MONITORING THE ENVIRONMENTAL IMPACT OF THE WORKS REGARDING THE IMPROVING OF THE NAVIGATION CONDITIONS ON THE DANUBE RIVER BETWEEN CALARASI AND BRAILA, KM 375-175

MONTHLY REPORT N0. 62

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FINAL VERSION

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CONTENT

1. INTRODUCTION

1.1. Brief presentation of the objectives monitored in the construction phase

I. This report presents the monitoring activities for the period of 01-30 June 2016.

For post-construction phase the monitoring frequencies for the environmental components are presented in Table 1.1.

II. *3D numerical modeling*

During this period have been conducted activities for bathymetric data aquisition.

Besides a proper organization and development of the field campaign, a permanent cooperation has been ensured between the Coordinator and Partners.

Table 1.1. Post-construction phase - monitoring objectives – frequencies with differences in the Critical Points

MONITORING OBJECTIVES				Critical points							
				Main Critical Points			Secondary Critical Points				
				01	02	10	03A	03B	04A	04B	07
A.	AIR			S	S	S	Q	Q	Q	Q	Q
B.	NOISE			S	S	S	Q	Q	Q	Q	Q
C.	SOIL			S	S	S	Q	Q	Q	Q	Q
D.	HYDROMORPHOLOGY	Water level		C	C	C	Q	Q	Q	Q	Q
		Water velocity		M	M	M	Q	Q	Q	Q	Q
		Turbidity		C	C	C	Q	Q	Q	Q	Q
		2D bathymetric elevation		M	M	M	Q	Q	Q	Q	Q
		3D bathymetric elevation		Q	Q	Q	Not the case				
E.	WATER QUALITY			Q	Q	Q	S	S	S	S	S
	SEDIMENTS			Q	Q	Q	S	S	S	S	S
F.	AQUATIC FLORA			July			Q	Q	Q	Q	Q
	AQUATIC FAUNA			Q	Q	Q	Q	Q	Q	Q	Q
	F. is STURGEONS AND BARBELL	STURGEONS		Two seasons / year (February - June / August – December)			Two seasons / year (February - June / August – December)				
		BARBELL		One season/year June- June (breeding season)			One season/year June- June (breeding season)				
	F. i OTHER FISH SPECIES			Annually (June - June, July - September)			Annually (June - June, July - September)				
G.	TERRESTRIAL FLORA			Annually in July			Annually in July				
	TERRESTRIAL FAUNA/ AVIFAUNĂ			Annually (June - June, September - October, January)			Annually (June - June, September-October, January)				
H.	NATURA 2000 SITES	SCI	ICHTYOFAUNA	Annually (June - June, July - September)			Annually (June - June, July - September)				
			AQUATIC FLORA	July			Q	Q	Q	Q	Q
			AQUATIC FAUNA	Q	Q	Q	Q	Q	Q	Q	Q
			TERRESTRIAL FLORA	Annually in July			Annually in July				
			TERRESTRIAL FAUNA	Annually (June - June, September - Octombrie, Ianuarie)			Annually (June - June, September - October, January)				
		SPA	AVIFAUNĂ	Annually (June - June, September - October, January)			Annually (June - June, September - October, January)				
J.	3D numerical modeling			M							

NOTĂ: QC – quasi continuous | M- monthly | Q – quarterly | S – semester | C – continuous

1.2. Overview

The elements related to the sampling periods for the objectives monitored in June 2016 for post-construction period are presented in Table 1.2.

Table 1.2. Objectives monitored during the period of 01-30.06.2016

Objectives monitored		Sampling period / ongoing activities	Campaign	Critical Points							
				Main Critical Points			Secondary Critical Points				
				01	02	10	03A	03B	04A	04B	07
A.	AIR	10, 16.06.2016	C59	NO	NO	NO	YES	YES	YES	YES	YES
B.	NOISE	10, 16.06.2016	C62	NO	NO	NO	YES	YES	YES	YES	YES
C.	SOIL	07.06.2016	C22	YES	YES	YES	YES	YES	YES	YES	YES
D.	HYDROMORPHOLOGY	01, 07, 09-10, 16-17, 23-24, 27.06.2016	C62	YES	YES	YES	**NO**	NO	NO	NO	NO
E.	WATER QUALITY	07.06.2016 24.06.2016	C60	YES	YES	YES	NO	NO	NO	NO	NO
	SEDIMENTS	07.06.2016 24.06.2016	C60	YES	YES	YES	NO	NO	NO	NO	NO
F.	AQUATIC FLORA	-	-	NO	NO	NO	NO	NO	NO	NO	NO
	AQUATIC FAUNA	24.06.2016	C23	YES	YES	YES	YES	YES	YES	YES	YES
	F.is. STURGEONS	9, 10, 16, 23, 27.06.2016	C22	YES	YES	YES	YES	YES	YES	YES	YES
	F.is. BARBELL	-	-	NO	NO	NO	NO	NO	NO	NO	NO
	F.i. OTHER FISH SPECIES		-	NO	NO	NO	NO	NO	NO	NO	NO
G.	TERRESTRIAL FLORA	-	-	NO	NO	NO	NO	NO	NO	NO	NO
	TERRESTRIAL FAUNA/ AVIFAUNĂ	06-10, 13-17, 21-23.06.2016	Avifauna monitoring	YES	YES	YES	YES	YES	YES	YES	YES
H.	NATURA 2000 SITES	14, 15, 16, 17.06.2016	Avifauna monitoring	YES	YES	YES	YES	YES	YES	YES	YES
I.	BUILDING SITE	-	-	NO	NO	NO	NO	NO	NO	NO	NO

NOTE:

YES – samples were taken / activities were conducted in the field

NO - no samples taken / no activities conducted in the field

Means of transportation used for sampling/conducting activities and samples analysis are presented in Table 1.3.

Table 1.3 Means of transportation

Field	Transportation means
WATER	trimaran type boat with 25 CP engine
	Laguna type boat with 25 CP engine
	Lotus type boat with 20 CP engine
	Boat - autolaboratory – with trailer - RANIERI CLF22 model, Suzuki engine, 175 CP
	Boat ANA 5.0 with trailer, Suzuki engine, 70 CP
	Boat ANA 5.5 with trailer, Suzuki engine, 40 CP
LAND	Autolaboratory – Pickup jeep Toyota Hilux Double Cab 4x4
	Autolaboratory – Jeep Toyota LandCruiser
	Autolaboratory for air monitoring
	Autolaboratory for water and soil monitoring

2. STATE OF THE PROGRESS ACTIVITIES

2.1. State and progress on each activity / critical point on specific monitoring objectives

The equipments used for sampling/ongoing activities and samples analysis are presented in table 2.1.

Table 2.1 Main devices

Objectives monitored		Sampling equipment	Laboratory equipments / ongoing activities
A.	**AIR**	- LECKEL dust sampler - Auto-laboratory - Desaga pump - GPS - Autolaboratory for air monitoring	- Analytical balance KERN 770-14 - Atomic absorption spectrometer with graphite furnace AAS - UNICAM 939
B.	**NOISE**	- Sound Level Meter and Microphone, Brüel & Kjær Denmark - GPS	
C.	**SOIL**	- Burkle sampler - GPS	- ION-CROMATOGRAPH DIONEX ICS 1500 – anions, cations - Multi N/C Analytic Jena (total carbon analyzer and organic carbon) - Spectrometer ATI UNICAM UV-VIS - Mass Spectrometer with inductively coupled plasma ICPMS NexIon 350x equiped with hydrides generator system and autosampler system with autodiluter
D.	**HYDROMORPHOLOGY**	- Portable Turbidimeter type VELP SCENTIFICA - mini ADP SONTEK - Monitoring systems for turbidity and level - Monitoring systems for flow - velocities - Portable Turbidimeter HANNA Instruments - ADCP SONTEK River Surveyor R9 - Multiparameter YSI for turbidity and level measurements - Bathimetric System 3D - Konsgberg GeoSwath Plus Compact, 250 kHz - Acoustic Doppler Current Profiler (ADCP) - Teledyne RD Instruments RiverRay - ROV (Remote Operate Vehicle) – ROVBUILDER Mini 600 - GPS	- Turbidimeter HACH RATIO/RX - Device for water quality parameters measurements, type 1, Manta 2-Sub3.5+Amphibian 2 - Device for water quality parameters measurements, type 2, Manta 2-Sub4.0+Amphibian 2
E.	**WATER QUALITY**	- Ruttner sampler - GPS	- Spectrometer with atomic absorbtion VARIAN - Spectrometer CARY BIO 300 U.V.-VIS - Spectrofotometer with atomic absorbtion – with flame, graphyte oven, hydrides system with amalgamation and automatic system for solids CONTRAA - Automatic analyzer in continous segmented flux model SAN++ - Mineralization system Speedwave Four with microwave

