NIBULON AGRICULTURAL LIMITED LIABILITY COMPANY
(economic entity)
USREOU/EDRPOU code 14291113,
(USREOU/EDRPOU code/ identification code)
Cabotazny spusk, 1, Mykolayiv,
Mykolaiv region, 54002.
location of a legal entity or place of business of an individual entrepreneur (postal code, address)
registration number **№ 20225199566** in the Unified Register of Environmental Impact Assessment
21/1-20225199566/2 dated July 7, 2023
(number and date of the public discussion report)

REPORT ON PUBLIC DISCUSSION
of the planned activity
"New construction of a transport infrastructure facility – a river port (terminal) in the city of Izmail, Izmail District, Odesa Region, with a railway access track – adjacent to the Izmail station of the "Odesa Railway" regional branch

In compliance with the requirements of the Law of Ukraine "On Environmental Impact Assessment", the Ministry of Environmental Protection and Natural Resources of Ukraine prepared a report on public discussion of the planned activity, which is subject to an environmental impact assessment procedure in accordance with the legislation.

1. Information on the publication of documents on planned activity by the competent authority on the website of the Unified Register for Environmental Impact Assessment:

1) Notification of the planned activity, which is subject to an environmental impact assessment, was published on the website of the Unified Register for Environmental Impact Assessment (hereinafter - the Register) on June 6, 2022;

2) The announcement of the start of public discussion of the environmental impact assessment report was published on the website of the Register on October 21, 2022;

3) The environmental impact assessment report (hereinafter referred to as the EIA Report) and other documents provided by the economic entity were published on the Register website on October 21, 2022;

2. Information on the publication of the documents on planned activity by the economic entity in printed mass media and on message boards:

1) The notification about the planned activity, which is subject to an environmental impact assessment, was published in the printed media "Prydanajskie vesti" № 18 (13264) dated May 27, 2022, and "Kurier Nedeli" № 21 (1807) dated May 28, 2022;

2) The announcement of the beginning of the public discussion of the EIA Report was published in the print media "Prydunaiskie vesti" № 35 (13281) dated October 14, 2022, and "Kurier Nedeli" № 41 (1827) dated October 15, 2022;

3) The notification of the planned activity, which is subject to an environmental impact assessment, was posted on the message board (confirmation of the fact of the posting is a photo recording);

4) The announcement of the start of the public discussion of the EIA Report was posted on the message board (confirmation of the fact of the posting is a photo recording).

3**. List of the materials submitted for consideration, which were placed in places accessible to the public:**

The environmental impact assessment report, as well as other materials provided to the public, are available at:

The premises of the competent authority:

Ministry of Environmental Protection and Natural Resources of Ukraine (Department of Environmental Assessment), located at Metropolitan Vasyl Lypkivskyi str. 35, Kyiv, 03035;

The premises of the local government body(s) of the corresponding administrative-territorial unit(s) that may be affected by the planned activity:

Izmail City Council located at Nezalezhnosti Ave. 62, Izmail, 68600,

As well as other public places determined by the economic entity (if any):

Were not placed.

4. The number of public hearings held during the period of public discussion of the planned activity (<u>if held</u>)*:

Public hearings on the discussion of the EIA Report of the planned activity were held on ___—___ at ___—___ time, in the premises ___—___ .

If the public representatives did not appear at the public hearings, which were scheduled for ___—___ at ___—___ in the premises of ___—___ located at ___—___, an act on the non-appearance of public representatives during the public hearings in the process of environmental impact assessment is drawn up.

*Note: According to Part 21 of Article 17 of the Law of Ukraine "On Environmental Impact Assessment" for the period of validity and within the territory of the quarantine established by the Cabinet of Ministers of Ukraine to prevent the spread of the coronavirus disease (COVID-19) on the territory of Ukraine, until its complete cancellation and within 30 days from the date of cancellation of the quarantine, public hearings provided for in Article 7 of this Law, are not held and are not scheduled for dates falling within this period.

5. Public discussion of the planned activity at all stages of the environmental impact assessment procedure:

Public discussion of the amount of research and the level of information detailing to be included in the EIA Report began on June 7, 2022. By the order of the Ministry of Environment № 159 dated March 22, 2022, access to the Register for external use was temporarily restricted, due to which access to the documents of the environmental impact assessment procedure was limited. By the order of the Ministry of Environment №. 225 dated June 15, 2022, the work of the Register was renewed. In connection with the above, to comply with the terms of the public discussion and the requirements of the Aarhus Convention, the public discussion was extended until July 13, 2022;

Public discussion of the EIA Report began on October 24, 2022, lasted for 25 working days, and was completed on November 25, 2022.

6. The list of written comments and suggestions received from the public during the public discussion:

Since the day of the official publication of the notice on the planned activity, no comments and suggestions from the public regarding the planned activity have been received by the Ministry of Environmental Protection and Natural Resources of Ukraine;

No comments and suggestions from the public were received for the EIA Report.

Table of consideration of public comments and suggestions received during the public discussion period (if any)

№	Full name, patronymic (for individuals), as well as the name (for legal entities) of the person submitting comments and suggestions	Content of comments and suggestions	Information on full consideration, partial consideration, or justified rejection of comments and suggestions received during the public discussion
—	—	—	—
—	—	—	—
—	—	—	—

7. Description of the procedure for public discussion with the public of other countries in case of transboundary environmental impact assessment:

June 6, 2022 – a decision was made to carry out a transboundary environmental impact assessment (the order of the Ministry of Environmental Protection and Natural Resources of Ukraine on carrying out a transboundary environmental impact assessment of NIBULON LLC № 218 dated June 6, 2022);

June 7, 2022 – the Ministry of Environment, Water and Forests of Romania was notified (the letter from the Ministry of Environment № 25/4-21/7156-22 dated June 7, 2022, regarding participation in the procedure for carrying out a transboundary environmental impact assessment of the planned activity of NIBULON LLC) and the Secretariat of the Espoo Convention (the letter from the Ministry of Environment № 25/4-21/7157-22 dated June 7, 2022, regarding the start of the transboundary environmental impact assessment of the planned activity of NIBULON LLC);

- comments and suggestions regarding the planned activity, the amount of research, and the level of information detailing to be included in the EIA Report were received from the Ministry of Environment, Water Resources and Forests of Romania via the letter № DGEICPSC/1363/04.08.2022 dated August 4, 2022, and were sent to NIBULON LLC via the letter from the Ministry of Environmental Protection and Natural Resources of Ukraine № 25/4-21/10405-22 dated August 11, 2022;

October 21, 2022 – the EIA Report, other documents, and announcement on the beginning of a public discussion of the EIA Report were published in the Register (the case registration number in the Register – 20225199566);

- the EIA Report of NIBULON LLC regarding the planned activity "New construction of a transport infrastructure facility – a river port (terminal) in the city of Izmail, Izmail District, Odesa Region, with a railway access track – adjacent to the Izmail station of the "Odesa Railway" regional branch" was sent to the Ministry of Environmental Protection, Water and Forests of Romania via the letter from Ministry of Environment № 25/5-21/14399-22 dated October 25, 2022;

February 2, 2023 – the letter from the Ministry of Environmental Protection, Water and Forests of Romania № DGEICPSC/21143/01.02.2023 dated February 1, 2023, regarding comments to the Environmental Impact Assessment Report about the planned activity "New construction of a transport infrastructure facility – a river port (terminal) in the city of Izmail, Izmail District, Odesa Region, with a railway access track – adjacent to the Izmail station of the "Odesa Railway" regional branch was received. These comments were sent to NIBULON LLC via the letter from Ministry of Environment № 25/5-21/1639-23 dated February 2, 2023;

NIBULON LLC sent the letter № 1322/3-23/50 dated February 22, 2023, with a response to the comments of the Ministry of Environment, Water Resources and Forests of Romania;

- the Ministry of Environmental Protection and Natural Resources of Ukraine sent the letter № 25/5-21/2887-23 dated February 1, 2023, to the Ministry of Environment, Water Resources and Forests of Romania with NIBULON's LLC response to the comments of the Ministry of Environment, Water Resources and Forests of Romania to the EIA Report (case registration number in the Register – 20225199566);

March 29, 2023 – expert consultations between Romania and Ukraine were held as part of the procedure for assessing the transboundary impact on the environment of the new construction of a transport infrastructure facility – a river port (terminal) in the city of Izmail, Izmail District, Odesa Region, with a railway access track – adjacent to the Izmail station of the "Odesa Railway" regional branch were held. In the course of expert consultations, the Romanian side requested additional materials to the EIA Report;

- the Ministry of Environmental Protection and Natural Resources of Ukraine sent the letter № 25/5-21/6622-23 dated May 1, 2023, to the Ministry of Environment, Water Resources and Forests of Romania with additional materials to the EIA Report and the draft of the protocol of expert consultations of Romania and Ukraine within the procedure of transboundary environmental impact assessment of NIBULON`s LLC planned activity – "New construction of a transport infrastructure facility – a river port (terminal) in the city of Izmail, Izmail District, Odesa Region, with a railway access track – adjacent to the Izmail station of the "Odesa Railway" regional branch";

- the protocol of expert consultations of Romania and Ukraine within the procedure of transboundary environmental impact assessment of NIBULON`s LLC planned activity – "New construction of a transport infrastructure facility – a river port

(terminal) in the city of Izmail, Izmail District, Odesa Region, with a railway access track – adjacent to the Izmail station of the "Odesa Railway" regional branch" was signed on March 29, 2023.

July 3, 2023 – a meeting of the Interdepartmental Coordination Council was held, during which a decision was made to take into account the results of the transboundary environmental impact assessment.

Attachments:

All evidence of publication and placement of documents provided by the business entity, according to clauses 2, 3;

Materials according to clause 6;

The order of the Ministry of Environmental Protection and Natural Resources of Ukraine on the implementation of a transboundary environmental impact assessment of the agricultural enterprise NIBULON LLC № 218 dated June 6, 2022;

The letter from the Ministry of Environment № 25/4-21/7156-22 dated June 7, 2022, regarding participation in the procedure for carrying out a transboundary assessment of the impact on the environment of the planned activity of NIBULON LLC;

The letter from the Ministry of Environment № 25/4-21/7157-22 dated June 7, 2022, regarding the start of the transboundary environmental impact assessment of the planned activity of NIBULON LLC;

The letter from the Ministry of Environment № 25/4-21/10405-22 dated August 11, 2022, regarding comments and suggestions for the planned activity, the amount of research, and the level of information detailing to be included in the environmental impact assessment report received from the Ministry of Environmental Protection, Water and Forests of Romania by letter № DGEICPSC/1363/04.08.2022 dated August 4, 2022;

The letter from Ministry of Environment № 25/5-21/14399-22 dated October 25, 2022, by which the EIA Report of NIBULON LLC of the planned activity "New construction of a transport infrastructure facility – a river port (terminal) in the city of Izmail, Izmail District, Odesa Region, with a railway access track – adjacent to the Izmail station of the "Odesa Railway" regional branch" was sent to the Ministry of Environmental Protection, Water and Forests of Romania;

The letter from the Ministry of Environmental Protection, Water and Forests of Romania № DGEICPSC/21143/01.02.2023 dated February 1, 2023, regarding comments to the Environmental Impact Assessment Report regarding the planned activity "New construction of a transport infrastructure facility – a river port (terminal) in the city of Izmail, Izmail District, Odesa Region, with a railway access track – adjacent to the Izmail station of the "Odesa Railway" regional branch";

The letter from the Ministry of Environment № 25/5-21/1639-23 dated February 2, 2023, by which the comments of the Ministry of Environmental Protection, Water and Forests of Romania about the Environmental Impact Assessment Report of the planned activity "New construction of a transport infrastructure facility – a river port

(terminal) in the city of Izmail, Izmail District, Odesa Region, with a railway access track – adjacent to the Izmail station of the "Odesa Railway" regional branch" were sent to NIBULON LLC;

The letter from NIBULON LLC № 1322/3-23/50 dated February 22, 2023, regarding the provision of answers of NIBULON LLC to the comments of the Ministry of Environmental Protection, Water and Forests of Romania;

The letter from the Ministry of Environment № 25/5-21/2887-23 dated February 27, 2023, by which the responses of NIBULON LLC to the comments of the Ministry of Environment, Water and Forests of Romania to the EIA Report (case registration number in the Register – 20225199566) were sent to the Ministry of Environmental Protection, Water and Forests of Romania;

The letter from the Ministry of Environment № 25/5-21/6622-23 dated May 1, 2023, by which additional materials to the EIA Report and the draft protocol of expert consultations of Romania and Ukraine within the framework of the transboundary environmental impact assessment procedure for the planned activity of NIBULON LLC "New construction of a transport infrastructure facility – a river port (terminal) in the city of Izmail, Izmail District, Odesa Region, with a railway access track – adjacent to the Izmail station of the "Odesa Railway" regional branch" were sent to the Ministry of Environmental Protection, Water and Forests of Romania;

The protocol dated March 29, 2023, of expert consultations of Romania and Ukraine as part of the transboundary environmental impact assessment procedure of the new construction of a transport infrastructure object – a river port (terminal) in the city of Izmail, Izmail District, Odesa Region, with an access railway track – adjacent to the Izmail station of the "Odesa Railway" regional branch;

Protocol № 1 dated July 3, 2023, of the meeting of the Interdepartmental Coordination Council on the implementation of the Convention on Environmental Impact Assessment in a transboundary context in Ukraine.

Table of consideration of questions, comments, and suggestions submitted during transboundary consultations with affected parties in the context of the transboundary environmental impact assessment of the planned activity "New construction of a transport infrastructure facility – a river port (terminal) in the city of Izmail, Izmail District, Odesa Region, with a railway access track – adjacent to the Izmail station of the "Odesa Railway" regional branch".

Deputy director of the department – head of the environmental impact assessment department
Department of Environmental Assessment **Olena HRYTSAK**

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of an electronic document

MINISTRY OF ENVIRONMENTAL PROTECTION AND NATURAL RESOURCES OF UKRAINE

Mytropolyta Vasylia Lypkivskoho Street, 35, Kyiv, 03035, tel.: (044) 206-31-00, (044) 206-31-15, fax: (044) 206-31-07, E-mail: info@mepr.gov.ua, Unified State Register of Enterprises and Organizations of Ukraine code 43672853

For № ____dated _____

NIBULON Agricultural Limited Liability Company
54002, Mykolaiv City,
Kabotazhnyi spusk Street, 1

Ministry of Environmental Protection and Natural Resources of Ukraine informs that:

according to the Notice of the Planned Activity of NIBULON Agricultural Limited Liability Company that is a subject of the environmental impact assessment (case registration number in the Unified Register of Environmental Impact Assessment – 20225199566) on a new construction of a transport infrastructure object in Odesa region, the procedure of environmental impact assessment started in accordance with the legislation;

since the day of the official publication of the mentioned Notice of the Planned Activity, comments and suggestions from the public regarding the planned activity have not been received by the Ministry of Environmental Protection and Natural Resources of Ukraine.

At the same time, we inform you that in case of receiving comments and suggestions from the affected party that is ready to participate in transboundary consultations, in accordance with the requirements of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) regarding the specified planned activity, they will be sent additionally

The Deputy Minister **Olena KRAMARENKO**

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MINISTRY OF ENVIRONMENTAL PROTECTION AND NATURAL RESOURCES OF UKRAINE

Mytropolyta Vasylia Lypkivskoho Street, 35, Kyiv, 03035, tel.: (044) 206-31-00, (044) 206-31-15,
fax: (044) 206-31-07, E-mail: info@mepr.gov.ua, Unified State Register of Enterprises and Organizations of Ukraine code 43672853

To № _____

NIBULON Agricultural Limited Liability Company
54002, Mykolaiv City,
Kabotazhnyi spusk Street, 1

Regarding the conditions of definition the scope of research and level of information detailing

The Ministry of Environmental Protection and Natural Resources of Ukraine according to the requirements of parts eight and nine of Article 5 of the Law of Ukraine "On Environmental Impact Assessment", provides conditions regarding the scope of research and the level of information detailing to be included in the Environmental Impact Assessment Report on planned activities of NIBULON Agricultural Limited Liability Company regarding the new construction of the transport infrastructure facility of the Odesa region (case registration number in the Unified Register of Environmental Impact Assessment - 20225199566).

However, we inform you that in case of receiving conditions regarding the scope of research and the level of information detailing to be included in the Environmental Impact Assessment Report from the affected party, which is ready to participate in transboundary consultations, according to the requirements of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) in relation to the specified planned activity, these conditions will be provided additionally.

Appendix: 4 pages in 1 copy

The Deputy Minister **Olena KRAMARENKO**

Inna Telychko

Conditions for determining the scope of research, the level of information detailing to be included in the Environmental Impact Assessment Report

«New construction of the transport infrastructure object of Odesa region»
(Name of the planned activity)

case registration number in the Unified Environmental Impact Assessment Register – 20225199566

Pursuant to Article 5 of the Law of Ukraine «On Environmental Impact Assessment», The Ministry of Environment reviewed the notification of planned activity, which is subject to environmental impact assessment of the NIBULON Agricultural Limited Liability Company regarding the new construction of the transport infrastructure object of Odessa region and provides conditions for determining the scope of research and the level of detail of information to be included in the Environmental Impact Assessment Report.

This document is issued in accordance with the legislation of Ukraine, in particular, the Law of Ukraine «On Environmental Impact Assessment» and the Law of Ukraine «On Environmental Protection».

The requirements for the structure and content of the Environmental Impact Assessment Report, defined by Article 6 of the Law of Ukraine «On Environmental Impact Assessment» and Appendix 3 of the Resolution of the Cabinet of Ministers of Ukraine № 1026 dated December 13, 2017, are mandatory.

The Environmental Impact Assessment Report must include information from the interested authorities regarding the possibility of implementation of the planned activity considering the impact on human health, water and land resources, biodiversity, other environmental factors (i.e., the Environmental Impact Assessment Report must include information on permit documents for the planned activity, if available).

In the Environmental Impact Assessment Report, detail the following:

- 1. Include information on the technical characteristics of the planned activity in the Environmental Impact Assessment Report (hereinafter – EIA Report), in particular:
- - technical characteristics of the equipment that will be used in the activity;
- technical documentation, information on confirmation of the assessment of compliance of the equipment with regulatory documentation for production;
- information regarding the available material and technical base and its technical characteristics, that are necessary for the implementation of the planned activity.

2. Detail the place of implementation of the planned activity with the information on the compliance of the planned activity with the urban planning documentation approved in the established manner, including the provision of a corresponding copy of the general plan of the settlement, and/or the planning scheme of the territory (part of the territory) of the district and/or region, as well as with the provision of existing plans for socio-economic development of the region at the place of implementation of the planned activity.

3. Indicate the relation of the territory of the planned activity to the territory and objects of the nature reserve fund, objects of cultural heritage, sanitary protection and security zones, water intakes of water objects, indicating their status (including the width of the coastal protective strip, water protection zone, etc.) with corresponding display of this information on a topographical basis (with definition of scale) in the EIA Report,.

4. Include calculations and analysis of the probable impact on the specified territory and objects according to each technological scheme of the works, indicating compensatory and environmental protection measures.

5. Provide a copy of the master plan indicating all objects, which are part of the enterprise, including equipment, mechanisms and sources of environmental impact.

6. Detail the characteristics of the geological structure, composition and properties of soils within the territory of possible impact during the operation of the object of the planned activity.

7. Provide information on soil categories and quality, analysis of the impact of planned activities on soils, taking into account the occurrence of dangerous engineering and geological processes and phenomena, and other factors that negatively affect the condition of soils.

8. Detail the description of the technological process of the planned activity with an indication of all factors affecting the water environment and technical solutions aimed at the elimination or reduction of harmful effects (emissions, discharges, leaks into water bodies), including measures REGARDING the prevention or reduction of pollutants entering the water environment, violation of the hydrodynamic regime, depletion of surface and underground water resources, deterioration of the state of water and probable changes in the water balance of the territory.

9. Detail the technology of cleaning all types of wastewater, provide information on the results of laboratory control of the state of water supply sources and reservoirs located in the impact zone, with the provision of measures regarding the perspectives of control of their condition.

Describe the peculiarities of the hydrological regime of the territory of the object of the planned activity, indicating the characteristics of the water balance.

Provide data and analysis regarding the impact of the planned activity on the groundwater level.

Provide measures aimed at protecting aquifers from pollution and depletion.

10. In the EIA Report, provide: characteristics of the sources of emissions of pollutants into the atmosphere, the scheme of their placement, calculations of the mass of emissions with reference to the methods used; results of calculations of ground level concentration with reference to the software tools used; data on background atmospheric pollution in the area where the object of the planned activity is located; assessment of the level of atmospheric air pollution that will be created by the object of the planned activity (during the operation of the object), as well as taking into account the background level of pollution according to hygienic standards (maximum permissible concentrations – MPC, groups of summation of complex indicators and danger criteria).

11. Provide the information on official certificates-characteristics about the climatic conditions of the area where the object of the planned activity is located (average annual wind speeds along the points of the 8-point compass roses, etc.) and about the background content of pollutants in the atmospheric air of the area where the facility is located for the current year.

12. Particular attention should be paid to the assessment of the probable impact on flora and fauna (habitats, migration routes, breeding conditions, consequences of the impact) during the implementation of the planned activity, including taking into account the expected transport connections for the implementation of the planned activity, indicating compensatory and environmental protection measures.

13. Provide measures for monitoring the natural environment during the implementation of the planned activity, including constant monitoring of the state of atmospheric air, underground and surface waters, soils.

14. Include in the EIA Report calculations of options for carrying out the planned activity under the least favorable meteorological conditions and possible emergency situations with the definition of resource-saving, protective, restorative, compensatory, security measures with their brief characteristics and ensure that the affected area is displayed

15. Detail the assessment of probable impacts on human health, in particular, indicating the levels of noise and vibrations from the implementation of the planned activity.

16. Indicate the expected economic effect from the implementation of the activity, taking into account the socio-economic development of the region.

17. When writing the Report, be guided by the provisions of the order of the Ministry of the Environment “General Methodological Recommendations on the Content and Procedure for Compiling an Environmental Impact Assessment Report”,

which determine the best practice for the preparation of the environmental impact assessment report" № 193 dated March 15, 2021, (https://mepr.gov.ua/documents/3342.html).

18. Add to the EIA Report a list of references indicating the sources used for descriptions and assessments when developing an environmental impact assessment report (including a list of references, letters received from competent organizations and services).

The Deputy Minister **Olena KRAMARENKO**

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MINISTRY OF ENVIRONMENTAL PROTECTION AND NATURAL RESOURCES OF UKRAINE

Mytropolyta Vasylia Lypkivskoho Street, 35, Kyiv, 03035, tel.: (044) 206-31-00, (044) 206-31-15,
fax: (044) 206-31-07, E-mail: info@mepr.gov.ua, Unified State Register of Enterprises and Organizations of Ukraine code 43672853

To № _____

NIBULON Agricultural Limited Liability Company (NIBULON Ltd.)
54002, Mykolaiv City,
Kabotazhnyi spusk Street, 1

In addition to the letter of the Ministry of Environmental Protection and Natural Resources of Ukraine № 25/4-21/9217-22 dated July 18, 2022, (case registration number in the Unified Environmental Impact Assessment Register – 20225199566), we provide comments and suggestions on the planned activities, the amount of the research, and the level of information detailing to be included in the Environmental Impact Assessment Report of the NIBULON Ltd. regarding the new construction of the transport infrastructure object of the Odesa region, that were given from the Romanian side during transboundary consultations, in accordance with the requirements of the Convention on Environmental Impact Assessment in a Transboundary Context (Espo Convention).

Appendix: the above mentioned on 11 pages in 1 copy

The Deputy Minister **Olena KRAMARENKO**

MINISTRY OF ENVIRONMENT, WATERS AND FORESTS

Ref.no. DGEICPSC/1363/04.08.2022

To: Mr. Ruslan STRILETS, Minister

Ministry of Environmental Protection and Natural Resources of Ukraine

Ref: Transboundary environmental impact assessment procedure for the new construction of transport infrastructure facility -river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch "Odesa Railway", Ukraine

Dear Mr. Minister,

Ministry of Environment, Waters and Forests presents its compliments to Ministry of Environmental Protection and Natural Resources of Ukraine and has the honor to thank for the previous cooperation between our countries, and looks forward to strengthening joint efforts in the field of environmental protection.

With regard to your letter ref. no. 25/4-21/7156-22 dated 7th of June 2022, transmitted through the Embassy of Ukraine in Romania, registered at the Ministry of Environment, Waters and Forests with the ref. no. 2/R/1363/15.06.2022, on the Notification of the planned activities - new construction of transport infrastructure facility -river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch "Odesa Railway", as required by Article 3 of the Espoo Convention, we would like to inform you that Romania will participate in the transboundary environmental impact assessment procedure for this project.

In order to ensure compliance with the provision of Article 3 paragraph (8) of the Espoo Convention, we have made the received Notification, available to the public for making comments, by disseminating it on the official web site of the Romanian Ministry of Environment, Waters and Forests for 30 days. Furthermore, we sent the documentation to the competent Romanian authorities for assessment.

Thus, considering the notification submitted, we would like to bring to your attention that at their first meeting of the Parties to the Espoo Convention, in 1998, the Parties adopted a format for notification and recommended that Parties use the format to the extent possible when transmitting a notification according to article 3 of the Convention. Thus, the notification to an affected Party of a proposed activity under article 3 of the Convention should be done in accordance with format and information from Decision I/4.

I have the pleasure to forward, in accordance with the provisions of the Espoo Convention, several comments and proposals prepared by the Romanian institutions and experts for the scoping on the environmental impact assessment documentation of this project. I sincerely hope that all these comments and proposal will be duly taken into account in

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order to ensure that the Danube Delta and Danube river is not negatively impacted by the Ukrainian project.

I. General comments and proposals:

The planned activities are new construction of transport infrastructure facility - river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch "Odesa Railway". In this way, the aim is to ensure the operation of the transshipment complex of cereals, legumes and oilseeds and to plan the location of buildings and structures on the allocated area.

The location of the designed works is on the left shore of the Danube, downstream being located industrial enterprises. In relation to the location of the works, the nearest Romanian neighboring locality to Izmail is Plauru village, Ceatalchioi commune -Tulcea county and the nearest surface water flow is the Danube river. The transboundary environmental impact can have a significant effect on the nearest neighborhood, the minimum distance from the sources of pollution emissions during the execution or operation works being 570 m - Plauru village in Romania.

The project include the construction and operation of hydro-technical installations of the port (cargo berth etc.), access railway track, production transshipment complex for grain, legumes and oilseeds (railway and road reception facilities, dryer, warehousing, transshipment facilities for water and road transport) as well as dredging to a depth of 8.23 m from the „0" of the Izmail port with the excavation of the bottom soil in the amount of 112.0 thousand m^3 and its storage in the shore dump.

Having analyzed the notification, the alternative considered feasible and proposed by the project is alternatives 1, being the best option for the selection of facilities/installations and technical characteristics of the equipment to ensure the integration of a complex technology.

Thus, the environmental impact assessment documentation (EIA documentation) to be elaborated for this planned activities, shall contain as a minimum, in accordance with the provisions of the Espoo Convention, the following:

- Detailed information on the project itself including: the location of the project works, description of these proposed works (please include sections, cross-sectional and longitudinal profiles of the objects related to the activities proposed), an area plan and a project location map, with reference to the state border between Romania and Ukraine;
- A description of reasonable alternatives to the proposed activities and also the no-action alternative;
- A description of the environment/factors that are likely to be significantly affected by the proposed activities and its alternatives;
- A description of the potential environmental impact of the proposed activities and its alternatives and an estimation of its significance;
- A description of prevention, mitigation measures to keep adverse environmental impact to a minimum. It is necessary to assess the transboundary impact on environmental factors and to have measures to prevent, reduce, supervise and monitor the activities during the execution/construction phase or during the operation of any negative impact on the environment according to the relevant legislation. All these measures to prevent, limit and reduce any impact on the environment are also applicable to protect the surface waters of the Danube river both during the execution works and during the operation within the river port (terminal) Izmail. We consider it imperative to take measures to reduce or prevent adverse effects and protection measures to be planned and implemented in accordance with international law at all stages of the planned activities (implementation, operation, in case of accident, etc.) and to ensure a high degree of

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environmental protection, adaptation to climate change and ensuring sustainable development.

- An explicit indication of predictive methods, including mathematical modeling methods and underlying assumptions as well as the relevant environmental data used;
- Assessment of probable consequence of changes in the environment/change intervention in the environment;
- An estimation of the duration, length, magnitude of the proposed works;
- A description of effects on key species and organisms, including impacts on sediment disturbance on maritime organisms;
- Use of natural resources;
- Monitoring and management plans;
- A description with regard to measures for prevention and response of accidents, including shipping accidents that may result in sinking;
- An identification of gaps in knowledge and uncertainties encountered in compiling the environmental impact assessment documentation.

Supplementary, we would also like to emphasize that a significant adverse transboundary impact of the project on the activities to be financed under the Interreg VI-A NEXT Programme Romania-Ukraine, can be expected taking into consideration that the Odessa oblast, including Izmail County, is part of the eligible area of this Programme. The Programme offers financing opportunities under three priorities and five specific objectives, among which we mention those activities financed under the Romania-Ukraine Programme thus, in our view, may be impacted by the mentioned project: infrastructure (construction/rehabilitation/modernization of infrastructure related to systems/structures dealing with fires, floods, strengthening the banks of rivers, canals, the condition of dams, afforestation of river banks, preservation, revitalization and re-naturalization of water bodies and ecosystems, preservation and restoration of small rivers); equipment (firefighting equipment, floods, etc.); common strategies and tools for hazard management and risk prevention including joint action plans, hydrological monitoring of rivers, water temperature, precipitation measurements, ice regime; joint projects for the creation/extension of natural reserves in a transboundary context; endowment: improving human and technical capacity and modernizing monitoring equipment of protected areas; assessment, protection and improvement of existing ecosystems (research activities, inventory of resources, protection of endangered species, eradication of invasive species, afforestation etc.).

II. Comments and proposals regarding surface and groundwater bodies/water elements

From the point of view of the naval transport field, through the planned activities, the Ukrainian Party intends to build 8.23 m depths in the future port/terminal in Izmail at the operating front, which involves the dredging works on the next sector: Sulina Branch, Sulina Channel, Tulcea Branch, Ceatal Izmail, then following the Chilia Arm to Izmail so that, from a depth of 7.32 m, a depth of 8.23 m is ensured.

In this respect, we would like to mention the fact that the depths of the Sulina bar and the Sulina mouth are in direct dependence on the Danube sediment intake. The higher the waters of the Danube, the more intense the sediment deposition processes are, with influences of decreasing depth. The more intense the dredging in the bar, the greater the

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depths in the bar and vice versa, so that the dredging is carried out during the year with a time delay compared to the Danube sediment supply regime.
In view of the above, it is necessary to analyze the project/activities under the following aspects:

- hydro morphological - the speed variations of the water current in several sections of the Sulina sector, Sulina Canal, Tulcea arm, Ceatal Izmail, then Chilia arm to Izmail and their influences on the existing hydro technical works on this sector, in case of works dredging from 7.32 m to 8.23 m;
- the correlation with the new hydro morphological process that appeared related to the issue of the development to the south of the secondary delta Chilia, which refers to the formation by the coarse alluvial outflows of the Stambulul Vechi of a coastal cordon that closes at the Black Sea the Gulf of Musura, which endangers navigation at the mouth of Sulina, it must be analyzed to what extent the rate of sedimentation in the mouth of the Sulina channel will intensify;

- the accomplishment of the dredging works from 7.32m to 8.23m and, subsequently, the exploitation of this waterway will have important effects on the distribution of the water and alluvium flows of the Danube between the Chilia and Tulcea arms;

- the major volumes of dredging will negatively influence the flow of water on the secondary arms of Chilia which supply water on the territory of the Danube Delta and may significantly affect the Danube Delta Biosphere Reserve.

It is also necessary to include aspects on the status of the water body and possible impact, in accordance with the requirements of the Water Framework Directive (2006/60/EC), taking into account the mention from the notification, in the context of a likely transboundary impact (page 6), of the Convention for the Protection and Sustainable Use of the Danube River in the context of a likely transboundary impact, and the Convention on the Protection and Sustainable Use of the Danube River (1994, ratified by Ukraine in 2002).

From the point of view of safety of navigation, for the normal development of the naval traffic, the carrying out of transports on the water, the physical integrity of the navigation personnel, passengers and cargoes, we inform you that the depths of 8.23 meters, planned to be carried out by dredging operations according to the project, are much higher than the draught of 23 feet (7.01 meters) allowed at the Sulina bar according to art. 3.05 Cap. 3 second Part of the Regulation of navigation on the Danube in the Romanian sector. In conclusion, the ships witch will be loaded at Izmail port, so in the future will not be able to load at full capacity, due to restrictions at Sulina bar.

The Ukrainian Party will have to comply with the provisions of international and bilateral normative acts regarding navigation on the Danube and the regime of border water drainage, such as: the Convention on the Regime of Navigation on the Danube, signed in Belgrade on 18 August 1948 (ratified by Decree No. 298/1948) hereinafter referred to as the Belgrade Convention, Treaty between Romania and Ukraine on the regime of state border (2003), Agreement between the Government of Romania and the Government of Ukraine on cooperation in the field of border water management, signed on 30 September 1997 in Galati, as well as other bilateral documents signed by Romania and Ukraine. It is necessary for the Ukrainian Party to take all possible measures to limit and manage the environmental consequences for the Danube Delta ecosystem.

Considering the pressures listed in European Commission Directive EU 2017/845 of 17 May 2017, that the proposed activities exert on the aquatic environment, there is a possibility that the marine environment may be affected in different ways. Thus, the works carried out in the project implementation area, could lead to the resuspension of some priority substances from the sediments in the water column. Moreover, the equipment and transport activities may represent additional pollution sources generating atmospheric

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emissions of priority hazardous substances (heavy metals, hydrocarbons, etc.), which may then be released into the aquatic environment, introducing contaminants into the marine area. Together with other pressures from the same activities, the cumulative impact might be a threat for the marine ecosystem.

Therefore, we consider that a monitoring programme of the Black Sea ecosystem in front of the Danube mouths is mandatory, both during the project implementation period and after the completion of the works regarding the concentration of pollutants in all matrices: water, sediments and biota.

III. Comments and proposals regarding air quality and noise

Air quality shall be monitored by measurements, determined by the combustion of fuels at the level of machinery and equipment and by means of transport or by the circulation of materials (emissions of CO, CO2, NOX, SO2, VOC, dust, etc.) and monitoring of parameters so as to ensure that the maximum permissible concentrations under the relevant legislation are not exceeded.
Ensuring noise level measurements on site and at the limits close to the areas adjacent to the port, during the execution period (temporarily) or during the operation period through the noise produced by construction/operating equipment and material transport vehicles.

IV. Comments and proposals regarding waste management

Waste management regarding collection through companies specialized in the field and application of hazardous and non-hazardous waste management measures. We also mention the need to manage any accidental spills/discharges on hazardous substances, especially in the category of fuels (oil, diesel, mineral oils, used engine oils, etc.) at the surface or groundwater bodies. At the same time, the waste generated during the current activity of the dredging vessels but also of the other activities will be managed, selectively collected, in storage places/containers arranged for this purpose and taken over by specialized companies in the field.

V. Comments and proposals regarding the appropriate impact assessment on Natura 2000 sites

As you are certainly aware, the Danube Delta is an integral part of the European Ecological Network Natura 2000 in Romania and overlaps at the level of the Danube Delta with the following special protection areas (SPA) and sites of Community importance (SCI) established under the Habitats (92/43/CE) and Birds (79/409/CE) directives:

No	Name of SCI	Code	Surface of SCI (ha)	Biogeographical Region
1.	Delta Dunării	ROSCI0065	453.645,5	49,8% Steppe and 50,2% Pontic
2.	Delta Dunării - marine area	ROSCI0066	336.200,2	100% Black Sea marine area

No.	Name of SPA	Code	Surface of SPA (ha)	Biogeographical Region

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3.	Delta Dunării and Complexul Razim-Sinoie	ROSPA0031	508.302,3	44,74% Steppe and 55,26% Pontic

The detailed maps of these sites can be found online - https://natura2000.eea.europa.eu/#. Information regarding the sites is made available on the website of the Romanian Administration of the Danube Delta Biosphere Reserve: http://www.ddbra.ro/rezervatia/delta-dunarii/biodiversitate/situri-natura-2000-administrate-de-a-r-b-d-d-a921. This link also contains the Standard Form Natura 2000 which was prepared for each Natura 2000 site.

1. **"Delta Dunării ROSCI0065"** was designated for the conservation of species/habitats of Community interest:
- 29 types of habitats of community interest, of which 7 habitats of priority interest (71,24% of the ROSCI0065 surface is occupied by Natura 2000 habitats)
- species listed in Annex II of Directive 92/43/CEE: 5 plant species, 9 invertebrates species, 15 fish species, 2 amphibians species and 3 reptile species, 7 mammals species.

2. **"Delta Dunării ROSCI0066 marine area"** was designated for the conservation of species/habitats of Community interest:
- 4 types of habitats of community interest
- species listed in Annex II of Directive 92/43/CEE: 2 fish species, 2 mammals species.

3. **"Delta Dunării and the Complex Razim Sinoe ROSPA0031"** was designated for the conservation of birds of Community interest: 221 birds species listed in Annex I of the Directive 2009/147/CE from which 13 are permanent species, 95 are for reproduction, 38 are wintering, 137 are within this area during migration.

The Romanian Party is particularly concerned about the proposed dredging works and believes that all interventions aimed at changing the cross-sectional and longitudinal sections of the branches will have a likely significant impact on most components of the Natura 2000 sites.

In conclusion, adequate assessment studies for the protected areas indicated above need to be conducted, in accordance with the provisions of the directives referred to above. The methodology adopted for identifying and evaluating negative impact should be simple and in accordance with the Danube Delta Biosphere Reserve management plan. The conclusions of the adequate assessment studies should be then addressed in the environmental impact assessment documentation.

The works in the Danube waters, in the phase of construction of the port or dredging capacities, will be able to affect the aquatic ecosystem of the Danube, in the immediate vicinity and to a limited extent downstream. The works will also affect the presence of ichthyofauna and the presence of birds that are related to aquatic ecosystems. The activity and the increased presence of people on the site within the port complex during the works are expected to have a negative effect on the fauna in the area.

VI. Comments and proposals regarding the monitoring programme

We consider it necessary to monitor the environmental factors that may be significantly affected. The developer must implement the prescribed environmental monitoring measures in accordance with the international applicable environmental legislation.

In conclusion, taking into account the Notification on planned activities - new construction of transport infrastructure facility -river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch "Odesa Railway", which involves:

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- "the construction of the operating water area with an approach canal with dredging to a depth of 8.23 m from the "0" of the Izmail seaport with the excavation of the bottom soil in the amount of 112.0 thousand m^3 and its storage in the shore dump";
- "the total area of the site planned for the construction and operation of the transport infrastructure facility - the river port (terminal) with an area of 19.0 hectares from the lands of the reserve and an area of 5.29 hectares from the lands of the water funds";
- "operational water area with an approach channel on the Danube River from 91.09 to 91.55 km: length - 460 m, with -115 m, area - 5.29 ha, design depth - 8.23 m from the "0" of the Izmail seaport";
- "environmental restrictions (...)" to the planned activities by technical alternative 1" are "for pollution of the aquatic environment - the value of the MPC of pollutants in the surface water of a water body, the background content of pollutants in the surface water of a water body ", and for "impact on wildlife" - ban on dredging during spawning";
- that for the notification transmitted, additional information is needed about the planned activities regarding berths, roadsides, aquariums, silos, outer port defense constructions, the current capacity of the port and to what level the expansion is carried out, if there are facilities for 8 million tons/year, if the total area of the port is 1.074.712 m^2, i.e. 107,47 ha as specified in the "Danube Ports Handbook, Edition December 2021[1] ";
- the Notification does not establish any possible impact on the environment, but only mentions some aspects of the impact on water during the operating period through the deposition of dust resulting from the transshipment works on the surface of the water and does not mention any possible transboundary impact, for example through the modification of the hydrological parameters of the Chilia arm with the consequence of the redistribution of flows between the Chilia and Sulina arms, in clear favor of the first;
- the likely transboundary impact, in particular due to the hydrological changes of the Danube (in terms of morphological conditions: depth and width of the course, structure and substrate of the bed of the riverbed, hydrological regime: quantity of flow, perturbation of the continuity of sediment transport, water velocity, etc.) through the implementation of the planned activities (...)", must be considered in the context of the implementation of another project: *"Development of the Danube-Black Sea deep water navigable channel on the Ukrainian side of the Danube Delta[2]" (Bystroe Channel)*, since the planning of works for the Izmail harbour with 8.23 m deep berths also requires at least similar access depths for the whole Chilia arm and the Bystroe Channel;
- in a wider context, these two interconnected projects belong to the "Development of the Danube Corridor" project, of which the LOGMOS Master Plan - Annex 6, Part II, TRACECA Inland Waterways - Danube Case Study, October 2013, ENPI 2011/264 459, "Logistics Processes and Motorways of the Sea II in Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Ukraine, Uzbekistan[3]", mentions the construction of an external port at the entrance to the Ukrainian portion of the Danube waterway for transhipment operations to increase the volumes of cargo shipped to the ports of Reni and Izmail and the reconstruction of the port of Reni;
- Research report "Analysis of the environmental impact in the Danube Delta resulting from the already implemented works related to the Danube-Black Sea

[1] https://www.danubeports.eu/images/Danube_Ports_Handbook_Edition_2021_final.pdf
[2] http://www.mmediu.ro/app/webroot/uploads/files/Notificare%20UA.pdf
[3] http://www.traceca-org.org/fileadmin/fm-dam/TAREP/65ta/Master_Plan/MPA6.2.pdf

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Deep Waterway project on the Ukrainian side of the Delta[4] " carried out from the implementation of both Phase 1 of the project and the Full development phase (which also covers the development of compensatory measures and mitigation measures likely based on the 2004-2017 integrated environmental monitoring materials and the results of field monitoring observations, at least in the transboundary context), states that the hydrotechnical works (not specifying what these works consisted of) did not generate a transboundary impact on the hydrological regime of the Danube Delta and thus:

- did not cause any changes in the flow distribution from the top of the Delta where the Danube splits into the Kiliynsky and Tulchinsky arms", but no data was provided to confirm this;
- have not changed current trends in the development of water flow in the Chilia Delta;
- no significant impact on migratory fish populations has been established.

