



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURII



Institutul Național de Cercetare-Dezvoltare
pentru Protecția Mediului



Instrumente Structurale
2007-2013



PROGRAMUL OPERATIONAL NAȚIONAL TRANSPORT
TRANS
Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II

MONTHLY REPORT NO. 36: 1 – 30 April 2014

ANNEX 6.3.

EXPERTS' ACTIVITY REPORTS



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURII



Institutul Național de Cercetare-Dezvoltare
pentru Protecția Mediului



Instrumente Structurale
2007-2013



PROGRAMUL OPERATIONAL NAȚIONAL TRANSPORT
TRANS
Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II

MONTHLY REPORT NO. 36: 1 – 30 April 2014

6.3.1. Expert position: PROJECT LEADER EXPERT- Deák György

MONTHLY REPORT 1 - 30 April 2014

NO	ACTIVITIES	DESCRIPTION	RESULTS
1	Elaboration of the Monthly Report no. 36	<ul style="list-style-type: none"> ○ Covering issues according to AFDJ Galati guidelines 	Monthly Report 36
2	Communication of the project phase and results to the beneficiary - AFDJ Galați	<ul style="list-style-type: none"> ○ Elaboration of the addresses sent to AFDJ Galati ○ Participation at the progress meeting 	
3	Coordination and checking of the field monitoring activity	<ul style="list-style-type: none"> ○ Checking the continuous monitoring stations, velocity measurements and bathymetry ○ Checking the monitoring stations for sturgeons ○ Checking the sampling campaigns ○ Checking the building site activities 	
4	Coordination of the project implementation team and permanent monitoring of the progress of proposed activities for the reporting period	<ul style="list-style-type: none"> ○ Field visits for activities monitoring ○ Working meetings 	
5	Approval of monthly activity reports of the experts		
6	Checking and approving the documents elaborated in 36 th month of project activity		
7	Coordinate the completion of Interim Report 8		
8	Elaboration of the project activities program for the next period (1 - 31 May 2014)		

Project leader,
PhD eng. Deák György



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURII



Institutul Național de Cercetare-Dezvoltare
pentru Protecția Mediului



Instrumente Structurale
2007-2013



PROGRAMUL OPERATIONAL NAȚIONAL TRANSPORT
TRANS
Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II

MONTHLY REPORT NO. 36: 1 – 30 April 2014

6.3.2. Expert position: WATER AND SOIL MONITORING EXPERT - Gina Ghiță

MONTHLY REPORT 1 - 30 April 2014

NO	ACTIVITIES	DESCRIPTION	RESULTS
1.	ORGANISING SAMPLING CAMPAIGN FOR WATER AND SEDIMENTS	<ul style="list-style-type: none"> ▪ Preparation of sampling recipients (differently, according to chemical indicators) for soil, water and sediments; ▪ Preparation of reagents to fix water samples in field conditions; ▪ Laboratory and field AMC's calibration; ▪ Preparation of reagents set for field and laboratory analysis 	<ul style="list-style-type: none"> ▪ Assurance of proper conditions for the sampling campaign
2.	SAMPLING CAMPAIGN FOR WATER AND SEDIMENTS (26.04.2014) (28.04.2014)	<ul style="list-style-type: none"> ▪ Water and sediments sampling from CP 01, 02, 10 ▪ The conformation to the geographical coordinates for each sampling point has been checked; ▪ The samples have been labeled; ▪ For each water and sediment sample has completed a registration bulletin for the sampling activity; ▪ Field analysis were performed (pH, temperature, dissolved oxygen, turbidity) regarding water quality; ▪ Water samples have been fixed according to actual standards to determine indicators in the laboratory 	<ul style="list-style-type: none"> ▪ 50 water samples ▪ 20 sediment samples
3.	PHYSICAL-CHEMICAL LABORATORY ANALYSIS	<ul style="list-style-type: none"> ▪ Conducting the specific standard procedures for analytical data quality assurance. 	<ul style="list-style-type: none"> ▪ Preliminary data regarding water and sediment quality
4.	OTHER ACTIVITIES	<ul style="list-style-type: none"> ▪ Participation at the monthly Report 36 	

