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. 65

01 – 30 September 2016

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 objectives for the period 01-30 September 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			August			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 - May / August – December)			Two seasons / year (February - May / August – December)				
		BARBELL		One season/year April- May (breeding season)			One season/year April- May (breeding season)				
	F. i OTHER FISH SPECIES			Annually (April- May, July - September)			Annually (April- May, July - September)				
G.	TERRESTRIAL FLORA			Annually in July			Annually in July				
	TERRESTRIAL FAUNA/ AVIFAUNĂ			Annually (April - June, September - October, January)			Annually (April - June, September - October, January)				
H.	NATURA 2000 SITES	SCI	ICHTYOFAUNA	Annually (April- May, July - September)			Annually (April- May, 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 (April - June, September - October, January)			Annually (April - June, September - October, January)				
		SPA	AVIFAUNĂ	Annually (April - June, September - October, January)			Annually (April - 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 September 2016 for post-construction period are presented in Table 1.2.

Table 1.2. Objectives monitored during the period of 01-30.09.2016

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	28-29.09.2016	62	NO	NO	NO	YES	YES	YES	YES	YES
B.	NOISE	28-29.09.2016	65	NO	NO	NO	YES	YES	YES	YES	YES
C.	SOIL	20.09.2016	C23	NO	NO	NO	YES	YES	YES	YES	YES
D.	HYDROMORPHOLOGY	01-02, 05-09, 19-22.09.2016	C65	YES	YES	YES	**NO**	NO	NO	NO	NO
E.	WATER QUALITY	06.09.2016, 20.09.2016	C61	YES	YES	YES	YES	YES	YES	YES	YES
	SEDIMENTS	06.09.2016, 20.09.2016	C61	YES	YES	YES	YES	YES	YES	YES	YES
F.	AQUATIC FLORA	06.09.2016 20.09.2016	C23 - macrophytes C24- phytoplankton	NO	NO	NO	YES	YES	YES	YES	YES
	AQUATIC FAUNA	06.09.2016	C24	YES	YES	YES	YES	YES	YES	YES	YES
	F.is. STURGEONS	01, 06, 07, 28.09.2016	C25	YES	YES	YES	YES	YES	YES	YES	YES
	F.is. BARBELL	-	-	NO	NO	NO	NO	NO	NO	NO	NO
	F.i. OTHER FISH SPECIES	28.09.2016	C10	NO	NO	YES	NO	NO	NO	NO	NO
G.	TERRESTRIAL FLORA	-	-	NO	NO	NO	NO	NO	NO	NO	NO
	TERRESTRIAL FAUNA/ AVIFAUNĂ	01-13.09.2016	Autumn migration	YES	YES	YES	YES	YES	YES	YES	YES
H.	NATURA 2000 SITES	06-09.09.2016	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, 40 CP
	Boat ANA 5.5 with trailer, Suzuki engine, 70 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
	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

Objectives monitored		Sampling equipment	Laboratory equipments / ongoing activities
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 01/30.09.2016 refers to air quality monitoring for each critical point are presented 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 65
2.	Contribution to Interim Report RI 14

According to post-construction monitoring objectives, in September 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 CP01 have been made the reception of the construction work) frequency is biannual (as Table 1.1).

2.1.1.B. Noise monitoring

The activities carried out during 01/31.09.2016 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 65
2.	Contribution to Interim Report 14

According to post-construction monitoring objectives, in September 2016 for noise level monitoring in this main critical point CP 01 is not provided a measurements campaign. In post-construction period (in this main critical point CP01 have been made the reception of the construction work) frequency is biannual (as Table 1.1).

2.1.1.C. Soil quality monitoring

During this period have not been made soil sampling in this critical point.