The Romanian Party expresses the following point of view on the implementation of the works:

Since the Ukrainian Party intends to create depths of 8.23 m at the operating berths in the port of Izmail, we consider that it is not opportune to create these depths because the ships that are going to operate in the port of Izmail, if they enter the Sulina Channel, Tulcea Arm, Izmail Ceatal, then Chilia Arm up to Izmail, will need to ensure this depth throughout the entire sector crossed. This situation is in contradiction with what is currently going on in this segment between Bara Sulina - Sulina Channel - Tulcea Arm - Ceatal Izmail, since, in compliance with the Danube Commission Recommendations[5], it provides depths of 7.32 m for the navigation of maritime vessels with draughts of 7.01 m. Currently the navigation depths provided by the Lower Danube River Administration Galați are in accordance with the navigation gauges for which the Sulina Canal was designed, the present situation being directly proportional to the existing geomorphological conditions, the infrastructure of the banks and the port on this segment, between Bara Sulina and Ceatal Izmail. In the situation desired by this project, to ensure depths of 8.23 m in the berths of the port of Izmail, we consider that this cannot be achieved on the above-mentioned segment, namely from Bara Sulina to Ceatal Izmail, both from the geomorphological point of view, financial resources, existing equipment, as well as the fact that it is not necessary from the point of view of the Administration, which must ensure a depth of 7.32 m, according to the Recommendations of the Danube Commission. At the same time, it must be taken into account the current situation regarding high temperature and drought, as well as the high traffic flow on the Danube River compared to previous years, which led to the decrease of the Danube river flow by 50%, being necessary to ensure recommended and accepted navigability conditions in the sector concerned.

The area to be dredged additionally for the 8.23 m depth is between Bara Sulina and Ceatal Izmail (Mm43) at the critical points Bara Sulina, Mm31, Mm36, Mm40 and the dredged material must be dumped at sea. From the measurements carried out, for a covering depth of -9.00 m, it results the necessity of dredging a volume of about 1,500,000 m3, with annual periodical maintenance, with adverse effects on the Sulina Canal, both for the bank defences and on the bed, with enormous costs, unjustified by the Romania and without having additional equipment to carry out the above mentioned works. In this regard, the Romanian authorities does not agree with the realization of the Izmail port

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[4] http://www.mmediu.ro/app/webroot/uploads/files/Annex_2_Analysis_of_the_impact_of_the_environment_which_follows_from_the_already_implemented_work_ENG_-_RO.pdf

[5] https://www.danubecommission.org/uploads/doc/publication/Gabaritov_farvatera/Recommandations%20gabarits%202013.pdf

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for depths of 8.23 m and recommends to take into account that the future sea berths should provide depths for ships with draughts in close correlation with the existing situation in the Sulina Channel, i.e. depths for the navigation of sea vessels with draughts of 7.01 m.

At the same time, in the case of dredging for the construction of the depths at the berths of the Izmail seaport, we recommend that the dumping areas be established as close as possible to the Ukrainian shore, that they be checked periodically to monitor the quantity of alluvium dumped, and that the dumping area be respected in order to prevent their migration into the navigable channel, towards the Romanian side, avoiding the clogging of the navigable channel maintained by the Romanian Party.

Please note that the Romanian Party, through Lower Danube River Administration Galati, ensures for the Chilia Arm, on the segment from Ceatal Izmail to Periprava navigation conditions for river vessels for the transport of goods and passengers, only for the area between the border line and the Romanian shore, is not open to navigation of maritime vessels with third flags according to international legislation under the Romanian-Ukrainian Border Treaty, art. 9, para. 1.

The Romanian Party expresses its concern about the following matters:

- That in Decision IS/1f on compliance by Ukraine with its obligations under the Convention in respect of the Danube-Black Sea Deep Water Navigation Canal in the Ukrainian sector of the Danube Delta (ECE/MP.EIA/27/Add.1–ECE/MP.EIA/SEA/11/Add.1)[6] adopted at the Intermediate Sessions of the Meetings of the Parties to the Espoo Convention and the SEA Protocol, Geneva, 5-7 February 2019 published on the website of the United Nations Economic Commission for Europe (UNECE), the Meeting of the Parties:

"6. Regrets that only limited steps have been taken to bring the Bystroe Canal Project into full compliance with the Convention, further to paragraph 24 of decision VI/2;
7. Endorses that (...) Ukraine has not yet fulfilled its obligations (...) bringing the project itself into full compliance with the Convention;
8. Also endorses that the continuation of dredging activities by the Government of Ukraine constitutes a further breach of its obligations under the Convention;
13. Takes note of the intention of Ukraine to develop a new project for a "Bystroe Route" and to carry out a transboundary environmental impact assessment procedure on the new project in accordance with the Convention."

- for the lack of relevant information on both the status of the complex hydrotechnical works carried out so far and the projects that are planned to be implemented, such as the Izmail terminal, which may have a transboundary impact on the Romanian territory;
- that the projects already implemented for the "Development of the Danube Corridor" are very extensive and require a lot of complex hydrotechnical works on the Chilia arm, on the Bystroe arm and in the ports of Reni and Izmail which will determine the redistribution of flows on the Danube between the Chilia arm and the Sulina arm, in clear favour of the former and which will cause a significant transboundary impact on the Romanian territory, affecting the sites of the Danube Delta Biosphere Reserve, having a strong negative social and economic effect on the local communities of the Delta and determining unfavorable conditions for navigation on the Danube in the Romanian sector;

[6] https://unece.org/fileadmin/DAM/env/eia/documents/WG2.8_Nov2019/official_docs/G1910581ENG.pdf

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- that the impact of these works is not assessed in an integrated, synergistic, direct, indirect and cumulative context and no information was provided on the possible transboundary impact, in particular due to the hydrological changes of the Danube river (in terms of morphological conditions: depth and width of the course, of the fairway, bed structure and substrate, hydrological regime: quantity of flow, disturbance of sediment transport continuity, water velocity, etc.);
- that the impact studies presented by the Ukrainian Party do not present data and information that can be compared with those obtained by the Romanian Party but only statements unsupported by numbers, i.e. without a scientific basis; e.g. "Updated information on the current depth and width of the Bystroe Channel is not available because recently carried out hydrographic measurement numbers cannot be obtained. It is not known whether hydrographic measurements are carried out regularly (at least annually), or only occasionally." - Study on current situation and likely development of the Bystroe canal and Kiliya arm, TRACECA IDEA II, Transport Dialogue and, Networks Interoperability II, January 2016[7];
- that the Ukrainian approach regarding the impacts does not take into account very sensitive areas that may be significant such as affecting sturgeon migration, this in the context that "rare reef species such as sturgeons are more common on the Bystroe than elsewhere." (Documentation on the likely significant transboundary impact of the Ukrainian Deep-Water Navigation Canal Danube-Black Sea in the context of Espoo Convention, Danube Delta National Institute Tulcea, Romania, February 2005)[8] and "regarding ultrasound-tagged individuals, records showed that in spring 2012 and 2014, 53% of the individuals that migrated to the Black Sea used the Chilia arm" - Methods, techniques and monitoring results regarding the sturgeon migration on Lower Danube, INCDPM Bucharest, Strasbourg 2015/ Bern Convention[9];
- that the estimates of the amount of **112,000 m³** of material that needs to be excavated for the Izmail port access channel are very optimistic, from the data presented this amount that would result for an excavation on an area of 5.29 ha to a depth of 8.23 m from "0" would be according to a simple calculation about **435,367 m³;**
- that the conditions for temporary or final storage of excavated, dredged material that could also have a transboundary impact on Romanian territory are not presented;
- that the Ceatal Izmail bifurcation requires special scientific attention due to the intensity and complexity of the hydromorphological processes acting on the riverbed, hydromorphological changes in this sector of the Danube are significant because they produce associated risks, affecting the ecological balance of the Danube Delta Biosphere Reserve, therefore, monitoring and assessing morphological changes in the riverbed are essential - Assessing Danube riverbed morphology as a response to natural and anthropogenic conditions using GIS: A case study of the Ceatal Izmail Branching Area, National Research-Development Institute for Marine Geology and Geoecology - Geoecomar, Romania, December 2021[10];
- that the total area of land affected by erosion in the Ceatal Izmail bifurcation is 21.5 ha, while the total area occupied by sediment accumulations is 27.4 ha for the period 1980-2020, erosion and sedimentary deposition acting differently on the three branches of the bifurcation - Assessing Danube riverbed morphology as a response to natural and anthropogenic conditions using GIS: A case study of the

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[7] https://mtu.gov.ua/files/31110551_dod.pdf

[8] https://unece.org/DAM/env/eia/documents/inquiry/Rom.1.pdf

[9] https://www.afdj.ro/sites/default/files/prezentari/presentation_incdpm_deak_bern_convention_0.pdf

[10] https://www.researchgate.net/publication/359387451_ASSESSING_DANUBE_RIVERBED_MORPHOLOGY_AS_A_RESPONSE_TO_NATURAL_AND_ANTHROPOGENIC_CONDITIONS_USING_GIS_A_CASE_STUDY_OF_THE_CEATAL_IZMAIL_BRANCHING_AREA

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Ceatal Izmail Branching Area, National Research and Development Institute for Marine Geology and Geoecology - Geoecomar, Romania, December 2021[11];

- that no 3D mathematical modelling of hydrodynamic and hydromorphological effects of sediment transport has been carried out, results from the simulation of the solutions of the mentioned projects and the analysis of scenarios following the calibration and validation of 3D hydrodynamic models as well as 3D morphodynamic models in which the effects and transboundary impact on water bodies in the territories of Ukraine and Romania could be highlighted (an example Romanian coastal dynamics during cold and warm seasons analyzed by means of a numerical model, 2017, National Institute of Marine Geology and Geo-Ecology - GeoEcoMar[12]).

Thus, taking into account the provisions of the Espoo Convention, the provisions of the Treaty on the relations of good neighbourliness and cooperation between Romania and Ukraine, signed in Constanta on 2 June 1997, Article 16 on the "development cooperation in the area of protection and improvement of the environment, ... in the area of rational use of natural resources, of expansion of ecologically safe production, of implementation of efficient measures for the protection and revival of nature, in order to improve the environmental security of the two countries",

as there are reasonable grounds for believing that a significant adverse transboundary impact is likely to be caused by the planned activities to be carried out in the future, we request that the environmental impact assessment documentation which will elaborated and transmitted to Romania Party, to include the domains that have been identified as being of interest for which additional data and information are requested and for which an environmental impact assessment is required.

In the context above, we expect to receive according to Article 4 paragraph 2 of the Espoo Convention, the environmental impact assessment documentation (EIA Study), and indication of the time schedule for transmittal of comments to this or a timetable for the transboundary EIA procedure.

In the light of the foregoing, we consider that the Romanian Party has shown that it respects its responsibilities and obligations arising from international agreements and conventions to which Romania is a Party and looks forward to strengthening joint efforts in the field of Danube Delta protection.

On this occasion, I express my willingness to continue the fruitful cooperation and please accept, Ms. Deputy Minister, the assurance of my highest consideration.

Sincerely yours,

Barna TÁNCZOS

Minister

[11] Idem.

[12] https://www.geoecomar.ro/website/publicatii/Nr.23-2017/05_DINU_2017_web.pdf

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Natural Resources of Ukraine its proposals and comments regarding the scope of research and the level of detailing of information to be included in the environmental impact assessment report (appendix 21).

NIBULON LLC informs about taking into account in the EIA Report the provisions of the letter of the Ministry of Environment, Water Resources and Forests of Romania according to the ref. No. DGEICPSC/1363/04/08/2022:

Comments and suggestions of the Romanian side	Answers and links to the EIA Report
I. General comments and suggestions regarding the composition and content of the EIA Report	
The location of the project works is on the left bank of the Danube River, industrial enterprises are downstream. Regarding the location of the work, the nearest Romanian settlement to Izmail is Pleasa village, Ceatal commune – the county of Tulcea, and the nearest surface water stream is the Danube River. Transboundary impact on the environment can significantly affect the nearest surroundings, the minimum distance from the sources of pollutant emissions during work is 570 m - Pleasa village in Romania	Comments and suggestions are taken into account
As part of the project, the planned activities include the construction and operation of hydrotechnical structures of the port (cargo berth, etc.), railway access track, an industrial transshipment complex for grain, leguminous and oil crops (railway and road receiving facilities, a grain dryer, warehouse capacity, shipment devices for water and road transport), as well as dredging to a depth of 9.23 m from the "0" of the Sea Port of Izmail with the excavation of bottom soil in the amount of 1112.0 thousand m3 and its storage in the coastal dump.	Partially corresponds to the Notification. In the Report, the project decisions regarding the construction of buildings and structures correspond to the intentions published in the Notification of Planned Activities. The list of buildings and structures with their in turn construction is given in subsection 1.3 of the Report. The exception is the cargo berth, which has been replaced by two floating berths on which shipment floating complexes are installed. The description of the floating berth is given in subsection 1.4 of the Report.
After analyzing the notification, the alternative that is considered possible and proposed by the project is alternative 1, which is the best option for the selection of objects installations and technical characteristics of equipment to ensure the integration of a complex of technologies.	Not responding. Based on the comparison of technical alternatives 1 and 2, technical alternative 2 is recognized as environmentally sound. A description of justified alternatives and their comparative analysis is provided in subsections 1.3.1., 1.4. and in chapter 2

Thus, the environmental impact assessment documentation (EIA documentation) that will be developed for this planned activities must contain, as a minimum, in accordance with the provisions of the Espoo Convention, the following:	Proposals are accepted and taken into account
- Detailed information about the project itself, including the location of the project works, a description of these proposed works (please include sectional, cross-sectional profiles and longitudinal profiles of objects related to the proposed activity), a site plan and a map of the location of the project with along the state border between Romania and Ukraine;	Detailed information about the project is contained in subsection 1 of the Report "Description of planned activities", in particular in its subsections 1.1, 1.2, 1.3, including 1.3.2 "Dredging works", and 1.4 "Description of the main characteristics of the planned activities", as well as in Graphic materials - Drawings 1-5 as part of the Report.
- A description of justified alternatives to the proposed types of activities, as well as an option of refusal of the activity;	A description of technical alternatives is provided in subsection 1.3.1. and 1.4. report
- A description of the environment factors that may be significantly affected by the proposed actions and their alternatives;	A description of the current state of the environment is given in chapter 3 of the Report of the same name, a description of environmental factors likely to be affected by the planned activity and its alternative options is in chapter 4
- A description of the potential impact of the proposed activity and its alternatives on the environment and an assessment of their significance;	An assessment of the potential impact of the planned activity as a result of preparatory and construction works is provided in subsection 1.5.1. of the report, in the course of the planned activity - in subsection 1.5.2. report
- Descriptions of prevention and mitigation measures to minimize adverse environmental impact. It is necessary to assess the transboundary impact on environmental factors and take measures to prevent, reduce, supervise and monitor any negative impact on the environment during the execution construction phase or during operation in accordance with the relevant legislation. All these measures to prevent, limit and reduce any impact on the environment are also applicable to the protection of the surface waters of the Danube River both during the execution of works and during the operation of the river part terminal of Izmail. We consider it necessary to take measures to reduce or prevent adverse consequences and protective measures, which must be planned and implemented in accordance with international law at all stages of the planned activity implementation, operation, in	A description of planned measures aimed at prevention, diversion, avoidance, reduction, elimination of significant negative impact on the environment, including (if possible) compensatory measures are provided in chapter 7 of the Report. The assessment of possible transboundary impact is provided in subsection 5.8 of the Report.

case of an accident, etc.) and to ensure a high degree of environmental protection, adaptation to climate change and ensuring sustainable development.	
- A clear indication of the forecasting methods used including mathematical modeling methods and the assumptions underlying them, as well as relevant environmental data;	A general description of the forecasting methods is given in chapter 6 of this report. references to the methods. assumptions adopted and outgoing data underlying each of the calculations are given in the relevant appendixes to this report where these calculations are given.
- Assessment of likely consequences of changes in the environment intervention in environmental change;	An assessment of the likely consequences of changes in the environment is given in chapters 4 and 5 of the Report
- Assessment of the duration, length and scope of the proposed works;	The calculation period of the forecast is given in section 6 of this report, the length and scope of the planned works - in the corresponding calculations given in the appendixes to this report
- Description of impacts on key species and organisms including sediment disturbance impacts on marine organisms;	A description of the impact on flora, fauna and biodiversity is given in subsections 1.5.1 and 1.5.2. of this report. The assessment of the impact of hydrotechnical works on the state of ichthyofauna and aquatic biocenoses of the Danube River was carried out by the Institute of Fisheries and Marine Ecology of the State Agency of Land Reclamation and Fisheries of Ukraine (Appendix 8 to this report)
- Use of natural resources;	The description of impacts from the use of natural resources is given in subsection 5.1 of the Report
- Monitoring and management plans;	The post-project monitoring program is listed in Table 11.1 of Chapter 11 of this report
- A description of measures to prevent and respond to accidents, including accidents to vessels that may lead to flooding;	Scenarios of probable accidents, including on the ship, with a description of their prevention measures are given in chapter 8 of this report.
- Identification of gaps in knowledge and uncertainties that arose during the preparation of environmental impact assessment documentation.	A description of the difficulties that arose during the preparation of the report is given in chapter 9.

In addition, we would also like to emphasize that a significant negative transboundary impact of the project on the activities that will be financed under the Interreg VI-A NEXT Romania-Ukraine Program can be expected, given that the Odesa region, including the Izmail district, is part of the relevant territory of this Program. The program offers funding opportunities for three priorities and five specific goals, among which we mention those activities which are financed under the Romania-Ukraine Program, thus, in our opinion, the mentioned project can affect them: infrastructure construction restoration modernization of infrastructure related to systems structures to fight against fires, floods, strengthening of riverbanks, channels, condition of dams, afforestation of riverbanks, conservation, regeneration and re-naturalization of water bodies and ecosystems, conservation and restoration of small rivers, equipment (means for extinguishing fires, eliminating floods, etc.); general strategies and tools for hazard management and risk prevention, including joint action plans, hydrological monitoring of rivers, water temperature, measurement of precipitation and ice regime; joint projects on the creation expansion of nature reserves in a transboundary context; assistance, improvement of human and technical potential and modernization of equipment for monitoring nature conservation areas; assessment, protection and improvement of existing ecosystems (research activities, resource inventory, protection of endangered species, eradication of invasive species, afforestation, etc.).	Suggestions are not accepted. The planned activity has a very local character - the zone of impact of the planned activity on the quality of the atmospheric air, according to the estimates of subsection 5.8, is the territory with a radius of 673 m around the point "0" of the coordinate system of the industrial site; - the impact of dredging does not go beyond the water area of the object of the planned activity (the assessment is given in subsection 1.3.2), - during the discharge of recycled water of the object of the planned activity, the quality indicators of surface water in the control cross-section at 500 m downstream of the recycled water release do not exceed the established standards (the assessment is given in subsection 1.5.2); - transboundary impact on the state of the atmospheric air in Romania is assessed as absent, on the state of the surface waters of the Danube River as normative (the assessment is given in subsection 5.8.)
II. Comments and suggestions regarding surface and underground water bodies/ water elements	
From the point of view of the naval transport sector, with the help of the planned measures, the Ukrainian side intends to build a depth of 8.23 m in the future port terminal in Izmail in the operational area, which involves dredging in the following areas: Sulina Strait, Sulina Channel, Tulcea Strait, Izmail Canal, further following the Kiliya estuary to Izmail so that a depth of 8.23 m was provided from a depth of 7.32 m. *In this regard, I would like to note the fact that the depths of the Sulina shoal and the Sulina estuary are directly dependent on the sedimentation of the Danube River. The higher the water in the Danube River, the more intense the processes of sediment deposition, which affects the decrease in depth. The more*	Comments are not accepted. The planned activity does not include dredging in the following areas: Sulina Strait, Sulina Channel, Tulcea Strait, Izmail Canal, further following the Kiliya estuary to Izmail. "NIBULON" does not intend to transfer to itself the functions of the state regarding the deepening of navigable waterways for public use. The implementation of the planned activity is foreseen at the expense of private investments and has a very local character - a new construction of a river port (terminal) on an area of 19.7 hectares with hydrotechnical structures (operational water area with an

intensive the dredging works in the shoal, the greater the depth in the shoal and vice versa, so that dredging is carried out during the year with a delay in time compared to the regime of the Danube River sediments	approach channel) located along the Vylkove - Izmail Ceatal shipping channel from 91.09 to 91.55 km wide from the channel border to the left bank (area 10.4357 hectares). The design depth of hydrotechnical structures is 8.23 m from "0" of the Izmail Sea Port, which corresponds to the design depth of the shipping channel "Vylkove - Izmail Ceatal" (approved by the Resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 N 136 with the clarification "the depth has not been reached in "due to non-completion of construction works under the project"). A more detailed description of the dredging technology is provided in subsection 1.3.1 of this Report and Drawing 3
In view of the above, it is necessary to analyze the project activity according to the following aspects. *- hydromorphological – fluctuations in the speed of water flow in several areas of the Sulina sector, the Sulina channel, the Tulcea estuary, the Izmail Ceatal, then the Kiliya estuary to Izmail and their impact on the existing hydrotechnical works in this sector, in the case of dredging works from 7.32 m to 8.23 m;* *- correlation with the new hydromorphological process, which is related to the issue of the development of the secondary delta of Kiliya to the south, which refers to the formation of the coastal border by the coarse alluvial outflows of the Istanbul Vicky, which is closed in the Black Sea by the Musura Bay, which represents a danger for shipping in the mouth of Sulina; it is necessary to analyze the increase of speed of sediment accumulation at the mouth of the Sulina Channel;* *- the completion of dredging works from 7.32 m to 8.23 m and, subsequently, the operation of this waterway will have an important impact on the distribution of water flows and flows of the Danube River alluvium between the Kiliya and Tulcea mouths;* *- large volumes of dredging operations will negatively affect the flow of water on the secondary branches of the Kiliya, which supply water to the territory of the Danube Delta, and may significantly affect the Danube Delta Biosphere Reserve.*	<u>Suggestions are not accepted.</u> Clarification in the resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 No. 136 regarding the design depth of 8.23 m of the Vylkove - Izmail Ceatal shipping channel "the depth has not been reached due to the non-completion of construction works according to the project" provides for the existence of another, larger-scale construction project with studies and assessments of the impact of these works on environmental factors Meanwhile, dredging works as part of the planned activity are characterized by very modest results: excavation of bottom soil in the volume of 112.0 thousand m3 on an area of 2.32 hectares (in the case of bringing depths to 8.23m). In the rest of the water area, the natural depths correspond to the declared design depths (Drawing 3). Execution of dredging works is planned in several stages, which is related to the sequence of construction of the object of the planned activity. The last step - reaching depths from 7.32m to 8.23m from "0" of the Izmail seaport will be implemented in case Ukraine initiates dredging works on the shipping channel "Vylkove - Izmail Ceatal" and downstream sections of the shipping route and water areas More detailed information on the issue of dredging works, conducted studies and environmental impact assessment is given in subsections of this report. 1.3. 1.5.1. appendixes 5, 6, 8.

It is also necessary to include aspects regarding the status of the water body and the possible impact, in accordance with the requirements of the Water Framework Directive (2000/60/EC), taking into account the reference from the notification, in the context of the likely transboundary impact (page 6), the Convention on the Protection and sustainable use of the Danube River in the context of possible transboundary impacts and the Convention on the Protection and Sustainable Use of the Danube River (1994, ratified by Ukraine in 2002).	Suggestions are accepted The current state of the water body is given in chapter 3 of the Report, the assessment of the transboundary impact of the planned activity within the framework of the Convention on the Protection of the Danube River is given in subsection 5.8 report
From the point of view of the safety of navigation, for the normal development of maritime traffic, the implementation of water transportation, the physical integrity of navigation personnel, passengers and cargo, we inform you that the depth of 8.23 meters, planned for carrying out dredging works according to the project, significantly exceeds the draft of 23 feet (7.01 meters), allowed at the mouth of the Sulina in accordance with Art. 3.05 chapter 5 second part of the Danube Navigation Regulations in the Romanian sector. In summary, vessels that will be loaded at the port of Izmail will not be able to load at full capacity in the future due to restrictions at the Sulina estuary. *The Ukrainian Party will have to comply with the provisions of international and bilateral regulatory acts regarding navigation on the Danube and the drainage regime of border waters, such as: Convention on the regime of navigation on the Danube, signed in Belgrade on August 18, 1948; (ratified by Decree No. 298/1948); further Belgrade Convention, Agreement between Romania and Ukraine on State Border Regime (2003), Agreement between the Government of Romania and the Government of Ukraine on Cooperation in the Field of Border Water Management, signed on September 30, 1997 in Galati, as well as other bilateral documents signed by Romania and Ukraine. The Ukrainian side needs to take all possible measures to limit and manage the environmental consequences for the Danube Delta ecosystem.*	Remarks are taken into consideration. Execution of dredging works is planned in several stages, which are related to the sequence of construction of the object of the planned activity. The last step – reaching depths from 7.32 m to 8.23 m from "0" of the Izmail sea port will be implemented in case Ukraine initiates dredging works on the shipping channel "Vylkove - Izmail Ceatal" and downstream sections of the shipping route and water areas. More details about the sequence of dredging works are given in subsections 1.3 and 1.4 Shipping company "NIBULON" works in the legislative field and has experienced specialists in this field. Therefore, it is the duty of everyone at their workplace to unquestionably comply with the requirements of current legislation and the provisions of all international acts, including national and international regulatory acts regarding shipping on the Danube River. The planned activity envisages the implementation of measures aimed at preventing, diverting, avoiding a significant negative impact on the environment, including limiting the ecological consequences for the ecosystem of the Danube River. Description of measures - chapter 7 of the Report.

taking into account the pressures listed in the European Commission Directive (EU 2017/845 of 17 May 2017 that the proposed activity has on the aquatic environment there is a possibility that the marine environment may be affected differently. Thus, the works carried out in the project implementation area may lead to the resuspension of some priority substances from sediments in the water column. In addition, equipment and transport activities can be additional sources of pollution, generating atmospheric emissions of priority hazardous substances (heavy metals, hydrocarbons, etc.), which can then be released into the aquatic environment, introducing pollutants into the marine area. Together with other burdens from the same activity, the cumulative impact can pose a threat to the marine ecosystem. *Thus, we believe that the monitoring program of the Black Sea ecosystem in front of the mouths of the Danube is mandatory, both during the project implementation period and after the completion of work on the concentration of pollutants in all matrices, water, sediment, and flora and fauna.*	Suggestions are accepted During the impact assessment, a study of subsoil samples was conducted in the area of its planned development, information is provided in subsection 3.3., measurement protocols – appendix 3 to this Report A study of surface water samples of the Danube River was also conducted, measurement protocol - Appendix 3. The post-project monitoring program provides for conducting studies of soils (bottom sediments), as well as the state of surface waters (section 11, table 11.1)
III. Comments and suggestions regarding air quality and noise level	
Air quality should be monitored by measurements determined by fuel combustion at the level of machinery and equipment and vehicles or by circulation of materials (emissions of CO, CO2, NOx, NO2, VOCs, dust, etc.) and monitoring of parameters to ensure that the maximum permissible concentrations according to the relevant legislation are not exceeded. *Ensuring measurement of the noise level on the site and on the boundaries adjacent to the territory adjacent to the port during the implementation period (temporary or during the operation period from noise generated by construction operational machinery and vehicles.*	Suggestions are accepted. The post-project monitoring program specified in subsection 11 of this Report (table 11.1) contains information on conducting direct instrumental measurements directly at organized and mobile sources of emissions, as well as monitoring the quality of atmospheric air at the border of the sanitary protection zone and residential buildings, which includes determining the content of pollutants and the level of noise during construction and operation The list of sources of emissions, their characteristics, nomenclature and estimated volumes of pollutants emitted into the air during preparatory and construction works are given in subsection 1.5.1, during the implementation of planned activities - in subsection 1.5.2.
IV. Comments and suggestions on waste management	
Waste management regarding the collection through companies specialized in this field and the application of hazardous and safe waste management measures. We also mention the need to manage any emergency spills/discharges of hazardous substances, especially in the fuel category (petroleum, diesel, mineral oils, used	Suggestions are accepted. Information on waste, which is expected to be generated as a result of the implementation of the planned activity, and ways of handling it during preparatory and construction works - are given in subsection 1.5.1 of the Report;

motor oils, etc.) on surface or underground bodies of water. At the same time, the waste generated during the ongoing activities of the dredging vessels, as well as other activities, will be treated, selectively collected in the storage areas/containers designated for this purpose and accepted by specialized companies on site.	during the implementation of the planned activity - in 1.5.2. The planned activity also provides for the implementation of a set of emergency measures, including those related to the spillage of oil fuel from the ship, which led to the pollution of surface waters. The ship emergency scenario and emergency measures are given in Chapter 8.

Comments and suggestions regarding the appropriate impact assessment on the "Natura 2000" territory

As you already know, the Danube Delta is an integral part of the European Ecological Network "Natura 2000" in Romania and overlaps at the level of the Danube Delta with such Special Protection Areas (SPAs) and Sites of Community Importance and Interest (SCI) created according to the Habitats Directive (92/43/CE) and the Birds Directive (79/409/CE):

№	*Name SCI*	*Code*	*SCI surface (ha)*	*Biogeographic region*
1.	*Danube Delta*	*ROSCIOO 65*	*453.645,5*	*49.8% of the Steppe and 50.2% of Seaside*
2.	*Danube Delta*	*ROSCIOO 66*	*336.200,2*	*100% maritime area of the Black Sea*

№	*Name SCI*	*Code*	*SCI surface (ha)*	*Biogeographic region*
3.	*The Danube Delta and the Razim-Sinoye Complex*	*ROSCIOO 63*	*508.302,3*	*44.74% of the Steppe and 55.26% of Seaside*

Detailed maps of these places can be found on the Internet Natura 2000 Network Viewer (europa.eu). Information about the sites is available on the website of the Romanian Administration of the Danube Delta Biosphere Reserve: https://ddbra.ro/rezervatia/delta-dunarii/biodiversitate/situri-natura-2000-administrate-de-a-r-b-d-d-a921. This link also contains the Natura 2000 standard form for which each Natura 2000 site has been prepared.

1. "Danube Delta ROSCI0065" was intended for the conservation of species/habitats of interest to the Community:
- 29 types of biotopes of public interest, of which 7 are priority (71.24% of the surface of ROSCI0065 is occupied by "Natura 2000" habitats);
- species listed in Appendix II of Directive 92/43/CEE: 5 species of plants, 9 species of invertebrates, 15 species of fish, 2 species of amphibians and 3 species of reptiles, 7 species of mammals.
2. The "Danube Delta ROSCI0066" marine zone is intended for the preservation of species/habitats of interest to the Community:
- 4 types of biotopes that are of interest to the community;
- species listed in Appendix II of Directive 92/43/CEE: 2 species of fish, 2 species of mammals.
3. "Danube Delta and Complex "Razim-Sinoye" ROSPA0031" was designated for the conservation of birds of interest to the Community: 221 bird species listed in Appendix 1 of Directive 2009/147/CE, of which 13 are permanent species, 95 - for reproduction, 38 are wintering, 137 are within this territory during migration.

The Romanian side is particularly concerned about the proposed dredging works and considers that all interventions aimed at changing the cross-sections and longitudinal sections of the branches are likely to affect most components of the Natura 2000 areas. *In summary, it is necessary to carry out thorough evaluation studies of the above-mentioned nature conservation areas in accordance with the provisions of the above-mentioned directives. The methodology adopted for the identification and assessment of negative impacts should be simple and consistent with the Danube Delta Biosphere Reserve Management Plan. The conclusions of thorough evaluation studies should be considered in the environmental impact assessment documentation.* *Works in the waters of the Danube, during the construction phase of the port or dredging facilities, will be able to affect the aquatic ecosystem of the Danube in the close proximity and to a limited extent downstream. The works will also affect the presence of ichthyofauna and the presence of birds that belong to the aquatic ecosystem. It is expected that the activity and increased presence of people in the territory of the port complex during the works will have a negative impact on the fauna in the area.*	The suggestion is partially accepted On the territory of the implementation of the planned activity and in the zone of its territorial impact on atmospheric air quality (within a radius of 673 m from the "0" point of the coordinate system of the industrial site) there are no objects of the nature reserve fund and reserved territories for the creation of NRF objects. Also, this territory is not a migratory eco-corridor for rare species of birds, does not belong to the territories of the "Emerald Network" project and Natura 2000. Meanwhile, the dredging works carried out within the framework of the planned activity affect the hydrobionts of the Danube River. The assessment of the impact of hydrotechnical works on the state of fish stocks of the Danube River is given in Appendix 8. More detailed information about the impact of the planned activities on fauna and flora is given in subsections of this Report 1.5.1, 1.5.2, 4, 5.1, 5.3, 5.4
V. Comments and suggestions regarding the monitoring program	
We consider it necessary to monitor environmental factors that can be significantly affected. The developer must implement established environmental monitoring measures in accordance with current international environmental legislation.	The suggestion has been taken into account The program after project monitoring is given in chapter 11 of this Report.

Summarizing and taking into account the notification of the planned activity - the new construction of the river port (terminals) of the transport infrastructure facility in Izmail, Izmail district, Odesa region, with a railway access track adjacent to the Izmail station of the Odesa Railway regional branch, provides:	
"Construction of an operational water area with an approach channel with dredging to a depth of 8.23 m from "0" of the Izmail Sea Port with excavation of the bottom soil in the volume of 112.0 thousand m³ and its storage on the coastal dump";	Corresponds to the characteristics stated in the Notification However, the Report provides clarifications regarding the design depth of 8.23 m from "0" of the Izmail seaport - the last stage of dredging works - reaching depths from 7.32 m to 8.23 m will be realized in case if Ukraine initiates dredging works on the shipping channel "Vylkove – Izmail Ceanal" and downstream sections of the shipping route and water areas
"The total area of the site planned for the construction and operation of the river port (terminal) transport infrastructure facility is 19.0 hectares from reserve lands and 5.29 hectares from water fund lands"; "Operational water area with an approach channel on the Danube River from 91.09 to 91.55 km: length - 460 m, from -115 m, area - 5.29 hat. estimated depth - 8.23 m from "0" of the Izmail seaport; *"ecological restrictions (...)" of the planned activity according to technical alternative 1"* *"for pollution of the aquatic environment, the MPC value of pollutants in the surface waters of the water body, the background content of pollutants in the surface waters of the water body", and for " impact on the animal world" - prohibition of dredging during spawning";* *That the notification submitted requires additional information on the planned activities in terms of berths, roadsides, aquariums, silos, external defenses of the port, the current capacity of the port and to what level expansion is made, if there are facilities for 8 million tons/year, if the total area of the port is 1,074,712 m², i.e. 107.47 hectares, as stated in the "Handbook of Danube Ports, December 2021edition."* *Danube Ports Handbook Edition 2021 finel.p df(danubeports.org).* *The notification does not establish any possible impact on the environment, but only mentions*	Partially corresponds to the characteristics stated in the Notification. In the course of work on the project, the area of land plots was specified: - 19.0 ha - from reserve lands; -10.4357 ha - from the lands of the water fund, - 0.7 ha with the category "land of transport", acquisition from PJSC "UKRAINIAN DANUBE SHIPPING COMPANY". Detailed information about land plots in subsections 1.1. 1.3., including 1.3.2. "Dredging works", as well as in cartographic materials - Drawings 1-5 Description of the main characteristics of the planned activity - subsection 1.4 Comments are not accepted

some aspects of the impact on water during the period of operation due to the deposition of dust as a result of transshipment works on the surface of the water and does not mention any possible transboundary impact for example due to the modification of the hydrological parameters of the Kiliya Estuary with the consequence of the redistribution of flows between the Kiliya estuary and the Sulina estuary in favor of the former. *probable transboundary impact, in particular due to hydrological changes of the Danube (in terms of morphological conditions: depth and width of the river bed, structure and substrate of the river bed, hydrological regime: amount of runoff, disruption of the continuity of sediment transportation, water velocity, etc.) through the implementation of planned measures (...)", should be considered in the context of the implementation of another project "Development of the deep-water Danube-Black Sea shipping channel from the Ukrainian side of the Danube Delta (Bystre estuary), as planning works for the Izmail harbor with 8.23 m deep berths also require at least similar access depths for the entire Kiliya arm and the Bystre channel; in a broader context, these two interrelated projects belong to the "Development of the Danube Corridor"; a project of which the LOGMOS Master Plan - Appendix 6, Part II. TRACECA Inland Waterways - Danube Case Study is a part, October 2013, UNPP 2011 264 459, "Logistics processes and sea lanes II in Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Ukraine, Uzbekistan" refers to the construction of an external port at the entrance to the Ukrainian section of the Danube waterway for transshipment operations to increase the volume of cargo transported to the ports of Reni and Izmail and the reconstruction of the port of Reni;*	The notification of the planned activity contains the types of possible impacts expected from the planned activity. In the Report, all types of impacts correspond to the scope of the planned works, their qualitative and quantitative assessment, as well as possible consequences are provided in the relevant subsections of the Report 1.5.1, 1.5.2, 5.1, 5.3. However, the planned activity does not include dredging in the following areas: Sulina strait, Sulina Channel, Tulcea strait, Izmail Ceatal, further following the Kiliya estuary to Izmail Implementation of the planned activity is foreseen at the expense of private investments, has a very local character and does not belong to the General Plan of LOGMOS. An assessment of the possible transboundary impact of the planned activity is provided in subsection 5.8 of the Report.
The research report "Analysis of the impact on the environment in the Danube Delta as a result of the already completed works related to the project of the Danube-Black Sea deep-water route on the Ukrainian side of the delta", carried out as a result of the implementation of both Phase I of the project and the Full Development Phase (which also covers the development of compensatory and mitigation measures, probably based on the 2004-2017 integrated environmental monitoring materials and the results of field monitoring observations,	<u>The comment is not accepted.</u> The planned activity is not related to the project of the Danube-Black Sea deep water route on the Ukrainian side of the delta and is not responsible for its content

at least in a transboundary context), states that hydraulic works (without specifying what these works consisted of) did not cause a transboundary impact on the hydrological regime of the Danube Delta and, thus: *- did not cause any changes in the distribution of runoff from the top of the delta where the Danube divides into the Kiliya and Tulcea mouths, but no data were provided to confirm this;* *- the current trends in the development of water flow in the Kiliya estuary were not changed;* *- no significant impact on migratory fish populations was established.*	
<u>The Romanian side expresses the following point of view regarding the implementation of the works:</u> *Since the Ukrainian Party intends to create depths of 8.23 m in the operating berths in the port of Izmail, we consider that it is not opportune to create these depths because the ships that are going to operate in the port of Izmail, if they enter the Sulina Channel, Tulcea Arm, Izmail Ceatal, then Kiliya Arm up to Izmail, will need to ensure this depth throughout the entire sector crossed. This situation is in contradiction with what is* *currently going on in this segment between Bara Sulina - Sulina Channel - Tulcea Arm - Ceatal Izmail, since, in compliance with the Danube Commission Recommendations, it provides depths of 7.32 m for the navigation of maritime vessels with draughts of 7.01 m.* *Currently the navigation depths provided by the Lower Danube River Administration Galati are in accordance with the navigation gauges for which the Sulina Canal was designed, the present situation being directly proportional to the existing geomorphological conditions, the infrastructure of the banks and the port on this segment, between Bara Sulina and Ceatal Izmail. In the situation desired by this project, to ensure depths of 8.23 m in the berths of the port of Izmail, we consider that this cannot be achieved on the above-mentioned segment, namely from Bara Sulina to Ceatal Izmail, both from the geomorphological point of view, financial resources, existing equipment, as well as the fact that it is not necessary from the point of view of the Administration, which must ensure a depth of 7.32 m, according to the Recommendations of the Danube Commission. At the same time, it must be taken into account the current situation regarding high temperatures and drought, as well as the high traffic flow on*	<u>Comments are taken into consideration.</u> The design depth of the hydrotechnical structures of the planned activity is 8.23m from the "0" of the Izmail sea port, which corresponds to the design depth of the shipping channel "Vylkove - Izmail Ceatal" (approved by the resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 N 136 with the clarification "the depth has not been reached due to non-completion of construction works under the project"). Dredging works are planned to be carried out in stages, which is coordinated with the implementation of the construction phase. The last stage of dredging works to achieve depths from 7.32 m to the design depth of 8.23 m will be implemented in case if Ukraine initiates dredging works on the Vylkove - Izmail Ceatal shipping channel and downstream sections of the shipping route and water areas. A detailed description of dredging works and their impact on the environment is given in subsections of this report: 1.3, 1.5.1, appendixes 5, 6, 8.