Objectives monitored		Sampling equipment	Laboratory equipments / ongoing activities
	SEDIMENTS	- Petersen sampler - GPS	- Cryo – drying system ALPHA 2-4 LSCplus - Gas cromatograph coupled with mass spectrometer for dioxine screening, PCF, PCB and pesticides, with autosampler r-GC MS MS 15-02 - Drying stove - Sieving system for sediment samples - Ethos - digester with microwave for sediments - GC-MS-VARIAN - Spectrometer with atomic absorbtion SOLAAR M5 - Mineralization System Speedwave Four with microwave
F.	**AQUATIC FLORA**	- planktonic nets - Patalas sampler - dredges 20cmx50 cm - Square wooden frame, with surface of 1m^2 - GPS	- reverse microscope ZEISS - OPTIKA B-600T microscope - KRUSS microscope - Canon A570 IS camera for microscope
	AQUATIC FAUNA	- zooplanktonic nets - zoobenthic nets - Petersen sampler - benthos grabbing dredges - benthos sampling probe - GPS	- Stereomicroscope Olympus - Binocular Zeiss - Microscope ZEISS - Canon A570 IS camera for microscope - magnifying glass
	F.is. STURGEONS AND BARBELL	- Fixed monitoring system DKTB - Floating monitoring system type DKMR-01T - Complex monitoring, alarming and control system type DK-PRB-01U - Monitoring system with ultrasonic transmitter type 40 - Monitoring system with ultrasonic transmitter type 60 - Mobile receiver for sturgeons telemetry Vemco VR 100 - GPS	- Reception station of WR2W - VR100 mobile receptor - Multiparameter YSI - Endoscope for sturgeon gender determining WELLD WED 3000V - Radar Lowrance Elite 9 CHIRP – 4 pieces
	F.i. OTHER FISH SPECIES	- High power electrical fishing device Hans Grassl EL 65 II GI - Low power electrical fishing device Hans Grassl EL 60 II HI - Ihtyometer - Electronic scale - GPS - binocular microscope - stereo microscope	
G.	**TERRESTRIAL FLORA**	Binoculars, GPS, notebook, standard forms, camera	
	TERRESTRIAL FAUNA/ AVIFAUNĂ	Binocular, lunette, camera, GPS	
H.	**NATURA 2000 SITES**	Binocular, lunette, camera, GPS	
I.	**BULDING SITE ACTIVITY**	- DESAGA pump - Autolaboratory - Sound Level Meter and Microphone, Brüel & Kjær - dust sampler LECKEL	

2.1.1 Critical Point 01 monitoring, Bala branch area and Caragheorghe sand strip

2.1.1.A. Air quality monitoring

The activities carried out during 01/30.06.2016 regarding air quality monitoring, for each critical point are summarized in Table 2.1.1.A.1.

Table 2.1.1.A.1 Specific objective: air quality monitoring

No.	Activities
1.	Contribution to Monthly Report 62
2.	Contribution to Phase Report CP01
3.	Contribution to Finalization Report, phase I of financing

According to post-construction monitoring objectives, in June 2016 for air quality monitoring in this main critical point CP 01 is not provided a sampling campaign. In post-construction period (in this main critical point CP 01 have been made reception of the construction work) frequency is biannual (as Table 1.1).

2.1.1.B. Noise monitoring

The activities carried out during 01/30.06.2016 related to noise level monitoring, for each critical point are summarized in Table 2.1.1.B.1.

Table 2.1.1.B.1. Specific objective: noise monitoring

No.	Activities
1.	Contribution to Monthly Report 62
2.	Contribution to Phase Report CP01
3.	Contribution to Finalization Report, phase I of financing

According to post-construction monitoring objectives, in June 2016 for noise level monitoring in this critical point CP 01 is not provided a measurements campaign. In post-construction period (in this main critical point CP 01 have been made reception of the construction work) frequency is biannual (as Table 1.1).

2.1.1.C. Soil quality monitoring

The activities carried out during 01/30 June 2016 related to soil quality monitoring, in this critical point are summarized in Table 2.1.1.C.1.

Table 2.1.1.C.1. Specific objective: soil quality monitoring

No.	Activities
1.	Organizing campaign 22 for soil sampling (Table 1.2)
2.	Campaign 22 for soil sampling (soil sampling bulletins - Annex 6.2.3)
3.	Field observations – lumbricides presence/absence
4.	Performing laboratory analysis (preliminary determinations) for physical-chemical characterization for soils
5.	Performing laboratory analysis (preliminary determinations) for physical-mechanical characterization for soils

Number of soil samples collected from CP01 is presented in Table 2.1.1.C.2.

Table 2.1.1.C.2. Soil samples

Type of Critical Point	Critical Point (CP)	Samples collected for laboratory analysis	
		depth 5 cm	depth 30 cm
Main	**CP 01**	3	3

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annex 6.2.3.

2.1.1.D. Hydromorphological monitoring

The activities from this reporting period are synthetically presented in Table 2.1.1.D.1:
Overall 3 main activities have been carried out:

- Single-beam bathymetric measurements for sections profiling;
- Flow and velocity measurements on the monitoring sections;
- Turbidity and level continuous measurements in the 5 automatic hydrometric stations have continued.

Table 2.1.1.D.1 Specific objective: hydromorphological monitoring

No.	Activities
1.	Single-beam bathymetric measurements for sections profiling
2.	Flow and velocity measurements on the monitoring sections
3.	Turbidity and level continuous measurements in the 5 automatic hydrometric stations

2.1.1.E. Water and sediments monitoring

The activities carried out during 01/30.06.2016, related to water and sediments quality monitoring, in this critical point are summarized in Table 2.1.1.E.1.

Table 2.1.1.E.1. Specific objective: water and sediments quality monitoring

No.	Activities
1.	Organizing the 60 th campaign for water and sediments sampling (Tabel 1.2)
2.	Performing water sampling campaign on cross sections at different depths (water sampling bulletins - Annex 6.2.4)
3.	Sampling campaign for sediments (sampling bulletins for sediments - Annex 6.2.5)
4.	Physical-chemical analysis for water samples
5.	Physical-chemical analysis in laboratory for water and sediments samples

In this sampling campaign were collected water and sediments samples as presented in Table 2.1.1.E.2.

Table 2.1.1.E.2. Water and sediments samples

Type of Critical Point	Critical Point (CP)	Water samples	Sediment samples
Main	01	20	8

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annexes 6.2.4 and 6.2.5.

2.1.1.F. Aquatic flora and fauna monitoring

The activities carried out during reporting period, regarding aquatic flora and fauna(except for ichtyofauna), are summarized in Table 2.1.1.F.1.

Table 2.1.1.F.1 Specific objective: aquatic flora and fauna monitoring

No.	Activities
1.	Organizing the sampling campaign for aquatic macroinvertebrates (Table 1.2)
2.	Conducting the sampling campaign for aquatic macroinvertebrates (sampling bulletins for aquatic flora and fauna - Annex 6.2.6)
3.	Preparing and laboratory analysis for benthic macroinvertebrates samples

From CP01 were collected benthic macroinvertebrates samples, as presented in Table 2.1.1.F.2.

Table 2.1.1.F.2 Benthic macroinvertebrates samples

Type of Critical Point	Critical Point (CP)	Section	Samples collected for laboratory analysis	
			Left bank	Right bank
Main	01	1	1	1
		2	1	1
		3	1	1
		4	1	1
TOTAL			**8**	

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annex 6.2.6.