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 of high resolution;
- 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 of high resolution
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 01/30.09.2016, 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 campaign 61 for water and sediments sampling (Table 1.2)
2.	Performing water sampling campaign on cross-sections at various depths (sampling bulletins for water - Annex 6.2.4)
3.	Performing sediments sampling campaign (sampling bulletins for sediments - Annex 6.2.5)
4.	Physical-chemical analysis in the field for water samples
5.	Physical-chemical analysis in laboratory for water and sediments samples

In this 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	Sediments samples
Main	01	20	8

For each sampling point, have been determined geographical coordinates. Samples were coded and labeled according to the encoding and labeling instructions. For each sample, a bulletin has been completed, see Annexes 6.2.4 şi 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.	Laboratory analysis for aquatic macroinvertebrates samples
4.	Processing and analysis of the obtained results

Benthic macroinvertebrates samples were collected from CP01 according to data 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 September were marked with ultrasonic tags, two specimen of barbell at km 43 on Borcea branch. For these sturgeons have been done also an active tracking with VR100 device in order to determine their behavior in the first period after tagging.

During the month, have been downloaded all monitoring systems from this critical point, but have not been recorded any fish passing over the bottom sill on Bala branch.

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

No.	Activities
1.	Data downloading and maintenance actions for the monitoring systems
2.	Marking with ultrasonic tag for 2 specimens of barbell species, on Borcea branch, km 43

No.	Activities
3.	Active tracking with VR 100 of sturgeons tagged in September
4.	Monitoring of the migration paths

2.1.1.F.i. Other fish species monitoring

In this critical point were not been performed field activities and data processing.

2.1.1.G. Terrestrial flora and fauna monitoring

2.1.1.G.1 Terrestrial flora

During this period have not been made monitoring activities for terrestrial flora.

2.1.1.G.2 Terrestrial fauna/ Avifauna

The activities carried out during this reporting period, regarding 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.	Field activities: - Observations for aquatic and migratory avifauna from the shore - Observations for aquatic and migratory avifauna from the boat
2.	Processing and analysis of the field data

2.1.1.H. Natura 2000 sites monitoring

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

The activities carried out during this reporting period, regarding 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 in CP01 area: - **ROSPA0039 "Dunăre Ostroave"** - **ROSCI0022 "Canaralele Dunării"** Field activities: - Observations for aquatic and migratory avifauna from the shore - Observations for aquatic and migratory avifauna from the boat
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, Epurașu Island area (Lebăda)

2.1.2.A. Air quality monitoring

The activities carried out during 01/30.09.2016 related to air quality monitoring in this critical point are those presented in Table 2.1.1.A.1.

According to post-construction monitoring objectives, in September 2016 for air quality monitoring in this main critical point CP02 is not provided a sampling campaign. In post-construction period (in this main critical point CP02 have been made the reception of the construction work) frequency is biannual (as 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.

According to post-construction monitoring objectives, in September 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 CP02 have been made the reception of the construction work) frequency is biannual (as Table 1.1).

2.1.2.C. Soil quality monitoring

In this period has not been made any soil sampling.

2.1.2.D. Hydromorphological monitoring

The activities from this reporting period are summarized in table 2.1.2.D.1.

Overall 3 main activities have been carried out:

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

Table 2.1.2.D.1 Specific objective: hydromorphological monitoring

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

In September 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. Probe de apă şi sedimente

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

For each sample, a bulletin has been completed, see Annex 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.	Laboratory analysis for collected aquatic macroinvertebrates samples
4.	Processing and preliminary analysis of obtained results

From CP 02 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 migration with the monitoring station fixed on Old Danube.

2.1.2.F.i. Other fish species monitoring

No field activities or data processing have been made in this critical point.

2.1.2.G. Terrestrial flora and fauna monitoring

2.1.2.G.1 Terrestrial flora

In this period have not been made monitoring activities for terrestrial flora.

2.1.2.G.2 Terrestrial fauna/ Avifauna

Activities conducted in this reporting period, regarding 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.	Field activities: - Observations for aquatic and migratory avifauna from the shore - Observations for aquatic and migratory avifauna from the boat
2.	Analysis and processing of the field data

2.1.2.H. Natura 2000 sites monitoring

In this reporting period were monitored Natura 2000 sites in critical points and in Dobrogea lakes areas, due to the importance of islets in birds autumn migration.