the Danube River compared to previous years, which led to the decrease of the Danube river flow by 50%, being necessary to ensure recommended and accepted navigability conditions in the sector concerned.	
The area to be dredged additionally for the 8.23 m depth is between Bara Sulina and Ceatal Izmail (Mm43) at the critical points Bara Sulina, ym31, Mm36, Mm40 and the dredged material must be dumped at sea. From the measurements carried out, for a covering depth of -9.00 m, it results the necessity of dredging a volume of about 1,500,000 m3, with annual periodical maintenance, with adverse effects on the Sulina Canal, both for the bank defences and on the bed, with enormous costs, unjustified by the Romania and without having additional equipment to carry out the above mentioned works. In this regard, the Romanian authorities does not agree with the realization of the Izmail port for depths of 8.23 m and recommends to take into account that the future sea berths should provide depths for ships with draughts in close correlation with the existing situation in the Sulina Channel, i.e. depths for the navigation of sea vessels with draughts of 7.01 m. 'htt/ / yyyyy. mmedN ro . app Awebroot / uploads/ files /Annex 2 Analysis of the i mpact of the I fi om the already worh ENG RO. pdf 'https / /www. danubecomm ssion. org/uploads/doc/ publication/Gabaritov farvatera / pdf	The comment is not accepted. The planned activity involves dredging works with the extraction of bottom soils in the volume of 112.0 thousand m3, the area of the bottom damage is 2.32 hectares, the storage of the soil is provided for in a coastal dump, which is organized on the territory leased for the construction and operation of the object of the planned activity. More information on the issue of dredging works and their impact on the environment is given in subsections of this report: 1.3, 1.5.1, appendices 5, 6, 8.
At the same time, in the case of dredging for the construction of the depths at the berths of the Izmail seaport, we recommend that the dumping areas be established as close as possible to the Ukrainian shore, that they be checked periodically to monitor the quantity of alluvium dumped, and that the dumping area be respected in order to prevent their migration into the navigable channel, towards the Romanian side, avoiding the clogging of the navigable channel maintained by the Romanian Party.	The suggestion is accepted. The planned activity involves the arrangement of a coastal dump of dredged soils on the territory leased for the construction and operation of the object of the planned activity. The construction of the coastal dump prevents the soil from being eroded by waves and currents, as it has embankments, sedimentation areas and discharge pipes. Detailed information on dredging works and arrangement of alluvium maps is provided in subsection 1.3.2.
Please note that the Romanian Party, through Lower Danube River Administration Galati, ensures for the Kiliya Arm, on the segment from Ceatal Izmail to Periprava navigation conditions for river vessels for the transport of goods and passengers, only for the area between the border line and the Romanian shore, is not	The comment is taken into consideration. The planned activity involves shipping on the inland waterways of Ukraine.

open to navigation of maritime vessels with third flags according to international legislation under the Romanian- Ukrainian Border Treaty, art. 9, para. 1.	
The Romanian side expresses its concern regarding the following: *regarding Decision IS/1f on compliance by Ukraine with its obligations under the Convention on the Danube-Black Sea Deep Sea Navigation Channel in the Ukrainian part of the Danube Delta (ECE/MP. EIA/27/Add.1—ECE/MP.EIA/SEA/11/Add.1)[6] adopted at the interim sessions of the meetings of the Parties to the Espoo Convention and the SEA Protocol, Geneva, February 5-7, 2019, published on the website of the United Nations Economic Commission for Europe (UNECE), Meeting of the Parties:* *"6. Regrets that only limited steps have been taken to bring the Bystre Canal Project into full compliance with the Convention pursuant to paragraph 24 of decision VI/2;* *7. Confirms that (...) Ukraine has not yet fulfilled its obligations (...) to bring the project itself into full compliance with the Convention* *8. Also confirms that the continuation of dredging works by the Government of Ukraine is a further violation of its obligations under the Convention;* *13. Takes note of Ukraine's intention to develop a new project for the "Bystre route" and to carry out the procedure for assessing the transboundary impact on the environment of the new project in accordance with the Convention."*	The comment is not accepted This issue belongs to the competence of the state and relevant authorities and does not relate to the planned activity. NIBULON company does not intend to assume the functions of the state, but acts exclusively as an investor and customer of the project of the planned activity, which is considered in this report and does not include work on the deep-sea navigation channel. Description of the characteristics of the planned activity - subsection 1.3., dredging works - subsection 1.3.2. The fulfillment of Ukraine's obligations regarding the Convention on the Danube-Black Sea Deep Sea Navigation Channel in the Ukrainian part of the Danube Delta is the exclusive function of the state (ECE/MP.EIA/27/Add.1—ECE/MP.EIA/SEA/11/Add.1)[6]
for the lack of relevant information on both the status of the complex hydrotechnical works carried out so far and the projects that are planned to be implemented, such as the Izmail terminal, which may have a transboundary impact on the Romanian territory; *that the projects already implemented for the "Development of the Danube Corridor" are very extensive and require a lot of complex hydrotechnical works on the Kiliya arm, on the Bystre arm and in the ports of Reni and Izmail which will determine the redistribution of flows on the Danube between the K1liya arm and the Sulina arm, in clear favor of the former and which will cause a significant transboundary impact on the Romanian territory, affecting the sites of the Danube Delta Biosphere Reserve, having a strong negative social and economic effect on the local communities of the Delta and*	The comment is not accepted. The planned activity does not involve carrying out large-scale dredging works in the following areas: Kiliya arm, Bystre arm, Reni port. Dredging works as part of the planned activity are characterized by very modest results: excavation of bottom soil in the volume of 112.0 thousand m3, development area - 2.32 ha (in case of bringing depths to 8.23 m). This amount of work is not capable of redistributing flows between the Kiliya and Sulina branches. The works envisaged by the planned activity will only allow to achieve the design values determined by the resolution of the The Cabinet of Ministers of Ukraine of February 9, 2022 No. 136. A detailed description of the characteristics of the planned activity is given in subsection 1.3

determining unfavorable conditions for navigation on the Danube in the Romanian sector	of this Report and Drawings 1.3; assessment of possible transboundary impact is provided in subsection 5.8 of the Report.
^https://unece.org/fileadmin/DAM/env/eia/documents/WG.2.8_Nov2019/officiat_docs/GJ_91_058s_ENG_.pdf *- that the impact of these works is not assessed in an integrated, synergistic, direct, indirect and cumulative context and no information was provided on the possible transboundary impact, in particular due to the hydrological changes of the Danube river (in terms of morphological conditions: depth and width of the course, of the fairway, bed structure and substrate, hydrological regime: quantity of flow, disturbance of sediment transport continuity, water velocity, etc.);* *- that the impact studies presented by the Ukrainian Party do not present data and information that can be compared with those obtained by the Romanian Party but only statements unsupported by numbers, i.e. without a scientific basis; e.g. "Updated information on the current depth and width of the Bystre Channel is not available because recently carried out hydrographic measurement numbers cannot be obtained. It is not known whether hydrographic measurements are carried out regularly (at least annually), or only occasionally." - Study on current situation and likely development of the Bystre channel and Kiliya arm, TRACECA IDEA II, Transport Dialogue and, Networks Interoperability II, January 2016;* *- that the Ukrainian approach regarding the impacts does not take into account very sensitive areas that may be significant such as affecting sturgeon migration, this in the context that "rare reef species such as sturgeons are more common on the Bystre than elsewhere." (Documentation on the likely significant transboundary impact of the Ukrainian Deep-Water Navigation Canal Danube-Black Sea in the context of Espoo Convention, Danube Delta National Institute Tulcea, Romania, February 2005) and "regarding ultrasound-tagged individuals, records showed that in spring 2012 and 2014, 53% of the individuals that migrated to the Black Sea used the Kiliya arm" Methods, techniques and monitoring results regarding the sturgeon migration on Lower Danube, INCDPM Bucharest, Strasbourg 2015/ Bern Convention* *- that the estimates of the amount of 112,000 m3 of material that needs to be excavated for the Izmail port access channel are very optimistic, from the data presented this amount that would*	The comment is not accepted. The accusations of the Romanian side do not in any way relate to the planned activities considered in this report. The planned activity does not involve conducting dredging works that may cause hydrological changes of the Danube River (from the point of view of morphological conditions: depth and width of the channel, fairway, structure of the bottom and substrate, hydrological regime: amount of flow, disruption of the continuity of sediment transportation, speed of water movement, etc. Development of the Bystre Channel and Kiliya Arm do not concern a planned activity.

result for an excavation on an area of 5.29 ha to a depth of 8.23 m from "0" would be according to a simple calculation about 435,367 m3; *that the conditions for temporary or final storage of excavated, dredged material that could also have a transboundary impact on Romanian territory are not presented;* *that the bifurcation in the Izmail Ceatal area requires special scientific attention due to the intensity and complexity of hydromorphological processes acting on the riverbed, hydromorphological changes in this sector of the Danube are significant, as they create relevant risks, affecting the ecological balance of the Danube Delta biosphere reserve, therefore monitoring and the assessment of morphological changes in the river bed are important - Assessment of the morphology of the Danube bed in response to natural and anthropogenic conditions using GIS: a case study of the Izmail Ceatal branching zone, National Research Institute of Marine Geology and Geoecology - Geoecomar, Romania, December 2021;* *- that the total area of land affected by erosion in the Izmail Ceatal bifurcation area is 21.5 ha, while the total area occupied by sediment accumulation is 27.4 ha for the period 1980-2020, erosion and sedimentation act differently on the three bifurcation branches - Evaluation of the morphology of the Danube channel in response to natural and anthropogenic conditions using GIS: a case study of the Izmail Ceatal branching zone, National Research Institute of Marine Geology and Geoecology - Geoecomar, Romania, December 2021* https://mtu.gov.ua/files/31110551 dod.pdf ^ https://unece.org/DAM/env/eia/documents/inquiry/Rom.1.pdf "https://www.afdj.ro/sites/default/files/prezentari/presentation_incdpm_deakbern convention 0.pdf 'O https://www.researchgate.net/publication/359387451_ASSESSING_DANUBE_RIVERBED_AS_A_TO_NATURAL_AND_CONOITIONS_USING_GIS_A_CASE_OF_THE_L IZMAIL BRANCHING AREA *- that three-dimensional mathematical modeling of the hydrodynamic and hydromorphological effects of sediment transport was not carried out, the results of modeling the solutions of the mentioned projects and the analysis of scenarios after the calibration and verification of three-dimensional hydrodynamic models, as well as three-dimensional morphodynamic models, in which the effects and transboundary impact on*	The comment is not accepted. The report contains the characteristics of the planned activity, in particular, dredging works (subsection 1.3.2), as well as the provided Plan of control measurement of depths (Drawing 3), which makes it possible to check the reliability of the presented data regarding the amount of subsoil extraction. The comment is not accepted. Dredging works have very limited characteristics and, accordingly, impact on the state of the Danube River, which, according to calculations, does not go beyond the water area of the object of the planned activity: the maximum length of the turbidity plume reaches 69.23 m; the maximum time for the water environment to return to the standard state is 1.0 hours. The calculation of indicators of the effects of dredging works on the state of surface waters is given in Appendix 6. Therefore, the claims of the Romanian side that the planned activity creates risks, affecting the ecological balance of the Danube Delta biosphere reserve, are greatly exaggerated, and the demand for large-scale research and the creation of three-dimensional hydrodynamic and morphodynamic models is not justified.

water bodies on the territory of Ukraine and Romania can be shown for an example of the dynamics of the Romanian coast during the cold and warm seasons, analyzed using a numerical model. 2017. National Institute of Marine Geology and Geoecology, Geoecomar).	

Announcement on the start of public discussion of the environmental impact assessment report No. 202251995б6 (appendix 23)

- organization and holding of public discussion on environmental impact assessment paid under contract No. 172/22-OVD dated September 5, 2022, payment order No. 108 dated September 15, 2022 (appendix 25)

Придунайские вести

ПЯТНИЦА, 27 МАЯ 2022 г. № 18 (13 264)

ГАЗЕТА ИЗДАЕТСЯ С 1940 ГОДА

vestiizm@ukr.net

НОВАЯ УСЛУГА

С 23 мая в Украине можно получить услугу одновременного оформления ID-карты и загранпаспорта. Об этом сообщает МВД Украины в Facebook.

[illegible]

ТРАССА РЕНИ-ОДЕССА СЕГОДНЯ

Пограничники рассказали, можно ли ехать по трассе Одесса-Рени мужчинам призывного возраста.

[illegible]

ОДНОЙ СТРОКОЙ

С 25 мая в Одесской области сократят комендантский час — теперь он будет длиться с 23:00 до 05:00.

К СВЕДЕНИЮ

В апреле украинцы, выехавшие за границу из-за войны с Россией, потратили там около $2 млрд, рассчитываясь или снимая наличные с карт украинских банков. Об этом пишет Forbes со ссылкой на информацию Нацбанка.

[illegible]

17% – оплата в продуктовых магазинах/супермаркетах;

11% – [illegible]

8% – [illegible]

5% – [illegible] на АЗС;

4% – расчеты в заведениях питания.

[illegible]

* * *

Правительство Болгарии [illegible]

ЗАБОТЫ НАСУЩНЫЕ

НА ПЕРВОМ ПЛАНЕ ВЗАИМОВЫРУЧКА

[illegible]

Продолжение на 2-й странице

УКРЕПЛЕНИЕ РУБЛЯ И ПОИСК ЛАЗЕЕК ПО ИМПОРТУ

ЧТО ПРОИСХОДИТ С ЭКОНОМИКОЙ РФ ЧЕРЕЗ ТРИ МЕСЯЦА ПОСЛЕ НАЧАЛА

Окончание. Начало на 5-й странице

Сработают ли лазейки

ПОВІДОМЛЕННЯ

КН
КУРЬЕР НЕДЕЛИ
БИЗНЕС
455

Придунайские озера обмелели, в Катлабух принудительно закачивают воду из Дуная

2

В Одесской области сократили комендантский час

Главы Одесской областной военной администрации Максим Марченко распорядился сократить действие комендантского часа на территории области.

С 25 мая комендантский час начинается с 23:00 каждый день и будет действовать до 05:00 следующего дня. Запрещено пребывание людей в указанное время на улицах и других общественных местах без специально выданных пропусков и удостоверений.

«Фисташковая арифметика» измаильского фермера Андрея Петкова

8

ПОВІДОМЛЕННЯ

про планувану діяльність, яка підлягає оцінці впливу на довкілля

AGRICULTURAL LIMITED LIABILITY COMPANY
NIBULON
Faleevska St., 9-B, Mykolaiv, 54030, Ukraine
legal address: Kabotazhny spusk, 1, Mykolaiv, 54002, Ukraine
tel.: +38(0512) 37 23 44; +38(0512) 58 04 04
fax: +38(0512) 50 01 91; +38(0512) 58 04 05
E-mail: mail1@nibulon.com.ua; mail3@nibulon.com.ua
www.nibulon.com

our ref. № _____ dtd. _____

your ref.№ _____dtd._____

Izmail city mayor of Izmail district of Odesa region
Andriy ABRAMCHENKO

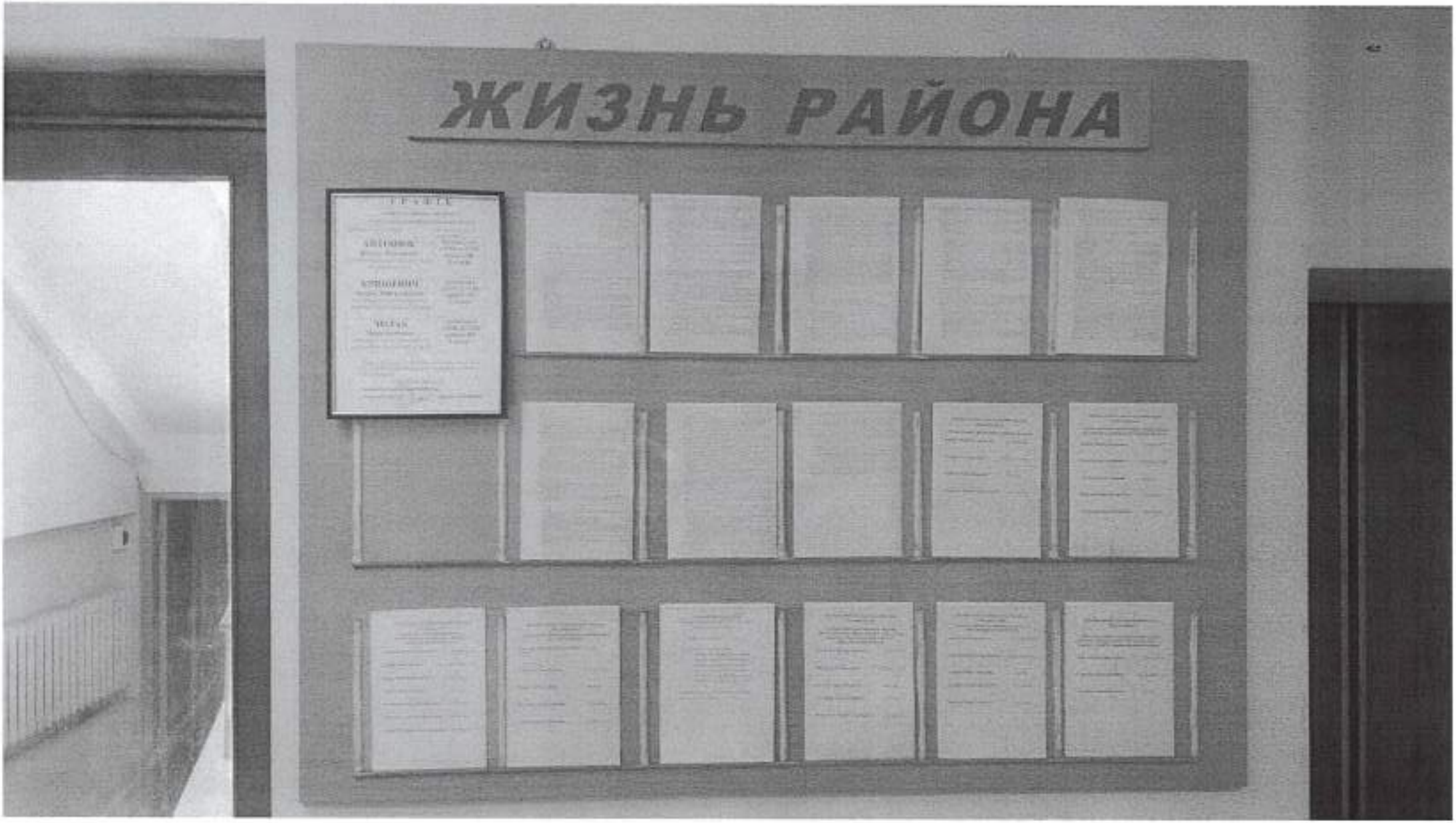
Dear sir,

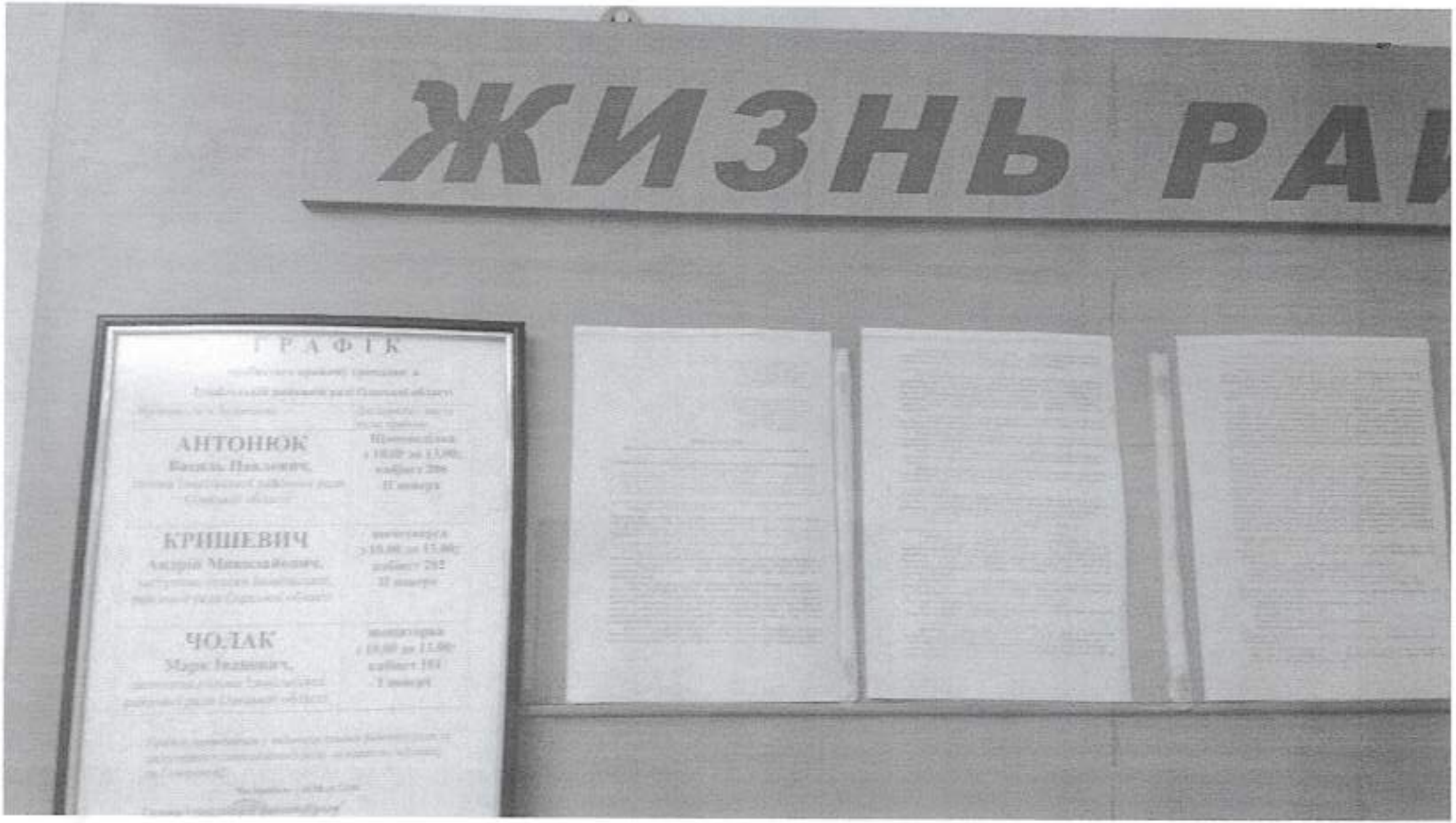
In order to inform the general public about the construction project "New construction of a transport infrastructure object - a river port (terminal) in Izmail, Izmail district, Odesa region, with a railway access track which will connect to the Izmail station of the regional branch of the “Odesa Railway” and to fulfill the requirements of Clause 3 of Art. 4 of the Law of Ukraine "On environmental impact assessment", we kindly asking you to provide an access of notice No. 20225199566 on planned activity, which is subject to environmental impact assessment on the bulletin boards of the Izmail City Council.

Annex: notice No. 20225199566 on planned activity, which is subject to environmental impact assessment; 1 copy on 8 pages.

Director of Resourcing and
Production Support — Leonid MYHAILOV
(Power of attorney №222 dtd Dec12, 2020)

Executor:
Iryna Ploshnik,
tel. 050-024-53-03


ЖИЗНЬ РАЙОНА


ЖИЗНЬ РА
ГРАФІК
АНТОНЮК
КРИШЕВИЧ
ЧОЛАК

Придунайские вести

ГАЗЕТА ИЗДАЕТСЯ С 1940 ГОДА

ПЯТНИЦА,
14 ОКТЯБРЯ 2022 г.,
№ 35 (13 281)

vestiizm@ukr.net

ЗІ СВЯТОМ!

Сьогодні День захисника та захисниць України є особливим для тих, хто зі зброєю в руках боронить нашу землю. Усвідомлюючи своє високе призначення – охороняти життя та мирну працю свого народу, сьогоднішнє покоління героїв сучасної історії України бере приклад із своїх попередників. Адже любов до рідної землі та батьківської хати, повага до українських традицій та рідної мови передалася їм у спадок та ні за яких обставин не можуть бути знеціненими.

СТРАШНЫЙ ДИАГНОЗ - "ОБЕЗВОЖИВАНИЕ" И "МЕРТВЫЙ ОБЪЕМ"

КАК БУДУТ "РЕАНИМИРОВАТЬ" ПРИДУНАЙСКИЕ ОЗЕРА

НА ТЕМУ ДНЯ

Измаильщину в конце сентября с рабочим визитом посетил начальник Одесской областной военной администрации Максим Марченко – разбирался с проблемными вопросами состояния водоемов и водохранилищ района. В Придунайском регионе таких проблем множество и от их решения, по большому счету, зависит нормальная жизнедеятельность не только местного населения, которая напрямую связана с водой, но и всей Украины, так как Бессарабия сегодня обеспечивает рыбной и агропродукцией большинство регионов страны. Совещание, прошедшее в стенах Измаильской РГА, было не просто информативным для ее участников, а достигло недюжинного конструктива.

Экологическая ситуация в этом некогда преуспевающем оазисе в дельте Дуная в последние годы тревожная – озера и плавни высыхают, а в пустыне, как известно, ничего не растет. Ни для кого не новость, что вода из придунайских водоемов и водохранилищ используется для нужд фермерских хозяйств и населения региона, в частности для оросительного и питьевого водоснабжения, рыбного промысла. Каналы, через которые они подпитываются и обеспечивают водообмен с рекой Дунай, эксплуатируются уже более 60 лет, становлению. В аварийном состоянии находится и защитная дамба на 97 км реки Дунай, что создает угрозу питьевому водозабору Измаила. В модернизации нуждаются также насосные станции и шлюзы (4 из них – немедленного). Еще одна причина "кризиса" водоемов и ухудшения их экологического состояния – климатические изменения.

И это далеко не весь перечень проблем, которые с каж-

наши источники жизни пересыхают. Ко всем существующим годами проблемам в этом году добавилась засуха и критическое падение уровня воды в реке Дунай.

Чтобы хоть как-то улучшить

тала региональную программу по охране окружающей среды на 2022 год, предусматривающую выполнение мероприятий по наполнению водой озер Катлабух и Китай. Из областного бюджета на это было выделено 12 млн. грн. – воду всередине лета подкачали (из Дуная), падение уровня остановили. Но проблему это полностью не решило и, с большой долей вероятности, ситуация с пересыханием в будущем повторится, потому что подобные экстренные (и, согласитесь, весьма недешевые) меры не способны решить первопричину – для этого

Как ты пришла во церковь на Украйне,
В достойном поклонении молясь!

Ты нам являешься, чтоб оградить,
Как можно больше душ от погибели.

Редакцией полностью сохранены стилистика и орфография автора

снег выпал на Тюкров - Димитриев день будет снежным.

(дата офіційного опублікування в Єдиному реєстрі з оцінки впливу на довкілля (автоматично генерується програмними засобами ведення Реєстру, не зазначається суб'єктом господарювання)

(реєстраційний номер справи про оцінку впливу на довкілля планованої діяльності)

ОГОЛОШЕННЯ
про початок громадського обговорення звіту з оцінки впливу на довкілля

Повідомляємо про початок громадського обговорення звіту з оцінки впливу на довкілля планованої діяльності, зазначеної у пункті 1 цього оголошення, з метою виявлення, збирання та врахування зауважень і пропозицій громадськості до планованої діяльності.

1. Планована діяльність

Планована діяльність - нове будівництво об'єкта транспортної інфраструктури - річковий порт (термінал) в м. Ізмаїл Ізмаїльського району Одеської області із залізничною під'їзною колією.

Загальна площа ділянки, що запланована для будівництва та експлуатації об'єкта транспортної інфраструктури – річкового порту (терміналу), - 19,7 га, операційної акваторії 5,29 га. Площа запланованої забудови складає 7,0 га.

Планована діяльність передбачає будівництво та експлуатацію:

виробничого перевантажувального комплексу з багатоваріантною схемою переміщення зернових, зернобобових та олійних культур при їх прийомі із залізничного, автомобільного і водного транспорту, зберіганні з доведенням до товарних кондицій (очистка, сушка) та відвантаженні на водний і автомобільний транспорт;

паливозаправного пункту для власних потреб;

гідротехнічних споруд (операційна акваторія з підхідним каналом).

Будівництво об'єкту планованої діяльності передбачено здійснювати пусковими комплексами з почерговим (5 черг) введенням будівель та споруд та оснащенням їх технологічним обладнанням.

(загальні технічні характеристики, у тому числі параметри планованої діяльності (потужність, довжина, площа, обсяг виробництва тощо), місце провадження планованої діяльності)

2. Суб'єкт господарювання

Товариство з обмеженою відповідальністю сільськогосподарське підприємство «НІБУЛОН» код ЄДРПОУ 14291113

(повне найменування юридичної особи, код згідно з ЄДРПОУ або прізвище, ім'я та по батькові фізичної особи - підприємця, ідентифікаційний код або серія та номер паспорта (для фізичних осіб, які через свої релігійні переконання відмовляються від прийняття реєстраційного номера облікової картки платника податків та офіційно повідомили про це відповідному контролюючому органу і мають відмітку у паспорті),

54020, Миколаївська область, м. Миколаїв. Каботажний спуск,1.

Тел.: +38 (0512) 37-23-44, +38 (0512) 58-04-04, e-mail: mail1@nibulon.com.ua

(місцезнаходження юридичної особи або місце провадження діяльності фізичної особи - підприємця (поштовий індекс, адреса), контактний номер телефону)

3. Уповноважений орган, який забезпечує проведення громадського обговорення

Міністерство захисту довкілля та природних ресурсів України, поштова адреса: 03035, м. Київ, вул. Митрополита Василя Липківського, 35, OVD@mepr.gov.ua, тел. (044) 206-31-40; (044) 206-31-50, Котяш Лада Павлівна

(найменування уповноваженого органу, місцезнаходження, номер телефону та контактна особа)

4. Процедура прийняття рішення про провадження планованої діяльності та орган, який розглядатиме результати оцінки впливу на довкілля

Дозвіл на виконання будівельних робіт, що надається Державною інспекцією архітектури та містобудування України відповідно до Закону України «Про регулювання містобудівної діяльності».

(вид рішення про провадження планованої діяльності, орган, уповноважений його видавати, нормативний документ, що передбачає його видачу)

5. Строки, тривалість та порядок громадського обговорення звіту з оцінки впливу на довкілля, включаючи інформацію про час і місце усіх запланованих громадських слухань

Тривалість громадського обговорення становить 25 робочих днів (не менше 25, але не більше 35 робочих днів) з моменту офіційного опублікування цього оголошення (зазначається у назві оголошення) та надання громадськості доступу до звіту з оцінки впливу на довкілля та іншої додаткової інформації, визначеної суб'єктом господарювання, що передається для видачі висновку з оцінки впливу на довкілля.

Протягом усього строку громадського обговорення громадськість має право подавати будь-які зауваження або пропозиції, які, на її думку, стосуються планованої діяльності, без необхідності їх обґрунтування. Зауваження та пропозиції можуть подаватися в письмовій формі (у тому числі в електронному вигляді) та усно під час громадських слухань із внесенням до протоколу громадських слухань. Пропозиції, надані після встановленого строку, не розглядаються.

Тимчасово, на період дії та в межах території карантину, встановленого Кабінетом Міністрів України з метою запобігання поширенню на території України гострої респіраторної хвороби (COVID-19), спричиненої коронавірусом SARS-CoV-2, до повного його скасування та протягом 30 днів з дня скасування карантину, громадські слухання не проводяться і не призначаються на дати, що припадають на цей період.

Громадські слухання (перші) відбудуться

(зазначити дату, час, місце та адресу проведення громадських слухань)

Громадські слухання (другі) відбудуться

(вказати дату, час, місце та адресу проведення громадських слухань)

6. Уповноважений центральний орган або уповноважений територіальний орган, що забезпечує доступ до звіту з оцінки впливу на довкілля та іншої доступної інформації щодо планованої діяльності

Міністерство захисту довкілля та природних ресурсів України, поштова адреса: 03035, м. Київ, вул. Митрополита Василя Липківського, 35, OVD@mepr.gov.ua, тел. (044) 206-31-40; (044) 206-31-50, Котяш Лада Павлівна

(зазначити найменування органу, місцезнаходження, номер телефону та контактну особу)

7. Уповноважений центральний орган або уповноважений територіальний орган, до якого надаються зауваження і пропозиції, та строки надання зауважень і пропозицій

Міністерство захисту довкілля та природних ресурсів України, поштова адреса: 03035, м. Київ, вул. Митрополита Василя Липківського, 35, OVD@mepr.gov.ua, тел. (044) 206-31-40; (044) 206-31-50, Котяш Лада Павлівна

(зазначити найменування органу, поштову та електронну адресу, номер телефону та контактну особу)

Зауваження і пропозиції приймаються протягом усього строку громадського обговорення, зазначеного в абзаці другому пункту 5 цього оголошення.

8. Наявна екологічна інформація щодо планованої діяльності

Звіт з оцінки впливу на довкілля планованої діяльності на 332 аркушах.

(зазначити усі інші матеріали, надані на розгляд громадськості) (зазначити іншу екологічну інформацію, що стосується планованої діяльності)

9. Місце (місця) розміщення звіту з оцінки впливу на довкілля та іншої додаткової інформації (відмінне від приміщення, зазначеного у пункті 6 цього оголошення), а також час, з якого громадськість може ознайомитися з ними

Міністерство захисту довкілля та природних ресурсів України, поштова адреса: 03035, м. Київ, вул. Митрополита Василя Липківського, 35, OVD@mepr.gov.ua, тел. (044) 206-31-40; (044) 206-31-50, Котяш Лада Павлівна

(найменування підприємства, установи, організації, місцезнаходження, дата, з якої громадськість може ознайомитися з документами, контактна особа)

КН
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Региональный информационно-рекламный еженедельник
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Пусть "Крылья" окрыляют!

ОГОЛОШЕННЯ
про початок громадського обговорення звіту з оцінки впливу на довкілля

Повідомляємо про початок громадського обговорення звіту з оцінки впливу на довкілля планованої діяльності, зазначеної у пункті 1 цього оголошення, з метою виявлення, збирання та врахування зауважень і пропозицій громадськості до планованої діяльності.

1. Планована діяльність

Планована діяльність - нове будівництво об'єкта транспортної інфраструктури - річковий порт (термінал) в м. Ізмаїл Ізмаїльського району Одеської області із залізничною під'їзною колією.

Загальна площа ділянки, що запланована для будівництва та експлуатації об'єкта транспортної інфраструктури – річкового порту (терміналу), - 19,7 га, операційної акваторії 5,29 га. Площа запланованої забудови складає 7,0 га.

Планована діяльність передбачає будівництво та експлуатацію:

виробничого перевантажувального комплексу з багатоваріантною схемою переміщення зернових, зернобобових та олійних культур при їх прийомі із залізничного, автомобільного і водного транспорту, зберіганні з доведенням до товарних кондицій (очистка, сушка) та відвантаженні на водний і автомобільний транспорт;

паливозаправного пункту для власних потреб;

гідротехнічних споруд (операційна акваторія з підхідним каналом).

Будівництво об'єкту планованої діяльності передбачено здійснювати пусковими комплексами з почерговим (5 черг) зведенням будівель та споруд та оснащенням їх технологічним обладнанням.

(загальні технічні характеристики, у тому числі параметри планованої діяльності (потужність, довжина, площа, обсяг виробництва тощо), місце провадження планованої діяльності)

2. Суб'єкт господарювання

Товариство з обмеженою відповідальністю сільськогосподарське підприємство «НІБУЛОН» код ЄДРПОУ 14291113

(повне найменування юридичної особи, код згідно з ЄДРПОУ або прізвище, ім'я та по батькові фізичної особи – підприємця, ідентифікаційний код або серія та номер паспорта (для фізичних осіб, які через свої релігійні переконання відмовляються від прийняття реєстраційного номера облікової картки платника податків та офіційно повідомили про це відповідному контролюючому органу і мають відмітку у паспорті).

54020, Миколаївська область, м. Миколаїв. Каботажний спуск, 1.

Тел.: +38 (0512) 37-23-44, +38 (0512) 58-04-04, e-mail: mail1@nibulon.com.ua

(місцезнаходження юридичної особи або місце провадження діяльності фізичної особи – підприємця (поштовий індекс, адреса), контактний номер телефону)

3. Уповноважений орган, який забезпечує проведення громадського обговорення

Міністерство захисту довкілля та природних ресурсів України, поштова адреса: 03035, м. Київ, вул. Митрополита Василя Липківського, 35, OVD@mepr.gov.ua, тел. (044) 206-31-40; (044) 206-31-50, Котяш Лада Павлівна

(найменування уповноваженого органу, місцезнаходження, номер телефону та контактна особа)

4. Процедура прийняття рішення про провадження планованої діяльності та орган, який розглядатиме результати оцінки впливу на довкілля

Дозвіл на виконання будівельних робіт, що надається Державною інспекцією архітектури та містобудування України відповідно до Закону України «Про регулювання містобудівної діяльності».

(вид рішення про провадження планованої діяльності, орган, уповноважений його видавати, нормативний документ, що передбачає його видачу)

5. Строки, тривалість та порядок громадського обговорення звіту з оцінки впливу на довкілля, включаючи інформацію про час і місце усіх запланованих громадських слухань

Тривалість громадського обговорення становить 25 робочих днів (не менше 25, але не більше 35 робочих днів) з моменту офіційного опублікування цього оголошення (зазначається у назві оголошення) та надання громадськості доступу до звіту з оцінки впливу на довкілля та іншої додаткової інформації, визначеної суб'єктом господарювання, що передається для видачі висновку з оцінки впливу на довкілля.

(дата офіційного опублікування в Єдиному реєстрі з оцінки впливу на довкілля (автоматично генерується програмними засобами ведення Реєстру, не зазначається суб'єктом господарювання)

(реєстраційний номер справи про оцінку впливу на довкілля планованої діяльності)

Протягом усього строку громадського обговорення громадськість має право подавати будь-які зауваження або пропозиції, які, на її думку, стосуються планованої діяльності, без необхідності їх обґрунтування. Зауваження та пропозиції можуть подаватися в письмовій формі (у тому числі в електронному вигляді) та усно під час громадських слухань із внесенням до протоколу громадських слухань. Пропозиції, надані після встановленого строку, не розглядаються.

Тимчасово, на період дії та в межах території карантину, встановленого Кабінетом Міністрів України з метою запобігання поширенню на території України гострої респіраторної хвороби (COVID-19), спричиненої коронавірусом SARS-CoV-2, до повного його скасування та протягом 30 днів з дня скасування карантину, громадські слухання не проводяться і не призначаються на дати, що припадають на цей період.

Громадські слухання (перші) відбудуться

(зазначити дату, час, місце та адресу проведення громадських слухань)

Громадські слухання (другі) відбудуться

(вказати дату, час, місце та адресу проведення громадських слухань)

6. Уповноважений центральний орган або уповноважений територіальний орган, що забезпечує доступ до звіту з оцінки впливу на довкілля та іншої доступної інформації щодо планованої діяльності

Міністерство захисту довкілля та природних ресурсів України, поштова адреса: 03035, м. Київ, вул. Митрополита Василя Липківського, 35, OVD@mepr.gov.ua, тел. (044) 206-31-40; (044) 206-31-50, Котяш Лада Павлівна

(зазначити найменування органу, місцезнаходження, номер телефону та контактну особу)

7. Уповноважений центральний орган або уповноважений територіальний орган, до якого надаються зауваження і пропозиції, та строки надання зауважень і пропозицій

Міністерство захисту довкілля та природних ресурсів України, поштова адреса: 03035, м. Київ, вул. Митрополита Василя Липківського, 35, OVD@mepr.gov.ua, тел. (044) 206-31-40; (044) 206-31-50, Котяш Лада Павлівна

(зазначити найменування органу, поштову та електронну адресу, номер телефону та контактну особу)

Зауваження і пропозиції приймаються протягом усього строку громадського обговорення, зазначеного в абзаці другому пункту 5 цього оголошення.