2.1.1.F.is. Sturgeons and barbell migration monitoring

In June 2016 have been conducted maintenance activities and data downloading from the monitoring systems in CP 01 and were made measurements for velocities determination at water surface and on the riverbed bottom, in potential feeding habitats specific for sturgeons on Borcea branch km 62 and Bala branch km 4 and km 7, also in habitats of interest, specific for barbell species on Borcea branch, km 0 and km 43.

Desk activities included drafting of the Finalizing Report, for the construction stage in this critical point and Interim Report 13.

Table 2.1.1.F.is.1. Specific objective: Sturgeons and barbell migration monitoring

No.	Activities
1.	Data downloading from the monitoring systems and performing maintenance activities
2.	Velocities measurements in potential feeding habitats on Borcea and Bala branches
3.	Finalization Report for the construction phase, in critical point 01 on Bala branch
4.	Interim Report 13

2.1.1.F.i. Other fish species monitoring

In this month are not provided any scientific fishing activities. Have been processed data obtained from scientific fishing for the *Alosa* genus, in May.

2.1.1.G. Terrestrial flora and fauna monitoring

2.1.1.G.1 Terrestrial flora

No monitoring campaign for terrestrial flora in June 2016.

2.1.1.G.2 Terrestrial fauna/ Avifauna

The activities carried out during this reporting period, related to avifauna monitoring are summarized in Table 2.1.1.G.2.1.

Table. 2.1.1.G.2.1 Specific objective: Avifauna monitoring

No.	Activities
1.	Activities in field: - Aquatic avifauna observation from the shore - Nesting avifauna census – assessments on linear trails (transects) and observation points (point count)
2.	Analysis and processing of the field data

2.1.1.H. Natura 2000 sites monitoring

In this reporting period were monitored Natura 2000 sites in critical point area.

The activities carried out during reporting period, related to Natura 2000 sites monitoring, are summarized in Table 2.1.1.H.1.

Table. 2.1.1.H.1 Specific objective: Natura 2000 sites monitoring

No.	Activities
1.	Avifauna assessment in Natura 2000 sites: - **ROSPA0039 "Dunăre Ostroave"** – in CP01 area - **ROSCI0022 "Canaralele Dunării"** – in CP01 area Activities in field: - Aquatic avifauna observation from the shore - Nesting avifauna census – assessments on linear trails (transects) and observation points (point count)
2.	Analysis and processing of the field data

2.1.1.I. Working site activities monitoring and intervention plan compliance in case of accidental pollution

According to post-construction monitoring objectives are not necessary monitoring activities for the construction site.

2.1.2. Critical Point 02 monitoring, Epuraşu Island area (Lebăda)

2.1.2.A. Air quality monitoring

The activities carried out during 01/30.06.2016 related to air quality monitoring in this critical point are those presented in Table 2.1.1.A.1.

Table 2.1.2.A.1. Specific objective: Air quality monitoring

No.	Activities
1.	Contribution to Monthly Report 62 drafting
2.	Contribution to Finalization Report, phase I of financing

According to post-construction monitoring objectives, in June 2016 for air quality monitoring in this main critical point CP 02 is not provided a sampling campaign. In post-construction period (in this main critical point CP 02 have been made reception of the construction work) frequency is biannual (see Table 1.1).

2.1.2.B. Noise monitoring

The activities carried out in reporting period, regarding noise level monitoring, in this critical point are presented in Table 2.1.1.B.1.

Table 2.1.2.B.1. Specific objective: Noise monitoring

No.	Activities
1.	Contribution to Monthly Report 62 drafting
2.	Contribution to Finalization Report, phase I of financing

According to post-construction monitoring objectives, in June 2016 for noise level monitoring in this main critical point CP 02 is not provided a measurements campaign. In post-construction period (in this main critical point CP 02 have been made reception of the construction work) frequency is biannual (see Table 1.1).

2.1.2.C. Soil quality monitoring

Activities conducted during 01/30 June 2016, regarding soil quality monitoring in this critical point are those presented in Table 2.1.1.C.1.

Number of soil samples collected from CP02 in presented in Table 2.1.2.C.1.

Table 2.1.2.C.1. Soil samples

Type of Critical Point	Critical Point (CP)	Samples collected for laboratory analysis	
		depth 5 cm	depth 30 cm
Main	CP 02	3	3

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annex 6.2.3.

2.1.2.D. Hydromorphological monitoring

The activities from this reporting period are presented in table 2.1.2.D.1.
Overall 3 main activities have been carried out:

- Single-beam bathymetric measurements
- Flow and velocities measurements on the monitoring sections
- Turbidity and level continuous measurements in the 2 automatic hydrometric stations

Table 2.1.2.D.1 Specific objective: hydromorphological monitoring

No.	Activities
1.	Single-beam bathymetric measurements
2.	Flow and velocities measurements on the monitoring sections
3.	Turbidity and level continuous measurements in the 2 automatic hydrometric stations

In June 2016, were conducted - mainly – ADCP measurements (flow rates/velocities) provided in Specifications. Results will be presented in the Interim Report for this month.

2.1.2.E. Water and sediments monitoring

Activities performed during this reporting period, regarding water and sediment quality monitoring, reported to this critical point are those presented in Table 2.1.1.E.1.

In this campaign were collected water and sediments samples as presented in Table 2.1.2.E.1.

Table 2.1.2.E.1. Water and sediments samples

Type of Critical Point	Critical Point (CP)	Water samples	Sediment samples
Main	02	15	6

For each collected sample, a bulletin has completed, see Annexes 6.2.4 and 6.2.5.

2.1.2.F. Aquatic flora and fauna monitoring

Activities conducted in this reporting period, regarding aquatic flora and fauna(except for ichtyofauna), are summarized in Table 2.1.2.F.1.

Table 2.1.2.F.1 Specific objective: aquatic flora and fauna monitoring

No.	Activities
1.	Organizing the sampling campaign for aquatic macroinvertebrates (Table 1.2)
2.	Conducting the sampling campaign for aquatic macroinvertebrates (sampling bulletins for aquatic flora and fauna - Annex 6.2.6)
3.	Preparing and laboratory analysis for benthic macroinvertebrates samples

From CP02 were collected *benthic macroinvertebrates* samples, as presented in Table 2.1.2.F.2.

Table 2.1.2.F.2 Benthic macroinvertebrates samples

Type of Critical Point	Critical Point (CP)	Section	Qualitative and quantitative analysis	
			Left bank	Right bank
Main	02	3	1	1
		4	1	1
		5	1	1
TOTAL			**6**	

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annex 6.2.6.

2.1.2.F.is. Sturgeons and barbell migration monitoring

In CP02 have been studied sturgeons and barbell migration with the monitoring station fixed on Old Danube.

2.1.2.F.i. Other fish species monitoring

In this month are not provided any scientific fishing activities. Have been processed data obtained from scientific fishing for the *Alosa* genus, in May.

2.1.2.G. Terrestrial flora and fauna monitoring

2.1.2.G.1 Terrestrial flora

No campaign for terrestrial flora monitoring in June 2016.

2.1.2.G.2 Terrestrial fauna/ Avifauna

The activities carried out during reporting period, regarding to avifauna monitoring, are summarized in Table 2.1.2.G.2.1.

Table 2.1.2.G.2.1 Specific objective: Avifauna monitoring

No.	Activities
1.	Activities in field: - Aquatic avifauna observation from the shore - Nesting avifauna census – assessments on linear trails (transects) and observation points (point count)
2.	Analysis and processing of the field data

2.1.2.H. Natura 2000 sites monitoring

During this reporting period were monitored Natura 2000 sites, in critical points area and on adjacent lakes of this critcal point.

The activities carried out during reporting period, related to Natura 2000 sites monitoring, are summarized in Table 2.1.2.H.1.