The activities carried out during this reporting period, regarding 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 assessments in Natura 2000 sites: - **ROSPA0039 "Dunăre Ostroave"** – in CP02 area - **ROSCI0022 "Canaralele Dunării"** in CP02 area - In zona PC02-04: ○ **ROSCI0071 „Dumbrăveni - Valea Urluia - Lacul Vederoasa"** – in Baciului and Balta Vederoasa lakes areas ○ **ROSPA0007 „Balta Vederoasa"** – in Balta Vederoasa and Baciului lake areas ○ **ROSCI0172 „Pădurea and Valea Canaraua Fetii - Iortmac"** – in Dunăreni, Iortmac and Oltina lakes areas ○ **ROSPA0054 „Lacul Dunăreni"** in Dunăreni lake area ○ **ROSPA0056 „Lacul Oltina"** - in Oltina and Iortmac lakes areas Field activities: - Observations for aquatic and migratory avifauna from the shore - Observations for aquatic and migratory avifauna from the boat
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 this reporting period, regarding air quality, in this critical point are those presented in Table 2.1.1.A.1.

For main critical point CP10, in September 2016 have not been made monitoring activities for air quality, as a post-construction period (in this main critical point CP10 have been made the reception of the construction work) frequency is biannual (as Table 1.1).

2.1.3.B. Noise monitoring

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

For main critical point CP10, in September 2016 have not been made monitoring activities for noise level, as a post-construction period (in this main critical point CP10 have been made the reception of the construction work) frequency is biannual (as Table 1.1).

2.1.3.C. Soil quality monitoring

In this period soil samples have not been collected.

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 were collected water and sediments samples 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	Sediments samples
Main	10	15	6

For each sample, a bulletin has been completed, see Annex 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.	Laboratory analysis for collected aquatic macroinvertebrates samples
4.	Processing and preliminary analysis of obtained results

In this campaign 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

Monitoring of sturgeons migration was made with monitoring systems on Caleia, Cravia branches and navigable Danube.

2.1.3.F.i. Other fish species monitoring

In September, the research team went to critical point 10 for electrical fishing from shore, to identify the ichtyofauna composition of the area and establish the relative abundance and biomass per each species. All specimens captured during fishing were measured and weighed before being released into the natural environment. The data obtained by researchers were processed at the office.

2.1.3.G. Terrestrial flora and fauna monitoring

2.1.3.G.1 Terrestrial flora

In this period have not been made monitoring activities for terrestrial flora.

2.1.3.G.2 Terrestrial fauna/ Avifauna

Activities conducted in this reporting period, regarding 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.	Field activities: - Observations for aquatic and migratory avifauna from the shore - Observations for aquatic and migratory avifauna from the boat
2.	Analysis and processing of the field data

2.1.3.H. Natura 2000 sites monitoring

In this reporting period were monitored Natura 2000 sites in critical points and in Dobrogea lakes areas, due to the importance of islets in birds autumn migration.

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 in CP10 area: - **ROSCI0006 „Balta Mică a Brăilei”** - **ROSPA0005 „Balta Mică a Brăilei”** - **ROSCI0307 „Lacul Sărat - Brăila”** Field activities: - Aquatic and migratory avifauna observations from the shore - Aquatic and migratory avifauna observations from the boat -
2.	Analysis and processing for 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 01/30.09.2016 refers to air quality monitoring for each secondary critical points are 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.	Performing air sampling campaign (bulletins for air sampling - Annex 6.2.1)

In Table 2.1.4.1.A.2. is presented the number of air samples collected/ measurements “in situ” made during 01-30 September 2016.

Table 2.1.4.1.A.2. Air samples repartition

Type of Critical Point	Critical Point (CP)	Samples collected for laboratory analysis	Number of "in situ" measurements
Secondary	03 A and 03 B	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 01/30.09.2016 refers to noise level monitoring for each secondary critical points are presented in Table 2.1.4.1.B.1.

Table 2.1.4.1.B.1. Specific objective: Noise level monitoring

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

In this campaign for noise level monitoring, performed during 01/30.09.2016, have been made measurements according to 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	03 A	2	0
	03 B	2	0

For each sampling point there have been established geographic coordinates which were then transcalculated in the STEREO'70 projection system. The 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.

2.1.4.1.C. Soil quality monitoring

The activities carried out during 01/30 September 2016 regarding soil quality monitoring in this critical point are summarized Table 2.1.4.1.C.1.