8. Наявна екологічна інформація щодо планованої діяльності

Звіт з оцінки впливу на довкілля планованої діяльності на 332 аркушах.

(зазначити усі інші матеріали, надані на розгляд громадськості) (зазначити іншу екологічну інформацію, що стосується планованої діяльності)

9. Місце (місця) розміщення звіту з оцінки впливу на довкілля та іншої додаткової інформації (відмінне від приміщення, зазначеного у пункті 6 цього оголошення), а також час, з якого громадськість може ознайомитися з ними

Міністерство захисту довкілля та природних ресурсів України, поштова адреса: 03035, м. Київ, вул. Митрополита Василя Липківського, 35, OVD@mepr.gov.ua, тел. (044) 206-31-40; (044) 206-31-50, Котяш Лада Павлівна

(найменування підприємства, установи, організації, місцезнаходження, дата, з якої громадськість може ознайомитися з документами, контактна особа)

AGRICULTURAL LIMITED LIABILITY COMPANY
NIBULON
Faleevska St., 9-B, Mykolaiv, 54030, Ukraine
legal address: Kabotazhny spusk, 1, Mykolaiv, 54002, Ukraine
tel.: +38(0512) 37 23 44; +38(0512) 58 04 04
fax: +38(0512) 50 01 91; +38(0512) 58 04 05
E-mail: mail1@nibulon.com.ua; mail3@nibulon.com.ua
www.nibulon.com

our ref. № 5066/3-22 dtd. Oct 12, 2022

your ref.№ _____dtd._____

Izmail city mayor of Izmail district of Odesa region
Andriy ABRAMCHENKO

Dear sir,

As a part of informing the general public about the beginning of public discussion of the environmental impact assessment report registration number 20225199566. New construction of a transport infrastructure object - a river port (terminal) in Izmail, Izmail District, Odesa Region, with a railway access track and to fulfill the requirements of clause 5 of Art. 4 of the Law of Ukraine "On Environmental Impact Assessment", we kindly asking you to provide access to announcement about the start of public discussion of the above-mentioned environmental impact assessment report on the bulletin board of the self-governing body or in other public places for guaranteed getting acquainted the residents of the Izmail.

The report was published in the local mass media

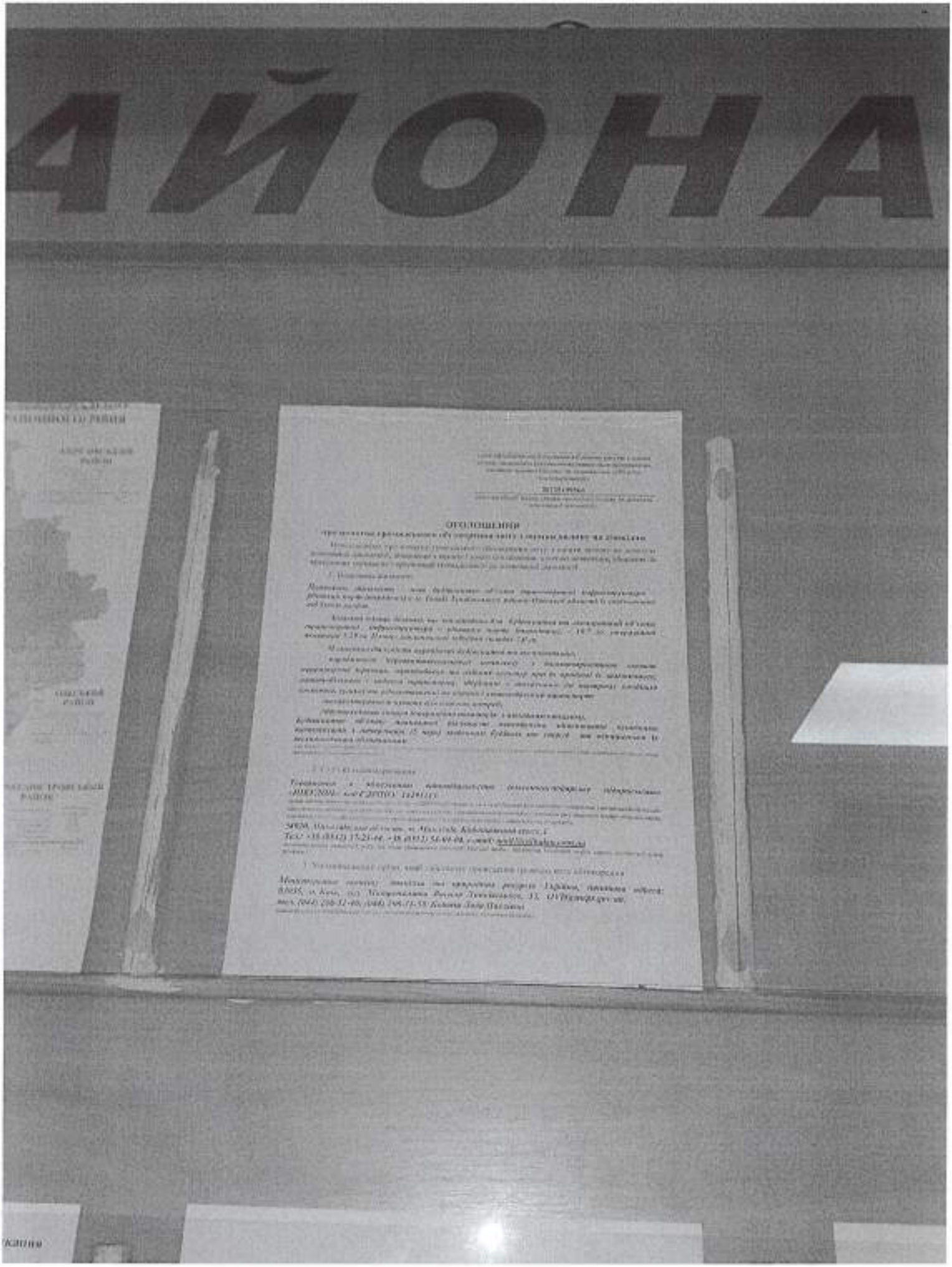
1. “Kurier” edition № 41(1827) dtd. Oct15, 2022.
2. “Prydunaiski visti” № 35 (13281) dtd. Oct14, 2022.

Annex on на 3 pages.

Director of Resourcing and
Production Support — Leonid MYHAILOV
(Power of attorney №222 dtd Dec12, 2020)

Executor:
Iryna Ploshnik,
tel. 050-024-53-03


ЖИЗНЬ РАЙОНА


АЙОНА

MINISTRY OF ENVIRONMENTAL PROTECTION AND NATURAL RESOURCES OF UKRAINE

ORDER

from _____ 20__year Kyiv №_____

On implementation of transboundary environmental impact assessment of NIBULON Ltd.

In accordance with part two of Article 14 of the Law of Ukraine "On Environmental Impact Assessment", paragraphs 3 and 5 of the Procedure for Deciding on the Implementation of a transboundary environmental impact assessment, approved by the Resolution of the Cabinet of Ministers of Ukraine № 877 dated September 23, 2020, based on the notification of planned activity, which is subject to environmental impact assessment, received by the letter of NIBULON Ltd. № 3143/3-22/50 dated May 12, 2022.

ORDER:

1. To carry out a transboundary environmental impact assessment according to the procedure of the state of origin of the planned activity of NIBULON Ltd. "New construction of a transport infrastructure facility – river port (terminal) in the Izmail city, Izmail district, Odessa region, with a railway access line - adjacent to the Izmail station of the "Odessa Railway" regional branch, case registration number in the Unified Environmental Impact Assessment Register – 20225199566.
2. Send a notification about the transboundary environmental impact assessment of the planned activities of the NIBULON Ltd. to the Romanian side.
3. The Department of Digital Transformation and Environmental Monitoring (Vitaliy BILOUSOV) to ensure the publication of this order on the website of the Ministry of Environment.
4. Control over the implementation of this order should be put on Deputy Minister of KRAMARENKO Olena.

Ruslan Strilez

UB
Ministry of Environment
№218 від 06.06.2022
electronic signature key: Strilez R.O. 06.06.2022 20:40
58E2B9E7P900307B0400000035892P001АРБ8500
Certificate is valid from 13.07.2020 00:00 to 13.07.2022 00:00

МІНІСТЕРСТВО ЗАХИСТУ
ДОВКІЛЛЯ ТА ПРИРОДНИХ
РЕСУРСІВ УКРАЇНИ

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MINISTRY OF ENVIRONMENTAL
PROTECTION AND NATURAL
RESOURCES OF UKRAINE

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Ministry of Environment, Water
and Forests of the Romanian Republic

The Ministry of Environmental Protection and Natural Resources of Ukraine (hereinafter – the Ministry) presents its compliments to the Ministry of Environment, Water and Forests of Romania and has the honor to announce its intention to carry out an environmental impact assessment of the planned activity of the LIMITED LIABILITY COMPANY «NIBULON».

On June 06, 2022 the LIMITED LIABILITY COMPANY «NIBULON» started an environmental impact assessment procedure for the new construction of transport infrastructure facility - river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch «Odesa Railway» (Unified EIA Registry entry 20225199566, http://eia.menr.gov.ua/uk/case/id-9566). The Ministry made a decision that transboundary Environmental Impact Assessment shall be carried out from June 06, 2022.

For the purposes of implementation of the provisions of the Espoo Convention the Ukrainian Party submits to the Romanian Party the Notification on the planned activity (both in Ukrainian and in English). If the Romanian Party wishes to take part in the environmental impact assessment procedure in a transboundary context, please inform the Ministry within 30 days from the date of receipt of the notification.

Should you have any questions, please, contact info@mepr.gov.ua.

The Ministry avails itself of this opportunity to renew to the Ministry of Environment, Water and Forests of Romania the assurances of its highest consideration.

Please see the Notification from the LIMITED LIABILITY COMPANY «NIBULON» attached on 16 pages.

Olena KRAMARENKO
Deputy Minister

(date of official publication in the Unified environmental impact assessment registrer (automatically generated by software means of maintaining the Unified environmental impact assessment registrer, not specified by the entity)

(registration number of the case on environmental impact assessment of the planned activities (automatically generated by the software of the Unified environmental impact assessment registrer, for the paper version indicated by the business entity)

The notice
on the planned activities subject to the environmental impact assessment

LIMITED LIABILITY COMPANY "NIBULON", USREOU code 14291113

(full name of the legal entity, code according to the USREOU, or surname, name and patronymic of the private entrepreneur, identification code or series and passport number (for individuals who, due to their religious beliefs, refuse to accept the registration number of the taxpayer's registration card and have officially notified the relevant supervisory authority and have a mark in the passport)

informs about the intention to carry out the planned activities and assess its impact on the environment.

1. The information about the business entity

Legal address: 54002, Mykolaiv,, st. Kabotazhnyi Spusk, 1, postal address: 54030, Mykolaiv, st.Faleevskaya, 9-B, tel. (0512) 58-04-28

(location of the legal entity or place of residence of the entrepreneur (postal code, address), contact phone number)

2. The planned activities, characteristics thereof, technical alternatives[*].

The planned activities, characteristics thereof.

Planned activities - new construction of transport infrastructure facility - river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch "Odesa Railway".

The planned activities include the construction and operation of hydro-technical installations of the port (cargo berth, operating water area with approach canal), access railway track, production transshipment complex for grain, legumes and oilseeds (railway and road reception facilities, dryer, warehousing, transshipment facilities for water and road transport), fuel station (confluent railway overpass, two underground tanks, fuel stations for road transport and watercraft).

The construction of the operating water area with an approach canal involves dredging to a depth of 8.23 m from the "0" of the Izmail seaport with the excavation of the bottom soil in the amount of 112.0 thousand m3 and its storage in the shore dump.

The location of the planned activities is the left bank of the Danube River, downstream industrial enterprises are located: maintenance station «BLAZ», Izmail sea trade port, PSC Izmail river port Danube Ship-Service.

Technical alternative 1.

To ensure the operation of the transshipment complex for grain, legumes and oilseeds, it is planned to place the following buildings and structures on the allotted area: administrative

and household building with a laboratory and a canopy; transformer substation with distribution point and operating room; operator weighing; cafe for internal use: mechanical workshop with garage, warehouse, fire station; 3 canalized yard toilets; house for business travelers.

For transport communication will be used: the railway of the New station Izmail of the regional branch "Odessa railway", inland waterways of Ukraine, national and local roads.

It is planned to receive grain and oilseeds through unloading stations for road and rail transport, equipped with built-in transport mechanisms.

This alternative is the best option for the selection of facilities and equipment with technical characteristics that will ensure their integration into a single technological complex.

Water supply for the needs of the river port (household, industrial, fire-fighting needs and also needs for landscaping) from the surface water intake from the Danube River, which is the object of new construction.

Technical alternative 2.

Water supply of household and industrial needs of the port due to the connection of water supply to municipal networks, provision of landscaping needs - from the surface water intake from the Danube River, which is the subject of new construct

* An entity has the right to consider more technical and territorial alternatives.

3. The location of the planned activities, territorial alternatives.

The location of the planned activities, territorial alternatives I

Izmail, Izmail district, Odessa region, within the streets Portova, embankment of Luka Kapikrayan and Dunayska, on the banks of the Danube River

The specified territory is located in the industrial zone of the city of Izmail with a rich coastal infrastructure and intensive shipping and is promising for joining the existing transport and energy infrastructure, and also meets the requirements that are provided for the construction and operation of a transshipment complex for grain, leguminous and oilseeds planned to be built.

The planned activities requires the allocation for use for a period of 49 years of two land plots with their classification as "Transport Lands": with an area of 19.0 hectares from the lands of the reserve and an area of 5.29 hectares from the lands of the water fund.

Location of the planned activities: territorial alternative 2.

Not considered, territorial alternative I is the best option for locating a river port (terminal).

4. Social-economic impact of the planned activities

The construction of a river port (terminal) on the Danube River with the possibility of delivering grain cargo by rail and road to the border zone is of strategic importance for ensuring the food security of the state in wartime conditions and is aimed at developing agricultural production and the region as a whole.

5. Main technical characteristics, including features of the planned activities (capacity, length, size, output, etc.)

The total area of the site planned for the construction and operation of the transport infrastructure facility - the river port (terminal) - is 19.0 hectares, the operating water area is 5.29 hectares. The area of the planned development is 7.0 hectares.

The territory is free from development with capital structures and is overgrown with self-sown green spaces, according to the results of a commission survey of green spaces, it was determined that 841 emergency and dead trees and 740 bushes are subject to removal.

Grain cargo is planned to be received from road, rail, and water transport. The

technological scheme of the complex provides for the possibility of simultaneous execution of operations for the receipt and shipment and provides for the simultaneous reception of three types of grain crops through the points of unloading vehicles; the ability to simultaneously perform internal operations (bringing to marketable conditions (cleaning, drying) and moving grain from silo to silo for ventilation or formation of a shipment batch) and external operations (reception and shipment); stability of the complex

The operation of the transshipment complex includes the following technological operations: laboratory quality control of grain legumes and oilseeds; weighing loaded and empty vehicles; acceptance of grain cargo by road, rail and water transport; transportation of grain cargoes from block pits by conveyors (belt, chain) and bucket elevators for their subsequent storage or processing (cleaning, drying); moving grain cargoes into wet grain containers for subsequent drying; storage of conditioned grain in granaries by types of grain crops and the content of garbage impurities; cleaning of cereals and oilseeds using a scalper and separator; drying grain and oilseeds in a grain dryer; section of dusty air from the nodes of technological equipment (aspiration) with its subsequent cleaning on dust-cleaning equipment (DCE); weighing of grain cargoes before shipment to water transport; shipment of grain and oilseeds to water and road transport

Transshipment of grain cargo:

- throughput - 3.1 million tons per year of grain products, including acceptance by rail - 1.0 million tons, by road transport - 2.0 million tons, by water transport - 100 thousand tons;

- the volume of the simultaneous storage of grain products - 105.5 thousand tons;

- work schedule - three shifts, 365 days a year;

- staff - 100 full-time personnel, including engineering and technical personnel - 30 units.;

- resource consumption volumes: gas - 218.7 thousand m3/year; water - 4, 117 thousand m3/year.

Construction of a filling station with a maximum annual capacity of 1950 tons/year, which includes:

- *- drain railway overpass for 2 tank cars;*
- *two underground tanks V=75m3;*
- *operator building;*
- *an island of diesel fuel for motor transport;*
- *watercraft refueling point.*

Construction of hydraulic structures (cargo berth, operational operating water area with approach canal):

- *cargo berth: total length - 300 m, including construction stage 1 - 140 m, stage 2 - 160 m, width - 20 m, design depth at the border - 8.23 m from the mark "0" of the Izmail seaport;*
- *bank protection on both sides of the cargo berth;*
- *operational water area with an approach channel on the Danube River from 91.09 to 91.55 km: length - 460 m, width - 115 m, area - 5.29 ha, design depth - 8.23 m from the "0" of the Izmail seaport.*

Structurally, the cargo berth is equipped with equipment for receiving household sewage, bilge water, solid domestic waste from ships, and also replenishing the ship's drinking water and fuel supplies.

The construction of the object of the planned activity is planned to be carried out by start-up complexes with sequential (5 stages) erection of buildings and structures and equipping them with technological equipment.

6. Environmental and other restrictions applicable to the planned activities by alternatives. according to the technical alternative 1

- *<u>- on air pollution -</u> values of maximum permissible concentrations (MPC) of pollutants at the border of Sanitary Protection Zones, levels of maximum permissible emissions (MPE) from process equipment, background content of pollutants in ambient air, use of diesel fuel engines*

that meets the requirements on the requirements for gasoline, diesel, marine and boiler fuels, approved by the Cabinet of Ministers Resolution 27927 of 01.08.2013;

- *for pollution of the aquatic environment - the value of the MPC of pollutants in the surface water of a water body, the background content of pollutants in the surface water of a water body;*
- *on soil pollution - the absence of direct intensive exposure, the value of the MPC of pollutants in the soil, radiation safety standards;*
- *- sanitary-epidemiological - standards of noise impact on humans;*
- *impact on wildlife - ban on dredging during spawning, ban on work and activities that are a source of increased noise and disturbance (pile up) during the period of mass reproduction of wild animals;*

regarding technical alternative 2
the same as for technical alternative 1;

regarding territorial alternative 1

restriction of the planned activity consists in compliance with the normative state of the environment; observance of the size of the sanitary protection zone in accordance with the requirements of the "State Sanitary Rules for Planning and Development of Settlements", approved by Order of the Ministry of Health of Ukraine dated June 19, 1996 № 173 and DBN B.2.2-12: 2019 "Planning and Development of Territories".

regarding territorial alternative 2
not considered, territorial alternative 1 is the best option.

7. Required environmental and engineering preparations and the protection of the territory by alternatives:

regarding technical alternative 1

- *maximum preservation of green spaces with the removal of dead, emergency and falling into the building spot;*
- *vertical planning of the territory with a 1m level increase;*
- *strengthening the coastline;*
- *organization on its territory of maps of alluvium of bottom soil removed during dredging (temporary construction): layout of the site with a collapse along the perimeter, allocation of a settling zone, installation of discharge pipes;*

regarding technical alternative 2
the same as for the technical alternative 1;

regarding the territorial alternative 1

- *engineering, geological and geodesic survey on the site for construction and on the route of laying communications;*
- *reclamation of maps with bottom soil alluvium on;*
- *organization of drainage of rain and melt water;*

regarding territorial alternative 2
is not considered, territorial alternative 1 is an optimal variant.

8. Sphere, sources, and types of the possible impact on the environment:

regarding the technical alternative 1
during construction works:
- on ambient air – emissions of pollutants during preparatory and construction works, welding works, earthworks, during the activity of construction equipment and transport;
- on the aquatic environment – deposition of dust emissions on the surface water of the Danube river during pouring and storage of bulk construction materials, increasing the turbidity of

surface water in the dredging zone due to the transition of the fine-dispersed component of the bottom soil to a suspended state and its losses;
- on flora and fauna – removal of self-sown trees which are recognized as defective, dead, and in an emergency condition. Amenity planting and site improvements with the planting of vegetation, creation of grassplots and flower gardens are provided;
- on soil and the geologic environment – the impact is due to the preparatory and construction work, the inevitable impact is absent;
- acoustic impact – the activity of construction equipment, entry and exit of transport on the construction site;
- generation of waste - the generation of construction and other types of waste is expected, it will be transferred to specialized enterprises for further processing, disposal, or utilization. provided for in accordance with current regulations.

during the operation of the designed object:

- on ambient air – emission of pollutants from engines of vehicles; dusting during transshipment works and storage of cargoes, the activity of engineering equipment, etc.;
- acoustic impact – noise emission during the work of combustion engine of vehicles, engineering and technological equipment;
- on the aquatic environment – the negative impact is mediated by increasing the indicators of water consumption and sewerage, it is planned to connect to the existing engineering networks of the city; sedimentation of dust emissions on the surface water of the Danube during transshipment works, discharge of treated surface runoff from the territory of the port;
- on social environment - increasing the cargo turnover of the port, creating optimal conditions for the development of existing and creating promising cargo flows, creating additional working positions. and improving the economic situation in the region;
- on a technogenic environment – the risk of developing emergency situations is extremely insignificant, the company plans to mechanize and automate, equip aspiration systems of the dusted air, and fire breaks are maintained;
- generation of waste – the generation of industrial and household waste is expected. All waste will be saved in specially designated areas and transferred for further utilization, disposal and processing to the specialized enterprises according to agreements. Temporary accumulation of waste in the transport batch is planned to be carried out in accordance with the requirements of current legislation.

regarding technical alternative 2
the same as for the technical alternative 1;

regarding territorial alternative 1
social environment, sources of impact:
- non-compliance with the size of the sanitary protection zone of production, possible impact - exceeding the hygienic standards of permissible content of chemicals in the air of populated areas, exceeding the sanitary norms of permissible noise in residential areas;
- violation of the legal regime of sanitary protection zones of water bodies, possible impact - exceeding the sanitary norms of the maximum permissible content of harmful substances in the water body;

regarding territorial alternative 2
is not considered, territorial alternative 1 is an optimal variant.

9. Affiliation of the planned activities to the first or the second category of activity types and objects, which can have a significant impact on the environment and are subject to environmental impact assessment (to mention corresponding paragraph and part of Article 3 of Law of Ukraine on Environmental Impact Assessment).

It belongs to the first category of the types of the planned activities and objects that are likely to cause a significant impact on the environment and subject to the environmental impact assessment,as the construction of hydro technical facilities of sea and river ports that can take vessels of over 1 350 tonnes (Paragraph two, part seven of Article 3)

10. Presence of grounds for the transboundary environmental impact assessment (including the presence of the significant negative transboundary environmental impact and list of states environment of which can be affected by significant negative transboundary environmental impact (affected states)

Transboundary environmental impact is probable, the area of impact can include:

- housing construction in Romania, in particular, minimal distance from sources of pollutants emission of the main production to housing construction of Romanian city Plauru is 370 m;
- Danube river, protection and stable using of which is regulated by the Convention on Protection Danube river adopted on June 29, 1994, and ratified by Law of Ukraine from January 17, 2002, № 2997-III.

11. Envisioned scope of assessment and the level of detail of the information to be included in the environmental impact assessment report

In full, in accordance with current legislation, including:
- ***conducting calculations of the volume of pollutant emissions and their dispersion in the air;***
- ***conducting calculations of noise on the verge with housing construction;***
- ***determination of the nomenclature and volumes of generated waste;***
- ***conducting calculations of risk assessment of planned activities;***
- ***determination of bottom soil volumes based on the results of depth measurements in the water area;***
- ***obtaining information on the values of background concentrations of pollutants in the air, climatic characteristics of the area of work;***
- ***conducting instrumental laboratory studies of the bottom soil on its sanitary condition and environmental safety;***
- ***inventory of green areas with commission establishment of green areas to be removed.***

12. Environmental impact assessment procedure and opportunities for the public to participate

The activity planned by the business entity may have a significant impact on the environment and, therefore, is subject to environmental impact assessment in accordance with the Law of Ukraine On Environmental Impact Assessment. Environmental impact assessment is a procedure that involves:

the preparation of an environmental impact assessment report by the business entity;

the carrying out of the public discussion of planned activity;

the examination by the competent authority of the information presented in the environmental impact assessment report, any supplementary information provided by the business entity, as well as the information received from the public through the public consultations, during the transboundary impact assessment, other information;

the reasoned environmental impact assessment conclusion provided by the competent authority, which takes into account the results of the examination referred to in paragraph 5 of this point;

taking into account the environmental impact assessment conclusion in the decision on carrying out the planned activities mentioned at point 14 of this Notification.

In the environmental impact assessment conclusion, the competent local authority takes into

account the environmental impact assessment of planned activities, ascertains the admissibility or justifies the inadmissibility of the planned activities, and determines the ecological conditions of its proceeding.

The commencement of the planned activities without the environmental impact assessment thereof and without granting the decision on carrying out the planned activities thereto shall be prohibited.

The environmental impact assessment procedure provides the right and opportunity of the public to participate in such a procedure, in particular at the stage of discussing the scope of research and the level of detail of information to be included in the environmental impact assessment report and at the stage of the consideration provided by business entity environmental impact assessment report by the competent authority.

At the stage of public discussion of the environmental impact assessment report for at least 25 working days, the public is given the opportunity to provide any comments and suggestions to the environmental impact assessment report and planned activities, as well as to participate in public hearings. More details on the procedure for the public discussion report on environmental impact assessment are provided in the announcements for the start of the public discussion.

Temporarily, for the period of and within the territory of quarantine established by the Cabinet of Ministers of Ukraine in order to prevent the spread of coronavirus disease (COVID-19), caused by SARS-CoV-2 coronavirus, to its full cancellation and within 30 days from the day of cancellation of quarantine, public consultations shall not be conducted nor appointed on the dates within this period as stated in the announcement of the public discussion of the report on environmental impact assessment.

13. Public discussion of the scope of research and the level of detail of the information to be included in the environmental impact assessment report

Within 20 business days of the official disclosure of the notification on the official website of the competent authority, the public has the right to provide the authorized body referred to in paragraph 15 of this notification its comments and suggestions for the planned activities, the scope of assessment and the level of detail of the information to be included in the environmental impact assessment report.

During providing such comments and suggestions, point the registration number of case about environmental impact assessment of planned activities at the Unified environmental impact assessments register (mentioned on the first page of your notification). This will greatly simplify the process of registering and reviewing your comments and suggestions.

In case of receiving such comments and suggestions, they will be posted at the Unified environmental impact assessments register and transferred to the business entity (during 3 business days from their receiving). Persons who submit comments and suggestions, by their signature certify their consent to the processing of their personal data. During the preparation of the environmental impact assessment report, the business entity is obliged to take into account in full, in part, or reasonably reject the comments and suggestions of the public provided during the public discussion of the scope of research and level of detail of the information to be included. Detailed information on this is included in the environmental impact assessment report.

14. The decision on carrying out the planned activities

According to the legislation, the decision on carrying out such planned activities will be

Permission for construction works

(type of decision according to part 1 of Article 11 of Law of Ukraine on Environmental impact assessment),

which is provided by the ***State Inspection of Architecture and Urban Construction of Ukraine***

(the body responsible for making such a decision)

15. All comments and suggestions of the public to the planned activities, scope of research and level of detail of the information to be included in the environmental impact assessment report should be sent to

Ministry of Environmental Protection and Natural Resources of Ukraine, postal address: 03035, Kyiv, Metropolitan Vasyl Lypkivskyi street, 35, OVD@mepr.gov.ua, telephone. (044) 206-31-40; (044) 206-31-50, Kotiash Lada Pavlivna

(name of the authorized body, postal address, email, telephone, and contact person)

{Appendix 2 with changes made according to resolution of CM № 824 from 14 09 2020}

МІНІСТЕРСТВО ЗАХИСТУ
ДОВКІЛЛЯ ТА ПРИРОДНИХ
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MINISTRY OF ENVIRONMENTAL
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Secretariat of the Espoo Convention
Implementation Committee of the
Espoo Convention Protocol on
Environmental Impact Assessment

The Ministry of Environmental Protection and Natural Resources of Ukraine (hereinafter – the Ministry) presents its compliments to the Implementation Committee of the Espoo Convention and has the honor to announce its intention to carry out an environmental impact assessment of the planned activity of the LIMITED LIABILITY COMPANY «NIBULON».

On June 06, 2022 the LIMITED LIABILITY COMPANY «NIBULON» started an environmental impact assessment procedure for the new construction of transport infrastructure facility - river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch «Odesa Railway» (Unified EIA Registry entry 20225199566, http://eia.menr.gov.ua/uk/case/id-9566). The Ministry made a decision that transboundary Environmental Impact Assessment shall be carried out from June 06, 2022.

For the purposes of implementation of the provisions of the Espoo Convention the Ukrainian Party submitted to the Romanian Party the Notification on the planned activity (both in Ukrainian and in English).

The Ministry avails itself of this opportunity to renew to the Secretariat of the Espoo Convention the assurances of its highest consideration.

Annex: letter to the Romanian Party on 18 pages.

Olena KRAMARENKO
Deputy Minister

МІНІСТЕРСТВО ЗАХИСТУ
ДОВКІЛЛЯ ТА ПРИРОДНИХ
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Ministry of Environment, Water
and Forests of the Romanian Republic

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Should you have any questions, please, contact info@mepr.gov.ua.

The Ministry avails itself of this opportunity to renew to the Ministry of Environment, Water and Forests of Romania the assurances of its highest consideration.

Please see the Notification from the LIMITED LIABILITY COMPANY «NIBULON» attached on 16 pages.

Olena KRAMARENKO
Deputy Minister

MINISTRY OF ENVIRONMENT, WATERS AND FORESTS

Ref.no. DGEICPSC/1363/04.08.2022

To: Mr. Ruslan STRILETS, Minister

Ministry of Environmental Protection and Natural Resources of Ukraine

Ref: Transboundary environmental impact assessment procedure for the new construction of transport infrastructure facility -river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch "Odesa Railway", Ukraine

Dear Mr. Minister,

Ministry of Environment, Waters and Forests presents its compliments to Ministry of Environmental Protection and Natural Resources of Ukraine and has the honor to thank for the previous cooperation between our countries, and looks forward to strengthening joint efforts in the field of environmental protection.

With regard to your letter ref. no. 25/4-21/7156-22 dated 7th of June 2022, transmitted through the Embassy of Ukraine in Romania, registered at the Ministry of Environment, Waters and Forests with the ref. no. 2/R/1363/15.06.2022, on the Notification of the planned activities - new construction of transport infrastructure facility -river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch "Odesa Railway", as required by Article 3 of the Espoo Convention, we would like to inform you that Romania will participate in the transboundary environmental impact assessment procedure for this project.

In order to ensure compliance with the provision of Article 3 paragraph (8) of the Espoo Convention, we have made the received Notification, available to the public for making comments, by disseminating it on the official web site of the Romanian Ministry of Environment, Waters and Forests for 30 days. Furthermore, we sent the documentation to the competent Romanian authorities for assessment.

Thus, considering the notification submitted, we would like to bring to your attention that at their first meeting of the Parties to the Espoo Convention, in 1998, the Parties adopted a format for notification and recommended that Parties use the format to the extent possible when transmitting a notification according to article 3 of the Convention. Thus, the notification to an affected Party of a proposed activity under article 3 of the Convention should be done in accordance with format and information from Decision I/4.

I have the pleasure to forward, in accordance with the provisions of the Espoo Convention, several comments and proposals prepared by the Romanian institutions and experts for the scoping on the environmental impact assessment documentation of this project. I sincerely hope that all these comments and proposal will be duly taken into account in

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order to ensure that the Danube Delta and Danube river is not negatively impacted by the Ukrainian project.

I. General comments and proposals:

The planned activities are new construction of transport infrastructure facility - river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch "Odesa Railway". In this way, the aim is to ensure the operation of the transshipment complex of cereals, legumes and oilseeds and to plan the location of buildings and structures on the allocated area.

The location of the designed works is on the left shore of the Danube, downstream being located industrial enterprises. In relation to the location of the works, the nearest Romanian neighboring locality to Izmail is Plauru village, Ceatalchioi commune -Tulcea county and the nearest surface water flow is the Danube river. The transboundary environmental impact can have a significant effect on the nearest neighborhood, the minimum distance from the sources of pollution emissions during the execution or operation works being 570 m - Plauru village in Romania.

The project include the construction and operation of hydro-technical installations of the port (cargo berth etc.), access railway track, production transshipment complex for grain, legumes and oilseeds (railway and road reception facilities, dryer, warehousing, transshipment facilities for water and road transport) as well as dredging to a depth of 8.23 m from the „0" of the Izmail port with the excavation of the bottom soil in the amount of 112.0 thousand m^3 and its storage in the shore dump.

Having analyzed the notification, the alternative considered feasible and proposed by the project is alternatives 1, being the best option for the selection of facilities/installations and technical characteristics of the equipment to ensure the integration of a complex technology.

Thus, the environmental impact assessment documentation (EIA documentation) to be elaborated for this planned activities, shall contain as a minimum, in accordance with the provisions of the Espoo Convention, the following:

- Detailed information on the project itself including: the location of the project works, description of these proposed works (please include sections, cross-sectional and longitudinal profiles of the objects related to the activities proposed), an area plan and a project location map, with reference to the state border between Romania and Ukraine;
- A description of reasonable alternatives to the proposed activities and also the no-action alternative;
- A description of the environment/factors that are likely to be significantly affected by the proposed activities and its alternatives;
- A description of the potential environmental impact of the proposed activities and its alternatives and an estimation of its significance;
- A description of prevention, mitigation measures to keep adverse environmental impact to a minimum. It is necessary to assess the transboundary impact on environmental factors and to have measures to prevent, reduce, supervise and monitor the activities during the execution/construction phase or during the operation of any negative impact on the environment according to the relevant legislation. All these measures to prevent, limit and reduce any impact on the environment are also applicable to protect the surface waters of the Danube river both during the execution works and during the operation within the river port (terminal) Izmail. We consider it imperative to take measures to reduce or prevent adverse effects and protection measures to be planned and implemented in accordance with international law at all stages of the planned activities (implementation, operation, in case of accident, etc.) and to ensure a high degree of

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environmental protection, adaptation to climate change and ensuring sustainable development.

- An explicit indication of predictive methods, including mathematical modeling methods and underlying assumptions as well as the relevant environmental data used;
- Assessment of probable consequence of changes in the environment/change intervention in the environment;
- An estimation of the duration, length, magnitude of the proposed works;
- A description of effects on key species and organisms, including impacts on sediment disturbance on maritime organisms;
- Use of natural resources;
- Monitoring and management plans;
- A description with regard to measures for prevention and response of accidents, including shipping accidents that may result in sinking;
- An identification of gaps in knowledge and uncertainties encountered in compiling the environmental impact assessment documentation.

Supplementary, we would also like to emphasize that a significant adverse transboundary impact of the project on the activities to be financed under the Interreg VI-A NEXT Programme Romania-Ukraine, can be expected taking into consideration that the Odessa oblast, including Izmail County, is part of the eligible area of this Programme. The Programme offers financing opportunities under three priorities and five specific objectives, among which we mention those activities financed under the Romania-Ukraine Programme thus, in our view, may be impacted by the mentioned project: infrastructure (construction/rehabilitation/modernization of infrastructure related to systems/structures dealing with fires, floods, strengthening the banks of rivers, canals, the condition of dams, afforestation of river banks, preservation, revitalization and re-naturalization of water bodies and ecosystems, preservation and restoration of small rivers); equipment (firefighting equipment, floods, etc.); common strategies and tools for hazard management and risk prevention including joint action plans, hydrological monitoring of rivers, water temperature, precipitation measurements, ice regime; joint projects for the creation/extension of natural reserves in a transboundary context; endowment: improving human and technical capacity and modernizing monitoring equipment of protected areas; assessment, protection and improvement of existing ecosystems (research activities, inventory of resources, protection of endangered species, eradication of invasive species, afforestation etc.).

II. <u>Comments and proposals regarding surface and groundwater bodies/water elements</u>

From the point of view of <u>the naval transport field</u>, through the planned activities, the Ukrainian Party intends to build 8.23 m depths in the future port/terminal in Izmail at the operating front, which involves the dredging works on the next sector: Sulina Branch, Sulina Channel, Tulcea Branch, Ceatal Izmail, then following the Chilia Arm to Izmail so that, from a depth of 7.32 m, a depth of 8.23 m is ensured.

In this respect, we would like to mention the fact that the depths of the Sulina bar and the Sulina mouth are in direct dependence on the Danube sediment intake. The higher the waters of the Danube, the more intense the sediment deposition processes are, with influences of decreasing depth. The more intense the dredging in the bar, the greater the

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depths in the bar and vice versa, so that the dredging is carried out during the year with a time delay compared to the Danube sediment supply regime.
In view of the above, it is necessary to analyze the project/activities under the following aspects:

- hydro morphological - the speed variations of the water current in several sections of the Sulina sector, Sulina Canal, Tulcea arm, Ceatal Izmail, then Chilia arm to Izmail and their influences on the existing hydro technical works on this sector, in case of works dredging from 7.32 m to 8.23 m;
- the correlation with the new hydro morphological process that appeared related to the issue of the development to the south of the secondary delta Chilia, which refers to the formation by the coarse alluvial outflows of the Stambulul Vechi of a coastal cordon that closes at the Black Sea the Gulf of Musura, which endangers navigation at the mouth of Sulina, it must be analyzed to what extent the rate of sedimentation in the mouth of the Sulina channel will intensify;

- the accomplishment of the dredging works from 7.32m to 8.23m and, subsequently, the exploitation of this waterway will have important effects on the distribution of the water and alluvium flows of the Danube between the Chilia and Tulcea arms;

- the major volumes of dredging will negatively influence the flow of water on the secondary arms of Chilia which supply water on the territory of the Danube Delta and may significantly affect the Danube Delta Biosphere Reserve.

It is also necessary to include aspects on the status of the water body and possible impact, in accordance with the requirements of the Water Framework Directive (2006/60/EC), taking into account the mention from the notification, in the context of a likely transboundary impact (page 6), of the Convention for the Protection and Sustainable Use of the Danube River in the context of a likely transboundary impact, and the Convention on the Protection and Sustainable Use of the Danube River (1994, ratified by Ukraine in 2002).

From the point of view of safety of navigation, for the normal development of the naval traffic, the carrying out of transports on the water, the physical integrity of the navigation personnel, passengers and cargoes, we inform you that the depths of 8.23 meters, planned to be carried out by dredging operations according to the project, are much higher than the draught of 23 feet (7.01 meters) allowed at the Sulina bar according to art. 3.05 Cap. 3 second Part of the Regulation of navigation on the Danube in the Romanian sector. In conclusion, the ships witch will be loaded at Izmail port, so in the future will not be able to load at full capacity, due to restrictions at Sulina bar.

The Ukrainian Party will have to comply with the provisions of international and bilateral normative acts regarding navigation on the Danube and the regime of border water drainage, such as: the Convention on the Regime of Navigation on the Danube, signed in Belgrade on 18 August 1948 (ratified by Decree No. 298/1948) hereinafter referred to as the Belgrade Convention, Treaty between Romania and Ukraine on the regime of state border (2003), Agreement between the Government of Romania and the Government of Ukraine on cooperation in the field of border water management, signed on 30 September 1997 in Galati, as well as other bilateral documents signed by Romania and Ukraine. It is necessary for the Ukrainian Party to take all possible measures to limit and manage the environmental consequences for the Danube Delta ecosystem.

Considering the pressures listed in European Commission Directive EU 2017/845 of 17 May 2017, that the proposed activities exert on the aquatic environment, there is a possibility that the marine environment may be affected in different ways. Thus, the works carried out in the project implementation area, could lead to the resuspension of some priority substances from the sediments in the water column. Moreover, the equipment and transport activities may represent additional pollution sources generating atmospheric

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emissions of priority hazardous substances (heavy metals, hydrocarbons, etc.), which may then be released into the aquatic environment, introducing contaminants into the marine area. Together with other pressures from the same activities, the cumulative impact might be a threat for the marine ecosystem.

Therefore, we consider that a monitoring programme of the Black Sea ecosystem in front of the Danube mouths is mandatory, both during the project implementation period and after the completion of the works regarding the concentration of pollutants in all matrices: water, sediments and biota.

III. Comments and proposals regarding air quality and noise

Air quality shall be monitored by measurements, determined by the combustion of fuels at the level of machinery and equipment and by means of transport or by the circulation of materials (emissions of CO, CO2, NOX, SO2, VOC, dust, etc.) and monitoring of parameters so as to ensure that the maximum permissible concentrations under the relevant legislation are not exceeded.
Ensuring noise level measurements on site and at the limits close to the areas adjacent to the port, during the execution period (temporarily) or during the operation period through the noise produced by construction/operating equipment and material transport vehicles.