Expert,
PhD eng. Gina GHIȚĂ

Project leader,
PhD eng. DEÁK György



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURII



Institutul Național de Cercetare-Dezvoltare
pentru Protecția Mediului



Instrumente Structurale
2007-2013



PROGRAMEL OPERATIONAL SECTORIAL TRANSPORT
TRANS
Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II

MONTHLY REPORT NO. 36: 1 – 30 April 2014

6.3.3. Expert position: AIR AND NOISE MONITORING EXPERT - BORȘ ADRIANA (chemist 2)

MONTHLY REPORT 1 - 30 April 2014

NO	ACTIVITIES	DESCRIPTION	RESULTS
1.	Measurements campaign for noise level, 36 th campaign (1,14.04.2014)	For main critical points (01, 02 and 10)	Punctual values of noise level
2.	Measurements/sampling campaign for air, campaign no. 33 (1,14.04.2014)	For main critical points (01, 02 and 10)	Preliminary values of the air quality indicators
3.	Data processing	Processing of the data measured in the field	Analysis bulletins
4.	Other activities	<ul style="list-style-type: none"> ○ Participation at the meetings of the project team, in order to plan the future activities ○ Contribution to the 36th monthly report (Chapters: Air and Noise Monitoring) 	Monthly Report no.36

Expert,
PhD chem. Adriana Borș

Project Leader,
PhD eng. DEÁK György



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURII



Institutul Național de Cercetare-Dezvoltare
pentru Protecția Mediului



Instrumente Structurale
2007-2013



PROIECTUL OPERATIONAL NAȚIONAL TRANSPORT
TRANS
Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II

MONTHLY REPORT NO. 36: 1 – 30 April 2014

6.3.4 Expert position: ICHTYOLOGIST 1 EXPERT - Sturgeons and barbell- Adrian Ionașcu

MONTHLY REPORT 1 - 30 April 2014

NO.	ACTIVITIES	DESCRIPTION	RESULTS
1.	Marking for sturgeons	32 sturgeon have been captured and marked with ultrasonic and spaghetti “anti-poaching” tags.	marked fish
2.	Marking for barbell	5 barbells have been captured and marked with ultrasonic and spaghetti “anti-poaching” tags.	marked fish
3.	Sturgeons and barbell migration monitoring	<ul style="list-style-type: none"> Monitoring the sturgeon and barbell migration with submersible automatic stations VR2W. 	recordings
4.	Bathimetric profiles	Bathimetric profiles carried out in potential breeding areas	profiles
5.	Velocities measurements in potential breeding areas on Borcea branch	Obtaining the data related to velocities in potential breeding areas	measurements results
6.	Benthic samples in potential breeding areas	Benthic fauna has been collected from potential breeding areas	collected samples
7.	Other activities	<ul style="list-style-type: none"> Contribution to the Monthly Report no.36 and Interim Report 7 Equipment preparation for spring migration season Preparation and submission of the documentation in order to obtain the permits for scientific fishing 	

Expert,
PhD biol. Adrian Ionașcu

Project Leader,
PhD eng. DEÁK György



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURII



Institutul Național de Cercetare-Dezvoltare
pentru Protecția Mediului



Instrumente Structurale
2007-2013



PROGRAMUL OPERATIONAL NAȚIONAL TRANSPORT
TRANS
Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II

MONTHLY REPORT NO. 36: 1 – 30 April 2014

6.3.5 Expert position: ICHTHYOLOGIST EXPERT 2 - Other fish species - Istvan Falka

MONTHLY REPORT 01 - 30 April 2014

NO.	ACTIVITIES	DESCRIPTION	RESULTS
1.	Shad migration monitoring and biometric measurements	Biometric measurements for captured shads, identification in GIS system for fishing nets in critical points	- biometric data for shad - migration monitoring for 2 shad species
2.	Preliminary analysis for previous obtained data	Biometric analysis for the data obtained from previous capture of other fish species, with electrical shore fishing, electrical deep fishing (electrified nets), fishing with fixed and drifting nets in critical points 01, 02, 03 A and B, 04 A and B, 07 and 10	- fish population characterization; - species composition, structure on size classes, distribution, abundance, habitat preference
3.	Other activities	Contribution to the Monthly Report no.36	Monthly Report