Table 2.1.4.1.C.1. Specific objective: soil monitoring

No.	Activities
1.	Organizing campaign 23 for soil sampling (Table 1.2)
2.	Campaign 23 for soil sampling (soil sampling bulletins - Annex 6.2.3)
3.	Field observations – presence/absence of lumbricides
4.	Laboratory analysis (preliminary determinations) for physical-chemical characterization of soils

Number of soil samples collected from CP03 (A and B) is presented in Table 2.1.4.1.C.2.

Table 2.1.4.1.C.2. 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 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

The activities carried out in this reporting period, regarding water and sediments quality in this critical point, are identical with those presented for CP01 (Table 2.1.1.E.1.).

In this campaign were collected water and sediments samples as presented in Table 2.1.4.1.E.1.

Table 2.1.4.1.E.1. Water and sediments samples

Type of Critical Point	Critical Point (CP)	Water samples	Sediments samples
Secondary	03A	10	4
Secondary	03B	10	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 (Annex 6.2.4 and 6.2.5).

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 phytoplankton, macrophytes and aquatic macroinvertebrates (Table 1.2)
2.	Conducting the sampling campaign for phytoplankton, macrophytes and aquatic macroinvertebrates (sampling bulletins for aquatic flora and fauna - Annex 6.2.6)
3.	Laboratory analysis for phytoplankton and aquatic macroinvertebrates collected samples
4.	Processing and preliminary analysis of obtained results

In this campaign, from CP03 were collected *phytoplankton samples* as presented in Table 2.1.4.1.F.2.

Table 2.1.4.1.F.2 Phytoplankton samples

Type of Critical Point	Critical Point (CP)		Samples collected for laboratory analysis							
			Qualitative analysis				Quantitative analysis			
			Left bank	Thalweg	Right bank	Average sample	Left bank	Thalweg	Right bank	Average sample
Secondary	03	03A	1	1	1	1	1	1	1	1
		03B	1	1	1	1	1	1	1	1
TOTAL			**6**			**2**	**6**			**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 6.2.6.

From CP03 were collected *macrophytes samples*, the number is presented Table 2.1.4.1.F.3.

Table 2.1.4.1.F.3. Macrophytes samples

Type of Critical Point	Critical Point (CP)		Qualitative and quantitative 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.

In Table 2.1.4.1.F.4. are presented ***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

No field activities or data processing have been made in this critical point.

2.1.4.1.G. Terrestrial flora and fauna monitoring

2.1.4.1.G.1 Terrestrial flora

During this period have not been made monitoring activities for terrestrial flora.

2.1.4.1.G.2 Terrestrial fauna / Avifauna

Activities conducted in 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: - Aquatic and migratory avifauna observations from the shore - Aquatic and migratory avifauna observations from the boat
2.	Analysis and processing of the field data

2.1.4.1.H. Natura 2000 sites monitoring

In this reporting period were monitored Natura 2000 sites in critical points and in Dobrogea

lakes areas, due to the importance of islets in birds autumn migration.

The activities carried out during this 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 assessment in Natura 2000 sites: - **ROSPA0039 "Dunăre Ostroave"** – in CP03 area - **ROSCI0022 "Canaralele Dunării"** – in CP03 area - in PC02-04 area: ○ **ROSCI0071 „Dumbrăveni - Valea Urluia - Lacul Vederoasa"** – in lake Baciului and Balta Vederoasa areas ○ **ROSPA0007 „Balta Vederoasa"** – in Balta Vederoasa and Baciului lakes areas ○ **ROSCI0172 „Pădurea and Valea Canaraua Fetii - Iortmac"** – in lakes Dunăreni, Iortmac and Oltina areas ○ **ROSPA0054 „Lacul Dunăreni"** in Dunăreni lake area ○ **ROSPA0056 „Lacul Oltina"** – in lakes Oltina and Iortmac areas Field activities: - Observations for aquatic and migratory avifauna from the shore - Observations for aquatic and migratory avifauna from the boat
2.	Analysis and processing for the 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 01/30.09.2016 regarding air quality monitoring for each secondary critical points are 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" made during 01-30 September 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	04 A and 04 B	4	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 6.2.1.

2.1.4.2.B. Noise level monitoring

The activities carried out during 01/30.09.2016 regarding noise level monitoring for each secondary critical points are presented in Table 2.1.4.1.B.1.