IV. Comments and proposals regarding waste management

Waste management regarding collection through companies specialized in the field and application of hazardous and non-hazardous waste management measures. We also mention the need to manage any accidental spills/discharges on hazardous substances, especially in the category of fuels (oil, diesel, mineral oils, used engine oils, etc.) at the surface or groundwater bodies. At the same time, the waste generated during the current activity of the dredging vessels but also of the other activities will be managed, selectively collected, in storage places/containers arranged for this purpose and taken over by specialized companies in the field.

V. Comments and proposals regarding the appropriate impact assessment on Natura 2000 sites

As you are certainly aware, the Danube Delta is an integral part of the European Ecological Network Natura 2000 in Romania and overlaps at the level of the Danube Delta with the following special protection areas (SPA) and sites of Community importance (SCI) established under the Habitats (92/43/CE) and Birds (79/409/CE) directives:

No	Name of SCI	Code	Surface of SCI (ha)	Biogeographical Region
1.	Delta Dunării	ROSCI0065	453.645,5	49,8% Steppe and 50,2% Pontic
2.	Delta Dunării - marine area	ROSCI0066	336.200,2	100% Black Sea marine area

No.	Name of SPA	Code	Surface of SPA (ha)	Biogeographical Region

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3.	Delta Dunării and Complexul Razim-Sinoie	ROSPA0031	508.302,3	44,74% Steppe and 55,26% Pontic

The detailed maps of these sites can be found online - https://natura2000.eea.europa.eu/#. Information regarding the sites is made available on the website of the Romanian Administration of the Danube Delta Biosphere Reserve: http://www.ddbra.ro/rezervatia/delta-dunarii/biodiversitate/situri-natura-2000-administrate-de-a-r-b-d-d-a921. This link also contains the Standard Form Natura 2000 which was prepared for each Natura 2000 site.

1. **"Delta Dunării ROSCI0065"** was designated for the conservation of species/habitats of Community interest:
- 29 types of habitats of community interest, of which 7 habitats of priority interest (71,24% of the ROSCI0065 surface is occupied by Natura 2000 habitats)
- species listed in Annex II of Directive 92/43/CEE: 5 plant species, 9 invertebrates species, 15 fish species, 2 amphibians species and 3 reptile species, 7 mammals species.

2. **"Delta Dunării ROSCI0066 marine area"** was designated for the conservation of species/habitats of Community interest:
- 4 types of habitats of community interest
- species listed in Annex II of Directive 92/43/CEE: 2 fish species, 2 mammals species.

3. **"Delta Dunării and the Complex Razim Sinoe ROSPA0031"** was designated for the conservation of birds of Community interest: 221 birds species listed in Annex I of the Directive 2009/147/CE from which 13 are permanent species, 95 are for reproduction, 38 are wintering, 137 are within this area during migration.

The Romanian Party is particularly concerned about the proposed dredging works and believes that all interventions aimed at changing the cross-sectional and longitudinal sections of the branches will have a likely significant impact on most components of the Natura 2000 sites.

In conclusion, adequate assessment studies for the protected areas indicated above need to be conducted, in accordance with the provisions of the directives referred to above. The methodology adopted for identifying and evaluating negative impact should be simple and in accordance with the Danube Delta Biosphere Reserve management plan. The conclusions of the adequate assessment studies should be then addressed in the environmental impact assessment documentation.

The works in the Danube waters, in the phase of construction of the port or dredging capacities, will be able to affect the aquatic ecosystem of the Danube, in the immediate vicinity and to a limited extent downstream. The works will also affect the presence of ichthyofauna and the presence of birds that are related to aquatic ecosystems. The activity and the increased presence of people on the site within the port complex during the works are expected to have a negative effect on the fauna in the area.

VI. Comments and proposals regarding the monitoring programme

We consider it necessary to monitor the environmental factors that may be significantly affected. The developer must implement the prescribed environmental monitoring measures in accordance with the international applicable environmental legislation.

In conclusion, taking into account the Notification on planned activities - new construction of transport infrastructure facility -river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch "Odesa Railway", which involves:

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- "the construction of the operating water area with an approach canal with dredging to a depth of 8.23 m from the "0" of the Izmail seaport with the excavation of the bottom soil in the amount of 112.0 thousand m^3 and its storage in the shore dump";
- "the total area of the site planned for the construction and operation of the transport infrastructure facility - the river port (terminal) with an area of 19.0 hectares from the lands of the reserve and an area of 5.29 hectares from the lands of the water funds";
- "operational water area with an approach channel on the Danube River from 91.09 to 91.55 km: length - 460 m, with -115 m, area - 5.29 ha, design depth - 8.23 m from the "0" of the Izmail seaport";
- "environmental restrictions (...)" to the planned activities by technical alternative 1" are "for pollution of the aquatic environment - the value of the MPC of pollutants in the surface water of a water body, the background content of pollutants in the surface water of a water body ", and for "impact on wildlife" - ban on dredging during spawning";
- that for the notification transmitted, additional information is needed about the planned activities regarding berths, roadsides, aquariums, silos, outer port defense constructions, the current capacity of the port and to what level the expansion is carried out, if there are facilities for 8 million tons/year, if the total area of the port is 1.074.712 m^2, i.e. 107,47 ha as specified in the "Danube Ports Handbook, Edition December 2021[1] ";
- the Notification does not establish any possible impact on the environment, but only mentions some aspects of the impact on water during the operating period through the deposition of dust resulting from the transshipment works on the surface of the water and does not mention any possible transboundary impact, for example through the modification of the hydrological parameters of the Chilia arm with the consequence of the redistribution of flows between the Chilia and Sulina arms, in clear favor of the first;
- the likely transboundary impact, in particular due to the hydrological changes of the Danube (in terms of morphological conditions: depth and width of the course, structure and substrate of the bed of the riverbed, hydrological regime: quantity of flow, perturbation of the continuity of sediment transport, water velocity, etc.) through the implementation of the planned activities (...)", must be considered in the context of the implementation of another project: *"Development of the Danube-Black Sea deep water navigable channel on the Ukrainian side of the Danube Delta[2]" (Bystroe Channel)*, since the planning of works for the Izmail harbour with 8.23 m deep berths also requires at least similar access depths for the whole Chilia arm and the Bystroe Channel;
- in a wider context, these two interconnected projects belong to the "Development of the Danube Corridor" project, of which the LOGMOS Master Plan - Annex 6, Part II, TRACECA Inland Waterways - Danube Case Study, October 2013, ENPI 2011/264 459, "Logistics Processes and Motorways of the Sea II in Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Ukraine, Uzbekistan[3]", mentions the construction of an external port at the entrance to the Ukrainian portion of the Danube waterway for transhipment operations to increase the volumes of cargo shipped to the ports of Reni and Izmail and the reconstruction of the port of Reni;
- Research report "Analysis of the environmental impact in the Danube Delta resulting from the already implemented works related to the Danube-Black Sea

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[1] https://www.danubeports.eu/images/Danube_Ports_Handbook_Edition_2021_final.pdf
[2] http://www.mmediu.ro/app/webroot/uploads/files/Notificare%20UA.pdf
[3] http://www.traceca-org.org/fileadmin/fm-dam/TAREP/65ta/Master_Plan/MPA6_2.pdf

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Deep Waterway project on the Ukrainian side of the Delta[4] " carried out from the implementation of both Phase 1 of the project and the Full development phase (which also covers the development of compensatory measures and mitigation measures likely based on the 2004-2017 integrated environmental monitoring materials and the results of field monitoring observations, at least in the transboundary context), states that the hydrotechnical works (not specifying what these works consisted of) did not generate a transboundary impact on the hydrological regime of the Danube Delta and thus:

- did not cause any changes in the flow distribution from the top of the Delta where the Danube splits into the Kiliynsky and Tulchinsky arms", but no data was provided to confirm this;
- have not changed current trends in the development of water flow in the Chilia Delta;
- no significant impact on migratory fish populations has been established.

The Romanian Party expresses the following point of view on the implementation of the works:

Since the Ukrainian Party intends to create depths of 8.23 m at the operating berths in the port of Izmail, we consider that it is not opportune to create these depths because the ships that are going to operate in the port of Izmail, if they enter the Sulina Channel, Tulcea Arm, Izmail Ceatal, then Chilia Arm up to Izmail, will need to ensure this depth throughout the entire sector crossed. This situation is in contradiction with what is currently going on in this segment between Bara Sulina - Sulina Channel - Tulcea Arm - Ceatal Izmail, since, in compliance with the Danube Commission Recommendations[5], it provides depths of 7.32 m for the navigation of maritime vessels with draughts of 7.01 m. Currently the navigation depths provided by the Lower Danube River Administration Galați are in accordance with the navigation gauges for which the Sulina Canal was designed, the present situation being directly proportional to the existing geomorphological conditions, the infrastructure of the banks and the port on this segment, between Bara Sulina and Ceatal Izmail. In the situation desired by this project, to ensure depths of 8.23 m in the berths of the port of Izmail, we consider that this cannot be achieved on the above-mentioned segment, namely from Bara Sulina to Ceatal Izmail, both from the geomorphological point of view, financial resources, existing equipment, as well as the fact that it is not necessary from the point of view of the Administration, which must ensure a depth of 7.32 m, according to the Recommendations of the Danube Commission. At the same time, it must be taken into account the current situation regarding high temperature and drought, as well as the high traffic flow on the Danube River compared to previous years, which led to the decrease of the Danube river flow by 50%, being necessary to ensure recommended and accepted navigability conditions in the sector concerned.

The area to be dredged additionally for the 8.23 m depth is between Bara Sulina and Ceatal Izmail (Mm43) at the critical points Bara Sulina, Mm31, Mm36, Mm40 and the dredged material must be dumped at sea. From the measurements carried out, for a covering depth of -9.00 m, it results the necessity of dredging a volume of about 1,500,000 m3, with annual periodical maintenance, with adverse effects on the Sulina Canal, both for the bank defences and on the bed, with enormous costs, unjustified by the Romania and without having additional equipment to carry out the above mentioned works. In this regard, the Romanian authorities does not agree with the realization of the Izmail port

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[4] http://www.mmediu.ro/app/webroot/uploads/files/Annex_2_Analysis_of_the_impact_of_the_environment_which_follows_from_the_already_implemented_work_ENG_-_RO.pdf

[5] https://www.danubecommission.org/uploads/doc/publication/Gabaritov_Sarvatera/Recommandations%20gabarits%202013.pdf

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for depths of 8.23 m and recommends to take into account that the future sea berths should provide depths for ships with draughts in close correlation with the existing situation in the Sulina Channel, i.e. depths for the navigation of sea vessels with draughts of 7.01 m.

At the same time, in the case of dredging for the construction of the depths at the berths of the Izmail seaport, we recommend that the dumping areas be established as close as possible to the Ukrainian shore, that they be checked periodically to monitor the quantity of alluvium dumped, and that the dumping area be respected in order to prevent their migration into the navigable channel, towards the Romanian side, avoiding the clogging of the navigable channel maintained by the Romanian Party.

Please note that the Romanian Party, through Lower Danube River Administration Galati, ensures for the Chilia Arm, on the segment from Ceatal Izmail to Periprava navigation conditions for river vessels for the transport of goods and passengers, only for the area between the border line and the Romanian shore, is not open to navigation of maritime vessels with third flags according to international legislation under the Romanian-Ukrainian Border Treaty, art. 9, para. 1.

The Romanian Party expresses its concern about the following matters:

- That in Decision IS/1f on compliance by Ukraine with its obligations under the Convention in respect of the Danube-Black Sea Deep Water Navigation Canal in the Ukrainian sector of the Danube Delta (ECE/MP.EIA/27/Add.1–ECE/MP.EIA/SEA/11/Add.1)[6] adopted at the Intermediate Sessions of the Meetings of the Parties to the Espoo Convention and the SEA Protocol, Geneva, 5-7 February 2019 published on the website of the United Nations Economic Commission for Europe (UNECE), the Meeting of the Parties:

"6. Regrets that only limited steps have been taken to bring the Bystroe Canal Project into full compliance with the Convention, further to paragraph 24 of decision VI/2;
7. Endorses that (...) Ukraine has not yet fulfilled its obligations (...) bringing the project itself into full compliance with the Convention;
8. Also endorses that the continuation of dredging activities by the Government of Ukraine constitutes a further breach of its obligations under the Convention;
13. Takes note of the intention of Ukraine to develop a new project for a "Bystroe Route" and to carry out a transboundary environmental impact assessment procedure on the new project in accordance with the Convention."

- for the lack of relevant information on both the status of the complex hydrotechnical works carried out so far and the projects that are planned to be implemented, such as the Izmail terminal, which may have a transboundary impact on the Romanian territory;
- that the projects already implemented for the "Development of the Danube Corridor" are very extensive and require a lot of complex hydrotechnical works on the Chilia arm, on the Bystroe arm and in the ports of Reni and Izmail which will determine the redistribution of flows on the Danube between the Chilia arm and the Sulina arm, in clear favour of the former and which will cause a significant transboundary impact on the Romanian territory, affecting the sites of the Danube Delta Biosphere Reserve, having a strong negative social and economic effect on the local communities of the Delta and determining unfavorable conditions for navigation on the Danube in the Romanian sector;

[6] https://unece.org/fileadmin/DAM/env/eia/documents/WG2.8_Nov2019/official_docs/G1910581ENG.pdf

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- that the impact of these works is not assessed in an integrated, synergistic, direct, indirect and cumulative context and no information was provided on the possible transboundary impact, in particular due to the hydrological changes of the Danube river (in terms of morphological conditions: depth and width of the course, of the fairway, bed structure and substrate, hydrological regime: quantity of flow, disturbance of sediment transport continuity, water velocity, etc.);
- that the impact studies presented by the Ukrainian Party do not present data and information that can be compared with those obtained by the Romanian Party but only statements unsupported by numbers, i.e. without a scientific basis; e.g. "Updated information on the current depth and width of the Bystroe Channel is not available because recently carried out hydrographic measurement numbers cannot be obtained. It is not known whether hydrographic measurements are carried out regularly (at least annually), or only occasionally." - Study on current situation and likely development of the Bystroe canal and Kiliya arm, TRACECA IDEA II, Transport Dialogue and, Networks Interoperability II, January 2016[7];
- that the Ukrainian approach regarding the impacts does not take into account very sensitive areas that may be significant such as affecting sturgeon migration, this in the context that "rare reef species such as sturgeons are more common on the Bystroe than elsewhere." (Documentation on the likely significant transboundary impact of the Ukrainian Deep-Water Navigation Canal Danube-Black Sea in the context of Espoo Convention, Danube Delta National Institute Tulcea, Romania, February 2005)[8] and "regarding ultrasound-tagged individuals, records showed that in spring 2012 and 2014, 53% of the individuals that migrated to the Black Sea used the Chilia arm" - Methods, techniques and monitoring results regarding the sturgeon migration on Lower Danube, INCDPM Bucharest, Strasbourg 2015/ Bern Convention[9];
- that the estimates of the amount of **112,000 m³** of material that needs to be excavated for the Izmail port access channel are very optimistic, from the data presented this amount that would result for an excavation on an area of 5.29 ha to a depth of 8.23 m from "0" would be according to a simple calculation about **435,367 m³**;
- that the conditions for temporary or final storage of excavated, dredged material that could also have a transboundary impact on Romanian territory are not presented;
- that the Ceatal Izmail bifurcation requires special scientific attention due to the intensity and complexity of the hydromorphological processes acting on the riverbed, hydromorphological changes in this sector of the Danube are significant because they produce associated risks, affecting the ecological balance of the Danube Delta Biosphere Reserve, therefore, monitoring and assessing morphological changes in the riverbed are essential - Assessing Danube riverbed morphology as a response to natural and anthropogenic conditions using GIS: A case study of the Ceatal Izmail Branching Area, National Research-Development Institute for Marine Geology and Geoecology - Geoecomar, Romania, December 2021[10];
- that the total area of land affected by erosion in the Ceatal Izmail bifurcation is 21.5 ha, while the total area occupied by sediment accumulations is 27.4 ha for the period 1980-2020, erosion and sedimentary deposition acting differently on the three branches of the bifurcation - Assessing Danube riverbed morphology as a response to natural and anthropogenic conditions using GIS: A case study of the

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[7] https://mtu.gov.ua/files/31110551_dod.pdf

[8] https://unece.org/DAM/env/eia/documents/inquiry/Rom.1.pdf

[9] https://www.afdj.ro/sites/default/files/prezentari/presentation_incdpm_deak_bern_convention_0.pdf

[10] https://www.researchgate.net/publication/359387451_ASSESSING_DANUBE_RIVERBED_MORPHOLOGY_AS_A_RESPONSE_TO_NATURAL_AND_ANTHROPOGENIC_CONDITIONS_USING_GIS_A_CASE_STUDY_OF_THE_CEATAL_IZMAIL_BRANCHING_AREA

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Ceatal Izmail Branching Area, National Research and Development Institute for Marine Geology and Geoecology - Geoecomar, Romania, December 2021[11];

- that no 3D mathematical modelling of hydrodynamic and hydromorphological effects of sediment transport has been carried out, results from the simulation of the solutions of the mentioned projects and the analysis of scenarios following the calibration and validation of 3D hydrodynamic models as well as 3D morphodynamic models in which the effects and transboundary impact on water bodies in the territories of Ukraine and Romania could be highlighted (an example Romanian coastal dynamics during cold and warm seasons analyzed by means of a numerical model, 2017, National Institute of Marine Geology and Geo-Ecology - GeoEcoMar[12]).

Thus, taking into account the provisions of the Espoo Convention, the provisions of the Treaty on the relations of good neighbourliness and cooperation between Romania and Ukraine, signed in Constanta on 2 June 1997, Article 16 on the "development cooperation in the area of protection and improvement of the environment, ... in the area of rational use of natural resources, of expansion of ecologically safe production, of implementation of efficient measures for the protection and revival of nature, in order to improve the environmental security of the two countries",

as there are reasonable grounds for believing that a significant adverse transboundary impact is likely to be caused by the planned activities to be carried out in the future, we request that the environmental impact assessment documentation which will elaborated and transmitted to Romania Party, to include the domains that have been identified as being of interest for which additional data and information are requested and for which an environmental impact assessment is required.

In the context above, we expect to receive according to Article 4 paragraph 2 of the Espoo Convention, the environmental impact assessment documentation (EIA Study), and indication of the time schedule for transmittal of comments to this or a timetable for the transboundary EIA procedure.

In the light of the foregoing, we consider that the Romanian Party has shown that it respects its responsibilities and obligations arising from international agreements and conventions to which Romania is a Party and looks forward to strengthening joint efforts in the field of Danube Delta protection.

On this occasion, I express my willingness to continue the fruitful cooperation and please accept, Ms. Deputy Minister, the assurance of my highest consideration.

Sincerely yours,

Barna TÁNCZOS

Minister

[11] Idem.

[12] https://www.geoecomar.ro/website/publicatii/Nr.23-2017/05_DINU_2017_web.pdf

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Unofficial translation

Ministry of Environment, Water and Forests of Romania

The Ministry of Environmental Protection and Natural Resources of Ukraine certifies its respect to the Ministry of Environmental Protection, Water and Forests of Romania and reports the following regarding the environmental impact assessment of the proposed activities of the LIMITED LIABILITY COMPANY «NIBULON».

On October 21, 2022, the LIMITED LIABILITY COMPANY «NIBULON» uploaded to the Unified Environmental Impact Assessment Register (hereinafter - the Register) an environmental impact assessment report regarding the proposed activity «New construction of a transport infrastructure object - a river port (terminal) in Izmail, Izmail district, Odesa region with a railway access track - adjacent to the Izmail station of the «Odesa Railway» regional branch» (Unified EIA Registry entry 20225199566, http://eia.menr.gov.ua/uk/case/id-9566).

Please note that according to the national environmental impact assessment procedure, the public consultations of the environmental impact assessment report takes 25 working days.

According to the paragraph 6 article 2 Espoo Convention, the Party of origin shall provide, in accordance with the provisions of this Convention, an opportunity to the public in the areas likely to be affected to participate in relevant environmental impact assessment procedures regarding proposed activities and shall ensure that the opportunity provided to the public of the affected Party is equivalent to that provided to the public of the Party of origin.

Taking into account the above, we submit an environmental impact assessment report on the planned activity «New construction of a transport infrastructure object - a river port (terminal) in Izmail, Izmail district, Odesa region with a railway access track - adjacent to the Izmail station of the «Odesa Railway» regional branch» to start public consultations and provide comments and suggestions that must be taken into account when preparing a decision regarding the proposed activity.

Separately, we inform you that information regarding the comments and suggestions to the proposed activity, scoping of the assessment and the level of detail of the information (received from the Romanian side) was included to the EIA report in section 10.

The Ministry avails itself of this opportunity to renew to the Ministry of Environment, Water and Forests of Romania the assurances of its highest consideration.

Please see the report on the environmental impact assessment from the LIMITED LIABILITY COMPANY «NIBULON» in Ukrainian and English attached on 1030 pages.

Deputy Minister **Olena KRAMARENKO**

MINISTRY OF ENVIRONMENT, WATERS AND FORESTS

Ref.no. DGEICPSC/21143/01.02.2023

To: Ms. Olena KRAMARENKO, Deputy Minister

Ministry of Environmental Protection and Natural Resources of Ukraine

Ref: Transboundary environmental impact assessment procedure for the new construction of transport infrastructure facility - river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch "Odesa Railway", Ukraine

Dear Ms. Deputy Minister,

Ministry of Environment, Waters and Forests presents its compliments to Ministry of Environmental Protection and Natural Resources of Ukraine and has the honor to thank for the previous cooperation between our countries, and looks forward to strengthening joint efforts in the field of environmental protection.

With regard to your letter sent via e-mail on 13 December 2022 and registered at the Ministry of Environment, Waters and Forests of Romania with the ref. no. 2/R/21143/14.12.2022, on **the environmental impact assessment report**, as required by Article 4 of the Espoo Convention, for **the project "New construction of transport infrastructure facility - river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch "Odesa Railway", owner Nibulon LLC"**, we would like to inform you as follows.

In order to ensure compliance with the provision of Article 4 paragraph (2) of the Espoo Convention, **the EIA documentation was made available to the public** for making comments, by disseminating it on the official web site of the Romanian Ministry of Environment, Waters and Forests for 30 days. During the consultation period, no comments were received from the interested public.

Moreover, the **EIA documentation was also sent to the competent Romanian authorities**. Considering the assessment made by the Romanian institutions and experts, **we would like to forward the comments and proposals prepared on the EIA documentation**.

I. First of all, we would like to stress out that there are some **differences between the notification and the EIA documentation regarding information on planned activities**.

The Notification mentions dredging works for obtaining the depths of 8,23 m in the future port/terminal in Izmail at the operating front, as well as a length of 460 m (between 91,09 to 91,55 river km) on a width of 115 m (page 3) which implies a volume of 112.000 m^3 of dredging material.

On the other hand, the EIA documentation includes the following information:

- At point 1.1 (page 9, penultimate paragraph) it is mentioned the fact that "the specified section of the Danube River water area stretches along the shipping

channel "Vylkove - Izmail Ceatal" from 91,09 km to 91,55 km with a width from the boundary of the shipping channel to the left bank";

- At point 1.3 / Construction works / Stage V (page 13, last paragraph) it is mentioned that "dredging to a depth of 8,23 m from "0" of the Izmail port - if necessary, related to carrying out of dredging works by Ukraine on the shipping channel "Vylkove - Izmail Ceatal" on reaching its project depth of 8,23 m from "0" of the Izmail port, which was approved by the resolution of the Cabinet of Ministers of Ukraine of February 9, 2022 N 136 [28]."
- At point 1.3.2. /Dredging works (...) (page 16 first and second paragraphs) it is mentioned that channel "Vylkove - Izmail Ceatal", in accordance with the resolution of the Cabinet of Ministers of Ukraine of February 9, 2022 N 136 [28] is an inland waterway of Ukraine with the approved design dimensions: length 95,445 km, width 120 m and depth 8,23 m.

II. As a general context, we would also like to point out that **the navigation on Danube is regulated by the Convention regarding the regime of navigation on the Danube (Belgrade Convention, 1948)** to which both Romania and Ukraine are Parties.

According to articles 20 and 22 of the Belgrade Convention, in 1953, an agreement was signed between the Governments of People's Republic of Romania and U.R.S.S. for the foundation of the Danube River Special Administration for performing hydrotechnical works for maintaining the navigable channel and regulating the navigation on the maritime sector of Danube (Brăila-Sulina), composed of representatives of both states.

In 1957, Moscow made a Bilateral Agreement between governments of R.P.R and U.R.S.S., based on which a protocol was signed to give the functions and commodities of the Danube River Special Administration to the Romanian Party, starting with 1 July 1957.

Based on the above-mentioned agreements and in order to achieve the provisions of articles 3, 20, 23 and 31 of the Belgrade Convention, Romania founded a juridical person having the statute of autonomous regia, with headquarters in Galati, named **Lower Danube River Administration Galați**, organized and regulated according to Government Decision no. 492/2003.

According to article 2 of GD no. 492/2003, the Lower Danube River Administration is the authority for waterways on the Romanian sector of Danube from the entrance in the country to km 1075 at the exit to Black Sea, on Sulina Arm, in road Sulina (*rada Sulina*), on Danube's navigable arms, Borcea, Bala, Măcin, Vâlciu, Caleia, on Chilia Arm with secondary arms, on Sfântul Gheorghe Arm with rectification channels and secondary arms of Sulina Channel, called Old Danube.

Also, according to article 5 of GD no. 492/2003, **the Lower Danube River Administration has responsibilities, in accordance with Belgrade Convention, both for the execution of hydrotechnical work and for the regulation of navigation.**

1) According to article 2 of the Belgrade Convention, **"the regime established by this Convention shall apply to the navigable part of the Danube River between Ulm and the Black Sea through the Sulina arm, with outlet to the sea through the Sulina channel."**

2) Also, according to article 3.05 **"The gauge of vessels"** from the **Regulation on navigation on Danube on the Romanian sector** - edition 2013 (RND), part II Special rules

for navigation on the Danube sector from road Sulina (*rada Sulina*) and Brăila port (km 175):

"1. On the maritime sector of Low Danube from Brăila to road Sulina (*rada Sulina*), under normal conditions, all maritime vessels and river-maritime vessels will navigate with a draught in freshwater of 23 feet, which is 7.01 meters. The situation of depths will be communicated daily on a radio channel with national coverage which will be communicated to navigators through a notice to navigators.

2. On this sector the navigation is allowed, under normal conditions, for vessels with a maximum length of 180 m and floating construction with a maximum width of 40 m.

3. In some situations, considering the Danube water level, the Administration can:

a) order the reduction or can approve to exceed the draughts provided by point 1;

b) approve the navigation of vessels with a length greater than 180 m, but no more than 225 m;

c) approve the navigation of floating construction with a width greater than 40 m, when the hydrometeorological condition allow for that."

We point out that RND is based on the Fundamental Dispositions for Navigation on Danube River (DFND) adopted by the Danube Commission in 2010 and was approved by Order of ministry no. 859/2013.

Keeping in mind the above information, the mouth and Sulina Channel, the main access way from Danube to Black Sea, with a navigable depth of 24 feet (7,32 m) assures, at present, on its entire route, with a length of 62,6 km, the navigation of maritime vessels with a capacity of no more than 25000 tdw.

III. From the point of view of **safety of navigation**, for the normal development of the naval traffic, the carrying out of transports on the water, the physical integrity of the navigation personnel, passengers and cargoes, we inform you that the depths of 8.23 meters, planned to be carried out by dredging operations according to the project, are much higher than the draught of 23 feet (7.01 meters) allowed at the Sulina bar (*Bara Sulina*) according to art. 3.05 Cap. 3 second Part of the Regulation of navigation on the Danube in the Romanian sector. In conclusion, **the ships which will be loaded at Izmail port will not be able to benefit from the depth obtained from the dredging of 8.23 meters, due to restrictions at Sulina bar** (*Bara Sulina*).

IV. Moreover, regarding the proposed project, since the Ukrainian Party intends to create depths of 8.23 m at the operating berths in the port of Izmail, **we consider that it is not opportune to create this port with different depths than Sulina Channel and/or Chilia Arm and Bâstroe**, because the ships that will operate in Izmail port, if they will enter Sulina Arm and will navigate on the route Sulina Channel, Tulcea Arm, Izmail Ceatal, then Chilia Arm up to Izmail or directly through/to Bâstroe, will need this depth of 8.23 m throughout the entire crossed sector.

This situation is in contradiction with what is currently going on in this segment between Bara Sulina - Sulina Channel - Tulcea Arm - Ceatal Izmail, since, in compliance with the Danube Commission Recommendations, the Lower Danube River Administration Galați provides depths of 7.32 m for the navigation of maritime vessels with draughts of 7.01 m.

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Currently the navigation depths provided by the Lower Danube River Administration Galaţi are in accordance with the navigation gauges for which the Sulina Channel was designed, the present situation being directly proportional to the existing geomorphological conditions, the infrastructure of the banks and the port on this segment, between Bara Sulina and Ceatal Izmail.

In the situation desired to be obtained with this project, which is to ensure depths of 8.23 m in the berths of the port of Izmail, we consider that this cannot be achieved on the above-mentioned segment, namely from Bara Sulina to Ceatal Izmail, both from the geomorphological point of view, the criteria of current design, financial resources, existing equipment, as well as the fact that it is not necessary from the point of view of the Administration, which must ensure a depth of 7.32 m, according to the Recommendations of the Danube Commission, especially since this is the depth for which the Romanian upstream ports were projected.

At the same time, the dredging of the whole lenght of Chilia Arm between the Black Sea and Izmail Port, following Bâstroe Channel, for the depth of 8,23 m, would mandatory require the development of studies aiming to assess the direct and indirect effects on the shores, since we would like to point out the fact that there are sectors where the dredging will be performed on the frontier line, which mean that the Romanian shores might be affected.

We would like to add that the depth in Sulina Arm and Sulina mouth depend directly on the Danube sediments supply. The bigger the Danube waters are, the more intense the alluvial depositing process is, and they influence the diminishing of the water depth. The more intense the dredging works are, the bigger the depths in channel are and vice-versa, which imply that the dredging is done during the year with a temporal delay from the regime of the Danube alluvial deposits.

Therefore, it is necessary that the following aspects of the project are analyzed:

- Hydromorphological aspects: the speed variation of the water draft in more sections of the sector Sulina mouth, Sulina Channel, Tulcea Arm, Ceatal Izmail, followed by Chilia Arm up to Izmail and the influence on the hydrotechnical works existing on this sector, in the situation the dredging works from 7,32 m to 8,23 m are done;
- Correlation with the new hydromorphological process appeared in relation to the problem of the development towards south of the Chilia secondary delta, which refers to the formation due to the casting of coarse-grained alluvial deposits of a littoral strap that closes Musala golf at the Black Sea, and which represents a risk to the navigation at Sulina mouth. There must be done an analysis of the degree in which the sedimentation rhythm will intensify at the mouth of the Sulina channel;
- The dredging works from 7,32 m to 8,23 m and after that, the exploitation of this waterways will have important effects on the repartition of water and alluvial debits of Danube between Chilia Arm and Tulcea Arm;
- The major dredging works will also negatively influence the water flow on the secondary arms of Chilia which supply with water the territory of Danube Delta and can majorly affect the Danube Delta Biosphere Reserve.

V. In the situation pursued by the Ukrainian Party, which is having depths of 8,23 m, the area to be additionally dredged for obtaining the 8.23 m depth is situated between Bara

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Sulina and Ceatal Izmail (Mm43), at the critical points Bara Sulina, Mm31, Mm36, Mm40 and other intermediate areas, and the **dredged material** must be dumped at sea, which is the only dumping area accepted by the Romanian Water National Administration and in strict accordance with Danube Delta Biosphere Reserve Authority. From the measurements carried out, for a covering depth of -9.00 m, it results the necessity of dredging a volume of about 1,500,000 m^3, with annual periodical maintenance. This activity will result in adverse effects on the Sulina Channel, both on the bank defenses and on the bed, with enormous costs, unjustified, that will need to be covered by Romania both for the dredging, and for the problems regarding disequilibrium caused to the infrastructure of Sulina Channel and to the Danube Delta Biosphere Reserve. Also, we mention that Lower Danube River Administration Galați does not have additional equipment to carry out the above-mentioned works. At the present moment, the dredging activity is carried out using an absorbent upsetting dredging machinery bought in 2000.

At the same time, in the case of dredging for the construction of the depths at the berths of the future Izmail seaport, we recommend the dumping areas to be established as close as possible to the Ukrainian shore, to be periodically checked in order to monitor the quantity of alluvium dumped, and the dumping area to be respected in order to prevent their migration into the navigable channel, towards the Romanian side, avoiding the clogging of the navigable channel having a river character, maintained by the Romanian Party.

Please note that at the present moment, the Romanian Party, through Lower Danube River Administration Galati, ensures for the Chilia Arm, on the segment from Ceatal Izmail to Periprava navigation conditions for river vessels for the transport of goods and passengers for the Romanian ports, for the area having a river character situated between the border line and the Romanian shore.

Considering the critical current situation, due to war, the Ministry of Foreign Affairs of Romania, on 13.07.2022, allowed sea vessels with third flags to navigate on Chilia Arm, Stambulul Vechi and Bâstroe, but in the future, it is possible that this will be prohibited, this being stipulated in the international legislation, in accordance with the Romanian-Ukrainian Border Treaty, article 9, point 1.

In case the Ukrainian Party will develop the Izmail Port with depths of 8,23 m, we propose that all vessels that will enter in operation through Bâstroe Channel will also go to sea through this channel and not through Sulina Channel, which was projected for depths of 7,32 m according to the Recommendations of Danube Commission, as already shown.

Considering the above information, the Lower Danube River Administration Galati expresses its concerns regarding Ukrainian's intention to develop Izmail port for depths of 8,23 m, since this activity will activate an additional alluvial input on Chilia Arm and will dramatically change the debit repartition in favor of this one and to the detriment of Sulina Channel and recommends to be taken into account that the future sea berths for the new port should provide depths for vessels with draughts in close correlation with the existing situation on Sulina Channel, respectively depths for navigation of sea vessels with draughts of 7,01 m.

VI. Also, considering the pressures listed in European Commission Directive EU 2017/845 of 17 May 2017, that the proposed activities exert on the aquatic environment, there is a possibility that the marine environment might be affected in different ways. Thus, the works carried out in the project implementation area, could lead to the **resuspension of some priority substances from the sediments in the water column.** Moreover, the

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equipment and transport activities may represent additional pollution sources generating atmospheric emissions of priority hazardous substances (heavy metals, hydrocarbons, etc.), which may then be released into the aquatic environment, introducing contaminants into the marine area. Together with other pressures from the same activities, the cumulative impact might be a threat for the marine ecosystem.

Therefore, we consider that a **monitoring programme** of the Black Sea ecosystem in front of the Danube mouths is mandatory, both during the project implementation period and after the completion of the works regarding the concentration of pollutants in all matrices: water, sediments and biota.

VII. In our response to the notification, we expressed some concerns regarding lack of data and information, and **we asked for studies and assessments in order to assure that all posible effects are anticipated and measures can be taken**. However, in Chapter 9 of the EIA documentation, at pages 135, 139 and 140, it is mentioned that the comments **were not accepted**, followed by the subsequent explanations:

> *"Implementation of the planned activity is foreseen at the expense of private investments, has a very local character and does not belong to the General Plan of LOGMOS."*
>
> *"(...) the claims of the Romanian side that the planned activity creates risks, affecting the ecological balance of the Danube Delta biosphere reserve, are greatly exaggerated, and the demand for large-scale research and the creation of three-dimensional hydrodynamic and morphodynamic models is not justified";*
>
> *"the planned activity does not involve conducting dredging works that may cause hydrological changes of the Danube River (from the point of view of morphological conditions: depth and width of the channel, fairway, structure of the bottom and substrate, hydrological regime: amount of flow, disruption of the continuity of sediment transportation, speed of water movement, etc."*

The approach to possible impact on water/water bodies, especially on the hydrodynamics and hydromorphology, with consequences on habitats and species (in particular on the migration of sturgeons), does not take into account the **cumulative aspects with other projects which are mandatory for the viability of the present project**, for example assuring depths of 8,23 m only for the port without any connection with the waterways on Chilia Arm and Bâstroe which would need the same depths. Our affirmation is based on the following paragraphs from Chapter 9 of the EIA documentation, pages 128, 134, 136 and 139.

> *"However, the Report provides clarifications regarding the design depth of 8.23 m from "0" of the Izmail seaport - the last stage of dredging works - reaching depths from 7.32 m to 8.23 m will be realized in case if Ukraine initiates dredging works on the shipping channel "Vylkove - Izmail Ceatal" and downstream sections of the shipping route and water areas."*
>
> *"Development of the Bystre Channel and Kiliya Arm do not concern a planned activity."*
>
> *"The implementation of the planned activity is foreseen at the expense of private investments and has a very local character - a new construction of a river port (terminal) (...)"*

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"The design depth of hydrotechnical structures is 8.23 m from "0" of the Izmail Sea Port, which corresponds to the design depth of the shipping channel "Vylkove - Izmail Ceatal" (approved by the Resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 N 136 with the clarification "the depth has not been reached in "due to non-completion of construction works under the project")."

The hydrodynamic aspects regarding the change in water debits and speeds in comparison to the state of reference that might affect the upstream **migration on sturgeons** on Chilia Arm which is essential to the migration of these fish are not properly assessed.

The aspects on sturgeon migration were ignored, the word 'sturgeon' only appears a few times in the EIA documentation, which includes inadequate information about the location of sturgeon habitats, since it is mentioned that the first reproduction habitat is located at 600 km from Danube's mouths and that sturgeons prefer warm and shallow waters. Our affirmation is based on the following paragraphs from the EIA documentation, pages 275, 282.

"Spawning of migratory fish (herrings and sturgeon types of fish) occurs not less than 600 km from the Danube mouth area"

"The aboriginal ichthyofauna of the Danube in its majority, according to the type of reproduction, consists of (...) lithophilous (sturgeon, starry sturgeon, sterlet, vimba, aspius, etc.) species. These groups of fish use the warmed shallow waters of backwaters and creeks for spawning, and lay their eggs on aquatic vegetation, roots and stones."

"According to the hydrological conditions that are formed in the areas of hydrotechnical works, they are not favorable for the reproduction of the ichthyofauna of the Danube River and are not considered as spawning grounds."

VIII. Given that Ukraine asked for the **adaptation of the indicative TEN-T network** - waterways in order to include Chilia Arm (from Ceatal Izmail) and Bâstroe Channel, we express out concerns regarding the development of project "Channel Vylkove - Izmail Ceatal" and we reiterate the fact that:

- performing the dredging works from 7,32 m to 8,23 m between Ceatal Izmail and Vylkove and afterwards, exploitation of these waterways will have important effects on the repartition of water debits and alluvial deposits of Danube between the arms Chilia and Tulcea, respectively on Sulina Channel which, in time, will become inadequate for navigation in safety conditions;

- navigation on Chilia Arm and on Stambulul Vechi with sea vessels of heavy duty and higher speeds will lead to strong erosion of the right side together with the loss of teritory, which will determine the need to perform consolidation works and defence of the shores;

- the project is outside of the field of application of the Convention regarding the regime of navigation on the Danube (Belgrade Convention, 1948) which, at article 2 provides that: „The regime established by this Convention shall apply to the navigable part of the Danube River between Ulm and the Black Sea through the Sulina arm, with outlet to the sea through the Sulina channel." Therefore, the project "Channel Vylkove - Izmail Ceatal" is not part of the conventional route of Danube;

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- we stand for maintaining Sulina Channel as the only channel for international navigation, which is a shorted and more viable route, carriageable, and which can be used also by the Ukrainian Party;

- also, according to article 9, para. (1) of the Treaty between Romania and Ukraine on the Romanian-Ukrainian State border regime, collaboration and mutual assistance on border matters, signed at Cernăuți on June 17, 2003, ratified by Law no. 93/2004: "On navigable border rivers, the vessels of both contracting-parties have the right to navigate on the main fairway, regardless of the route of the state border line on there rivers. Other means of navigation are allowed to navigate the border waters only to the state border line."

IX. In conclusion, as there are **reasonable grounds for believing that a significant adverse transboundary impact is likely to be caused by the planned activities to be carried out in the future, we request that all our concerns mentioned-above will be thoroughly analysed by the Ukrainian Party**. In this context, **we expect your answers to our comments, according to Article 5 of the Espoo Convention regarding consultations on the basis of the environmental impact assessment documentation.**

In the light of the foregoing, we consider that the Romanian Party has shown that it respects its responsibilities and obligations arising from international agreements and conventions to which Romania is a Party and looks forward to strengthening joint efforts in the field of Danube Delta protection.

On this occasion, I express my willingness to continue the fruitful cooperation and please accept, Ms. Deputy Minister, the assurance of my highest consideration.