Table. 2.1.2.H.1 Specific objective: Natura 2000 sites monitoring

No.	Activities
1.	Avifauna monitoring in Natura 2000 sites: - **ROSPA0039 "Dunăre Ostroave"** - in CP02 area - **ROSCI0022 "Canaralele Dunării"** - in CP02 area - in PC02-04 area: o **ROSCI0071 „Dumbrăveni - Valea Urluia - Lacul Vederoasa"** - in lake Baciului and Balta Vederoasa areas o **ROSPA0007 „Balta Vederoasa"** - in Balta Vederoasa and Baciului lakes areas o **ROSCI0172 „Pădurea and Valea Canaraua Fetii - Iortmac"** - in lakes Dunăreni, Iortmac and Oltina areas o **ROSPA0054 „Lacul Dunăreni"** in Dunăreni lake area o **ROSPA0056 „Lacul Oltina"** - in lakes Oltina and Iortmac areas Field activities: - Observations for aquatic avifauna from the shore - Census of nesting avifauna on linear trails (transects) and in observation points (point count)
2.	Analysis and processing of the field data

2.1.2.I. Work site activities monitoring and intervention plan compliance in case of accidental pollution

Due to completion of hydrotechnical construction, has not been necessary the construction site activity monitoring. Works reception have been made in November 26th, 2015.

2.1.3. Critical point 10 monitoring, Caleia Branch (Ostrovu Lupu)

2.1.3.A. Air quality monitoring

The activities carried out during 01/30.06.2016, regarding air quality monitoring for this critical point, are those presented in Table 2.1.1.A.1.

Table 2.1.3.A.1. Specific objective: Air quality monitoring

No.	Activities
1.	Contribution to Monthly Report 62 drafting
2.	Contribution to Finalization Report, phase I of financing

For main critical point CP10, in June 2016 have not been performed any monitoring activities for air quality, as a post-construction period (in this main critical point CP10 was done the reception of the construction work), frequency was biannual (as presented in Table 1.1).

2.1.3.B. Noise monitoring

The activities carried out during this reporting period, related to noise level monitoring, related to this critical point are those presented in Table 2.1.1.B.1.

Table 2.1.3.B.1. Specific objective: Noise monitoring

No.	Activities
1.	Contribution to Monthly Report 62 drafting
2.	Contribution to Finalization Report, phase I of financing

For critical point CP10, in June 2016 have not been performed any monitoring activities related to noise level, as a post-construction period (in this main critical point CP10 was done the reception of the construction works), frequency was biannual (as Table 1.1).

2.1.3.C. Soil quality monitoring

The activities carried out during 01/30 June 2016, regarding soil quality monitoring, in this critical point are those presented in Table 2.1.1.C.1.

Number of soil samples collected from CP10 is presented in Table 2.1.3.C.1.

Table 2.1.3.C.1. Soil samples

Type of Critical Point	Critical Point (CP)	Samples collected for laboratory analysis	
		depth 5 cm	depth 30 cm
Main	**CP 10**	3	3

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annex 6.2.3.

2.1.3.D. Hydrophological monitoring

Activities performed during this reporting period, are summarized in Table 2.1.3.D.1.
Overall, have been performed 3 main activities:

- Single-beam bathymetric measurements for sections profiling;
- Flow and velocity measurements on the monitoring sections;
- Have continued activities of continuous measurements for turbidity and level in the 3 hydrometrical automatic stations.

Table 2.1.3.D.1. Specific objective: hydromorphological monitoring

No.	Activities
1.	Single-beam bathymetric measurements for sections profiling
2.	Flow and velocity measurements on the monitoring sections
3.	Continuous measurements for turbidity and level in the 3 hydrometrical automatic stations

2.1.3.E. Water and sediments quality monitoring

The activities carried out in reporting period related to water and sediments quality in this critical point are those presented in Table 2.1.1.E.1.

In this campaign, water and sediments samples were collected as presented in Table 2.1.3.E.1.

Table 2.1.3.E.1. Water and sediments samples

Type of Critical Point	Critical Point (CP)	Water samples	Sediment samples
Main	10	15	6

For each sample has completed a bulletin as Annexes 6.2.4 and 6.2.5.

2.1.3.F. Aquatic flora and fauna monitoring

Activities performed in this reporting period, regarding aquatic flora and fauna(except for ichtyofauna), are summarized in Table 2.1.3.F.1.

Table 2.1.3.F.1 Specific objective: aquatic flora and fauna monitoring

No.	Activities
1.	Organizing the sampling campaign for aquatic macroinvertebrates (Table 1.2)
2.	Conducting the sampling campaign for aquatic macroinvertebrates (sampling bulletins for aquatic flora and fauna - Annex 6.2.6)
3.	Preparing and laboratory analysis for benthic macroinvertebrates samples

From CP10 were collected *benthic macroinvertebrates* samples, as presented in Table 2.1.3.F.2.

Table 2.1.3.F.2 Benthic macroinvertebrates samples

Type of Critical Point	Critical Point (CP)	Section	Qualitative and quantitative analysis	
			Left bank	Right bank
Main	10	1	1	1
		2	1	1
		3	1	1
TOTAL			**6**	

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annex 6.2.6.

2.1.3.F.is. Sturgeons and barbell migration monitoring

In CP10, during this month were conducted maintenance activities and data downloading from the systems placed on Caleia, Cravia branches and navigable Danube.

Measurements have been made in order to determine velocities at water surface and near riverbed bottom, in potential feeding habitats specific for sturgeons species on navigable Danube km 184, km 187, km 197 and km 195, Caleia branch km 9 and km 1, Cravia branch km 1 and Vâlciu branch km 1, also in habitats of interest specific for barbell species on Danube km 200 and km 182.

Desk activities included drafting of Interim Report 13.

Table 2.1.3.F.is.1. Specific objective: Monitoring for sturgeons and barbell migration

No.	Activities
1.	Data downloading from the monitoring systems and maintenance activities
2.	Velocities measurements in potential feeding habitats on Danube and Caleia, Cravia and Vâlciu branches
3.	Interim Report 13

2.1.3.F.i. Other fish species monitoring

In this month are not provided activities for scientific fishing. Have been processed data obtained after scientific fishing for *Alosa* species in May.

2.1.3.G. Terrestrial flora and fauna monitoring

2.1.3.G.1 Terrestrial flora

No terrestrial flora monitoring campaign during June 2016.

2.1.3.G.2 Terrestrial fauna/ Avifauna

The activities carried out in the reporting period related to avifauna monitoring, are summarized in Table 2.1.3.G.2.1.

Table. 2.1.3.G.2.1 Specific objective: Avifauna monitoring

No.	Activities
1.	Activities in field: - Observations for aquatic avifauna from the shore - Census of nesting avifauna – assessments on linear trails (transects) and observation points (point count)
2.	Analysis and processing of the field data

2.1.3.H. Natura 2000 sites monitoring

During this reporting period were monitored Natura 2000 sites, in critical points areas and of adjacent lakes.

The activities carried out during this reporting period, regarding Natura 2000 sites monitoring, are summarized in Table 2.1.3.H.1.

Table. 2.1.3.H.1 Specific objective: Natura 2000 sites monitoring

No.	Activities
1.	Avifauna assessment in Natura 2000 sites: - ROSCI0006 „Balta Mică a Brăilei" – in CP10 area - ROSPA0005 „Balta Mică a Brăilei" – in CP10 area - ROSCI0307 „Lacul Sărat – Brăila" – in Sărat lake area Field activities: - Observations for aquatic avifauna from the shore - Census of nesting avifauna - assessments on linear trails (transects) and observation points (point count)
2.	Analysis and processing of the field data

2.1.3.I. Work site activities monitoring and intervention plan compliance in case of accidental pollution

Due to completion of hydrotechical works has not been necessary the building site activity monitoring. Works reception was carried out on August 1st, 2014.

2.1.4. Monitoring in the critical points 03÷07

2.1.4.1. Monitoring in the CP 03 (upstream and downstream Seica)

2.1.4.1.A. Air quality monitoring

The activities carried out during 01/30.06.2016, related to air quality monitoring, for this secondary critical points are those presented in Table 2.1.4.1.A.1.

Table 2.1.4.1.A.1. Specific objective - air quality monitoring

No.	Activities
1.	Organizing the measurements campaign (Table 1.2)
2.	Conducting the sampling campaign for air (bulletins for air sampling - Annex 6.2.1)

In Table 2.1.4.1.A.2. is presented number of air samples collected/ measurements "in situ" made during 01-30 June 2016.