In this campaign for noise level monitoring performed during 01/30.09.2016, 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	04 A	2	0
	04 B	2	0

For each sampling point there have been established geographic coordinates which were then transcalculated in the STEREO'70 projection system. The 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 01/30.09.2016 regarding soil quality monitoring in this critical point are presented in Table 2.1.4.1.C.1.

The 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

The activities carried out during this reporting period, regarding regarding water and sediments quality, in this critical point are identical with those presented for CP01 (Table 2.1.1.E.1.)

In this campaign were collected water and sediments samples as presented in Table

2.1.4.2.E.1.

Table 2.1.4.2.E.1. Water and sediments samples

Type of Critical Point	Critical Point (CP)	Water samples	Sediments samples
Secondary	04A	10	4
Secondary	04B	10	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 (Annex 6.2.4 and 6.2.5).

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 sampling campaign for phytoplankton, macrophytes and aquatic macronivertebrates (Table 1.2)
2.	Performing sampling campaign phytoplankton, macrophytes and aquatic macronivertebrates (sampling bulletins for aquatic flora and fauna – Annex 6.2.6)
3.	Laboratory analysis for phytoplankton and aquatic macronivertebrates collected samples
4.	Processing and analysis for obtained results

In this campaign, from CP04 were collected ***phytoplankton*** samples for quantitative and qialitative analysis, as presented in Table 2.1.4.2.F.2.

Table 2.1.4.2.F.2. Phytoplankton samples

Type of Critical Point	Critical Point (CP)		Samples collected for laboratory analysis							
			Qualitative analysis				Quantitative analysis			
			Left bank	Thalweg	Right bank	Average sample	Left bank	Thalweg	Right bank	Average sample
Secondary	04	04A	1	1	1	1	1	1	1	1
		04B	1	1	1	1	1	1	1	1
TOTAL			**6**			**2**	**6**			**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 6.2.6.

From CP04 were collected ***macrophytes*** samples, their number is presented in Table

2.1.4.2.F.3.

Table 2.1.4.2.F.3. Macrophytes samples

Type of Critical Point	Critical Point (CP)		Qualitative and quantitative 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.

In Table 2.1.4.2.F.4. are presented ***benthic macroinvertebrates*** samples 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

No field activities or data processing have been made in this critical point.

2.1.4.2.G. Terrestrial flora and fauna monitoring

2.1.4.2.G.1 Terrestrial flora

During this period have not been made monitoring activities for terrestrial flora.

2.1.4.2.G.2 Terrestrial fauna/Avifauna

Activities conducted in 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 and migratory avifauna from the shore - Observations for aquatic and migratory avifauna from the boat - Birds ringing camp
2.	Analysis and processing for the field data

2.1.4.2.H. Natura 2000 monitoring sites

In this reporting period were monitored Natura 2000 sites in critical points and in Dobrogea lakes areas, due to the importance of islets in birds autumn migration.

The activities carried out during this 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 assessment in Natura 2000 sites: - **ROSPA0039 "Dunăre Ostroave"** – in CP04 area - **ROSCI0022 "Canaralele Dunării"** – in CP04 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 and migratory avifauna from the shore - Observations for aquatic and migratory avifauna from the boat
2.	Analysis and processing for the 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

Activities performed during 01/30.09.2016, 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 sample collected/measurements "in situ" made during 01-30 September 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

Activities performed during 01/30.09.2016, regarding noise level monitoring, in this secondary critical point are those presented in Table 2.1.4.1.B.1.

In this campaign for noise level monitoring, performed during 01/30.09.2016, have been 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 there have been established geographic coordinates which were then transcalculated in the STEREO'70 projection system. The 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

Activities performed during 01/30.09.2016, regarding soil quality monitoring, in this critical point, were summarized in Table 2.1.4.1.C.1.

Number of soil samples collected from CP07 is presented 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

Activities conducted during this reporting period, regarding water and sediments quality, in this critical point are identical with those presented for CP01 (Table 2.1.1.E.1.).

In this campaign were collected water and sediments samples as presented in Table 2.1.4.3.E.1.

Table 2.1.4.3.E.1. Water and sediments samples

Type of Critical Point	Critical Point (CP)	Water samples	Sediments samples
Secondary	07	10	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 (Annex 6.2.4 and 6.2.5).