Sincerely yours,

Barna TÁNCZOS

Minister

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Ministry of Environmental Protection and Natural Resources of Ukraine

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With regard to your letter sent via e-mail on 13 December 2022 and registered at the Ministry of Environment, Waters and Forests of Romania with the ref. no. 2/R/21143/14.12.2022, on **the environmental impact assessment report**, as required by Article 4 of the Espoo Convention, for **the project "New construction of transport infrastructure facility - river port (terminal) in Izmail, Izmail district, Odessa region with a railway access track - adjacent to the Izmail station of the regional branch "Odesa Railway", owner Nibulon LLC"**, we would like to inform you as follows.

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Also, according to article 5 of GD no. 492/2003, **the Lower Danube River Administration has responsibilities, in accordance with Belgrade Convention, both for the execution of hydrotechnical work and for the regulation of navigation.**

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for navigation on the Danube sector from road Sulina (*rada Sulina*) and Brăila port (km 175):

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a) order the reduction or can approve to exceed the draughts provided by point 1;

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III. From the point of view of **safety of navigation**, for the normal development of the naval traffic, the carrying out of transports on the water, the physical integrity of the navigation personnel, passengers and cargoes, we inform you that the depths of 8.23 meters, planned to be carried out by dredging operations according to the project, are much higher than the draught of 23 feet (7.01 meters) allowed at the Sulina bar (*Bara Sulina*) according to art. 3.05 Cap. 3 second Part of the Regulation of navigation on the Danube in the Romanian sector. In conclusion, **the ships which will be loaded at Izmail port will not be able to benefit from the depth obtained from the dredging of 8.23 meters, due to restrictions at Sulina bar** (*Bara Sulina*).

IV. Moreover, regarding the proposed project, since the Ukrainian Party intends to create depths of 8.23 m at the operating berths in the port of Izmail, **we consider that it is not opportune to create this port with different depths than Sulina Channel and/or Chilia Arm and Bâstroe**, because the ships that will operate in Izmail port, if they will enter Sulina Arm and will navigate on the route Sulina Channel, Tulcea Arm, Izmail Ceatal, then Chilia Arm up to Izmail or directly through/to Bâstroe, will need this depth of 8.23 m throughout the entire crossed sector.

This situation is in contradiction with what is currently going on in this segment between Bara Sulina - Sulina Channel - Tulcea Arm - Ceatal Izmail, since, in compliance with the Danube Commission Recommendations, the Lower Danube River Administration Galați provides depths of 7.32 m for the navigation of maritime vessels with draughts of 7.01 m.

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Currently the navigation depths provided by the Lower Danube River Administration Galaţi are in accordance with the navigation gauges for which the Sulina Channel was designed, the present situation being directly proportional to the existing geomorphological conditions, the infrastructure of the banks and the port on this segment, between Bara Sulina and Ceatal Izmail.

In the situation desired to be obtained with this project, which is to ensure depths of 8.23 m in the berths of the port of Izmail, we consider that this cannot be achieved on the above-mentioned segment, namely from Bara Sulina to Ceatal Izmail, both from the geomorphological point of view, the criteria of current design, financial resources, existing equipment, as well as the fact that it is not necessary from the point of view of the Administration, which must ensure a depth of 7.32 m, according to the Recommendations of the Danube Commission, especially since this is the depth for which the Romanian upstream ports were projected.

At the same time, the dredging of the whole lenght of Chilia Arm between the Black Sea and Izmail Port, following Bâstroe Channel, for the depth of 8,23 m, would mandatory require the development of studies aiming to assess the direct and indirect effects on the shores, since we would like to point out the fact that there are sectors where the dredging will be performed on the frontier line, which mean that the Romanian shores might be affected.

We would like to add that the depth in Sulina Arm and Sulina mouth depend directly on the Danube sediments supply. The bigger the Danube waters are, the more intense the alluvial depositing process is, and they influence the diminishing of the water depth. The more intense the dredging works are, the bigger the depths in channel are and vice-versa, which imply that the dredging is done during the year with a temporal delay from the regime of the Danube alluvial deposits.

Therefore, it is necessary that the following aspects of the project are analyzed:

- Hydromorphological aspects: the speed variation of the water draft in more sections of the sector Sulina mouth, Sulina Channel, Tulcea Arm, Ceatal Izmail, followed by Chilia Arm up to Izmail and the influence on the hydrotechnical works existing on this sector, in the situation the dredging works from 7,32 m to 8,23 m are done;
- Correlation with the new hydromorphological process appeared in relation to the problem of the development towards south of the Chilia secondary delta, which refers to the formation due to the casting of coarse-grained alluvial deposits of a littoral strap that closes Musala golf at the Black Sea, and which represents a risk to the navigation at Sulina mouth. There must be done an analysis of the degree in which the sedimentation rhythm will intensify at the mouth of the Sulina channel;
- The dredging works from 7,32 m to 8,23 m and after that, the exploitation of this waterways will have important effects on the repartition of water and alluvial debits of Danube between Chilia Arm and Tulcea Arm;
- The major dredging works will also negatively influence the water flow on the secondary arms of Chilia which supply with water the territory of Danube Delta and can majorly affect the Danube Delta Biosphere Reserve.

V. In the situation pursued by the Ukrainian Party, which is having depths of 8,23 m, the area to be additionally dredged for obtaining the 8.23 m depth is situated between Bara

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Sulina and Ceatal Izmail (Mm43), at the critical points Bara Sulina, Mm31, Mm36, Mm40 and other intermediate areas, and the **dredged material** must be dumped at sea, which is the only dumping area accepted by the Romanian Water National Administration and in strict accordance with Danube Delta Biosphere Reserve Authority. From the measurements carried out, for a covering depth of -9.00 m, it results the necessity of dredging a volume of about 1,500,000 m^3, with annual periodical maintenance. This activity will result in adverse effects on the Sulina Channel, both on the bank defenses and on the bed, with enormous costs, unjustified, that will need to be covered by Romania both for the dredging, and for the problems regarding disequilibrium caused to the infrastructure of Sulina Channel and to the Danube Delta Biosphere Reserve. Also, we mention that Lower Danube River Administration Galați does not have additional equipment to carry out the above-mentioned works. At the present moment, the dredging activity is carried out using an absorbent upsetting dredging machinery bought in 2000.

At the same time, in the case of dredging for the construction of the depths at the berths of the future Izmail seaport, we recommend the dumping areas to be established as close as possible to the Ukrainian shore, to be periodically checked in order to monitor the quantity of alluvium dumped, and the dumping area to be respected in order to prevent their migration into the navigable channel, towards the Romanian side, avoiding the clogging of the navigable channel having a river character, maintained by the Romanian Party.

Please note that at the present moment, the Romanian Party, through Lower Danube River Administration Galati, ensures for the Chilia Arm, on the segment from Ceatal Izmail to Periprava navigation conditions for river vessels for the transport of goods and passengers for the Romanian ports, for the area having a river character situated between the border line and the Romanian shore.

Considering the critical current situation, due to war, the Ministry of Foreign Affairs of Romania, on 13.07.2022, allowed sea vessels with third flags to navigate on Chilia Arm, Stambulul Vechi and Bâstroe, but in the future, it is possible that this will be prohibited, this being stipulated in the international legislation, in accordance with the Romanian-Ukrainian Border Treaty, article 9, point 1.

In case the Ukrainian Party will develop the Izmail Port with depths of 8,23 m, we propose that all vessels that will enter in operation through Bâstroe Channel will also go to sea through this channel and not through Sulina Channel, which was projected for depths of 7,32 m according to the Recommendations of Danube Commission, as already shown.

Considering the above information, the Lower Danube River Administration Galati expresses its concerns regarding Ukrainian's intention to develop Izmail port for depths of 8,23 m, since this activity will activate an additional alluvial input on Chilia Arm and will dramatically change the debit repartition in favor of this one and to the detriment of Sulina Channel and recommends to be taken into account that the future sea berths for the new port should provide depths for vessels with draughts in close correlation with the existing situation on Sulina Channel, respectively depths for navigation of sea vessels with draughts of 7,01 m.

VI. Also, considering the pressures listed in European Commission Directive EU 2017/845 of 17 May 2017, that the proposed activities exert on the aquatic environment, there is a possibility that the marine environment might be affected in different ways. Thus, the works carried out in the project implementation area, could lead to the **resuspension of some priority substances from the sediments in the water column.** Moreover, the

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equipment and transport activities may represent additional pollution sources generating atmospheric emissions of priority hazardous substances (heavy metals, hydrocarbons, etc.), which may then be released into the aquatic environment, introducing contaminants into the marine area. Together with other pressures from the same activities, the cumulative impact might be a threat for the marine ecosystem.

Therefore, we consider that a **monitoring programme** of the Black Sea ecosystem in front of the Danube mouths is mandatory, both during the project implementation period and after the completion of the works regarding the concentration of pollutants in all matrices: water, sediments and biota.

VII. In our response to the notification, we expressed some concerns regarding lack of data and information, and **we asked for studies and assessments in order to assure that all posible effects are anticipated and measures can be taken**. However, in Chapter 9 of the EIA documentation, at pages 135, 139 and 140, it is mentioned that the comments **were not accepted**, followed by the subsequent explanations:

> *"Implementation of the planned activity is foreseen at the expense of private investments, has a very local character and does not belong to the General Plan of LOGMOS."*
>
> *"(...) the claims of the Romanian side that the planned activity creates risks, affecting the ecological balance of the Danube Delta biosphere reserve, are greatly exaggerated, and the demand for large-scale research and the creation of three-dimensional hydrodynamic and morphodynamic models is not justified";*
>
> *"the planned activity does not involve conducting dredging works that may cause hydrological changes of the Danube River (from the point of view of morphological conditions: depth and width of the channel, fairway, structure of the bottom and substrate, hydrological regime: amount of flow, disruption of the continuity of sediment transportation, speed of water movement, etc."*

The approach to possible impact on water/water bodies, especially on the hydrodynamics and hydromorphology, with consequences on habitats and species (in particular on the migration of sturgeons), does not take into account the **cumulative aspects with other projects which are mandatory for the viability of the present project**, for example assuring depths of 8,23 m only for the port without any connection with the waterways on Chilia Arm and Bâstroe which would need the same depths. Our affirmation is based on the following paragraphs from Chapter 9 of the EIA documentation, pages 128, 134, 136 and 139.

> *"However, the Report provides clarifications regarding the design depth of 8.23 m from "0" of the Izmail seaport - the last stage of dredging works - reaching depths from 7.32 m to 8.23 m will be realized in case if Ukraine initiates dredging works on the shipping channel "Vylkove - Izmail Ceatal" and downstream sections of the shipping route and water areas."*
>
> *"Development of the Bystre Channel and Kiliya Arm do not concern a planned activity."*
>
> *"The implementation of the planned activity is foreseen at the expense of private investments and has a very local character - a new construction of a river port (terminal) (...)"*

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"The design depth of hydrotechnical structures is 8.23 m from "0" of the Izmail Sea Port, which corresponds to the design depth of the shipping channel "Vylkove - Izmail Ceatal" (approved by the Resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 N 136 with the clarification "the depth has not been reached in "due to non-completion of construction works under the project")."

The hydrodynamic aspects regarding the change in water debits and speeds in comparison to the state of reference that might affect the upstream **migration on sturgeons** on Chilia Arm which is essential to the migration of these fish are not properly assessed.

The aspects on sturgeon migration were ignored, the word 'sturgeon' only appears a few times in the EIA documentation, which includes inadequate information about the location of sturgeon habitats, since it is mentioned that the first reproduction habitat is located at 600 km from Danube's mouths and that sturgeons prefer warm and shallow waters. Our affirmation is based on the following paragraphs from the EIA documentation, pages 275, 282.

"Spawning of migratory fish (herrings and sturgeon types of fish) occurs not less than 600 km from the Danube mouth area"

"The aboriginal ichthyofauna of the Danube in its majority, according to the type of reproduction, consists of (...) lithophilous (sturgeon, starry sturgeon, sterlet, vimba, aspius, etc.) species. These groups of fish use the warmed shallow waters of backwaters and creeks for spawning, and lay their eggs on aquatic vegetation, roots and stones."

"According to the hydrological conditions that are formed in the areas of hydrotechnical works, they are not favorable for the reproduction of the ichthyofauna of the Danube River and are not considered as spawning grounds."

VIII. Given that Ukraine asked for the **adaptation of the indicative TEN-T network** - waterways in order to include Chilia Arm (from Ceatal Izmail) and Bâstroe Channel, we express out concerns regarding the development of project "Channel Vylkove - Izmail Ceatal" and we reiterate the fact that:

- performing the dredging works from 7,32 m to 8,23 m between Ceatal Izmail and Vylkove and afterwards, exploitation of these waterways will have important effects on the repartition of water debits and alluvial deposits of Danube between the arms Chilia and Tulcea, respectively on Sulina Channel which, in time, will become inadequate for navigation in safety conditions;

- navigation on Chilia Arm and on Stambulul Vechi with sea vessels of heavy duty and higher speeds will lead to strong erosion of the right side together with the loss of teritory, which will determine the need to perform consolidation works and defence of the shores;

- the project is outside of the field of application of the Convention regarding the regime of navigation on the Danube (Belgrade Convention, 1948) which, at article 2 provides that: „The regime established by this Convention shall apply to the navigable part of the Danube River between Ulm and the Black Sea through the Sulina arm, with outlet to the sea through the Sulina channel." Therefore, the project "Channel Vylkove - Izmail Ceatal" is not part of the conventional route of Danube;

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- we stand for maintaining Sulina Channel as the only channel for international navigation, which is a shorted and more viable route, carriageable, and which can be used also by the Ukrainian Party;

- also, according to article 9, para. (1) of the Treaty between Romania and Ukraine on the Romanian-Ukrainian State border regime, collaboration and mutual assistance on border matters, signed at Cernăuți on June 17, 2003, ratified by Law no. 93/2004: "On navigable border rivers, the vessels of both contracting-parties have the right to navigate on the main fairway, regardless of the route of the state border line on there rivers. Other means of navigation are allowed to navigate the border waters only to the state border line."

IX. In conclusion, as there are **reasonable grounds for believing that a significant adverse transboundary impact is likely to be caused by the planned activities to be carried out in the future, we request that all our concerns mentioned-above will be thoroughly analysed by the Ukrainian Party**. In this context, **we expect your answers to our comments, according to Article 5 of the Espoo Convention regarding consultations on the basis of the environmental impact assessment documentation.**

In the light of the foregoing, we consider that the Romanian Party has shown that it respects its responsibilities and obligations arising from international agreements and conventions to which Romania is a Party and looks forward to strengthening joint efforts in the field of Danube Delta protection.

On this occasion, I express my willingness to continue the fruitful cooperation and please accept, Ms. Deputy Minister, the assurance of my highest consideration.

Sincerely yours,

Barna TÁNCZOS

Minister

Bd. Libertății, nr. 12, Sector 5, București

Minister of Environmental Protection
and natural resources of Ukraine
Ruslan STRILETS

Data: 16/02/2023

Regarding to public discussion
of the project

Dear Sir,

The Ministry of Environmental Protection and Natural Resources of Ukraine brought to the attention of "NIBULON" LLC the letter of the Ministry of Environment, Water Resources and Forests of the Republic of Romania No. DGEICPSC/21143/01/02/2023 dated 01/02/2023 regarding the results of public discussion on the territory of the Republic of Romania.

After carefully studying this letter, we inform the following, "NIBULON" LLC respects and understands the concern of the Romanian side regarding the condition of the Danube River. "NIBULON" LLC guarantees that the project initiated by the company is carried out in compliance with current Ukrainian and international legislation in the environmental sphere. At the same time, "NIBULON" LLC tried to take into account as much as possible all the comments and suggestions outlined in the letter of the Ministry of Environment, Water Resources and Forests of the Republic of Romania No. DGEICPSC/1363/04/08/2022 dated 04/08/2022 and enter relevant information in the Environmental Impact Assessment Report.

In particular, regarding the observation of the reaching of the mark of 8.23 meters from the "0" of the Izmail Sea Port, it is re-emphasized that the planned activity of "NIBULON" LLC has local nature - on the Danube River from 91.09 to 91.55 km wide from the border of the shipping lane to the left bank, a map-scheme of dredging works is attached.

The design depth of hydrotechnical equipment in the future will be 8.23 meters from "0" of the Izmail Sea Port, which corresponds to the design depth of the "Vylkove - Izmail Chatal" shipping channel, which was approved by Government Resolution No. 136 dated 09/02/2022 with the clarification: "the depth has not been reached in connection with the non-completion of construction works under the project". "NIBULON" LLC does not plan to reach it with its hydrotechnical equipment until this depth is reached by the Government of Ukraine in accordance with international agreements. The planned activity of NIBULON LLC provides dredging works only to the declared passport depths of the Izmail Sea Port (7.32 m).

The planned activity does not include dredging works in the areas: The Sulina branch, Sulina canal, Tulchyn branch, Izmail Chatal, further following the Chilia branch to Izmail.

The above information confirms that the company does not intend to transfer to itself the functions of the state regarding the deepening of the Danube waterway, as well as any other public waterway.

With regard to comments on the migration of sturgeon fish, we note the following. The water area of the Danube River, where construction of the operational water area with the approach channel was planned by "NIBULON" LLC is located in an industrially developed zone with intensive navigation, therefore, the conditions for the fish reproduction belonging to the lithophilic type of reproduction, such as beluga, sevryuga, sturgeon, sterlet, etc. remain adverse.

The area of the bottom damage during the dredging works at the mark 7.32 m from the "0" of the Izmail Sea Port is 2.2 hectares, with a maximum width of the work site of about 100 m, which does not prevent the free movement of fish, because the width of the Danube River at this point is 470 m. On this stretch of the Danube, the way to the sea is overcome by enduring individuals (linear dimensions from 13 cm and above), which are able to avoid places with adverse conditions.

According to scientists (Scientific-biological justification "Assessment of the impact of hydrotechnical works on the state of ichthyofauna and aquatic biocenoses" - appendix 2), after grazing in the Black Sea, sturgeon fish species during spawning migration enter to the water area of Danube River and, rising far up the river, pass ending their weay in the area of the Jerdap-2 hydroelectric power station dam (864 km of the Danube), next to which, on a short stretch of the river, therevare the main spawning areas of these species.

During the migration of young sturgeon fish species from the spawning grounds to the Black Sea water area, the fish stay close to the water surface, in a water column that does not exceed 3.2 m. Meanwhile, dredging work will take place at a depth of 4 m, which according to scientific observations does not use to overcome regular movements.

The period of predicted migration of sturgeon fish in the delta ща Chilia branch falls on the July - October period, therefore, in order to minimize the damage that can be caused to passing species of fish, "NIBULON" LLC will not carry out dredging works during this period (then it must be included in activity report).

In Appendix No. 3 to this letter, we resubmit our answers and comments regarding the issues covered in the letter of the Ministry of Environment, Water Resources and Forests of the Republic of Romania dated No. DGEICPSC/21143/01/02/2023 dated 01/02/2023. Separately, we would like to emphasize that during the 30 days of public discussion on the territory of Romania, no comment was received from the concerned public.

Based on the above, dear sir, I ask you to pay attention to the provisions of this letter and take them into account when preparing the conclusion on the environmental impact assessment of the project "New construction of a transport infrastructure object - a river port (terminal) in the Izmail, Izmail district, Odesa region with by the railway access track - adjacent to the Izmail station of the Odesa Railway regional branch (registration number 20225199566).

I am asking you to provide the conclusion of the environmental impact assessment of the above-mentioned project to NIBULON LLC as soon as possible, which is important for attracting additional investments in the construction of critical infrastructure along the Danube river.

Applications:

1. Map-scheme of dredging works - on 1 sheet in 1 note.;
2. Scientific and biological substantiation "Assessment of the impact of hydrotechnical works on the state of ichthyofauna and aquatic biocenoses - on 55 sheets in 1 note.;
3. Information on the comments made in the letter of the Ministry of the Environment, Water Resources and Forests of the Republic of Romania, ed. No. No. DGEICPSC/21143/01/02/2023 dated February 1, 2023. - on 11 sheets in 1 note.

Best regards,
Myhailo RIZAK
Deputy of the general director
for interaction with authorities

Unofficial translate

МІНІСТЕРСТВО ЗАХИСТУ ДОВКІЛЛЯ ТА ПРИРОДНИХ РЕСУРСІВ УКРАЇНИ

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MINISTRY OF ENVIRONMENTAL PROTECTION AND NATURAL RESOURCES OF UKRAINE

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Ministry of Environment, Water and
Forests of Romania

The Ministry of Environmental Protection and Natural Resources of Ukraine certifies its respect to the Ministry of Environmental Protection, Water and Forests of Romania and sends responses to comments on the environmental impact assessment report regarding the proposed activity «New construction of a transport infrastructure object - a river port (terminal) in Izmail, Izmail district, Odesa region with a railway access track - adjacent to the Izmail station of the «Odesa Railway» regional branch», received from the LIMITED LIABILITY COMPANY «NIBULON».

The Ministry avails itself of this opportunity to renew to the Ministry of Environment, Water and Forests of Romania the assurances of its highest consideration.

Addition: 1) a letter from the LLC «NIBULON» in Ukrainian and English on 5 pages;
2) map-scheme of dredging works in Ukrainian and English on 2 pages;
3) scientific and biological substantiation in Ukrainian and English on 105 pages;
4) answers and links to the environmental impact assessment report in Ukrainian and English on 22 pages.

Olena Kramarenko
Deputy Minister

Minister of Environmental Protection
and natural resources of Ukraine
Ruslan STRILETS

Data: 22/02/2023

Regarding to public discussion
of the project

Dear Sir,

The Ministry of Environmental Protection and Natural Resources of Ukraine brought to the attention of "NIBULON" LLC the letter of the Ministry of Environment, Water Resources and Forests of the Republic of Romania No. DGEICPSC/21143/01/02/2023 dated 01/02/2023 regarding the results of public discussion on the territory of the Republic of Romania.

After carefully studying this letter, we inform the following, "NIBULON" LLC respects and understands the concern of the Romanian side regarding the condition of the Danube River. "NIBULON" LLC guarantees that the project initiated by the company is carried out in compliance with current Ukrainian and international legislation in the environmental sphere. At the same time, "NIBULON" LLC tried to take into account as much as possible all the comments and suggestions outlined in the letter of the Ministry of Environment, Water Resources and Forests of the Republic of Romania No. DGEICPSC/1363/04/08/2022 dated 04/08/2022 and enter relevant information in the Environmental Impact Assessment Report.

In particular, regarding the observation of the reaching of the mark of 8.23 meters from the "0" of the Izmail Sea Port, it is re-emphasized that the planned activity of "NIBULON" LLC has local nature - on the Danube River from 91.09 to 91.55 km wide from the border of the shipping lane to the left bank, a map-scheme of dredging works is attached.

The design depth of hydrotechnical equipment in the future will be 8.23 meters from "0" of the Izmail Sea Port, which corresponds to the design depth of the "Vylkove - Izmail Chatal" shipping channel, which was approved by Government Resolution No. 136 dated 09/02/2022 with the clarification: "the depth has not been reached in connection with the non-completion of construction works under the project". "NIBULON" LLC does not plan to reach it with its hydrotechnical equipment until this depth is reached by the Government of Ukraine in accordance with international agreements. The planned activity of NIBULON LLC provides dredging works only to the declared passport depths of the Izmail Sea Port (7.32 m).

The planned activity does not include dredging works in the areas: The Sulina branch, Sulina canal, Tulchyn branch, Izmail Chatal, further following the Chilia branch to Izmail.

The above information confirms that the company does not intend to transfer to itself the functions of the state regarding the deepening of the Danube waterway, as well as any other public waterway.

With regard to comments on the migration of sturgeon fish, we note the following. The water area of the Danube River, where construction of the operational water area with the approach channel was planned by "NIBULON" LLC is located in an industrially developed zone with intensive navigation, therefore, the conditions for the fish reproduction belonging to the lithophilic type of reproduction, such as beluga, sevryuga, sturgeon, sterlet, etc. remain adverse.

The area of the bottom damage during the dredging works at the mark 7.32 m from the "0" of the Izmail Sea Port is 2.2 hectares, with a maximum width of the work site of about 100 m, which does not prevent the free movement of fish, because the width of the Danube River at this point is 470 m. On this stretch of the Danube, the way to the sea is overcome by enduring individuals (linear dimensions from 13 cm and above), which are able to avoid places with adverse conditions.

According to scientists (Scientific-biological justification "Assessment of the impact of hydrotechnical works on the state of ichthyofauna and aquatic biocenoses" - appendix 2), after grazing in the Black Sea, sturgeon fish species during spawning migration enter to the water area of Danube River and, rising far up the river, pass ending their weay in the area of the Jerdap-2 hydroelectric power station dam (864 km of the Danube), next to which, on a short stretch of the river, therevare the main spawning areas of these species.

During the migration of young sturgeon fish species from the spawning grounds to the Black Sea water area, the fish stay close to the water surface, in a water column that does not exceed 3.2 m. Meanwhile, dredging work will take place at a depth of 4 m, which according to scientific observations does not use to overcome regular movements.

The period of predicted migration of sturgeon fish in the delta ща Chilia branch falls on the July - October period, therefore, in order to minimize the damage that can be caused to passing species of fish, "NIBULON" LLC will not carry out dredging works during this period (then it must be included in activity report).

In Appendix No. 3 to this letter, we resubmit our answers and comments regarding the issues covered in the letter of the Ministry of Environment, Water Resources and Forests of the Republic of Romania dated No. DGEICPSC/21143/01/02/2023 dated 01/02/2023. Separately, we would like to emphasize that during the 30 days of public discussion on the territory of Romania, no comment was received from the concerned public.

Based on the above, dear sir, I ask you to pay attention to the provisions of this letter and take them into account when preparing the conclusion on the environmental impact assessment of the project "New construction of a transport infrastructure object - a river port (terminal) in the Izmail, Izmail district, Odesa region with by the railway access track - adjacent to the Izmail station of the Odesa Railway regional branch (registration number 20225199566).

I am asking you to provide the conclusion of the environmental impact assessment of the above-mentioned project to NIBULON LLC as soon as possible, which is important for attracting additional investments in the construction of critical infrastructure along the Danube river.

Applications:

1. Map-scheme of dredging works - on 1 sheet in 1 note.;
2. Scientific and biological substantiation "Assessment of the impact of hydrotechnical works on the state of ichthyofauna and aquatic biocenoses - on 55 sheets in 1 note.;
3. Information on the comments made in the letter of the Ministry of the Environment, Water Resources and Forests of the Republic of Romania, ed. No. No. DGEICPSC/21143/01/02/2023 dated February 1, 2023. - on 11 sheets in 1 note.

Best regards,
Myhailo RIZAK
Deputy of the general director
for interaction with authorities

Ministry of Environment, Water
and Forests of the Romanian Republic

Regarding public discussion
of the project

Dear Sir,

The Ministry of Environmental Protection and Natural Resources of Ukraine brought to the attention of NIBULON LLC the letter of the Ministry of Environment, Water Resources and Forests of the Republic of Romania No. DGEICPSC/21143/01/02/2023 dated 01/02/2023 regarding the results of public discussion on the territory of the Republic of Romania.

After carefully studying this letter, we inform the following, NIBULON LLC respects and understands the concern of the Romanian side regarding the condition of the Danube River. NIBULON LLC guarantees that the project initiated by the company is carried out in compliance with current Ukrainian and international legislation in the environmental sphere. At the same time, NIBULON LLC tried to take into account as much as possible all the comments and suggestions outlined in the letter of the Ministry of Environment, Water Resources and Forests of the Republic of Romania No. DGEICPSC/1363/04/08/2022 dated 04/08/2022 and enter relevant information in the Environmental Impact Assessment Report.

In particular, regarding the observation of the reaching of the mark of 8.23 meters from the "0" of the Izmail Sea Port, it is re-emphasized that the planned activity of NIBULON LLC has local nature - on the Danube River from 91.09 to 91.55 km wide from the border of the shipping lane to the left bank, a map-scheme of dredging works is attached.

The design depth of hydrotechnical equipment in the future will be 8.23 meters from "0" of the Izmail Sea Port, which corresponds to the design depth of the "Vylkove - Izmail Ceatal" shipping channel, which was approved by Government Resolution No. 136 dated 09/02/2022 with the clarification: "the depth has not been reached in connection with the non-completion of construction works under the project". NIBULON LLC does not plan to reach it with its hydrotechnical equipment until this depth is reached by the Government of Ukraine in accordance with international agreements. The planned activity of NIBULON LLC provides dredging works only to the declared passport depths of the Izmail Sea Port (7.32 m).

The planned activity does not include dredging works in the areas: The Sulina branch, Sulina canal, Tulcea branch, Izmail Ceatal, further following the Kiliya branch to Izmail.

The above information confirms that the company does not intend to transfer to itself the functions of the state regarding the deepening of the Danube waterway, as well as any other public waterway.

With regard to comments on the migration of sturgeon fish, we note the following. The water area of the Danube River, where construction of the operational water area with the approach channel was planned by NIBULON LLC is located in an industrially developed zone with intensive navigation, therefore, the conditions for the fish reproduction belonging to the lithophilic type of reproduction, such as beluga, starry sturgeon, sturgeon, starlet, etc. remain adverse.

The area of the bottom damage during the dredging works at the mark 7.32 m from the "0" of the Izmail Sea Port is 2.2 hectares, with a maximum width of the work site of about 100 m, which does not prevent the free movement of fish, because the width of the Danube River at this point is 470 m. On this section of the Danube, the way to the sea is overcome by enduring individuals (linear dimensions from 13 cm and above), which are able to avoid places with adverse conditions.

According to scientists (scientific and biological substantiation "Assessment of the impact of hydrotechnical works on the state of ichthyofauna and aquatic biocenoses" - appendix 2), after grazing in the Black Sea, sturgeon fish species during spawning migration enter the water area of the Danube River and, rising far up the river, pass ending their way in the area of the Derdap-2 hydroelectric power station dam (864 km of the Danube), next to which, on a short section of the river, there are the main spawning areas of these species.

During the migration of young sturgeon fish species from the spawning grounds to the Black Sea water area, the fish stay close to the water surface, in a water column that does not exceed 3.2 m. Meanwhile, dredging work will take place at a depth of 4 m, which according to scientific observations does not use to overcome regular movements.

The period of predicted migration of sturgeon fish in the delta of Kiliya branch falls on the July - October period, therefore, in order to minimize the damage that can be caused to passing species of fish, NIBULON LLC will not carry out dredging works during this period (then it must be included in activity report).

In Appendix No. 3 to this letter, we resubmit our answers and comments regarding the issues covered in the letter of the Ministry of Environment, Water Resources and Forests of the Republic of Romania dated No. DGEICPSC/21143/01/02/2023 dated 01/02/2023. Separately, we would like to emphasize that during the 30 days of public discussion on the territory of Romania, no comment was received from the concerned public.

Based on the above, dear sir, I kindly ask you to pay attention to the provisions of this letter and take them into account when preparing the conclusion on the environmental impact assessment of the project "New construction of a transport infrastructure object - a river port (terminal) in the Izmail, Izmail district, Odesa region with the railway access track - adjacent to the Izmail station of the Odesa Railway regional branch (registration number 20225199566).

I am asking you to provide the conclusion of the environmental impact assessment of the above-mentioned project to NIBULON LLC as soon as possible, which is important for attracting additional investments in the construction of critical infrastructure along the Danube river.

Applications:

1. Map-scheme of dredging works - on 1 sheet in 1 note.;
2. Scientific and biological substantiation "Assessment of the impact of hydrotechnical works on the state of ichthyofauna and aquatic biocenoses - on 55 sheets in 1 note.;
3. Information on the comments made in the letter of the Ministry of the Environment, Water Resources and Forests of the Republic of Romania, ed. No. No. DGEICPSC/21143/01/02/2023 dated February 1, 2023. - on 11 sheets in 1 note.

Best regards
General director
of NIBULON LLC Andriy VADATURSKYY

Appendix №

Map-scheme of dredging works in the operational water area Bessarabian branch of NIBULON LLC

Danube river

NIBULON LLC territory

ship's course

Coordinates of the water area operational water

1) 45°19'22.1249"N
028°50'22.7431"E

2) 45°19'16.3133"N
028°50'35.2572"E

3) 45°19'14.9011"N
028°50'40.2011"E

4) 45°19'07.4597"N
028°50'36.1842"E

5) 45°19'08.8176"N
028°50'32.5536"E

6) 45°19'19.3549"N
028°50'18.8807"E

S = 104357 m²

A 45°19'16,89"N
028°50'34,13"E

B 45°19'12,93"N
028°50'28,12"E

the boundary of the water area into two zonnchorages
(zone No. 1 and zone No. 2)

- the boundaries of the dredging site to the depth mark of 4.0 m

- the boundaries of the dredging site to the depth mark of 7.0 m

landing stage 1 and 2

State Agency of Melioration and Fisheries of Ukraine
Institute of Fisheries and Marine Ecology (IFME)

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APPROVED
Acting director of IFME
Candidate of biological sciences
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K.V. Demianenko
2022

SCIENTIFIC AND BIOLOGICAL SUBSTANTIATION

Assessment of the impact of hydrotechnical works on the state of fish stocks of the Danube River during the construction of a cargo berth with the operational water area of the river port in Izmail, Odesa Region

Responsible executor:
Head of the hydrobiological and ecological-toxicological research laboratory ***V.O. Hetmanenko***

The results of the work were reviewed
by the scientific council of IFME,
protocol No. 1 dated 17/05/2022

2022

LIST OF AUTHORS

Head of the hydrobiological and ecological-toxicological research laboratory	*V.O. Hetmanenko (2,3,4, conclusions)*
Junior Research Fellow	*K.V. Zhyriakova (2.1; 2.2; 2.3; 2.4; 3.1; 3.2)*
Acting Head of the Laboratory of Antarctic Marine Resources	*R.O. Solod (1; 2.5; 3.2; 3.3)*

REPORT

Report on scientific and biological substantiation: 55 pages, 1 figure, 5 tables, 21 sources, 4 appendices.

The object of research is the aquatic environment, phytoplankton, zooplankton, zoobenthos, ichthyoplankton, ichthyofauna.

DANUBE RIVER, HYDROTECHNICAL WORKS, DREDGER, FLOATING CRANE, PHYTOPLANKTON, ZOOPLANKTON, ZOOBENTOS, ICHTHYOPLANKTON, ICHTHYOFAUNA, DAMAGE.

The purpose of the work is to develop a scientific and biological substantiation with an assessment of the impact of hydrotechnical works on the state of fish stocks of the Danube River during the construction of the cargo berth of the River Port (terminal) of NIBULON LLC within Izmail city of Odesa Region.

Research method - assessment of the state of benthic and pelagic communities, determination of the degree of influence of hydrotechnical works, calculation of the cost of compensatory measures for fisheries with the possibility of works during the period of the ban during spawning.

The works were performed in accordance with the Agreement and the "Technical task" to the Agreement (Appendix A).

CONTENT

INTRODUCTION

The main document, which is taken as a basis in the nature protection legislative base of Ukraine, is the Bucharest Convention on the Protection of the Black Sea against Pollution (the Convention was ratified by Resolution of Ukrainian Parliament N 3939-XII (3939-12) dated 04.02.94. It entered into force for Ukraine on 14.04.1994. The Protocol on the Preservation of Biodiversity and Landscapes of the Black Sea to the Convention on the Protection of the Black Sea against Pollution (newsletter the Vidomosti of the Verkhovna Rada of Ukraine (VVR), 2007, N 50). The Protocol was ratified by Law N 685-V (685-16) dated 22.02.2007, and the presence of other international agreements, which provide for the creation of an ecological security system in the Black Sea basin, which should become a mandatory condition for the social and economic development of the country and the region as a whole.

Among the types of economic activities subject to mandatory regulation, considerable attention is paid to the control of hydrotechnical works. Hydrotecnical dredging works have certain negative impact on the aquatic environment and aquatic biocoenosis, since it is accompanied by the destruction of benthic groups of hydrobionts in the work areas and the death of pelagic and benthic organisms not only in the places of direct work, but also at some distance from the place of dredging (soil dumping, and, or due to siltation of adjacent water areas).

The development of scientific and biological substantiation is aimed at assessing the scale of hydrotechnical works (dredging) in the operational water area of the river port in Izmail, Odesa region.

Place of work: Izmail, Odesa region, Danube river from 91.09 to 91.55 km.

The place of storage of the extracted bottom soil: a coastal dump, the organization of which is provided for on the plot of land set aside for the construction of the River Port (terminal).

The following issues will be considered during the development of the scientific and biological substantiation:

- provided biological characteristics of the work performance area;

- calculation of the cost of compensatory measures for fisheries;

- provision of recommendations on minimizing the impact of dredging operations on the living conditions of ichthyofauna during the spawning period in the operational water area of the river port of Izmail, Odesa region.

For scientific and biological substantiation, the following will be used:

- the volume of bottom soil removed from the operational water area during the construction of the cargo berth of the River Port (terminal) of NIBULON LLC within the water area of the Izmail Sea Port, which is planned for 2022 - 112,000 m^3;

-information regarding the involvement of equipment that will perform dredging works (all

mechanisms are gradually engaged):

- dredging to the 4 m depths - the multifunctional diesel Watermaster Classic IV dredger in two regimes: an excavator using a bucket and a suction pump using a soil pump with a loosening cutter attachment and a slurry pipeline, through which bottom soil will be transported to the coastal dump with the help of water;

- dredging at depths from 4.0 m to 8.23 m will be carried out by a dredger of the SDS 15 project in suction mode using a soil pump with a loosening cutter attachment and a slurry pipeline, through which the bottom soil will be transported to the coastal dump using water;

-previous and current results of IFME research in the framework of scientific research works (2021), as well as data from list of references.

Works on the development of scientific and biological substantiation are carried out within the framework of the contract with the NIBULON Agricultural Limited Liability Company (NIBULON LLC). Contract No. NB-770-22 dated 07.05.2022.

Address on behalf of the "Customer": Kabotazhnyy spusk, 1, Mykolaiv, 54002, Ukraine.

Address of the "Perfomer": Konsulska street, 8, Berdiansk, Zaporizhzhya region, 71103, Ukraine.

1 SUBSTANTIATION FOR THE NEED TO PERFORM DEVELOPMENT

For the possibility of performing hydrotechnical works (dredging) in the water area of the Danube river which is located along the shipping channel Vylkove – Izmail Ceatal from 91.09 km to 91.55 km in order to build the River Port (terminal) of NIBULON LLC in Izmail city, Odesa Region (Fig. 1.1).

The total volume of bottom soil, which is removed as a result of hydrotechnical (dredging) works from the operational water area of the river port (terminal) of NIBULON LLC, Izmail - 112,000 m³, Appendix A.

The term of performance of works (excluding the period of preparatory works and possible repair works) is 52 days with the possibility of works during the period of the ban during spawning until 05.06.2022.

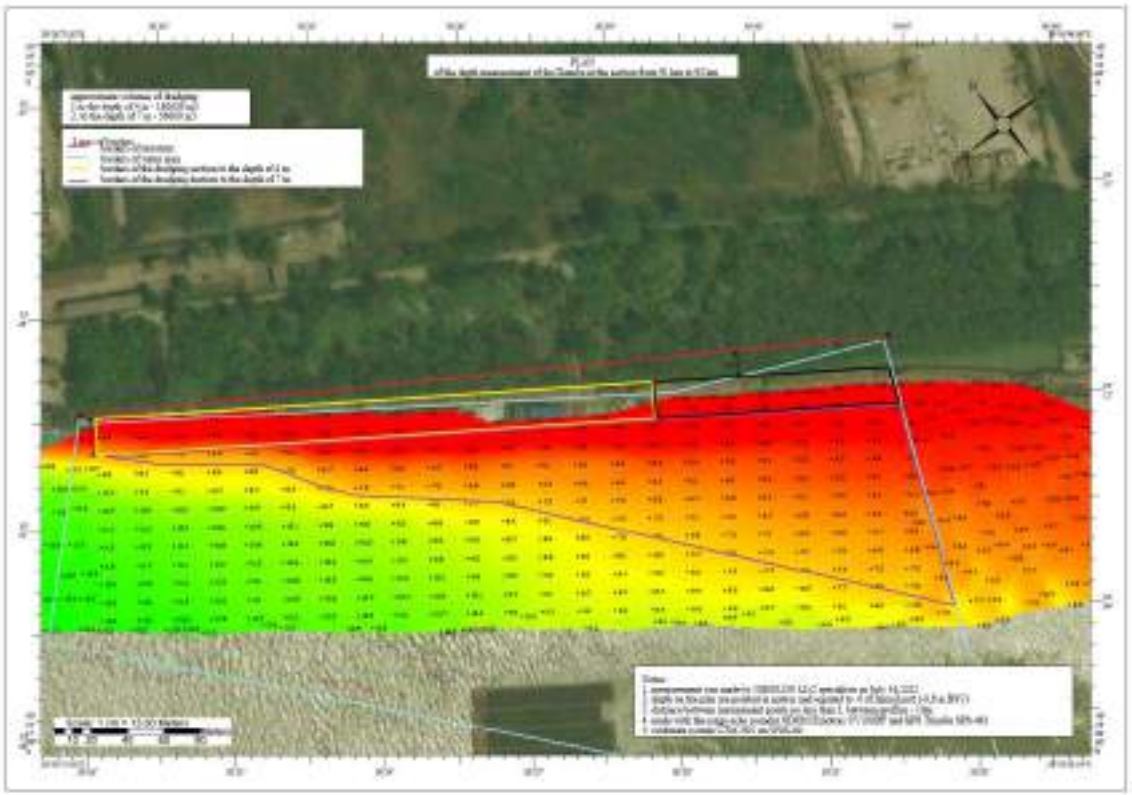

Figure 1.1 – Situational map-diagram of the river port of NIBULON LLC Izmail, Odesa Region

Design characteristics of the operational water area with an approach channel: length – 460 m, width – 115 m, area 10,4357 ha, design depth – 8.23 m from “0” of Izmail seaport.

