; 2/ **2**; 3-5/ **3**; >6/**4; NA 5**
Q4.2	1	**Number of Income Sources**: Yes **1**; No **2**
Q5.1	2	**Type of Job**: Self-Employed **1**; Employee **2**; Students **3**; None **4**
Q5.2		If **1**, number of Employees: 1-10/ **1**; 11-50/ **2**; >51/ **3**
Q6	3	**Beach as Income Source**: Yes,fully **1**; Yes,Partially **2**; No **3**
Q7	2	**Use of Beach**: Very Often **1**; Often **2**; Sometimes **3**; Rarely **4**; Never **5**
Q8	1	**Interest in Env Conservation:** Yes **1**; No **2**; Don't Know **3**
Q9.1	2	**Participatio to Environment Projects**: Yes **1**; No **2**
Q9.2		**Status**: Project Leader **1**; Project Member **2**; Financial Supporter **3**; Others **4 (*Specify*)**
Q10	1	**Awareness to Beach Erosion**: Yes **1**; No **2;** Don't Know **3**
Q11.1	3	**Evaluation**: VerySatisf **1**; RelSatisf **2**; Average **3**; RelUnsatisf **4**; VeryUnsatisf **5**
Q11.2	1	**If 5, Why?**: PoorAmbience **1**; RiskHouseSafety **2**; InsuffQualitySpace **3**;
Value of Life (Injuries)		ExpensiveCost **4**; Others **5** (Specify) mltpl answ
Q12	2	**Incidence of Injuries**: Yes **1**; No **2**
Q12details		**If Yes**, What Kind?: Mechanical **1**; Thermal **2**; Chemical **3**; Electrical **4**; Radiant **5**
Q12.A		**Who** was the Injured?: Interviwee **1**: family member(s) **2 (Specify,** Father, Mother
Q12.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4** Younger/elder Brother, etc.,)
Q12.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q12.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q12.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q12.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q12.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q12.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q12.I		**If No**, **How is it lower** than before?: (**percentage**)
Value of Life (Diseases)		
Q13	2	**Incidence of Desease**: Yes **1**; No **2**
Q13details		**If Yes**, What Kind?: **Specify**
Q13.A		**Who** was Sick?: Interviwee **1**: family member(s) **2 (Sp** ChronicDiarea/Dysentery;Others mltpl answ
Q13.B		**Age** of Patient: 1-15/ **1**; 16-40/**2**; 41-60/**3**; >60/**4**
Q13.C		**Cost of Treatment**: <0.5mil/ **1**; >1.0 mil/**2**; >3 mil/ **3**; >5 mil/ **4;** More **5** (ROL)
Q13.D		**Who Paid**?: Family (**%**); State (**%**); Private insurance Company (**%**);
Q13.E		**What Institution**?: Gov Hospital **1**; Private **2**; Pharmacies **3**; Others **4** (Specify)
Q13.F		**Duration** of Hospitalization: None **1**; or (**days**), (**months**), (**years**)
Q13.G		**Time of Non-Regular Works**: None **1**, or (**days**), (**months**), (**years**)
Q13.H		**Current Conditions** of Patient: Same as Before Yes **1**; No **2**
Q13.I		**If No**, **How is it lower** than before?: (**percentage**)
Q13.J		**Evaluation of Service Quality:** Excellent **1**; good **2**; Fair **3**; Poor **4**; Not Acce **5**
Q13.K		**If 4 or 5, Why**?: **Specify**
Bidding to Environment		
Q14-1	2	**Currently paying** any tax, contributions?: Yes **1**; No **2**
Q14	1	**Initial bidding**: Yes **1**; No **2**; No Answer **3**
Q15	2	**Second High**: Yes **1**; No **2**; No Answer **3**
Q16		**Second Lower**: Yes **1**; No **2**; No Answer **3**
Q17		**If No No, Why**?: a;b;c;d;e sgle answ
Bidding to Health		
Q18-1	1	**Now paying**?: Yes **1**; No **2**; NA **3**
Q18-2	2	**Are you satisfied of health services? Yes;No;NA**
Q18-3		**If No, Why not? Specify…**
Q18	2	**Initial bidding: Yes 1; No 2; No Answer 3**
Q19		**SH**: Yes **1**;No **2**; NA **3**
Q20	2	**SL**: Yes **1**;No **2**; NA **3**
Q21	1	**If NoNo, Why**?: a;b;c;d;e sgle answ
Q22	2	**Understanding**: Yes **1**;No **2;Some extent 3**
Q23.1.a	70000000	**Total Family Income**: GrossROL
Q23.2.b		**Total Family Income**: Net ROL