2.1.4.3.F. Aquatic flora and fauna monitoring

Activities conducted during this reporting period, regarding aquatic fauna and flora acvatică (except for ichtyofauna) are summarized in Table 2.1.4.3.F.1.

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

No.	Activities
1.	Organizing sampling campaign for phytoplankton, macrophytes and aquatic macronivertebrates (Table 1.2)
2.	Performing sampling campaign phytoplankton, macrophytes and aquatic macronivertebrates (sampling bulletins for aquatic flora and fauna – Annex 6.2.6)
3.	Laboratory analysis for phytoplankton and aquatic macronivertebrates collected samples
4.	Processing and analysis for obtained results

In this campaign, from CP07 have been collected ***phytoplankton samples*** for quantitative and qualitative analysis, as presented in Table 2.1.4.3.F.2.

Table 2.1.4.3.F.2. Phytoplankton samples

Type of Critical Point	Critical Point (CP)	Samples collected for laboratory analysis							
		Qualitative analysis				Quantitative analysis			
		Left bank	Thalweg	Right bank	Average sample	Left bank	Thalweg	Right bank	Average sample
Secondary	07	1	1	1	1	1	1	1	1
TOTAL		**3**			**1**	**3**			**1**

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.

In Table 2.1.4.3.F.3. is presented the number of samples collected in this campaign from CP07 for ***macrophytes*** analysis.

Table 2.1.4.3.F.3. Macrophytes 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.

In Table 2.1.4.3.F.4. are presented ***benthic macroinvertebrates*** collected from CP 07.

Table 2.1.4.3.F.4. Benthic macroinvertebrates benthic

Type of Critical Point	Critical Point (CP)		Samples collected for laboratory 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

No field activities or data processing have been made in this critical point.

2.1.4.3.G. Terrestrial flora and fauna monitoring

2.1.4.3.G.1 Terrestrial flora

During this period have not been made monitoring activities for terrestrial flora.

2.1.4.3.G.2 Terrestrial fauna / Avifauna

Activities conducted in this 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: - Aquatic and migratory avifauna observations from the shore - Aquatic avifauna observations and migratory from the boat
2.	Analysis and processing for field data

2.1.4.3.H. Natura 2000 sites monitoring

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

The activities carried out 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 in CP07 area: - **ROSPA0039 "Dunăre Ostroave"** - **ROSCI0022 "Canaralele Dunării"** Field activities regarding autumn migration: - Observations for aquatic and migratory avifauna from the – Observations for aquatic and migratory avifauna from the shore
2.	Analysis and processing of the field data

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

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

2.2. Stage of 3D numerical modeling

In September, 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	10
3.	Chemist 2	Borș Adriana	6
4.	Ichthyologist 1	Cristea Victor	6
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	13
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	0
13.	Ornithologist 1	Jozsef Szabo	20
14.	Ecologist 1	Ambrus Laszlo	3
15.	Ecologist 2	Zaharia Tania	5
16.	Assessor	Tudor Marian	6

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 01–31 October 2016 are synthetically presented in the table 3.3.