Stage of construction	Design characteristics	Involved dredger and working body	Volume of works, m3
I	Performance of work on the area of 1.0 ha to the point of 4.0 m	Watermaster Classic IV, bucket	22000
	Bottom cleaning on the area of 1.0 ha to the point of 4.0 m	Watermaster Classic IV, cutter, soil pump	10000
III	Dredging on the area of 2.2 ha to the point 7.32 m	Self-propelled vessel SDS-15, cutter, soil pump	53000
V	Dredging on the area of 2.32 ha to the point 8.23 m (if necessary)	Self-propelled vessel SDS-15, cutter, soil pump	27000

Dimensions of the work area: the largest length is 460.0 m (91.55 km - 91.06 km), the largest width is 30 m.

The dredging works are planned to be carried out by machinery in turn with the involvement of the following hydraulic engineering:

- **Watermaster Classic IV.** The pulp is pumped using a suction pump, through a pipeline with a diameter of 200 mm, with a pulp productivity of 600 m³/h. The soil: water ratio is 1:5; the work of bucket by the volume of bucket is 1 m3

- **self-propelled dredging vessel (dredge) SDS - 15**. The pulp is pumped using a suction pump, through a pipeline with a diameter of 450 mm, with a productivity of pulp 2400 m³/h. The soil:water ratio is 1:6;

The extracted soil (pulp) is transported through the pipeline and stored in a 1.24 ha coastal dump. The perimeter is surrounded by a dam with 2.5 m high, within its boundaries are formed alluvium maps with a discharge pipe Ø 200 m for the discharge of clarified water and a drainage ditch along the barrier dam with a depth of 0.5 m and a bottom width of 1.0 m for the discharge of water that filtered through the embankment dam (Appendix B).

Taking into account the location of planned activities, as well as being guided by the provision of the Resolution of the Cabinet of Ministers of Ukraine dated May 22, 1996 No 552 “On approval of the List of industrial sites of fishery water bodies (their parts)”, this territory, as a hydrotechnical structure and a place of intensive shipping (ports, shipping way) are not an industrial part of the Danube basin.

According to the Order of the State Agency of Melioration and Fisheries of Ukraine (Black Sea Fisheries Patrol) No. 132 dated April 14, 2022, industrial and amateur fishing is prohibited for the period of mass spawning in the Danube River from April 22 to June 05 (the ban does not apply on the directed fishing of herring), appendix C.

Taking into account the duration of the works (52 days) and the total volume of dredging of the operational water area of the River Port (terminal) of NIBULON LLC (112,000 m^3), the estimated amount of extracted soil will be equal to 2154 m^3 per day.

The dredging of the Danube river section will not have a negative impact on adult fish, as they are able to avoid dangerous areas. The negative impact (at the level of complete destruction) will be felt by eggs and young fish that get to the place of the production process, so the purpose of the work is to assess the degree of impact of the works on fish resources, due to the loss of fish products from eggs and early young fish. If dredging works will be carried out during the ban on specialized fishing, which will be associated with the period of their mass spawning, assessments and compensation must be obtained in accordance with the procedure established by the legislation of Ukraine.

According to the available cartographic materials, it has been established that there are no objects of the nature reserve fund and territories reserved for the creation of nature reserve fund objects on the territory of the planned activity and in the zone of its territorial impact (within a radius of 687 m from the centroid of the production site). Also, this territory is not a migratory eco-corridor for rare species of birds, does not belong to the territories of the "Emerald Network" project and Natura 2000.

Convention on the Protection and Sustainable Use of the Danube River (1994, ratified by Ukraine in 2002). Cooperation in the field of water management is aimed at sustainable water management, which means of the criteria of sustainable, ecologically sound development, which are simultaneously aimed at:

- maintaining the general quality of life;
- maintenance of long-term access to natural resources;
- avoidance of long-term environmental damage and protection of ecosystems;
- implementing a preventive approach.

The result of the biological substantiation will be an assessment of the impact of hydrotechnical works on the state of fish stocks of the Danube River with the provision of recommendations of a preventive approach for the implementation of hydraulic works.

2 PHYSICAL AND GEOGRAPHICAL CHARACTERISTICS OF THE REGION

The river port (terminal) of NIBULON LLC of the Izmail Sea Port is located in the Danube Delta and is located in the southwestern part of Ukraine and Eastern Romania, from the bifurcation of the Danube above Izmail to its flowing into the Black Sea. The Danube Delta occupies an area of 5,640 km², of which 1,200 km² is within the Odesa region [1]. The Danube delta zone is divided into two arms (mouths) - the left Kiliia (on the border with Romania) and Tulcea, the right one. Tulcea arm, in its turn, is divided on George and Sulina branches (both on the territory of Romania). The Kiliia arm is the most full-water, its length is 117 km. It is shipping to Izmail, ports: Izmail, Kiliia, Vylkove. Near Vylkove town, it splits into a series of waterways that form the young delta of the Kiliia mouth (area 1958 km²), which is in a state of dynamic development. On average, the area of the delta increases by 1.1 km² annually. There are numerous lakes and river branches in the Danube Delta. More than 85 % of its area is occupied by floodplains - marshy areas that are flooded for a long time or constantly. About 70% of the territory of the floodplains is covered by groups of southern reeds. In their composition, a large number of sedge, cattail, bulrush, as well as weeds grow in the most elevated areas of ridges near the riverbed. Among the flood plains are lakes connected by channels and often covered with thickets. Large, unvegetated channels have folded loamy levees.

The Danube delta ends with the front, seaward edge of the lower face of this river delta, which includes bays and mouths of arms, and the avandelta (in front of the delta), which is not part of the delta, is the water area from the coast of the sea to the zone of sea water overrepresentation; its length from the shore in the sea can be several kilometers. The river-sea geochemical border with the average values of the Danube flow is characterized by an isohaline of 6 ‰.

The Danube Delta is the largest in Europe and one of the largest in the world by area.

The river port (terminal) of NIBULON LLC is located in the water area of the Kiliia mouth of the Danube River, 93 km from the Black Sea. The water area of the SEA port of Izmail port includes the water space of the river from 81 km to 97 km, directly from the left bank to the conditional line of the state border of Ukraine, which passes along the fairway of the Danube, the river port (terminal) of NIBULON LLC occupies the river part of the port from km 91.09 to km 91.55.

The port can accept ships the length of which does not exceed 150 m, width - 30 m, draft - 7 m. The draft of ships entering the port is limited by the passing depths of the Sulina Channel and the Bystre Channel on the Ukrainian section of the Danube River.

In 2022, NIBULON LLC is building a cargo berth with the operational water area of a

river port in Izmail, Odesa region, under the project "New construction of a transport infrastructure object - a river port (terminal) in Izmail, Izmail district, Odesa region". The working project envisages the execution of dredging works with the subsequent transportation of pulp through the pulp pipeline on the coastal bottom soil dump (see Appendix C).

Over 30 years of activity, NIBULON has created a modern, unique grain logistics infrastructure in Ukraine, which consists of transshipment terminals and complexes for receiving, storing and shipping grain and oil crops, powerful fleet and production units throughout Ukraine. Today, the company is represented in most regions of our country. [2].

2.1 Climate

The climate of the temperate zone is characterized by relatively mild and wet winter and hot, dry summer [3]. In winter, due to the spread of the branch of the Asian anticyclone in the east of Europe, persistent and strong winds from north-east to east arise on the Black Sea, which bring cold and relatively dry continental air of moderate latitudes. The weakening from the horn of the Asian anticyclone leads to the development of cyclonic activity in the Black Sea, which leads to an increase in air temperature and abundant precipitation. In summer, the northwestern part of the Black Sea is under the influence of a subtropical anticyclone. Individual areas of this anticyclone often produce long periods of weather with little wind activity and a large number of dry, clear days. During the arrival of the polar front, cyclones are formed, which contribute to precipitation. The following types of weather can be distinguished in the northwestern part of the Black Sea.

The anticyclonic type of weather is distinguished by its breeze-type winds with a speed of no more than 7 m/s, and in the spring also by fogs.

Cyclonic type of weather, which is characterized by winds with a speed of 7 - 15 m/s from the south, west and north-west directions. In winter, this type of weather contributes to gloom and prolonged precipitation. Cloudiness prevails in summer.

The type of weather characterized by strong cyclonic winds with a speed of 19 - 23 m/s, stormy and heavy precipitation. Thunderstorms are observed in summer and autumn, according to a similar type of weather, and in winter, a sharp cooling is possible.

The north-eastern type of weather is different, there is a significant drop in temperature and "hovering" is noted. In the summer, the air temperature is high, insignificant humidity and clear skies.

The western type of weather is characterized by strong westerly winds, significant or

complete cloud cover, and prolonged precipitation. On the northwestern coast of the sea, for example, the average monthly temperature in the coldest months of the year (January and February) is - 1 - 4 °C. The absolute minimum air temperature in winter in the north west reaches - 30 °C. In March, the average temperature slightly changes to 2 - 3 °C, in May it is 14 - 17 °C. In summer, the air temperature is approximately equal. In the warmest months of the year (July and August), the average temperature on the coast is 22- 24 °C. The absolute maximum temperature reaches 40 - 41 °C. Autumn is warmer than spring. In mid-autumn - in October, the air temperature in the northwest is 13-14 °C.

The average annual number of days with frosts in the research area is approximately 100. It should be noted that frosts do not last long and are usually associated with strong winds from the northeast to north. The relative humidity of the air during the year in the described area varies on average from 60-70 to 80-88%, and in summer and early autumn it is lower than in other seasons.

In the greater northwestern part of the Black Sea, winds from the northwest, north, and northeast prevail in winter, the total recurrence of which reaches 50%; in certain points, winds from the east are also quite often observed. In the spring, winds from the northeast and northwest may prevail, but along with them, winds from the south, southeast and southwest receive a noticeable development. In summer, in most points, winds from the northwest (repeatability up to 20 - 35%); of the winds from other directions, the most likely winds are from the west and southwest, and in some points also from the north. In autumn, winds from the north, northeast and east are more often noted, and in some areas - winds from the northwest.

The average annual number of days with storms (wind speed ~> 15 m/s) can reach 112 days. Most often, they occur from October or from November 15 to March, when on average there are 4 - 7 days or more with storms per month. From April or from May to September, the average monthly number of days with them rarely exceeds 2.

Visibility of 5-10 miles or more prevails in the area. The best visibility conditions are noted from April to October - November. During the day, the highest visibility is observed in the afternoon, the lowest in the morning. When there is a repeat invasion of cold air masses, which is most likely from October to May, exceptional visibility is noted - at this time visibility can reach - 110 - 160 miles.

Thunderstorm activity is most developed from April - May to September, on a larger scale part of the area, when on average there are from 1 to 8 days with thunderstorms per month. From October to March thunderstorms are rare.

Hail, most likely from April to June. The number of days with it is small - 5: on average,

it does not exceed 1 - 2 per year.

Clear ice is possible in the cold season, but the average number of days with it is no more than once a month. Blizzards occur only from December - January to March. The average number of days with them varies from 1 to 3 per month.

A moderately cold climate is observed in the work area with a large (as for the southern part of Ukraine) amount of precipitation, even in the driest month. It falls about 452 mm of precipitation per year.

The average annual air temperature is 9.9 °C. The largest amount of precipitation is in October, with an average of 24 mm. The highest amount of precipitation falls in July, with an average of 54 mm.

The hottest month of the year is July, the average temperature is 22.7 °C. The lowest average temperature of the year is recorded in January, when it is about - 3.3 °C.

Between the dry and rainy months, the difference in precipitation is 30 mm. The temperature change throughout the year is 26.0 ° C.

2.2 Hydrological conditions of the Danube River

The place of work is located in the Danube Delta. The speed of surface currents of the Danube from Reni to the seacoast increases in the section from Reni to Kiliia - Velyke Stolitti, where the maximum speed of 175 cm/s is registered [1]. The speed of water flow from the entrance to each arm and exit from it to the sea decreases.

The Novostambulsky arm is characterized by the most powerful removal on the coast, the speed in which reaches 55 cm/s. Divergence of surface and bottom currents was repeatedly recorded. In 55% of the cases of observations of individual arms of the delta, the difference in current directions is vertical. These features of the flow regime in the arms of the Danube delta affect the spatial distribution of hydrochemical characteristics and the processes of accumulation of suspended and polluting substances.

The characteristic connection of the river flow regime with the change in turbidity is expressed in the low transparency of the water and the high content of suspended substance. The minimum transparency (0.3 m) was noted in the Kiliia Delta, slightly higher in the lower current of the Danube River (0.6 m) and in the avandelta (0.7 m). Along the course of the river from Reni to Kiliia, the content of suspended substance increases. On average, the content of suspended substance in the delta is twice as high as in the river. The general mineralization of water naturally increases from the river to the sea.

The temperature value was distributed relatively evenly, both by area and vertically.

Despite the high dynamics of waters and their intensive aeration, the content of dissolvable oxygen in water is almost everywhere below the saturation level, in the Kiliia delta it is slightly higher than in the river.

In general, the waters of the region are characterized by relatively low pH values. The reason for this phenomenon can be considered the presence of an excess of easily oxidizing organic substance, which is illustrated by high BOD_5 values (in 82% of cases they exceed the MPC by 2.5 times), as well as the MPC and the level of suspended organic carbon content. This, in turn, is due to the removal by the river from the upper and middle reaches a large amount of allochthonous (dead organic) matter, as well as the high trophic status of the region. BOD_5 values can be equal to 9.6 mg/l [4].

The Danube can carry an average of 205 km³ of water to its estuary annually. Approximately 7.3% of this volume of flow (i.e. 15 km³) is formed on the territory of Ukraine (Uzh, Tisza, Siret, Prut). The increase in flow in the river delta is insignificant - about 1.5 km³. Irreversible water consumption directly within the estuary region of the Danube currently does not exceed 0.5 km³/year, which is less than a quarter of a percent of the total flow of the river. Due to the protrusion of the estuarine sections of the waterways of the Kiliia delta in the sea, as well as due to the artificial direction and deepening of the Sulina arm and the construction of a guide dam at the bifurcation node of these arms, the flow of the Kiliia arm has slightly decreased. Recently, the redistribution of flow in favor of the Tulcea branch has slowed down.

In the annual course of the water level in the Danube in modern conditions, the spring flood, autumn and winter floods, summer-autumn low and winter low baseflows are distinguished. The spring flood occurs, as a rule, in two waves: the first - from the melting of snow on the flat parts of the basins; the second - from the melting of snow in the mountains and the rains that fall during this period. The maximum level of the spring flood is usually the highest of the year. From September to the beginning of ice formation in the Danube, water level rises caused by autumn floods are observed. As a rule, they are not high, although in some cases they can exceed maximum spring flood levels. A large rise in the water level can also be caused by winter floods, which are accompanied by ice jams. In about 20% of cases, these rises become the highest for the year. The minimum annual water level is observed in the summer-autumn period, but in some years (20% of cases) it can also be in winter. The amplitude of water level fluctuations in the Danube decreases downstream and amounts to 620 cm in Reni, Kiliia - 305 cm and Vylkove - 261 cm.

The water temperature in the Danube River, averaged on an annual scale, is 12.7 °C. The warmest river waters are usually in July - August (up to 24.1 °C in general); during this period, the maximum temperature is observed - 27.6 ° C. The duration of the period with a water

temperature exceeding 5 ° C is 265 days on average (16.03 - 6.12). The temperature is above 10°C, it is maintained from 10.04 to 9.11 (213 days), above 15°C - from 4.05 to 13.10 (162 days) and above 20° C - from 31.05 to 16.09 (108 days). Certain regularities in the distribution of water temperature along the length of the estuarine section of the river were not found.

An analysis of the wind regime of the Danube delta over a long period (1945-2000) showed that all hydrometeorological stations and posts in the delta are characterized by the dominance of winds from the north and south. The period of winds from the north-west, west, and north-east directions in total accounts for 40.75% every year, but the share of south, north, and north-west winds is 32.09%. The northerly wind is characterized by especially significant repeatability - 17.51%. A very high percentage of calms - 14.85%.

Ice phenomena on the Danube are not observed every year. Winters here are relatively mild - the average monthly air temperature of the coldest month (January) is -2° C. In colder winters, ice appears at the top of the river delta (on average 4 - 9.01), then spreads for 2 - 3 days in the entire estuarine region. The duration of the autumn ice movement, which is accompanied, most often, by the formation of ice jams, can be from one to 20 - 25 days. Ice formation lasting more than 5 days is formed only in 50% of cases. The ice thickness on the main branches of the delta does not exceed 25-35 cm. The destruction of the ice cover begins in February, at the beginning of March the river is cleared of ice. In recent years, in order to continue navigation and reduce traffic jams, the ice cover on the Danube and in the arms of the delta has been destroyed artificially, which leaves a noticeable mark on the ice regime of the river [3].

2.3 Hydrochemical mode

The hydrochemical regime of the Ukrainian section of the Danube is formed under the impact of its internal water flow, the vital activity of aquatic organisms and wastewater from industrial enterprises, agriculture and settlements. Many ingredients of the hydrochemical regime are inversely related to the amount of river flow.

The main factor in the formation of seasonal dynamics of water mineralization is the water flow of the river. According to the dominance of ions, the water of the Ukrainian section of the Danube belongs to the hydrocarbonate class of the calcium group. In the arms of the delta, the concentration of calcium fluctuates no more than 28 - 60 mg/l. The largest amount of magnesium is found in the mouth of the Prut, up to 23 mg/l, in the middle part of the river - 13 - 16, in the arms of the delta - 8 - 26 mg/l. Seasonal dynamics is characterized by a minimum content in spring and an increase towards winter.

Concentrations of carbonate ion are small: 3 - 24 mg/l. It occurs at pH 7.6 - 7.8 and is accompanied by a decrease in the amount of hydrocarbons to 160 - 180 mg/l [4].

The sulfate ion concentration also varies widely in the area with maximum values at the mouth of the Prut (up to 120 mg/l). Its content fluctuates significantly throughout the year within the limits of one point of observation. So, in the Vylkove area it was distributed as follows: in March – 92.2 mg/l, May – 55.2, June – 70.1, August – 46.4, October – 48.5 mg/l. Its maintenance is influenced, in addition to the water flow of the river, by the influx of phenomena from the Black Sea.

In the distribution of chlorides, there is an increasing trend from the Reni to the mouth of the river is observed, which is mainly due to the impact of the sea. Because of this, their seasonal dynamics are unstable.

The oxygen saturation of the water flow varies greatly down the river from the Reni to the Black Sea. Calculations of oxygen flows in the Reni, Izmail and Vylkove reservoirs showed that despite some qualitative differences caused by their transformation downstream, they directly depend on the change in the volume of the river flow.

Ecological observations of Ukrainian scientific center of Ecology of Sea (UkrSCES) in 2020 allow us to state that the content of total nitrogen in the water area ranged from 0.486 mg/dm³ to 1.6280 mg/dm³, total organic phosphorus – from 0.0141 mg/dm³ to 0.0595 mg/dm³ (Table 2.1).

Table. 2.1. Hydrochemical indicators in the water of the Danube estuary area [5]

Ingredient-indicator, mg/ dm³	Approach channel, fluctuations (average)
PO_4^{3-}	0.0 – 0.0526 (0.0173)
Porg	0.0141 – 0.0595 (0.0290)
NH_4^+	0.0 – 0.0142 (0.0042)
NO_2^-	0.0017 – 0.0242 (0.0099)
NO_3^-	0.0485 – 1.2110 (0.4579)
Norg	0.4860 – 1.6280 (1.0811)
SiO_3^{2-}	0.1520 – 2.7920 (1.1415)
Salinity, ‰	0.0 - 2.6
Oxygen mg/dm³	6.20 – 9.30
Biochemical oxygen demand5, mg O/ dm³	2.73 – 3.29
pH	8.19
Suspended substances	93 - 242

The materials of the Danube Hydrometeorological Observatory for a 20-year period show that the turbidity of water in the branches of the Kiliia delta is characterized by lower

values: in the Kiliia arm in Vylkove it is 158 g/m³, in the Starostambulske arm — 161, in the Prorva arm - 172 g/m³. The average turbidity of the Danube water in the Vylkove area can vary from 93 to 242 g/m³; the highest monthly average value of turbidity in this body can reach 800 g/m³ (October), the lowest – 16.6 g/m² (November). The range of fluctuations in daily values of water turbidity in the Danube Delta is exceptionally wide - from a few grams to 2-3 kg/m of water.

The main hydrochemical parameters of water masses are given in table 2.1.

The analysis of the spatial distribution of hydrochemical parameters shows that the research water area can be classified as anthropogenic-eutrophic and characterized by a high content of biogenic substances with a predominance of their organic forms.

2.4. Hydrobiological conditions of the Danube River

Phytoplankton. In the waters of the Danube River, diatoms have the greatest species diversity, accounting for 64% of the floristic composition [6]. Among the most common diatoms with a duration of 48-78% are freshwater *Cyclolella kuetzingiana Thw., C. meneghniana Kutz.,* Melosira granulata (Ehr.) Ralfs., *M varians Ag., Synedra acus Kutz., S. acus van radians* (Kutz) Hust. The representatives of marine flora *Sceletonema costatum (Grev.) CI., Cerataulina pelagica Perag* are much less common.

Green algae are represented by widespread *Scenedesmus quadricauda* (Turp.) Brebsl., *Ankistrodesmus arcuatus* Korch., *Kirchneriella lunaris* (SchmicUe) Bohl., in terms of the number of species they rank second after diatoms. In total, up to 67 taxons were found in the Danube and its arms, and up to 48 intraspecific taxons of algae in the Danubian water bodies. In the Danube, the floristic spectrum of diatoms is up to 62%, in the Danubian water bodies - up to 58.3%, green algae - 29% and 25%, respectively, blue-green algae - 7.5% and 6.2%. The species diversity of the phytoplankton of the delta and the avandelta differ. *Fragillaria crotonensis Kitt., Fr. virescens Ralfs., Nitzschia lorenziana Gran, M. varians Ag* were found only in the delta.

Indicators of the quantitative development of phytoplankton in the Danube, in the Yalpug and Kugurluy lakes varied widely: the number - from 3.0 million cells/m³ to 11.0 billion cells/m³, biomass - from 4.2 to 3687.6 mg/m³. The maximum number was achieved due to small cells of blue-green algae. In the upper part of the river at the Reni river crossing, as well as in the Yalpuh and Kuhurlui Danubian water bodies near the Romanian shore, the number (10.0 million cells/m³) of phytoplankton was an order of magnitude lower, and the

biomass was 4.5 times smaller than in other areas of the section. The average values of the number and biomass of diatoms (respectively, 92.6 and 93.3%) in the lakes were close and grew on the rush of the river.

An increase in the number of phytoplankton with the dominance of diatoms (98.7% of the number and 98.0% of the biomass) was noted on the Izmail crosspiece. Downstream of the Danube and in the estuaries of the Kiliia region, the number reached 410.0 million cells/m^3, biomass - 158.7 - 1055.8 mg/m^3. These values can vary widely. The increased amount of phytoplankton in these areas is associated with the intensive development of freshwater diatoms *Stephanodiscus hantzeshii Gran* (93.6 million cells/m^3 - number and 65.6 mg/m^3 - biomass) and brackish water *Diatoma elongatum* (Lyngb.) Ag. (86.4 million cells/m^3 and 121.0 mg/m^3, respectively).

In the greater part of the Kiliia section of the delta, where phytoplankton was distributed almost uniformly, the role of algae belonging to different systematic divisions is not the same. The spatial distribution of the number and biomass of diatoms and greens often acquired an inverse relationship.

In recent years, a decrease in the number of phytoplankton has been observed in the Danube Delta, which could be a consequence of a change in the hydrochemical regime of the Danube Delta and avandelta, which is associated with a significant decrease in the concentration of mineral forms of nitrogen [6].

According to research results, in 2000 [6] the average number of phytoplankton in the area of Izmail was 447.0 million cells/m^3, biomass - 524.4 mg/m^3.

The intensity of phytoplankton development is also directly dependent on the amount of water turbidity, since finely dispersed mineral suspension prevents penetration of solar energy to the water column. In addition, the suspension, having a mechanical effect on the pelagic cells, contributes to their sedimentation in the bottom layers. Degree of turbidity of Danube waters increases in the spring, during the flood period. In April, an extremely high content of suspended substance in river water is observed not only in connection with hydrodynamic factors, but also due to the removal of a large amount of allochthonous organic substance. In addition to this factor, the decrease in the number and biomass of phytoplankton, compared to previous years, can be explained by the high level of pollution. The high content of metals and allochthonous organic substance in the water can be attributed to the factors of suppression of phytoplankton, especially in the delta.

Zooplankton. Zooplankton of the Danube within Ukraine is characterized by significant diversity of species. Its structure can include more than 82 taxons [7]. The basis of structure of plankton group is represented by rotifers and cyclopedias. There are such

species of calanoida as *Eurytemora vefox* Lilleborg and *Diaptomus gracilis* Sars. Harpacticoida are also available. Representatives of the epibiotic Ponto-Caspian fauna *Heterocope caspia* G.O. Sars and *Calanipeda aquae-dulcis* Kritshagiii are absent in this part.

Zooplankton of the Danube usually has copepodit character. The total number of zooplankton of the riverbed part in average is 44.3 ths. specimen/m³, biomass – 241.52 mg/m³, at the delta: number – 35.4 ths. specimen/m³, biomass– 193.2 mg/m³. Both in the riverbed part and in the delta, the rotifers prevail in number. At the riverbed part their share is 72.7%, at the delta – 70.0%. In both parts, the copepods prevail by biomass: riverbed part - 65.7%, delta – 66.2%. The average number of zooplankton of riverbed part and delta in average is 39.8 ths. specimen/m³, biomass – 217.36 mg/m³ [8]. Analysis of the development of zooplankton shows that the formation of river zooplankton is mainly influenced by water content. In years of abundant water, the development of zooplankton increases. However, despite the fact that in some years (spring 2000) high water content is observed, such a trend in the development of zooplankton was not noted. In the spring period in the early 1980s, both in terms of number and biomass, rotifers prevailed. From the dominant species of zooplankton the rotifers were mentioned such as *Brachionis calyciflorus* Pallas and *Asplanchna priodonta* Gosse, from the copepods - *Acanthocyclops robustus* (Sars). At the high development of *Br. calyciflorus* the dominant place was taken by rotifers of Keratella genus: *K. quadrata* (Muller), *K. q. dispersa* and *K. cochlearis* (Gosse). With a high diversity of rotifers in the structure of the river community in certain years (2000), the main role belonged to a few species: *Br. Calyciflorus* Pallas, *Br. canuroeiformis* Brehm, *A. priodonta* Gosse, *A. herricki de Guerne, K. quadrata* (Muller), *K q. dispersa*. Among the diplostraca the *Daphnia lonqispina* O.F.Muller, *Simocephalus vet*ulus O.F. Muller, *Chydorus sphaericu* O.F. Muller, *Bosmina longirostris* O.F. Muller dominated.

Together with the representatives of zooplankton syrton organisms are registered in the river: larvae of insects and molluscs, nematode etc. The total numbers and biomass of this group of hydrobionts are not very significant. They averaged no more than 1%.

The fact that the number of larvae of the Dreissena mollusk in plankton significantly decreased, which in abundant water period could be up to 13% of the total number is noteworthy, the presence in the plankton of the dead larvae of Ostracoda increased. They are found already dead with open valves. Thus, in the Izmail area, in some years, up to 100% of dead larvae were found.

Molluscs at an earlier stage of development (veliger) are found in small quantities and have a "non-viable" appearance.

The development of zooplankton in different parts of the river is not uniform. In the

Izmail area, as a rule, indicators of numbers and biomass are at an average level. The development of zooplankton in the Danube can vary significantly. As for example, on May of low-water 1998, in the channel area the total amount of zooplankton was 4.5 ths. specimen/m³, biomass – 70.24 mg/m³ [8]. In that area in all cases, the tendency of dominance in the community of rotifers and copepods remains.

Therefore, taking into account the above, it should be assumed that the zooplankton of the Danube within the borders of Ukraine is characterized by a large species diversity, the increase in biomass occurs due to the development, mainly, of the copepodite complex.

Average number of zooplankton of riverbed part is 39.8 ths. specimen/m³, biomass – 217.36 mg/m³. A group change was noted in the development of the zooplankton of the river. In all areas of the riverbed part of the river and the delta, rotifers dominate in number, and copepods dominate in biomass.

Zoobenthos. Individual areas of the Danube River within Ukraine differ from each other in terms of flow speed, mineralization, depth, nature of bottom sediments, which are related to the sedimentation of suspended material, the level of pollution and other factors. As a result, the benthic fauna population differs in its qualitative composition, the ratio of numbers and biomass of the main systematic, ecological and trophic groups, the degree of dominance of the main species, the size composition of populations of dominant species of bivalve molluscs, and the spatial distribution of the quantitative characteristics of benthic invertebrates.

Up to 14 species of benthic invertebrates have been noted along the Izmail-Reni dam – one of worms and one of arachnids, molluscs – 4, crustacean - 2, insects (larvae and imago) - 6 The average number of benthos reaches 5000.0 specimen/m², biomass – 11.94 g/m². On the areas of river where the gastropods are found, the biomass can reach 20.08 g/m². Among the main systematic groups by the number of taxons (6) and density (65.6%) insects dominate, by the biomass (74.7%) – molluscs [9].

The amount of taxons of protoaquatic and secondary animals is almost the same, by number (65.6%) secondary organisms prevailed, by biomass (84.4%) – protoaquatic ones. The representatives of infauna in many times prevail over the animals of the epifauna, accounting for 75.0% of the number of species, 99.1% of the number and 83.6% of the biomass. The most wide-spread are mosquito larvae - 59.6% of the density of the entire benthos. At the same time, their biomass is only 9.7%, since the average mass of a specimen is small - about 0.0004 g. The highest biomass (64.3%) is noted in the gastropod molluscs *Bithynia tentaculata* L.

The number of taxons (85.7%) and biomass (88.6%) is dominated by representatives

of the epifauna, and by the number (63.6%) - invertebrate of infauna.

Among the trophic groups detritivores dominate by density (64.4%), by biomass (78.7%) – plant-detritus forms.

The biomass of benthos significantly varies by years, seasons and areas of the river. In the recent years extreme decrease of number indicators of benthos is determined in the Kiliia area of the Danube more than of an order. If in the 80s the number of benthos reached 11.7 ths. specimen/m², biomass 36.7 g/m², then in 2000s these values decreased to 205.0 specimen/m² and 1.43 g/m² respectively [9]. The number of oligochaetes and molluscs reduced significantly, which have created the main biomass of the benthos and have determined high food capacity of river at the Kiliia area of the Danube.

Thus, the quality composition of the benthic fauna of the Danube river in the area of Izmail port is poor and is represented mainly by larvae of insects (chironomidaes), oligochaetes and benthic crustacean (gammaridaes, mysida and others) [10].

The average biomass of forage organisms living in the Danube River in the area of dredging works is shown in Table 2.2.

Table 2.2 – The average biomass of forage organisms in the Danube River in the area of dredging works

The name of water body	Biomass of forage organisms		
	Phytoplankton, g/m³	Zooplankton, g/m³	Zoobenthos, g/m²
Danube river	0.524	0.217	1.43

2.5 Ichthyofauna and fishery significance of the works area

One of the main factors that determine the conditions for fish reproduction is the river level regime. In connection with the construction of dams, not only a part of spawning grounds in the Danube was lost, but also the flood decreased, which led to the deterioration of spawning conditions. Currently, the spawning of ordinary fish mainly takes place in the Kiliia mouth of the delta. Shrubs of soft aquatic vegetation are concentrated here, which is a spawning substrate of phytophilous fish species [11]. Along the entire length of the Ukrainian section of the Danube River, there are small meadows flooded with water where carp, crucian carp, bream, zander and others spawn.

In addition to anthropogenic eutrophication and pollution of the Danube waters, the state of fishing in the delta was significantly affected by the regulation of the river's flow and

the arrangement of the banks with dams, which significantly worsened the natural spawning conditions of many fish species.

The terms of fish spawning in the Danube River are similar to those in the Danubian water bodies. Their change occurs depending on the hydrometeorological conditions of the year. The success of spawning largely depends on the water content of the year. The biology of species living in the Danube River is described in the handbook [12]. Usually on February-March the northern pike *Esox luceus* (Linnaeus, 1758) already spawns. On the third decade of March - second decade of April at the temperature of water 10 – 11 °C, the highest intensity of spawning of European perch *Perca fluviatilis* (Linnaeus, 1758) is observed. Later the reproduction of common roach *Rutilus rutilus* (Linnaeus, 1758) and zander *Sander licioperca* (Linnaeus, 1758) occurs. Common bream *Abramis brama* (Linnaeus, 1758) spawns at the higher indicators of temperature of water – from 14 to 17 °C. After its heating to the 16 - 17 °C the spawning of crucian carp, golden or silver crucian carp *Carassius carassius* (Linnaeus, 1758), *C. gibelio* (Bloch, 1782) and European carp *Cyprinus carpio* (Linnaeus, 1758) begins. These species have a very extended, portioned spawning, which often continues throughout the summer.

In the aboriginal fauna of the Danube River, there are three main groups of fish with different types of reproduction:

- pelagophils (Black Sea and Azov Sea herring, sabrefish);
- litophils (sturgeon, starry sturgeon, sterlet, vimba, aspius etc.);
- phytophils (roach, bream, carp, crucian carp etc.).

In response to the change in reproduction conditions due to the construction of dams, many populations of phytophils fish showed ecological flexibility and adapted to spawning in the river bed on new substrates.

Spawning grounds of crucian carp usually is situated on areas or river with slow current and in the backwater with a ditch water. For spawning, it chooses shallow coastal areas with a depth of about 0.5 m, with a more or less muddy bottom and shrubs of aquatic vegetation - arrowhead, typha, pondweed etc., or flooded areas with ground vegetation of reedbed.

Spawning of common bream largely depends on the spring flood, spawning duration and size depend on it. In conditions of significant fluctuation of the river level, the *bream* has mastered new spawning areas at the greatest depths of the river. At the same time, a small part of the spawning herd of common bream spawns in the riverbed part of the Danube delta, and a significant part - in the reedbed system.

For European carp, spawning sites are usually shallow, well-warmed areas of water

bodies, characterized by a weak current, with a hard or slightly muddy bottom, which is covered with soft or hard aquatic vegetation, or flooded with meadow vegetation. At the lower part of the Danube river spawning grounds for European carp are flooded with meltwater areas of reedbed with well-developed vegetation namely grass, sedge, pondweed etc.

Sabrefish Pelecus cultratus (Linnaeus, 1758) spawns at the temperature of water 11 - 12°C. The spawning conditions of sabrefish are very peculiar. It can spawn both in the riverbed part and in the reedbed, laying eggs on vegetation. This species uses the so-called spawning grounds of the first and second type. Spawning sites of the first type are used with a high water level, when there are available flooded areas of reedbed at a depth of 20 - 50 cm. The second type - spawning in the riverbed of the river at a depth of up to 3 - 4 m - takes place at a low water level.

Zander spawns near the shores, in shallow water places where there are tree roots, flooded fragments of branches, dead but not rotted vegetation.

Spawning of the perch occurs in places with a weak current, or, in the absence of a current, in those places where there are hard aquatic vegetation, roots, branches of flooded bushes. Vegetation is not only a substrate for spawning, but also contributes to the spawning process of *perch*.

The northern pike spawns in shallow water and in flooded sections of reedbed, spaces with meadow vegetation. Northern pike eggs is laid into the bottom layer, on river and flooded meadow vegetation.

White bream *Blicca bjoerkna* (Linnaeus, 1758) spawns on May – the beginning of June. The spawning grounds of white bream - small bays with flooded or soft underwater vegetation.

Rudd spawns in late May and in June in bays, lakes or areas with a weak current. Spawning takes place in reed bushes.

Common roach spawns from early April to early May. Spawning takes place near the shore. Substrates for spawning can be different - aquatic vegetation, roots, flooded trees, in the absence of plant substrates - stones.

Gobiidae (round goby – *Neogobius melanostomus*, monkey goby – *N. fluviatilis*). The biggest length of body 25 cm, usually up to 20 cm, weight 140 g, usually 90 - 100 g; monkey goby - 20 cm, usually up to 15 cm, weight 70 g, usually up to 40 - 50 g, duration of life 5 - 6 years. During reproduction, the color of the males round goby turns black, and the fins also darken, which have a light border on the edges.

Adheres to areas with muddy shelly, sandy, or pebbly soil, but generally avoids clean

rocky or muddy soils and thickets of underwater vegetation. Lives at depths from 1 - 2 m to 10 - 15 (17) m, sometimes up to 30 m; usually migrates to greater depths after spawning and in the cold season. Spawning is portioned, begins at a water temperature of 9-10ºC, its peak falls on a water temperature of 15-16ºC.

Youngstock feed on plankton with a gradual transition to consumption of benthos (worms, crustaceans, insect larvae, small molluscs, etc.). Large individuals feed mainly on molluscs, which make up 90% of their diet, other benthic invertebrates and young fish. In the area, the works are not of industrial importance.

Roach - *Rutilus heckelii* (Linnaeus, 1758). Spawns from early April to early May. Spawning takes place near the shore. Substrates for spawning can be different - aquatic vegetation, roots, flooded trees, in the absence of plant substrates - stones.

Herring. Danube river herring *Alosa caspia nordmanni* Antipa, 1904. A pelagic schooling migratory fish that lives in the sea and enters fresh water to reproduce. Spring migration from March, at a water temperature of 6º C, most intensively at 13-17º C, until the end of April, when it enters the estuaries of rivers. It reaches sexual maturity at the age of one year with a length of 11-13 cm and a weight of 25-30 g. Spawning is from the end of April - the beginning of May to the end of June, at a water temperature of 13 - 22º C, on the area with weak flowing or ditch water, but clear water and sandy, or sandy and muddy soil. Egg is spawned on the surface layers of water.

Sturgeon family – Acipenseridae Bonaparti, 1831. Migratory demersal fish which constantly live in the sea and for spawning moves into rivers except the starlet which is freshwater fish and does not perform huge migrations.

The sturgeon family of the lower reaches of the Danube (within Ukraine) includes: beluga sturgeon - *Huso huso* (Linnaeus, 1758); freshwater sterlet - *Acipenser ruthenus* Linnaeus, 1758; russian sturgeon – *Acipenser gueldenstaedtii* Brandt et Ratzeburg, 1833; starry sturgeon – *A. stellatus* Pallas, 1771 [11].

Beluga sturgeon. Migratory demersal fish which constantly live in the sea and for spawning moves into rivers. Spawning migrations twice a year: fish which enters the rivers in spring (the second half of March-April at the temperature of water 4 – 5° C), reproduces at the same year, and wich enters the rivers in autumn (Spetember-November) – reproduces only in spring of the next year. Males become mature at the age of 12-14 years at length of more 120 and cm, females at the age of 16-18 years at the length of more 150 cm. Spawning from the end of April to the beginning of June occurs at the deep places with fast current and stone, sand- gravel ground. Fertility on sizes and age variates from 360 thousand to 7.7. million eggs. Egg is bottom, sticky at the temperature of water 12-14° C, its development

lasts for 8-9 days, larvaes start to feed after one and hal of wek after outlet from egg. After the spawning adult, and then young fish move to the sea. The length of body of adult fish can reach 5 m, mass – 1000 kg.

The quantative of beluga is extremely low. The speice is enlisted to the Red Book of Ukraine, 1994, lists of Bern convention, IUCN, and European Red List.

Freshwater starlet. Freshwater demersal residential fish, which don`t do huge migrations. It keeps alone or in small groups in deep areas of rivers with clean, cool running water in places with sandy or sandy-pebble soil. Males become sexually mature at the age of 3, mostly 4-6 years, with a length of more than 35 cm, females, respectively, at 5-9 years with a length of more than 45 cm. Spawning occurs in April-May at a water temperature above 10°C (usually at 12-17°C). Fertility up to 110-140 thousand eggs. Eggs are bottom, sticky, are deposited at a depth of 10 m or more in riverbed areas with a fast current and pebble or stony soil. A week or more after fertilization, larvae emerge from the eggs. After spawning, breeders and young move to places of permanent residence. The largest body length is up to 1.0 - 1.2 m, weight is up to 16 kg.