Expert,
PhD. biol. FALKA Istvan

Project Leader,
PhD eng. DEÁK György



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURII



Institutul Național de Cercetare-Dezvoltare
pentru Protecția Mediului



Instrumente Structurale
2007-2013



PROGRAMUL OPERATIONAL NAȚIONAL TRANSPORT
TRANS
Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II

MONTHLY REPORT NO. 36: 1 – 30 April 2014

6.3.6. Expert position: HYDROLOGY EXPERT - PhD eng. George POTERAȘ

MONTHLY REPORT 1 - 30 April 2014

NO.	ACTIVITIES	DESCRIPTION	RESULTS
1.	Turbidity, temperature and relative level data processing, recorded in the automatic stations in April 2014	Statistical processing of level, temperature and turbidity data recorded in April 2014 in automatic stations from CP01, CP02 and CP10	Statistical indicators, turbidity and temperature variation graphics, hodographs of the relative and absolute water level, water gradients, correlations between the automatic monitoring stations
2.	Contribution to the Monthly Report no 36	Data processing and interpretation	Hydrology subchapter elaboration for the hydromorphological monitoring activity and Annex 6.5

Expert,
PhD eng. George POTERAȘ

Project Leader,
PhD eng. Deák György



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURII



Institutul Național de Cercetare-Dezvoltare
pentru Protecția Mediului



Instrumente Structurale
2007-2013



PROGRAMUL OPERATIONAL NAȚIONAL TRANSPORT
TRANS
Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II

MONTHLY REPORT NO. 36: 1 – 30 April 2014

6.3.7. Expert position: HYDRAULIC SEDIMENTOLOGY EXPERT - Gh. Viorel UNGUREANU

MONTHLY REPORT 1 - 30 April 2014

NO.	ACTIVITIES	DESCRIPTION	RESULTS
1.	MONITORING CAMPAIGN (01-04, 09-11, 14-17, 22, 23, 28-30.04.2014)	Single-beam bathymetric measurements in the main critical points and on the monitoring sections	Raw and processed bathymetric data, transversal bathymetric profiles
2.	MONITORING CAMPAIGN (01-04, 09-11, 14-17, 22, 23, 28-30.04.2014)	Flow and velocity measurements in critical points and on monitoring sections	Unprocessed flow and velocity data
3.	MONITORING CAMPAIGN (01-04, 09-11, 14-17, 22, 23, 28-30.04.2014)	Weekly water velocity measurements on 5 transversal sections near the automatic monitoring stations for turbidity and level, CP01	Unprocessed velocity data
4.	OTHER ACTIVITIES	Continuation of flow and velocity measurements processing from previous months	Processed velocity and flow data Velocities sections
		Contributions to the Monthly Report no 36	Hydromorphology chapter and Annex 6.5

Expert,
PhD eng. Gh. Viorel UNGUREANU

Project Leader,
PhD eng. DEÁK György



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURII



Institutul Național de Cercetare-Dezvoltare
pentru Protecția Mediului



Instrumente Structurale
2007-2013



PROGRAMUL OPERATIONAL NAȚIONAL TRANSPORT
TRANS
Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II MONTHLY REPORT NO. 36: 1 – 30 April 2014

6.3.8 Expert position: PHYTOPLANKTON AND MACROPHYTES EXPERT- Florica Marinescu

MONTHLY REPORT 1 - 30 April 2014

NO.	ACTIVITIES	DESCRIPTION	RESULTS
1.	LABORATORY ANALYSIS	<ul style="list-style-type: none"> ▪Preparing the phytoplankton samples collected in 27 March 2014 campaign for microscopic analysis ▪Microscopic identification for organism from phytoplankton composition for samples collected in secondary critical points ▪Quantitative microscopic analysis of the composition of the phytoplankton algal units 	Results on quality data
2.	DATA PROCESSING AND ANALYSIS	<ul style="list-style-type: none"> ▪Establishing a list of phytoplankton species identified in samples ▪Calculation of density and biomass for phytoplankton samples ▪Calculation of saprobic index and Simpson diversity index for phytoplankton samples ▪Interpretation of the results and graphic representation of quality data resulting from phytoplankton analysis 	Preliminary values of quality indicators
3.	OTHER ACTIVITIES	<ul style="list-style-type: none"> ▪Participation in elaboration of the Monthly Report no. 36 - Chapter: Monitoring of aquatic flora and fauna (except for ichthyofauna) 	Monthly Report no.36 - Chapter F