Table 2.1.4.A.2. Air samples repartition

Type of Critical Point	Critical Point (CP)	Samples collected for laboratory analysis	Number of "in situ" measurements
Secondary	03A and 03B	4	4

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample/measurement a bulletin has been completed, see Annex 6.2.1.

2.1.4.1.B. Noise level monitoring

The activities carried out during 01/30.06.2016, regarding noise level monitoring, for this secondary critical points are those presented in Table 2.1.4.1.B.1.

Table 2.1.4.1.B.1. Specific objective: noise monitoring

No.	Activities
1.	Measurements campaign for noise level in zero naval traffic/ naval traffic (noise level measurement bulletins - Annex 6.2.2)
2.	Initial processing for the data obtained after measurements

In this campaign for noise level monitoring, conducted during 01/30.06.2016, were made measurements as Table 2.1.4.1.B.2, below.

Table 2.1.4.1.B.2. Noise level monitoring

Type of Critical Point	Critical Point (CP)	No. of measurements	
		zero naval traffic	intense naval traffic
Secondary	03A	2	0
	03B	2	0

For each sampling point, has been determined geographical coordinates, then transcalculated in projection system STEREO'70. Samples were coded according to the encoding instructions. Also, for each measurement, a bulletin has been completed for noise level, as Annex 6.2.2.

2.1.4.1.C. Soil quality monitoring

The activities carried out during 01/30 June 2016 reporting period, related to soil quality monitoring, in this critical point are presented in Table 2.1.1.C.1.

Number of soil samples collected fom CP03 (A and B) is presented in Table 2.1.4.1.C.1.

Table 2.1.4.1.C.1. Soil samples

Type of Critical Point	Critical Point (CP)	Samples collected for laboratory analysis	
		depth 5 cm	depth 30 cm
Secondary	CP 03A	2	2
Secondary	CP 03B	2	2

For each sampling point, have been determined geographical coordinates. Samples were

labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annex 6.2.3.

2.1.4.1.D. Hydromorphological monitoring

No activities regarding hydromorphological monitoring during this period.

2.1.4.1.E. Water and sediments quality monitoring

During this period have not been made water and sediments sampling.

2.1.4.1.F. Aquatic flora and fauna monitoring

Activities conducted during this reporting period, regarding aquatic flora and fauna (except for ichtyofauna) are summarized in Table 2.1.4.1.F.1.

Table 2.1.4.1.F.1 Specific objective: aquatic flora and fauna monitoring

No.	Activities
1.	Organizing the sampling campaign for aquatic macroinvertebrates (Table 1.2)
2.	Conducting the sampling campaign for aquatic macroinvertebrates (sampling bulletins for aquatic flora and fauna - Annex 6.2.6)
3.	Preparing and laboratory analysis for benthic macroinvertebrates samples

In Table 2.1.4.1.F.4. are presented the samples of *benthic macroinvertebrates* collected from CP 03.

Table 2.1.4.1.F.4 Benthic macroinvertebrates samples

Type of Critical Point	Critical Point (CP)		Samples collected for laboratory analysis	
			Left bank	Right bank
Secondary	03A	upstream	1	1
		downstream	1	1
	03B	upstream	1	1
		downstream	1	1
TOTAL			**8**	

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annex 6.2.6.

2.1.4.1.F.is. Sturgeons and barbell migration monitoring

Monitoring of sturgeons migration have been conducted on this sector by the monitoring systems placed between km 348 and km 240, on Old Danube.

2.1.4.1.F.i. Other fish species monitoring

In this month are not provided any scientific fishing activities. Have been processed data obtained from scientific fishing for the *Alosa* genus, in May.

2.1.4.1.G. Terrestrial flora and fauna monitoring

2.1.4.1.G.1 Terrestrial flora

No campaign for terrestrial flora monitoring in June 2016.

2.1.4.1.G.2 Terrestrial fauna / Avifauna

The activities carried out during this reporting period, regarding avifauna monitoring, are summarized in Table 2.1.4.1.G.2.1.

Table. 2.1.4.1.G.2.1 Specific objective: Avifauna monitoring

No.	Activities
1.	Field activities: - Observations for aquatic avifauna from the shore - Census of nesting avifauna - assessments on linear trails (transects) and observation points (point count)
2.	Analysis and processing for field data

2.1.4.1.H. Natura 2000 sites monitoring

During this reporting period were monitored Natura 2000 sites in critical points area and on lake adjacent to critical point.

The activities carried out during reporting period, regarding Natura 2000 sites monitoring, are summarized in Table 2.1.4.1.H.1.

Table. 2.1.4.1.H.1 Specific objective: Natura 2000 sites monitoring

No.	Activities
1.	Avifauna monitoring in Natura 2000 sites: - **ROSPA0039 "Dunăre Ostroave"** - in PC03 area - **ROSCI0022 "Canaralele Dunării"** - in PC03 area - in PC02-04 area: o **ROSCI0071 „Dumbrăveni - Valea Urluia - Lacul Vederoasa"** - in lake Baciului and Balta Vederoasa areas o **ROSPA0007 „Balta Vederoasa"** - in Balta Vederoasa and Baciului lakes areas o **ROSCI0172 „Pădurea and Valea Canaraua Fetii - Iortmac"** - in lakes Dunăreni, Iortmac and Oltina areas o **ROSPA0054 „Lacul Dunăreni"** in Dunăreni lake area o **ROSPA0056 „Lacul Oltina"** - in lakes Oltina and Iortmac areas Field activities: - Observations for aquatic avifauna from the shore - Census of nesting avifauna - assessments on linear trails (transects) and observation points (point count)
2.	Analysis and processing for field data

2.1.4.1.I. Work site activities monitoring and intervention plan compliance in case of accidental pollution

Because the hydrotechnical works have not started, was not necessary the monitoring of construction site activity.

2.1.4.2. Critical point 04 monitoring/Ceacâru/Fermecatu

2.1.4.2.A. Air quality monitoring

The activities carried out during 01/30.06.2016, related to air quality monitoring, in this secondary critical points are those presented in Table 2.1.4.1.A.1.

In Table 2.1.4.2.A.1. is presented the number of air samples collected/ measurements "in situ" conducted during 01-30 June 2016.

Table 2.1.4.2.A.1. Air samples repartition

Type of Critical Point	Critical Point (CP)	Samples collected for laboratory analysis	Number of "in situ" measurements
Secondary	04A and 04B	4	4

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample/measurement, a bulletin has been completed, see Annex 6.2.1.

2.1.4.2.B. Noise level monitoring

The activities carried out during 01/30.06.2016, regarding noise level monitoring, for this secondary critical points are those presented in Table 2.1.4.1.B.1.

In this campaign for noise level monitoring conducted during 01/30.06.2016, have been made measurements as presented in Table 2.1.4.2.B.1, below.

Table 2.1.4.2.B.1. Noise level monitoring

Type of Critical Point	Critical Point (CP)	No. of measurements	
		zero naval traffic	Intense naval traffic
Secondary	04A	2	0
	04B	2	0

For each sampling point were established the geographical coordinates, then been transcalculated in STEREO'70 projection system. Measurements were coded according to the encoding instructions. Also, for each measurement, a bulletin for noise level has been completed, see Annex 6.2.2.

2.1.4.2.C. Soil quality monitoring

The activities carried out during 01/30 June 2016, regarding soil quality monitoring, in this critical point are those presented in Table 2.1.1.C.1.

Number of soil samples collected from CP04 (A and B) is presented in Table 2.1.4.2.C.1.

Table 2.1.4.2.C.1. Soil samples

Type of Critical Point	Critical Point (CP)	Samples collected for laboratory analysis	
		depth 5 cm	depth 30 cm
Secondary	**CP 04A**	2	2
Secondary	**CP 04B**	2	2

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annex 6.2.3.

2.1.4.2.D. Hydromorphological monitoring

No activities regarding hydromorphological monitoring during this period.

2.1.4.2.E. Water and sediments quality monitoring

During this period have not been made any water and sediments sampling.

2.1.4.2.F. Aquatic flora and fauna monitoring

Activities conducted during this reporting period, regarding aquatic flora and fauna (except for ichtyofauna) are summarized in Table 2.1.4.2.F.1.