Table 3.3. Activities for the period of 01-31.10.2016

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

4.2. Budget and expenses incurred during the reporting period

Justifying calculation for 01 – 30 September 2016

I. CHELTUIELI CU EXPERŢII :				
Nr. crt.	Experti	Nr. zile Post - Constructie (36 luni)	Onorariu (Euro pe zi lucrătoare)	Valoarea totala maxima a onorariilor
1	Conducator proiect	5	240	1.200,00 EUR
2	Chimist 1	10	200	2.000,00 EUR
3	Chimist 2	6	200	1.200,00 EUR
4	Ihtiolog 1	6	330	1.980,00 EUR
5	Ihtiolog 2	3	200	600,00 EUR
6	Hidrologie	8	200	1.600,00 EUR
7	Hidraulic sedimentologic	12	200	2.400,00 EUR
8	Fitoplancton si macrofite acvatice	13	130	1.690,00 EUR
9	Zooplancton	0	130	0,00 EUR
10	Nevertebrate terestre	3	125	375,00 EUR
11	Macronevertebrate acvatice	15	125	1.875,00 EUR
12	Flora si vegetatia terestra	0	125	0,00 EUR
13	Ornitolog 1	20	200	4.000,00 EUR
14	Ecolog 1	3	140	420,00 EUR
15	Ecolog 2	5	140	700,00 EUR
16	Evaluator	6	330	1.980,00 EUR
SUBTOTAL ONORARII EXPERTI				22.020,00 EUR
II. CHELTUIELI CU JUSTIFICARE:				
1	Ihiologie-telemetrie (transmitatoare sturioni, transmitatoare mreana, baterii,cheltuieli privind captura sturioni)			133,12 EUR
2	Date biotice si abiotice pentru stabilirea cadrului de baza			0,00 EUR
3	Analize			0,00 EUR
SUBTOTAL CHELTUIELI CU JUSTIFICARE:				133,12 EUR
III. MODELARE MATEMATICA				
1	Achiziţia pachetului de software + hardware + licentele necesare			0,00 EUR
2	Achiziţia datelor batimetrice necesare modelării matematice			22.103,20 EUR
3	Instruire 2 specialişti în modelare numerică			0,00 EUR
4	Onorariu expert modelare numerica			0,00 EUR
5	Elaborarea model matematic 3D si implementare in monitorizare 3D			0,00 EUR
SUBTOTAL MODELARE NUMERICĂ:				22.103,20 EUR
TOTAL fara T.V.A.				44.256,32 EUR

4.3. Budget and expenses for the next period

Estimated calculation for 01 – 31 October 2016

I. CHELTUIELI CU EXPERȚII :				
Nr. crt.	Experti	Nr. zile	Onorariu (Euro pe zi lucrătoare)	Valoarea totala maxima a onorariilor
		Post - Constructie (36 luni)		
1	Conducator proiect	5	240	1.200,00 EUR
2	Chimist 1	5	200	1.000,00 EUR
3	Chimist 2	5	200	1.000,00 EUR
4	Ihtiolog 1	5	330	1.650,00 EUR
5	Ihtiolog 2	3	200	600,00 EUR
6	Hidrologie	8	200	1.600,00 EUR
7	Hidraulic sedimentologic	12	200	2.400,00 EUR
8	Fitoplancton si macrofite acvatice	0	130	0,00 EUR
9	Zooplancton	0	130	0,00 EUR
10	Nevertebrate terestre	0	125	0,00 EUR
11	Macronevertebrate acvatice	0	125	0,00 EUR
12	Flora si vegetatia terestra	0	125	0,00 EUR
13	Ornitolog 1	15	200	3.000,00 EUR
14	Ecolog 1	3	140	420,00 EUR
15	Ecolog 2	5	140	700,00 EUR
16	Evaluator	6	330	1.980,00 EUR
SUBTOTAL ONORARII EXPERTI				15.550,00 EUR
II. CHELTUIELI CU JUSTIFICARE:				
1	Ihiologie-telemetrie (transmitatoare sturioni, transmitatoare mreana, baterii,cheltuieli privind captura sturioni)			5.000,00 EUR
2	Date biotice si abiotice pentru stabilirea cadrului de baza			0,00 EUR
3	Analize			0,00 EUR
SUBTOTAL CHELTUIELI CU JUSTIFICARE:				5.000,00 EUR
III. MODELARE MATEMATICA				
1	Achiziția pachetului de software + hardware + licentele necesare			0,00 EUR
2	Achiziția datelor batimetrice necesare modelării matematice			35.000,00 EUR
3	Instruire 2 specialiști în modelare numerică			0,00 EUR
4	Onorariu expert modelare numerica			0,00 EUR
5	Elaborarea model matematic 3D si implementare in monitorizare 3D			0,00 EUR
SUBTOTAL MODELARE NUMERICĂ:				35.000,00 EUR
TOTAL fara T.V.A.				55.550,00 EUR

5. CONCLUSIONS, RECOMMENDATIONS, WARNINGS

5.1 This Monthly Report reflects monitoring activities from September 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 September 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 average 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 Reports of analytical results during 1 – 31 August 2016

6.6.1: Reports for AIR analytical results

6.7 Ichtyofauna monitoring

6.7.1: Sturgeons capture centralizer

6.7.2: Capture sheets

6.8 Avifauna monitoring

6.9 Natura 2000 sites monitoring