Expert,
Biologist Florica MARINESCU

Project Leader,
PhD eng. DEÁK György



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURII



Institutul Național de Cercetare-Dezvoltare
pentru Protecția Mediului



Instrumente Structurale
2007-2013



PROGRAMUL OPERATIONAL NAȚIONAL TRANSPORT

TRANS

Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II

MONTHLY REPORT NO. 36: 1 – 30 April 2014

6.3.13 Expert position: AVIFAUNA MONITORING EXPERT - JOZSEF SZABO

MONTHLY REPORT 1 - 30 April 2014

NO.	ACTIVITIES	DESCRIPTION	RESULTS
1.	AVIFAUNA MONITORING CAMPAIGN SPRING SEASON (07-19.04.2014)	<ul style="list-style-type: none"> ○ Field trip in CP01 <ul style="list-style-type: none"> ▪ Linear trails evaluation (transects) and observation points (point count) ▪ aquatic and migratory avifauna observations from the shore ▪ aquatic avifauna observations from the boat ○ Field trip in CP 02 <ul style="list-style-type: none"> ▪ Linear trails evaluation (transects) and observation points (point count) ▪ aquatic and migratory avifauna observations from the shore ▪ aquatic avifauna observations from the boat ○ Field trip in CP 10 <ul style="list-style-type: none"> ▪ Linear trails evaluation (transects) and observation points (point count) ▪ aquatic and migratory avifauna observations from the shore ▪ aquatic avifauna observations from the boat ○ Field trip in CP 03 <ul style="list-style-type: none"> ▪ Linear trails evaluation (transects) and observation points (point count) ▪ aquatic and migratory avifauna observations from the shore ▪ Field trip in aquatic avifauna observations from the boat ○ Field trip in CP 04 <ul style="list-style-type: none"> ▪ Linear trails evaluation (transects) and observation points (point count) ▪ aquatic and migratory avifauna observations from the shore ▪ aquatic avifauna observations from the boat ○ Field trip in CP 07 <ul style="list-style-type: none"> ▪ Linear trails evaluation (transects) and observation points (point count) ▪ aquatic and migratory avifauna observations from the shore ▪ aquatic avifauna observations from the boat 	<ul style="list-style-type: none"> ○ observation sheets; ○ data; ○ images; ○ species lists
2.	OTHER ACTIVITIES	<ul style="list-style-type: none"> ▪ Participation in elaboration of the Monthly Report no. 36 (Chapters G and H) ▪ Participation in elaboration of the Interim report 8 ▪ Elaboration of the program proposal for next activities. 	Monthly Report no.36

Expert,
JOZSEF SZABO

Project Leader,
PhD eng. DEÁK György



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURII



Institutul Național de Cercetare-Dezvoltare
pentru Protecția Mediului



Instrumente Structurale
2007-2013



PROGRAMUL OPERATIONAL NAȚIONAL TRANSPORT
TRANS
Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II *MONTHLY REPORT NO. 36: 1 – 30 April 2014*

6.3.14. Expert position: ANTHROPIC IMPACT MONITORING EXPERT - AMBRUS LASZLO (ecologist 1)

MONTHLY REPORT 1 - 30 April 2014

NO.	ACTIVITIES	DESCRIPTION	RESULTS
1.	MONITORING CAMPAIGN OF THE ANTHROPIC IMPACT (01, 14.04.2014)	<ul style="list-style-type: none"> ○ field campaign in CP01, CP02, CP10 areas to establish fixed and mobile sources of noise and emissions ○ field campaign in order to establish the anthropic level in the area of the building site ○ checking the building site, including the materials used by constructor ○ sites verification 	<ul style="list-style-type: none"> - data - images
2.	OTHER ACTIVITIES	<ul style="list-style-type: none"> ○ Contribution to the Monthly Report no. 36 ○ Program proposal for the next period activities 	Monthly Report no. 36