Table 2.1.4.2.F.1 Specific objective: aquatic flora and fauna monitoring

No.	Activities
1.	Organizing the sampling campaign for aquatic macroinvertebrates (Table 1.2)
2.	Conducting the sampling campaign for aquatic macroinvertebrates (sampling bulletins for aquatic flora and fauna - Annex 6.2.6)
3.	Preparing and laboratory analysis for benthic macroinvertebrates samples

În Table 2.1.4.2.F.4. are presented the samples of *benthic macroinvertebrates* collected from CP 04.

Table 2.1.4.2.F.4 Benthic macroinvertebrates samples

Type of Critical Point	Critical Point (CP)		Samples collected for laboratory analysis	
			Left bank	Right bank
Secondary	04A	upstream	1	1
		downstream	1	1
	04B	upstream	1	1
		downstream	1	1
TOTAL			**8**	

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annex 6.2.6.

2.1.4.2.F.is. Sturgeons and barbell migration monitoring

Monitoring of sturgeons migration was performed on this sector by the monitoring systems placed between km 347 and km 240 on Old Danube.

2.1.4.2.F.i. Other fish species monitoring

In this month are not provided any scientific fishing activities. Have been processed data obtained from scientific fishing for the *Alosa* genus, in May.

2.1.4.2.G. Terrestrial flora and fauna monitoring

2.1.4.2.G.1 Terrestrial flora

No monitoring campaign regarding terrestrial flora monitoring in June 2016.

2.1.4.2.G.2 Terrestrial fauna/Avifauna

The activities carried out during this reporting period, regarding avifauna monitoring, are summarized in Table 2.1.4.2.G.2.1.

Table. 2.1.4.2.G.2.1 Specific objective: Avifauna monitoring

No.	Activities
1.	Field activities: - Observations for aquatic avifauna from the shore - Census of nesting avifauna - assessments on linear trails (transecte) and observation points (point count)
2.	Analysis and processing for field data

2.1.4.2.H. Natura 2000 monitoring sites

During this reporting period were monitored Natura 2000 sites, in critical points area and on adjacent lakes.

The activities carried out during reporting period, regarding Natura 2000 sites monitoring, are summarized in Table 2.1.4.2.H.1.

Table. 2.1.4.2.H.1 Specific objective: Natura 2000 sites monitoring

No.	Activities
1.	Avifauna monitoring in Natura 2000 sites: - **ROSPA0039 "Dunăre Ostroave"** – in PC04 area - **ROSCI0022 "Canaralele Dunării"** – in PC04 area - in PC02-04 area: o **ROSCI0071 „Dumbrăveni - Valea Urluia - Lacul Vederoasa"** – in lake Baciului and Balta Vederoasa areas o **ROSPA0007 „Balta Vederoasa"** – in Balta Vederoasa and Baciului lakes areas o **ROSCI0172 „Pădurea and Valea Canaraua Fetii - Iortmac"** – in lakes Dunăreni, Iortmac and Oltina areas o **ROSPA0054 „Lacul Dunăreni"** in Dunăreni lake area o **ROSPA0056 „Lacul Oltina"** – in lakes Oltina and Iortmac areas Field activities: - Observations for aquatic avifauna from the shore - Census of nesting avifauna - assessments on linear trails (transecte) and observation points (point count)
2.	Analysis and processing for field data

2.1.4.2.I. Monitoring the building site activities and the compliance with the intervention plan in case of accidental pollution

The monitoring of the construction site was not necessary for this period of time because the hydrotechnical works have not been started.

2.1.4.3. Critical Point CP 07 / Fasolele monitoring

2.1.4.3.A. Air quality monitoring

The activities carried out during 01/30.06.2016, regarding air quality monitoring, for this secondary critical point are those presented in Table 2.1.4.1.A.1.

In Table 2.1.4.3.A.1. is presented the number of air samples collected/measurements "in situ" during 01-30 June 2016.

Table 2.1.4.3.A.1. Air samples repartition

Type of Critical Point	Critical Point (CP)	Samples collected for laboratory analysis	Number of "in situ" measurements
Secondary	07	2	2

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample/measurement, a bulletin has been completed, see Annex 6.2.1.

2.1.4.3.B. Noise level monitoring

The activities carried out during 01/30.06.2016, regarding noise level monitoring, related to these secondary critical points, are those presented in Table 2.1.4.1.B.1.

In this campaign for noise level monitoring, conducted during 01/30.06.2016, were made measurements as presented in Table 2.1.4.3.B.1, below.

Table 2.1.4.3.B.1. Noise level monitoring

Type of Critical Point	Critical Point (CP)	No. of measurements	
		zero naval traffic	intense naval traffic
Secondary	07	2	0

For each sampling point were established the geographical coordinates, then been transcalculated in STEREO'70 projection system. Measurements were coded according to the encoding instructions. Also, for each measurement, a bulletin for noise level has been completed, see Annex 6.2.2.

2.1.4.3.C. Soil quality monitoring

The activities carried out during 01/30 iunie 2016, related to soil quality monitoring, related to this critical point are those presented in Table 2.1.1.C.1.

Number of soil samples collected from CP07 is presented in Table 2.1.4.3.C.1.

Table 2.1.4.3.C.1. Soil samples

Type of Critical Point	Critical Point (CP)	Samples collected for laboratory analysis	
		depth 5 cm	depth 30 cm
Secondary	CP 07	2	2

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annex 6.2.3.

2.1.4.3.D. Hydromorphological monitoring

No activities regarding hydromorphological monitoring during this period.

2.1.4.3.E. Water and sediments quality monitoring

During this period have not been made water and sediments sampling.

2.1.4.3.F. Aquatic flora and fauna monitoring

The activities carried out during this reporting period, regarding aquatic flora and fauna (except for ichtyofauna) are summarized in Table 2.1.4.3.F.1.

Tabel. 2.1.4.3.F.1 Specific objective: aquatic flora and fauna monitoring

No.	Activities
1.	Organizing the sampling campaign for aquatic macroinvertebrates (Table 1.2)
2.	Conducting the sampling campaign for aquatic macroinvertebrates (sampling bulletins for aquatic flora and fauna - Annex 6.2.6)
3.	Preparing and laboratory analysis for benthic macroinvertebrates samples

In Table 2.1.4.3.F.4. are presented *benthic macroinvertebrates* samples collected from CP07.

Table 2.1.4.3.F.4 Benthic macroinvertebrates samples

Type of Critical Point	Critical Point (CP)		Qualitative and quantitative analysis	
			Left bank	Right bank
Secondary	07	upstream	1	1
		downstream	1	1
TOTAL			**4**	

For each sampling point, have been determined geographical coordinates. Samples were labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annex 6.2.6.

2.1.4.3.F.is. Sturgeons and barbell migration monitoring

Sturgeons migration monitoring were performed on this sector by the monitoring systems placed between km 348 and km 240 on Old Danube.

2.1.4.3.F.i. Other fish species monitoring

In this month are not provided any scientific fishing activities. Have been processed data obtained from scientific fishing for the *Alosa* genus, in May.

2.1.4.3.G. Terrestrial flora and fauna monitoring

2.1.4.3.G.1 Terrestrial flora

No campaign for terrestrial flora monitoring during June 2016.

2.1.4.3.G.2 Terrestrial fauna / Avifauna

The activities carried out during reporting period, regarding avifauna monitoring, are summarized in Table 2.1.4.3.G.2.1.

Table. 2.1.4.3.G.2.1 Specific objective: Avifauna monitoring

No.	Activities
1.	Field activities: - Observations for aquatic avifauna from the shore - Census of nesting avifauna - assessments on linear trails (transects) and observation points (point count)
2.	Analysis and processing for field data

2.1.4.3.H. Natura 2000 sites monitoring

During this reporting period were monitored Natura 2000 sites in critical point area.

Activities performed during this reporting period, regarding Natura 2000 sites monitoring, are summarized in Table 2.1.4.3.H.1.

Table 2.1.4.3.H.1 Specific objective: Natura 2000 sites monitoring

No.	Activities
1.	Avifauna assessment in Natura 2000 sites: - **ROSPA0039 "Dunăre Ostroave"** – in CP07 area - **ROSCI0022 "Canaralele Dunării"** – in CP07 area Field activities: - Observations for aquatic avifauna from the shore - Census of nesting avifauna - assessments on linear trails (transects) and observation points (point count)
2.	Analysis and processing for field data

2.1.4.3.I. Work site activities monitoring and intervention compliance plan in case of accidental pollution

Because there have not been conducted any hydrotechnical works during this period, the monitoring of the construction site activity was not necessary.

2.2. Stage of 3D numerical modeling

In June, INCDPM specialists have achieve, according to Specifications, bathymetric data acquisition in main critical points CP01, CP02 and CP10 areas. Thus, for this activity have been performed:

- bathymetric measurements for morphology and for sections profiling;
- bathymetric measurements for velocity and flow rates;
- longitudinal bathymetric measurements for bottom sill geometry determination.

3. MEMBERS OF THE EXPERTS TEAM

3.1. Members of the experts team

Team's members who carried out activities in the reporting period and the number of days worked by each expert are schematically presented in Table 3.1.

Table 3.1. Members of the team experts

No.	Experts	Names of experts	Number of working days post-construction
1.	Project manager	Deák György	5
2.	Chemist 1	Ghiță Gina	8
3.	Chemist 2	Borș Adriana	6
4.	Ichthyologist 1	Cristea Victor	8
5.	Ichthyologist 2	Falka Istvan	3
6.	Hydrology	Poteraș George	8
7.	Hydraulic sedimentology	Ungureanu Gh Viorel	12
8.	Phytoplankton and aquatic macrophytes	Marinescu Florica	0
9.	Zooplankton	Adina Popescu	0
10.	Terrestrial invertebrates	Șerban Cecilia	3
11.	Aquatic macroinvertebrates	Florea Luiza	10
12.	Terrestrial flora and vegetation	Frink Jozsef Pal	4
13.	Ornithologist 1	Jozsef Szabo	15
14.	Ecologist 1	Ambrus Laszlo	4
15.	Ecologist 2	Zaharia Tania	6
16.	Assessor	Tudor Marian	8

3.2. Experts' tasks during the project

The tasks accomplished by experts on each phase/activity/critical point are presented in Experts' Activity Reports (Annex 6.3).

3.3. Planning the activities for the next month on each phase/activity/critical point

The monitoring activities for the period of 01–31 July 2016 are synthetically presented in the table 3.4.

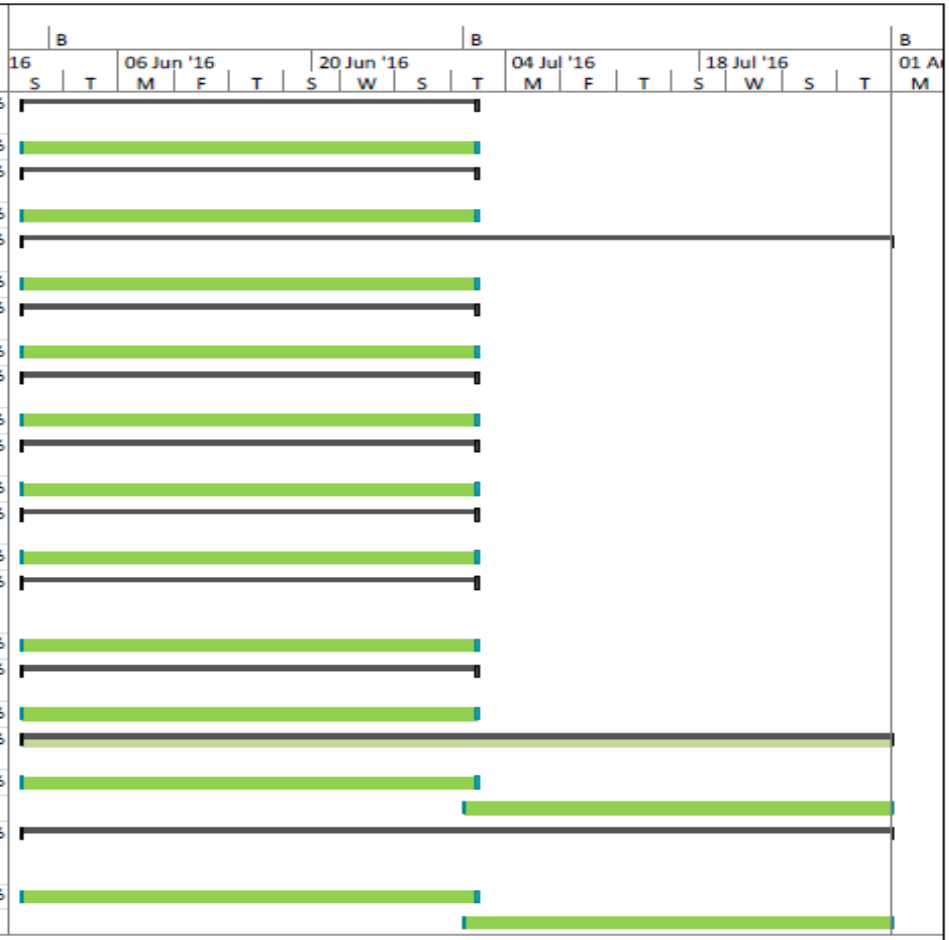
Table 3.4. Activities for the period of 01-31.07.2016

No.	ACTIVITIES	Critical points							
		Main critical points			Secondary critical points				
		01	02	10	03A	03B	04A	04B	07
1.	Further campaign of measurements, field observations (where is necessary)	YES	YES	YES	YES	YES	YES	YES	YES
2.	Processing and interpretation of field and laboratory data (where is necessary)	YES	YES	YES	YES	YES	YES	YES	YES
3.	Monthly report preparation	YES	YES	YES	YES	YES	YES	YES	YES

4. TIME SCHEDULE AND BUDGET PROJECT

4.1. Time schedule for project implementation

ID	Task Name	Start
1	Hydromorphological monitoring in CP 01/CP 02/CP10 - Single-beam measurements - sections profiling	Mon 30.05.16
2	Month 62	Mon 30.05.16
3	Hydromorphological monitoring in CP 01/CP 02/CP10 - Flow rate monitoring (volume, velocity, level)	Mon 30.05.16
4	Month 62	Mon 30.05.16
5	Hydromorphological monitoring in CP 01/CP 02/CP 10 - level and turbidity measurements in automatic hydrometric stations of INCDPM	Mon 30.05.16
6	Month 62	Mon 30.05.16
7	Soil monitoring CP 01, CP02, CP10, CP03 (A+B), CP04 (A+B), CP07 - lumbricides presence, abundance	Mon 30.05.16
8	Month 62	Mon 30.05.16
9	Soil monitoring CP 01, CP02, CP10, CP03 (A+B), CP04 (A+B), CP07 - mineral salts, humic acids, organic matter, physical-chemical	Mon 30.05.16
10	Month 62	Mon 30.05.16
11	Water quality monitoring CP01, CP02, CP10 - Sediments (heavy metals, organic micropollutants)	Mon 30.05.16
12	Month 62	Mon 30.05.16
13	Water quality monitoring CP01, CP02, CP10 - Water (physical-chemical analysis)	Mon 30.05.16
14	Month 62	Mon 30.05.16
15	Aquatic Fauna Monitoring - CP 01/02/10/03A/03B/04A/04B/07 - Aquatic macroinvertebrates - laboratory analysis, composition, abundance, biomass, saprobic index	Mon 30.05.16
16	Month 62	Mon 30.05.16
17	Monitoring of avifauna covered by Birds Directive in CP 01/02/3A/3B/4A/4B/07/10 - birds monitoring in Natura 2000 sites	Mon 30.05.16
18	Month 62	Mon 30.05.16
19	Ichthyofauna Biodiversity Monitoring in CP 01/02/10/03/04/07 - Monitoring the migration trails and seasons for tagged sturgeons	Mon 30.05.16
20	Month 62	Mon 30.05.16
21	Month 63	Fri 01.07.16
22	Ichthyofauna Biodiversity Monitoring in CP 01/10 - Velocity measurements in feeding habitats on Old Danube, Cravia, Caleia, Valciu, Borcea and Bala branches	Mon 30.05.16
23	Month 62	Mon 30.05.16
24	Month 63	Fri 01.07.16