**Expert,
AMBRUS Laszlo**

**Project Leader,
PhD eng. DEÁK György**



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURII



Institutul Național de Cercetare-Dezvoltare
pentru Protecția Mediului



Instrumente Structurale
2007-2013



PROGRAMUL OPERATIONAL NAȚIONAL TRANSPORT

TRANS

Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II

MONTHLY REPORT NO. 36: 1 – 30 April 2014

6.3.15. Expert position: Impact on biodiversity assessment/monitoring - ZAHARIA Tania (ecologist 2)

MONTHLY REPORT 1 - 30 April 2014

NO.	ACTIVITIES	DESCRIPTION	RESULTS
1.	ANTHROPIC IMPACT ON BIODIVERSITY MONITORING (07-11.04; 14-18.04.2014)	Observations of the anthropic impact on avifauna from Natura 2000 sites: <ul style="list-style-type: none"> Field trip in critical points areas and at Iortmac, Vederoasa, Dunăreni, Oltina, Baciului and Lacul Sărat lakes. Field observations in order to establish the influence of the construction sites on avifauna.	<ul style="list-style-type: none"> - data - images - lists of species
2.	OTHER ACTIVITIES	<ul style="list-style-type: none"> - Participation in elaboration of the Monthly Report no. 36 - Participation in elaboration of the Interim report 8 	Monthly Report no. 36 Interim Report 8

Expert,
PhD Tania ZAHARIA

Project Leader,
PhD eng. DEÁK György



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURII



Institutul Național de Cercetare-Dezvoltare
pentru Protecția Mediului



Instrumente Structurale
2007-2013



PROGRAMUL OPERATIONAL NAȚIONAL TRANSPORT
TRANS
Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II *MONTHLY REPORT NO. 36: 1 – 30 April 2014*

6.3.16. Expert position: EXPERT ASSESSOR OF THE MONITORING RESULTS - Marian TUDOR

MONTHLY REPORT 1 - 30 April 2014

NO.	ACTIVITIES	DESCRIPTION	RESULTS
1	Data processing for the 7 th Interim Report	Data regarding aquatic and terrestrial ecosystems	Centralization tables
2	Data processing regarding aquatic and terrestrial ecosystems	Establishing the primary statistical values	Primary statistical parameters
3	Abiotic and biotic data corroboration	Establishing the intercorrelations between abiotic and biotic determinants	Correlation functions

**Expert assessor,
PhD Marian TUDOR**

**Project Leader,
PhD eng. DEÁK György**



UNIUNEA EUROPEANĂ

GUVERNUL ROMÂNIEI
MINISTERUL TRANSPORTURILOR
ȘI INFRASTRUCTURIIInstitutul Național de Cercetare-Dezvoltare
pentru Protecția MediuluiInstrumente Structurale
2007-2013PROGRAMUL OPERATIONAL NAȚIONAL TRANSPORT
TRANS
Mobilitate în România. Conexiuni cu Europa.

Project: 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
PHASE II

MONTHLY REPORT NO. 36: 1 – 30 April 2014

6.3.17 Expert position: 3D MODELING EXPERT- prof.PhD HELMUT HABERSACK

MONTHLY REPORT 1 - 30 April 2014

No	ACTIVITIES	DESCRIPTION	RESULTS
1.	Modeling activity of the hydrotechnical works' effects on the Old Danube navigation conditions, between Bala and Epurasu area	<p>Rsim- 3D model's results have been analysed for the computation field from the Old Danube, upstream and downstream of Bala bifurcation, from the point of view of navigation conditions, in various works versions, including the effects estimated in the Bala's bottom dam area.</p> <p>Delft3D model's results at a large scale show the influences on the Old Danube, due to the bottom dam at the 3rd phase on Bala, in different situations.</p> <p>Delft model at a medium scale has been used to estimate the effects of some works' versions or measures upon the depths for navigation on the Old Danube, at flows under the medium ones.</p> <p>Simulations' results present values' scales estimated to different models, parameters and data, that emphasize works' effects importance in different versions on the navigation conditions, on the Old Danube, mentioning the aspects for which the study of some measures is necessary.</p>	Results of the simulations on the Old Danube and in the area of Bala ramification.
2	Modeling of the hydrotechnical works' effects from the CP10 upon the Danube's navigation conditions in April	The effects of the works upon Danube's navigation conditions have been simulated, in a situation with over medium flow, noticed in April. Then, the results have been analysed.	Simulations' results at the CP10
3.	Data completion based on the measurements.	Measurements results' processings contributed to the completion of data sets for modeling, with values in over medium flows, on Danube	Data sets based on the measurements
4.	Other activities	Participation at the Monthly Report no. 36	Monthly Report no. 36

Expert,
phD Helmut HABERSACK

Project Leader,
PhD eng. DEÁK György