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ID	Task Name	Start
25	Ichthyofauna Biodiversity Monitoring in CP 01/02/10 - data downloading from the monitoring systems and maintenance activities	Mon 30.05.16
26	Month 62	Mon 30.05.16
27	Month 63	Fri 01.07.16
28	Ichthyofauna biodiversity monitoring in CP 01/02/10/03/04/07 - processing the data obtained after scientific fishing for shad	Mon 30.05.16
29	Month 62	Mon 30.05.16
30	Ichthyofauna Biodiversity Monitoring in CP 01 - Drafting of Final Report construction phase, critical point 01, Bala branch	Mon 30.05.16
31	Month 62	Mon 30.05.16
32	Noise monitoring: Processing the data obtained for noise monitoring in critical points, for Final Report drafting phase I of financing; contribution to phase Report CP01	Mon 30.05.16
33	Month 62	Mon 30.05.16
34	Noise monitoring (zero and intense traffic) in secondary critical points CP 03A/03B/04A/04B/07	Mon 30.05.16
35	Month 62	Mon 30.05.16
36	Air monitoring: Processing the data obtained for air monitoring in critical points, for Final Report drafting phase I of financing; contribution to phase Report CP01	Mon 30.05.16
37	Month 62	Mon 30.05.16
38	Air monitoring: Performing the sampling and measurements campaigns in secondary critical points CP 03A/03B/04A/04B/07	Mon 30.05.16
39	Month 62	Mon 30.05.16
40	Noise monitoring: Preparing the measurements campaign for noise level in the field, in main critical points CP01, 02 and 10	Fri 01.07.16
41	Month 63	Fri 01.07.16
42	Air monitoring: Processing and asses. of the data and measurements obtained for air quality, in critical points CP03A/03B/04A/04B/07	Fri 01.07.16
43	Month 63	Fri 01.07.16
44	Air monitoring: Preparing the sampling campaign in the field for air quality, in main critical points CP01, 02 and 10	Fri 01.07.16
45	Month 63	Fri 01.07.16
46	Monthly reports	Wed 01.06.16
47	Month 62	Wed 01.06.16
48	Month 63	Fri 01.07.16

4.2. Budget and expenses incurred during the reporting period

Justifying calculation for 01 – 30 June 2016

I. EXPERTS EXPENSES				
No.	Experts	No. of working days Post - Construction (36 months)	Fee (Euro on working day)	Maximum total value of the fees
1	Project leader	5	240	1.200,00 EUR
2	Chemist 1	8	200	1.600,00 EUR
3	Chemist 2	6	200	1.200,00 EUR
4	Ichtyologist 1	8	330	2.640,00 EUR
5	Ichtyologist 2	3	200	600,00 EUR
6	Hydrology	8	200	1.600,00 EUR
7	Hydraulic- sedimentlogy	12	200	2.400,00 EUR
8	Aquatic phytoplankton and macropytes	0	130	0,00 EUR
9	Zooplankton	0	130	0,00 EUR
10	Terrestrial invertebrates	3	125	375,00 EUR
11	Aquatic macroinvertebrates	10	125	1.250,00 EUR
12	Terrestrial flora and fauna	4	125	500,00 EUR
13	Ornithologist 1	15	200	3.000,00 EUR
14	Ecologist 1	4	140	560,00 EUR
15	Ecologist 2	6	140	840,00 EUR
16	Evaluator	8	330	2.640,00 EUR
SUBTOTAL EXPERTS' FEES				20.405,00 EUR
II. EXPENSES with JUSTIFICATION				
1	Ichtyology- telemetry (sturgeons and barbel transmitters, batteries, expensis on stugeons' capturing)			0,00 EUR
2	Abiotic and biotic data for the establishment of the framework			0,00 EUR
3	Analysis			0,00 EUR
SUBTOTAL EXPENSES with JUSTIFICATION				0,00 EUR
III. MATHEMTICAL MODELING				
1	Softaware acquisiton+hardware+ necessary licenses			0,00 EUR
2	Acquisition of bathymetric data, necessary for the mathematical modeling			15.961,75 EUR
3	Training of 2 specialists in numerical modeling			0,00 EUR
4	Fee for the numerical modeling expert			0,00 EUR
5	3D numerical model and implementation in 3D monitoring			0,00 EUR
SUBTOTAL NUMERICAL MODELING				15.961,75 EUR
TOTAL without V.A.T.				36.366,75 EUR

4.3. Budget and expenses for the next period

Estimated calculation for 01 – 31 July 2016

I. EXPERTS EXPENSES				
No	Experts	No. of working days Post - Construction (36 monts)	Fee (Euro on working day)	Maximum total value of the fees
1	Project leader	5	240	1.200,00 EUR
2	Chemist 1	8	200	1.600,00 EUR
3	Chemist 2	6	200	1.200,00 EUR
4	Ichtyologist 1	8	330	2.640,00 EUR
5	Ichtyologist 2	3	200	600,00 EUR
6	Hydrology	8	200	1.600,00 EUR
7	Hydraulic- sedimentlogy	12	200	2.400,00 EUR
8	Aquatic phytoplankton and macropytes	7	130	910,00 EUR
9	Zooplankton	0	130	0,00 EUR
10	Terrestrial invertebrates	0	125	0,00 EUR
11	Aquatic macroinvertebrates	4	125	500,00 EUR
12	Terrestrial flora and fauna	10	125	1.250,00 EUR
13	Ornithologist 1	3	200	600,00 EUR
14	Ecologist 1	4	140	560,00 EUR
15	Ecologist 2	6	140	840,00 EUR
16	Evaluator	8	330	2.640,00 EUR
SUBTOTAL EXPERTS' FEES				18.540,00 EUR
II. EXPENSES with JUSTIFICATION				
1	Ichtyology- telemetry (sturgeons and barbel transmitters, batteries, expensis on stugeons' capturing)			0,00 EUR
2	Abiotic and biotic data for the establishment of the framework			
3	Analysis			0,00 EUR
SUBTOTAL EXPENSES with JUSTIFICATION				0,00 EUR
III. MATHEMTICAL MODELING				
1	Softaware acquisiton+hardware+ necessary licenses			0,00 EUR
2	Acquisition of bathymetric data, necessary for the mathematical modeling			17.000,00 EUR
3	Training of 2 specialists in numerical modeling			0,00 EUR
4	Fee for the numerical modeling expert			0,00 EUR
5	3D numerical model and implementation in 3D monitoring			0,00 EUR
SUBTOTAL NUMERICAL MODELING				17.000,00 EUR
TOTAL without V.A.T.				35.540,00 EUR

5. CONCLUSIONS, RECOMMENDATIONS, WARNINGS

5.1 This Monthly Report reflects monitoring activities from June 2016 related to post-construction period.

5.2 For the specific monitoring objectives within this phase, the Provider considered that the field and laboratory activities, logistics and infrastructure be sized so as to be according to the graphs and stipulations mentioned in the Specifications.

5.3 Taking into consideration the importance of the construction works that take place on Danube, on the section between Calarasi and Braila, the Consortium recommends further actions on biodiversity monitoring, with the frequency related with the post-construction stage, up to end of the project, in order to ensure an informational volume, with a high confidence level, to allow if necessary, the development of preventive solutions.

5.4 In June 2016, hydromorphological monitoring activity mainly based on ADCP measurements (flow rates and velocities) in main critical points area: CP01, CP02 and CP10, as well as from single-beam measurements for sections profiling in the 3 main critical points, in conditions with normal flow rates for this period of the year.

6. ANNEXES

6.1 Relevant correspondence

6.2 Recording bulletins for sampling/measurements

6.2.1: AIR sampling sheets

6.2.2: NOISE sampling sheets

6.2.3: SOIL sampling sheets

6.2.4: WATER sampling sheets

6.2.5: SEDIMENTS sampling sheets

6.2.6: AQUATIC FLORA and FAUNA sampling sheets

6.3 Experts' activity reports

6.4 Images of activities

6.5 Hydromorphological monitoring

6.6 Ichtyofauna monitoring

6.6.1: Velocities on analized profiles

6.7 Avifauna monitoring

6.8 Natura 2000 sites monitoring