In recent decades, its number has sharply decreased. The speice is enlisted to the Red Book of Ukraine, 1994, lists of Bern convention, IUCN, and European Red List.

Russian sturgeon. Migratory demersal fish which constantly live in the sea and for spawning moves into rivers. Spawning migrations twice a year: in autumn, depending on weather conditions, from August to January (reproduces the following spring) and in spring, usually from March to the beginning of April, sometimes from February to May to the beginning of June, at a water temperature of 6-11° C, en masse at 15° C (reproduction of the same year). Males reach sexual maturity at the age of 8 - 14 years with a length of more than 90 - 100 cm, females respectively at 10 - 17 years with a length of more than 105 - 110 cm. Spawning is from the end of April - the beginning of May to the middle of June at a water temperature of 11 - 22° C, at depths up to 16 m, at sections of the fundamental riverbed with a current speed (up to 1.5 m/s) and sandy-pebble, shelly, or stony soil. Fertility up to 800,000 eggs. Eggs are bottom, sticky, the development of the embryo in the eggs lasts up to 12 days. After reproduction, broodstock, and in general the young, move into salty waters to feed. The largest body length is more than 2 m, weight is more than 100 kg, life expectancy is more than 50 years.

In recent years, the number of the specie has been declining. The speice is enlisted to the third edition of the Red Book of Ukraine, 2004, IUCN, and, European Red List.

Starry sturgeon. A migratory demersal fish that constantly lives in the sea and enters the river twice a year to reproduce: in the autumn from the end of September to the end of

November (it reproduces in the spring of the following year), and in the spring, from March to the end of April to the beginning of May (it reproduces in the same year). It keeps alone or in small groups. Puberty of males occurs at the age of 5-14, mostly 9-12 years, females 7-17, mostly 7-14 years (when the body length of both sexes is more than 95-100 cm). Spawning from the end of April to the middle of June at a water temperature of 8 - 15 ° C and above, in deep areas of the fundamental riverbed with a fast current on hard, usually sandy-pebble, sandy-clay or stony soil. Fertility can exceed 360,000 eggs. Eggs are bottom, sticky, larvae emerge from it 1.8-4 days after fertilization. After the end of reproduction, broodstock, and later the young, move into the sea to feed. The largest body length is 220 cm, weight up to 80 kg.

In recent years, the number of the starry srurgeon has been declining. The speice is enlisted to the third edition of the Red Book of Ukraine, 2004, IUCN, and, European Red List.

Despite the low number of sturgeon species, the Danube remains a river where natural sturgeon spawning is observed.

3 ASSESSMENT OF THE ACTUAL IMPACT OF HYDROTECHNICAL WORKS

3.1.Impact on aquatic biological resources

When conducting dredging works in the operational water area of the river port (terminal) of NIBULON LLC within the water area of the Izmail sea port, the impact on the biotic and abiotic environment of the Danube River will be temporary.

The impact of dredging operations on mature individuals of fish is insignificant, as they can avoid areas with increased turbidity, chemical pollution, noise disturbances, etc. The planned works can have the most significant negative effect on hydrobionts, which serve as food objects for fish. The temporary effect of dredging will be manifested directly in the process of exavation soil during the operation of hydrotechnical means (Watermaster Classic IV and the self-propelled dredging vessel (dredge) SDS-15, the formation of suspension in the water column during the operation of the bucket (Watermaster Classic IV) near the berth. Increased man-made turbidity can lead to changes in thermal conductivity, optical properties of water, deterioration of the breathing conditions of hydrobionts, mechanical damage to their coverings, and can lead to the complete or partial death of pelagic and benthic forms of invertebrates. The damage caused to living water resources during the works will be due to the death of forage organisms for fish. As a result of complete destruction of benthic biocenoses in the area of dredging, partial silting of benthic communities in adjacent water areas, death of zooplankton in the zone of increased man-made turbidity, which is formed in the process of soil development.

An analysis of the mode of operational dredging of the Danube River in recent years has shown that the benthic communities affected areas remain sufficiently high. Previous studies have shown that dredging does not have a negative effect on bottom biocenoses of adjacent areas and their plankton complexes. The negative effect is expressed in the removal of benthic organisms together with the soil, but the species composition and partly the biomass of the zoobenthos in the areas, after the completion of the works, are restored after some time. The registered recovery rate of benthos communities after dredging works, according to available data of researchers [13], is: riverbed muddy soil – 6 months; lagoon muddy soil – up to 11 months; muddy soil-sand – 18 months; sand-gravel – 2 - 3 years. In the area with high variability of bottom precipitation, the effect of dredging operations was observed for a relatively short period of time. For example, full recovery of benthic communities in the channel and delta of the Wadden Sea near the coast of Netherlands occurred within one year of removal of bottom sediments in this movable sand area [14]. One of the factors that can have a direct impact on the state of fish stocks in the Danube section (within the river port (terminal) in Izmail) is dredging on the operational water area of the water body.

Carrying out dredging works with a further assessment of the impact on the state of fish stocks in the Danube River during the construction of a cargo berth will be considered from the destruction of forage organisms (plankton and benthos), as well as eggs and young fish in areas of the operational water area and areas of the spread of mud flow in the zone of increased turbidity.

Following the cautionary approach and taking into account the spatial limit of dredging works according to expert assessment of IFME, it is not expected stable negative ecological consequences for the Danube ichthyofauna species which live within the specific water area and are spread near the coast of Romania. In particular, it concerns species classified such as ones that need special attention and protection according to the Convention on the conservation of European wildlife and natural habitats (Bern, September 19, 1979), Convention on international trade in endangered species of wild fauna and flora (CITES), and also species mentioned in the European red list of freshwater fish. Respectively, planned works will not affect on the fish productivity and biodiversity of the local ichthyofauna.

In the context of the analysis of the impact of dredging works, information from the Romanian side was also taken into account regarding local species of hydrobionts (fish and invertebrates) that require special attention and protection, in accordance with the list of species living within the Romanian nature protection areas, which are elements of the all-European network "Natura 2000".

In particular, it is confirmed that there will be no permanent negative impact and any short-term impact outside the area where the dredging will take place, regarding species such as Alosa immaculata, Alosa tanaica, Aspius aspius, Cobitis taenia, Romanogobio albipinatus, Gobio kessleri, Gymnocephalus baloni, Gymnocephalus schraetzer, Misgurnus fossilis, Pelecus cultratus, Rhodeus sericeus amarus, Sabanejewia aurata, Umbra krameri, Zingel streber, Zingel zingel, Anisus vorticulus, Coenagrion ornatum, Graphoderus bilineatus, Ophiogomphus cecilia, Theodoxus transversalis.

3.1.1 Methodology for calculating damage due to the death of forage organisms

Dredging works are carried out according to the planned procedure, after obtaining appropriate permits and in compliance with the requirements of environmental protection legislation. In our case, dredging works are being considered with the possibility of working during the period of special ban during spawning on fishing in the Danube River (until June 5, 2022).

The "Temporary damage assessment method" will be used to assess fishery damage [15]. In connection with the fact that during the works the object of negative action is the forage base of fish, the amount of damage in natural value is calculated according to the formula:

$N = n_o \times P/B \times 1/K_2 \times K_3/100 \times F \times 10^{-6}$, (3.1)

where: N – value of damage due to the death of forage organisms, t;

F - volume, affected area, m^2, m^3;

P/B - coefficient for the conversion of the biomass of forage organisms into the products of forage organisms;

n_o – average concentration of forage organisms, g/m^3 of water;

K_2 - forage coefficient for the conversion of products of forage organisms into fish products;

K_3 – indicator of limited use of forage base by fish, %;

10^{-6} - multiplier for converting grams to tons.

According to the point 4 of the «Temporary damage assessment method» [15] cost value of damage at capital construction can be determined using calculation of capital investment on implementation of measures compensating for damage to fish stocks. The amount of the compensation payment for the damage is determined by the formula:

$$Ki = \sum_{i=1}^{n} (Mi \times Ki) \times En \times ti\ ,) \ , \quad (3.2)$$

where: Ki – specific capital investment to the objects of this type, ths. UAH;

Mi – capacity of its industrial return, in tons;

En – normative coefficient of economic efficiency of capital investments; the value of the normative coefficient of economic efficiency of capital investments for this object, determined volumes of necessary capital investments.

i – type of measure or object;

t_i – time of negative action on fish stocks.

Calculation of damage caused to aquatic biological resources.

Soil development in the water area of the river port (terminal) of NIBULON LLC on the Danube River is planned to be carried out using the dredging vessel Watermaster Classic IV(I stage) and self-propelled dredging vessel (dredge) SDS-15 (III, V stages) and with the transportation of excavated soil (pulp) using slurry pipelines to the coastal dump (see Appendix B).

During the dredging works, 112 000.00 m³ of soil will be removed at the operating water area of the river port of the NIBULON LLC on the Danube River for the construction of a cargo berth.

Work is carried out on an area of 1 ha up to the 4.0 m mark using a Watermaster Classic IV dredger with a pulp productivity of 600 m³/h. The ratio of soil: water is 1:5, so the amount of water that will be used for pulp formation is 50,000 m^3. When performing work with a self-propelled vessel of the SDS 15 project with a pulp productivity of 2400 m³/h, the ratio of soil: water is 1: 6 on an area of 2.2 ha up to the mark 7.32, the amount of water that will go to the formation of pulp is 318,000 m^3, and on an area of 2.32 ha up to the mark 8.23 is 162,000 m^3.

Thus, the total amount of water that will be used to form the pulp is equal to:

$$50000\ m^3 + 318000\ m^3 + 162000\ m^3 = 530000\ m^3$$

Dredging of the operational water area near the transshipment floating complex of the port will be carried out using a Watermaster Classic dredger with a bucket volume of 1 m³. The rise of the soil to the surface will cause increased turbidity in the water volume of 1840.0 m³ (shoreline length - 460 m, bottom mark - 4.0 m, bucket width - 1 m). In this volume of water, 100% death of planktonic forage organisms will occur.

During soil removal (dredging), work is performed on areas with an area of **23200.0 m²** (until the design depth of 8.23 m is reached). During the development of the soil on the area of 23200.0 m^2, 100% of the zoobenthos will die.

The duration of the works (not including the period of preparatory works and possible repair works) is 52 days, with the possibility of works during the ban during spawning until 05.06.2022 (estimated 18 days).

For creating calculation of damage, we use data from table 3.1.

Setting numerical values to the formula, we will get the value of the damage in natural value (52 days).

1. In water and oil mixture and on dredging area (operation of dredges).

Table 3.1 – Parameters of damage calculation, which affects the aquatic biological resources (fishery) by the development of soil of operational water area of river port (terminal) of NIBULON LLC, the Danube river, 2022

Groups of forage organisms	Average biomass, g/m^3 , g/m^2	P/B	K_3, %	K_2	Volume, affected area, m^2 , m^3
phytoplankton; 100% damage	0.524	2.0	30	30	530000
zooplankton; 100% damage	0.217	2.0	30	10	530000
zoobenthos; 100% damage	1.430	4.0	45	10	23200

N_1 (phytoplankton) = 0.524 x 2.0 x 1/30 x 30/100 x 530000,0 x 52/240 x 10^{-6} = 0.0012 t;

N_1 (zooplankton) = 0.217 x 2.0 x 1/10 x 30/100 x 530000.0 x 52/240 x 10^{-6} = 0.00150 t;

N_1 (benthos) = 1.430 x 4.0 x 1/10 x 45/100 x 1 x 23200.0 x 52/240 x 10-6 = 0.00129 t;

2. Turbidity near the berths (operation of bucket).

N_1 (phytoplankton) = 0.524 x 2.0 x 1/30 x 30/100 x 1840.0 x 52/240 x 10^{-6} = 0.000004t;

N_1 (zooplankton) = 0.217 x 2.0 x 1/10 x 30/100 x 1840.0 x 52/240 x 10^{-6} = 0.000005 t;

The damage in natural value, taking into account the period of restoration of planktonic and benthic communities, will be:

N_1 plankton = (0.0012 t + 0.00150 t + 0.000004 t + 0.000005 t) x 1.0 = 0.002709 t.

N_1 benthos = 0.00129 t x 2.0 = 0.00258 t.

Total N_1 development = 0.002709 t + 0.00258 t = 0.00529 t

At the *spawning period* (18 days). The estimated volume of extracted soil is 232632.0 m³ (takin into account 2154 m³/day and ratio of soil and water 1:6). Setting numerical values to the formula, we will get the value of the damage in natural value:

N_1 (phytoplankton) = 0.524 x 2.0 x 1/30 x 30/100 x 232632.0 x 18/240 x 10^{-6} = 0.00018 t;

N_1 (zooplankton) = 0.217 x 2.0 x 1/10 x 30/100 x 232632.0 x 18/240 x 10^{-6} = 0.00023 t;

N_1 (benthos) = 1.430 x 4.0 x 1/10 x 45/100 x 1 x 16200.0 x 18/240 x 10^{-6} = 0.00031 t;

2. Turbidity near the berths (operation of bucket).

N_1 (phytoplankton) = 0.524 x 2.0 x 1/30 x 30/100 x 3786.0 x 18/240 x 10^{-6} = 0.000003 t;

N_1 (zooplankton) = 0.217 x 2.0 x 1/10 x 30/100 x 3786.0 x 18/240 x 10^{-6} = 0.000004 t;

The damage in natural value, taking into account the period of restoration of planktonic and benthic communities, will be:

N_1 plankton = (0.00018 t + 0.00023 t + 0.000003 t + 0.000004 t) x 1.0 = 0.000417 t.

N_1 benthos = 0.00031 t x 2.0 = 0.00062 t.

Total N_1 development = 0.000417 t + 0.00062 t = 0.001037 t

During the operation of the bucket the integrity of the river soil is disturbed, the amount of which will enter a suspended state and will begin to spread downstream and deposit to the adjacent areas of the bottom of the water body.

As a result of the deposition of small particles, siltation will appear - an unfavorable factor for the life of forage organisms, which leads to the death of phytoplankton, zooplankton and zoobenthos.

The siltation area is calculated based on the size of the particles up to 0.05 mm, because their removal during the work will be maximum.

The distance of removal of suspended substance or the distance at which suspended solids will deposit to the bottom (the length of the turbidity plume) is determined by the formula:

$$L_p = \frac{h_{\max} \cdot V_{av}}{\omega_{av}}, \text{ m}$$

where: h_{max} – 4.0 m – the depth of dredging;

V_{av} = 0.50 m/s – average speed of current of the Danube river;

ω_{av} – 0.02889 m / s – the average hydraulic size of suspended substances that is determined according to the Building code B.2.4 - 1-99 (Appendix P recommended).

$$L_p = \frac{4.0 * 0.5}{0.02889} = 69.23\ m$$

Thus, the length of the turbidity plume is 69.23 m

The time of deposition of suspended substances is determined by relation:

$$T = \frac{L_p}{\omega_{av} * 3600}, hours$$

where: L_p -69.23 m – the length of the turbidity plume from the place of discharge of wastewater

ω_{av} – 0.02889 m/s – the average hydraulic size of suspended substances.

$$T = \frac{69.23}{0.02889 * 3600} = 1\ h$$

Thus, the time of deposition of the turbidity plume is 1 h

Calculation of the siltation area is carried out by formula:

$$F = \frac{B1 + B2}{2} * L\ (1)$$

(Typical technological scheme of extraction of sand, gravel, sand and gravel mixtures of the shipping rivers and other water bodies, M, Transport, 1980)

where: B_1 - initial flow width equal to the length of the initial mixing zone;

B_2 - the width of the water flow at a distance from the zone of initial mixing downstream to the calculated cross section;

L - the distance over which the particles will move.

The width of flow B_1 in the area of works is 1.0 m (bucket width). The estimated width of the flow B_2 is:

$B_2 = B_1 + 2 \times L \times tg13° = 1.0 + 2 \times 69.23 \times 0.23 = 32.84$ m

Actually, the width of flow B_2 will be smaller because from the left side the water flow with increased turbidity is limited by left bank curtailment. The siltation area is an isosceles trapezoid with height of 69.23 m. The width of upper (smaller) base of the trapezoid is 1.0 m, lower one – 32.84 m. While the length of reduction of flow B_2 will be:

$B_{reduction}$ = (32.84 m - 1.0 m) : 2 = 15.92 m

Thus, from the total area of siltation it is necessary to subtract area that is:

S = 15.92 m x 69.23 m : 2 = 551.07 m²

By substituting numerous values into formula 1, we will get the estimated siltation area:

F = (1.0 m + 32.84 m) : 2 x 69.23 m = 1171.37 m².

From the obtained value we need to subtract area which is limited by water curtailment and we will get the actual siltation area:

F_2 = 1171.37 m² – 551.07 m²= 620.3 m²

At the average depth of 4.0 m, the area of increased turbidity is 2481.2 m³(620.3 m² x 4.0 m).

N_2 (phytoplankton) = 0.524 x 2.0 x 1/30 x 0.3 x 2481.2 m³ x 52/240 x 10-6 = 0.000006t

N_2 (zooplankton) = 0.217 x 2.0 x 1/10 x 0.3 x 2481.2 m³ x 52/240 x 10-6 = 0.000007 t

N_2 (benthos) = 1.43g/m² x 4.0 x 1/10 x 45/100 x 620.3 m² x 52/240 x 10-6 = 0.000035 t

N_2 plankton = (0.00006 t + 0.00007 t) x 1.0 = 0.00013 t.

N_2 benthos = 0.00035 t x 2.0 = 0.00007 t.

Total N_2 siltation = 0.00013 t + 0.00007 t = 0.000083 t

During spawning period (18 days):

N_2 (phytoplankton) = 0.524 x 2.0 x 1/30 x 0.3 x 2481.2 m³ x 18/240 x 10^{-6} = 0.00002t

N_2 (zooplankton) = 0.217 x 2.0 x 1/10 x 0.3 x 2481.2 m³ x 18/240 x 10^{-6} = 0.00002 t

N_2 (benthos) = 1.43г/m² x 4.0 x 1/10 x 45/100 x 620.3 m² x 18/240 x 10^{-6} = 0.000012 t

N_2 plankton = (0.00002 t + 0.00002 t) x 1.0 = 0.00004 t.

N_2 benthos = 0.000012 t x 2.0 = 0.000024 t.

Total N_2 siltation = 0.00004 t + 0.000024 t = 0.000028 t

The total damage on the death of forage organisms during dredging works will be:

$\sum_N$ 52 days (benthos + plankton): 0.00529 t + 0.000083 t = 0.005373 t

$\sum_N$ 18 days (benthos + plankton): 0.001037 t + 0.000028 t = 0.001065 t

It is necessary to mention that this damage will be temporary.

3.1.2 Calculation of capital investments for the implementation of measures to prevent damage as a result of the death of forage organisms

According to point 4.2. [15], the adverse impact on fish stocks is not permanent, and its duration is shorter than the regulatory term for the total of capital investments. In this case, the amount of capital investments (K) is determined by formula:

$$К = \sum_{i=1}^{n} (M_i \times K_i) \times E_n \times t_i, \text{ where:}$$

M_i – capacity of industrial return, tones;

K_i – specific capital investments to the objects of this type (UAH per ton of industrial return);

E_n – normative coefficient of economic effectiveness of capital investments;

t_i – time of the negative impact on fish stocks (year).

The final damage assessment will be based on the death of forage organisms: 0.005373 t (total) and 0.001065 t (in the spawning period).

According to point 4 [15], the cost value of damage can be determined using calculation of capital investments for the implementation of measures that compensate the damage to fish stocks.

According to the calculations of the State institute of Ukraine for design of fisheries enterprises and industry Ukrrybproekt (point 6) the specific capital investments on 1 ton of raw fish reproduction of industrial returns at fish-farming objects-analogs are taken as "Fish farm of herbivorous fish of fish factory the 3-d determinative" of the VI zone of fishing – 548.73 ths. UAH. The coefficient of economic effectiveness – 0.18. As of 2022, specific capital investments per 1 ton of raw fish remained at the level of 2018. (Appendix D).

The expected amounts of compensation payments for the death of forage organisms in terms of cost value will amount to:

$К_1$ = 548.73 ths. UAH/t x 0.005373 t x 0.18 = 530.70UAH without VAT (total period of work).

$К_2$ = 548.73 ths. UAH/t x 0.001065 t x 0.18 = 105.19 UAH without VAT (during the spawning period of work).

Thus, during the implementation of hydrotechnical works (dredging) in the operational water area of the river port in Izmail, Odesa Region, on the Danube River in 2022 the compensation payments will be equal to:

- At the general period of work (52 days) – **530.70** UAH;
- At the spawning period of work (18 days - until 05.06.2022) – **105.19** UAH.

3.2 Deterioration of fish reproduction conditions

The operational water area of the river port (terminal) of NIBULON LLC in the city of Izmail (where dredging works will be carried out according to the plan) is a plot with a total area of 5.29 hectares and depths from 4.0 m to 8.23 m. In this section, the river's current speed is recorded up to 175 cm /s, which is the maximum for the lower Danube. In addition, the section of the water area of the river port is included in the territory with rich navigation and depths of 8.0 m and more.

If we consider the operational water area from the point of view of suitability for the reproduction of fish with a phytophilous type of reproduction (ram, bream, carp, crucian carp, etc.), then it is obvious that it (the dredging area) does not meet the requirements for spawning biotopes due to the presence of fast currents, depths, beyond the required limits, and the lack of sufficient aquatic vegetation. Spawning of phytophilic fish species takes place in warmed shallow water areas, in bays and creeks with a slow current and soft aquatic vegetation, which is a spawning substrate (eggs are deposited on aquatic vegetation and roots).

For fish that belong to the lithophilic type of reproduction, such as beluga, starry sturgeon, sturgeon, sterlet, etc., the hydrological conditions, which are formed in the areas of hydrotechnical works, are also not favorable. According to scientists, after feeding in the waters of the Black Sea, sturgeon species of fish enter the Danube, and pass through the territory of five countries during the period of spawning migration, going up far the river and ending their journey in the area of the Derdap hydroelectric power station dam - 2 (864 km of the Danube), below which the main spawning areas of these species are located on a short section of the river [16].

After spawning, adults of anadromous species (sturgeon) together with the young stay for some time in the spawning grounds, where they are fattened. After that, the breeders, together with this year's adult young, migrate to the Lower Danube, and then to the sea, where they continue to fatten near the mouth of the Danube [17, 18].

In the period of the predicted slide (gathering) (July - October) in the mouths of the Kiliya delta, there are 4 species of young sturgeon (sturgeon, starry sturgeon, beluga, sterlet, cocklefish, there are isolated cases of catching hybrids). In the catches of fry and small drift nets, juveniles of linear sizes from 13.0 cm to 29.0 cm are recorded: in bycatch of industrial fishing gear (32-50 mm mesh) - from 15 cm to 112 cm [19]. The ratio of the species composition and the number of juveniles of various species of sturgeon in the Ukrainian section of the Danube varies from year to year: sterlet - from 2% to 23%; belugas - from 3% to 83%, starry sturgeon - from 10% to 84%, sturgeon - from 3 to 33%.

According to the observations of Romanian scientists, young sturgeon species of fish during migration to feeding places stay close to the surface of the water, with a maximum depth limit of 3.2 m. This makes it possible to speed up and at the same time preserve or reduce the energy costs of movement as much as possible [18]. In this way, young sturgeons preserve the viability of the species, avoiding unnecessary possible injuries as much as possible.

The section of the river where hydrotechnical works are planned (91 km of the Danube) is at a great distance from the traditional natural spawning grounds of the sturgeon (864 km of the Danube), which were laid down by the ancestors of the sturgeon (864 km of the Danube), so the dredging water area and adjacent water areas are not suitable for spawning of wild species.

The area of hydrotechnical works is located on the migration path of young sturgeons. On this section of the Danube, the way to the sea is overcome by already viable individuals (linear dimensions from 13 cm and above), which are able to avoid places with unfavorable conditions. The work of dredging equipment will take place at a depth of 4 m, which, based on observations, is no longer used by modern fish to overcome regular movements to the sea coast.

Spawning of the herring (Danube Alosa) takes place in areas with weakly flowing or still but clean water and sandy or sandy-muddy soil. Eggs are deposited in the surface layers of water, its development takes place at the bottom, and lasts more than two days after fertilization. Juveniles are in estuarine areas in the summer and often stay there for the winter. The work area does not meet the hydrological conditions for the natural reproduction of Danube herring.

The hydrological conditions of the operating water area of the river port (terminal) of NIBULON LLC in the city of Izmail are unfavorable for the reproduction of fish of the Danube ichthyofauna (damages from the deterioration of reproduction conditions are not calculated), and the method of soil extraction (stacking in a coastal dump) minimizes the spread of silt flows and reduces the risk of negative impact on aquatic biota and spawning areas located outside the works.

3.2.1 Damage calculation method

According to the plan, the estimated volume of hydrotechnical works (dredging) on the Danube river will be 112000.0 m³.

According to the point 3.b of the «Temporary methods...»[15] the calculation of damage from the local deterioration of spawning, fish-growing or wintering conditions of fish is carried out according to the area method, by equating the affected areas to the area of complete loss of fish productivity according to the formula:

$N = n_o \times W_o \times (100 - K_o)/100 \times K_1/100 \times p \times 10^{-3}$ [15], where:

n_o – the average for the period in which this stage or weight category of the concentration of pelagic eggs, larvae, or early young fish occurs in the area affected by the works, in specimens per cubic meter;

W_o – volume of water affected by the negative impact during this period, m^3;

K_o – coefficient (percentage of death of the organisms), %;

K_1 – coefficient of industrial return, %;

p – average weight of specimen in the industrial takes, kg;

10^{-3} – multiplier for conversion kilograms into tones.

Based on the peculiarities of the hydrological and hydrochemical conditions of the southern part of the Danube in the water area of the river port of Izmail, Odesa region, the basis of ichthyoplankton is carp and herbivorous fish species, as well as herring [11, 18].

In the zone of influence of dredging works, the death rate of fish fry will be 100%, both for eggs and for early juveniles, in the area of increased turbidity, the death rate of fish eggs and fry will be 25%.

The following data were used when calculating the losses caused to the fishery from the death of ichthyoplankton organisms:

Coefficient of industrial return from eggs, %: carp and herbivorous – 0.01; the Black Sea migratory herring (Danube) – 0.001.

Coefficient of industrial return from larvae, %: carp and the Black Sea migratory herring (Danube) – 0.05; herbivorous – 0.01.

Coefficient of industrial return from juveniles, %: carp and herbivorous – 10.0; the Black Sea migratory herring (Danube) – 3.0.

Estimated volume – 531840.0 m³ (water and soil mixture - 530000.0 m³ and volume of turbidity - 1840 m³), where death of 100% of eggs and larvae will occur.

The daily production capacity of dredges will be about 2154 m³, during the spawning period (18 days) - 38772 m³. The total volume of the pulp will be equal to 232632m³ (1:6), the volume of turbidity - 1840 m³, the estimated volume - 234472.0 m³, where 100% death of fish eggs and larvae will occur.

The zone of increased turbidity is 2481.2 m³. In this volume, 25% of fish eggs and larvae will die.

By substituting the numerical values into the modified formula, we will get the value of the damage from the work carried out in natural calculation in terms of adult fish individuals (tables 3.2 and 3.3).

Table 3.2 – Expected losses of eggs and juveniles of fish during the general dredging of river port (terminal) of NIBULON LLC, Danube river, 2022

Fish species	Stage of development	Dead, %	Density, specimen /m^3	Industrial return, %	Volume of affection, m^3	N of dead fish, specimen	P Adult individuals, kg	Losses of fish products,t
Hydrotechnical works								
Carp	Larvae	100	0.01	0.0005	530000	0.027	4.000	0.00011
Bream	Larvae	100	0.1	0.002	530000	1.06	1.330	0.00141
Crucian carp	Larvae	100	23.0	0.004	530000	487.6	0.480	0.23405
Other	Larvae	100	0.3	0.0076	530000	12.084	0.300	0.00363
Perch	Larvae	100	0.01	0.001	530000	0.053	1.400	0.00007
Herring	egg	100	0.02	0.001	530000	0.106	0.200	0.00002
							Total	0.23929
Turbidity zone								
Carp	Larvae	25	0.01	0.0005	2481.2	0.00003	4.000	0.00000012
Bream	Larvae	25	0.1	0.002	2481.2	0.0012	1.330	0.00000160
Crucian	Larvae	25	23.0	0.004	2481.2	0.5707	0.480	0.00027394

carp								
Other	Larvae	25	0.3	0.0076	2481.2	0.0141	0.300	0.00000423
Perch	Larvae	25	0.01	0.001	2481.2	0.0001	1.400	0.00000014
Herring	egg	25	0.02	0.001	2481.2	0.0001	0.200	0.00000002
							Total	0.0002801
Total								0.2395701

Table 3.3 – Expected losses of eggs and juveniles of fish at the spawning period with dredging of river port (terminal) of NIBULON LLC, Danube river, 2022.

Fish species	Stage of development	Dead, %	Density, specimen /m^3	Industrial return, %	Volume of affection, m^3	N of dead fish, specimen	P Adult individuals, kg	Losses of fish products,t
Hydrotechnical works								
Carp	Larvae	100	0.01	0.0005	232632	0.012	4.000	0.00005
Bream	Larvae	100	0.1	0.002	232632	0.465	1.330	0.00062
Crucian carp	Larvae	100	23.0	0.004	232632	214.021	0.480	0.10273
Other	Larvae	100	0.3	0.0076	232632	5.304	0.300	0.00159
Perch	Larvae	100	0.01	0.001	232632	0.023	1.400	0.00003
Herring	egg	100	0.02	0.001	232632	0.047	0.200	0.00001
							Total	0.10503
Turbidity zone								
Carp	larvae	25	0.01	0.0005	2481.2	0.00003	4.000	0.00000012
Bream	larvae	25	0.1	0.002	2481.2	0.0012	1.330	0.0000016
Crucian carp	larvae	25	23.0	0.004	2481.2	0.5707	0.480	0.0002739
Other	larvae	25	0.3	0.0076	2481.2	0.0141	0.300	0.00000423
Perch	larvae	25	0.01	0.001	2481.2	0.0001	1.400	0.00000014
Herring	egg	25	0.02	0.001	2481.2	0.0001	0.200	0.00000002
							Total	0.0002801
Total								0.10531

3.2.2 Calculation of capital investments for the implementation of measures to prevent damage

According to point 4.2. [15], the adverse impact on fish stocks is not permanent, and its duration is less than the regulatory payback period for capital investments. In this case, the amount of capital investments (K) is determined by formula:

$$K = \sum_{i=1}^{n} (M_i \times K_i) \times E_n \times t_i, \text{ where:}$$

M_i – capacity of industrial return, tones;

K_i – specific capital investments to the objects of this type (UAH per ton of industrial return);

E_n – normative coefficient of economic effectiveness of capital investments;

t_i – time of the negative impact on fish stocks (year).

The final assessment of damage from the death of young fish is in the sum:

Σ_1 damage from deterioration of reproduction conditions during the *period of work* - 0.2395701 t

Σ_2 damage from deterioration of reproduction conditions during the *period of ban during spawning* - 0.10531 t

According to the calculations of the State institute of Ukraine for design of fisheries enterprises and industry Ukrrybproekt, the specific capital investments on 1 ton of raw fish reproduction of industrial returns at fish-farming objects-analogs are taken as "Fish farm of herbivorous fish of fish factory the 3-d determinative" of the VI zone of fishing – 548.73 ths. UAH at prices in 2022. The coefficient of economic effectiveness – 0.18.

Expected values of compensatory payments for the deterioration of reproduction conditions during the period of works in the form of cost value will be:

- at the general period K_1 = 548.73 ths. UAH/t x 0.2395701 t x 0.18 = 23662.67 UAH without VAT;
- At the spawning period K_1 = 548.73 ths. UAH/t x 0.10531 t x 0.18 = 10401.62 UAH without VAT

When hydrotechnical works are performed in the operational water area of the river port (terminal) of NIBULON LLC in Izmail on the Danube River in the spawning period of 2022 (until June 5, 2022), the compensation payment will be equal to UAH **105.19.** (due to the death of the forage base) and UAH **10401.62** (from the death of eggs and young fish), which will amount to UAH **10506.81**.

During the dredging operations, which are carried out *outside the ban during spawning period*, the final assessment of the loss is accepted according to the maximum amount from the estimated value [15] and will be carried out from the death of eggs and young fish - 0.2395701 t (death of forage organisms - 0.005373 t) and will be **23662.67** UAH.

Thus, if the works take over the period of the ban during spawning (until 05.06.2022), the amount of the compensation payment will consist of the loss from the death of eggs, larvae and forage organisms:

23662.67 UAH + 105.19 UAH = **23767.86** UAH.

4 RECOMMENDATIONS ON MINIMIZING WORK ACTIONS

The analysis of man-made impact on biological resources during the implementation of hydrotechnical works (dredging) in the operational water area of the river port in Izmail, Odesa region, on the Danube river and putting the soil to the coastal dump with the help of a suction pump through the pipeline shows the presence negative of effects on the water ecosystems of the Danube delta. The development of dredging soils, of course, have an impact on water ecosystems. First of all, the quality of river water is changed, albeit short-term, as a result of an increase in the content of suspended substances in the water, transferred from the bottom sediments into the water environment in the process of soil excavation. Therefore, the main parameters for the state of the changing water environment during dredging are the hydrochemical regime,conditions of living of aquatic organisms and redistribution of bottom sediments. The effect of dredging on the hydrochemical regime is determined by the chemical composition of the soils, the soil volume, which is developed. As a result of these processes, there can be secondary pollution of water masses with toxic pollutants, leading to a deterioration in water quality. Analysis of soil pollution level of dredging has shown that deterioration of water quality in the process of hydrotechnical works (dredging of water area during the construction of cargo berth), as a result of the introduction of toxicants into the river environment (heavy metals, oil products, chlor-organic compounds) will not be significant, in particular because the soils that are excavated, according to the Azov-Black Sea basin dredging soil classification, belong mainly to classes A - II.

Excessive slurry entering the water as a result of dredging is one of the main factors of negative impact on hydrobionts and the condition of recreational areas. The influence of slurry on hydrobionts is caused by purely mechanical reasons - clogging of fish gills, destruction of benthic animals and by other causes that lead to changes in the natural normal living conditions of biocenoses. The decrease transparency of water as a result of the turbidity of water leads to a decrease in the level of primary products. The introduction of suspensions into water objects at insignificant distances from recreational areas can lead to a decrease in water quality and natural bottom sediments (silting of sandy beaches). The shape of the suspension cloud, its size and the period of viability mainly depend on the hydrological regime of the researched water body.

Hydrodynamic conditions, in turn, depend on wind activity, shoreline ruggedness and bottom topography. Rapid change of synoptic situations, can several times change the speed of the current during the period of dredging. Therefore, the spread of the suspension cloud from working suction pumps is probable at any distance.

The impact of operational dredging on biological resources occurs both directly through the destruction of the biocenosis in the dredged area and indirectly through an increase in the turbidity of bottom sediments in the area adjacent to the dredged territory in the water area. As a

result, there is a siltation of benthic organisms, simultaneously with decrease of transparency and increase of content of suspended substances in the water environment, there is death of forage organisms for fish, and also for a short period of time, the development of phytoplankton in the area of carrying out works is stopped. Certainly, the effects of dredging on benthic organisms can be felt for more than a year.

For benthos and plankton in the siltation area, the negative impact is limited to the timing of the works. Studies have shown that during the observance of technological regulations of dredging, intensive restoration processes of the benthic community are taking place within a year.

Thus, realization of dredging leads to change of place of existence of hydrobionts, violation of conditions of reproduction of ichthyofauna, occurrence of barriers on ways of migration of organisms, elimination or restriction of their forage base. A set of measures to ensure the regulatory state of the environment during the process of development of dredging of water areas should include preparatory, protective, compensation and security measures.

Preparatory measures:

– the optimal choice of technical means for carrying out dredging;

– It is recommended to carry out works in water areas where soils belong mainly to the first, second or third group of soil development difficulty, involving the shore dump for the collection of extracted soil, which reduces the siltation of the water area and undoubtedly reduces the pressure on the ecosystem of the water body;

The protective measures include the following organizational and technical measures provided for at the design stage:

– conducting of dredging works in strict accordance with safety rules in construction. Rules of safety and industrial sanitation during the implementation of dredging works performed by the technical fleet;

– before the implementation of dredging works, carrying out of trawling or diving examination of the deep areas, with the purpose of revealing explosive objects, interference, which can cause damage of technical means and as a result, threat to life and health of personnel;

– during detection of explosive objects on the site of dredging works, the emission from the soil of harmful gases to the human body, works are immediately stopped to eliminate sources of danger and obtain permission of the relevant bodies;

– the strict implementation of measures on environmental protection, to prevent pollution of the water surface with fuel and oil materials;

– to reduce soil erosion and expansion of the area of spreading suspension, the dredging work are immediately stopped in the period of adverse weather conditions.

Compensatory measures include monetary compensation for the environmental damage

caused to aquatic living resources, as a result of the deterioration of the conditions of fish-growing period and reproduction.

Security measures.

In order to reduce the negative impact of dredging works on the state of biological resources on the operational water area of the river port in Izmail, the Danube, and taking into account the biology of the main industrial objects, ways and terms of their migration to places of spawning, in order to minimize the negative impact of economic activity on the state of the biological resources of the Danube basin - to limit the performance of hydrotechnical works during the period of mass spawning of the main industrial fish to the necessary minimum.

In case of urgent need to carry out hydrotechnical works during prohibited spawning periods the works are carried out in accordance with the Scientific and Biological Substantiation "Assessment of the impact of hydrotechnical works on the state of fish stocks of the Danube River during construction of the cargo berth with operational water area of the river port in Izmail, Odesa region (during spawning)" after agreement with the State Agency of Meliorations and Fisheries of Ukraine. Final impact of the dredging action on the ecosystem state is determined by the implementation of the integrated monitoring of the hydrotechnical works.

CONCLUSIONS

The cargo berth of the River port (terminal) of NIBULON LLC is building within the water area of the SEAPORT of Izmail.

Considering the location of the planned activities and following the provisions of Resolution № 552 of the Cabinet of Ministers of Ukraine dated 22 May 1996 "On Approval of the List of Industrial Areas of Fishery water objects (their parts)", this territory, as a hydrotechnical facility and a place of intensive navigation (ports, navigable waterway) is not an industrial area of the Danube basin.

Scientific and biological substantiation for the solving the issue regarding implementation of hydrotechnical (dredging) works in the operational water area of the river port (terminal) of NIBULON LLC in Izmail on the Danube River with the possibility to work during the ban during spawning up to 05.06.2022 is developing under the Contract № 243-V-FDL-21 dated 17.09.2021 by order of NIBULON LLC. The estimated dredging volume to a depth of 8.23 m in 2022 will be 112000.00 m^3.

The removed soil will be transported by slurry pumping using suction pump through pipelines to the coastal dump. The coastal dump area is 1.24 ha, the perimeter is surrounded by a dam with 2.5 m high, within its boundaries are formed alluvium maps with a discharge pipe Ø 200 m for the discharge of clarified water and a drainage ditch along the barrier dam with a depth of 0.5 m and a bottom width of 1.0 m for the discharge of water that was filtered through the embankment dam. The soil dumping technology excludes the negative impact on the biological resources of the Danube river.

The total term of the dredging is 52 days, the possible period of work in the period of ban during spawning until 05.06.2022 is about 18 days.

The expected dredging volumes during the state ban on fishing in the Danube during the spawning season of 2022 will be about 2154.00 m^3 per day (works of suction pumps and the floating grab crane which will be used for soil cleaning).

There are bans on industrial and amateur fishing of water bioresources in connection with spawning in the Danube from 22 April to 05 June (the ban does not apply to the special herring fishery).

The purpose of this development is to assess the impact of hydrotechnical works on the state of fishery stocks in the Danube during the construction of a cargo berth with a river port operational water area in Izmail, Odesa region and with calculation the cost of compensatory measures to the fishing industry.

The impact of hydrotechnical works (dredging) on the water environment can be seen in the direct destruction of the biocoenosis in the deep waters. In nearby (silted) water areas expected to partially death of zoobenthos from siltation, decrease of biomass of phytoplankton

and zooplankton from increased turbidity of water and decrease of transparency of water. Probability of getting in the water environment of polluting substances as a result of desorption of them from the surface layer of bottom sediments being developed.

The damage caused to the living water resources of the Danube River during the works (with the possibility of works during the period of the ban during spawning until 05.06.2022) will be caused by death of forage organisms as a result of complete destruction of bottom biocoenosis in the dredged area; partial siltation of benthic communities on adjacent water areas; death of phyto- and zooplankton in the zone of increased technogenic turbidity, which is formed in the process of soil development and deterioration of reproduction conditions for some spawning fish populations.

Research conducted earlier showed that along with the dredging works (on adjacent and neighboring areas) benthic and pelagic biocenoses do not have a negative impact. The death of the bottom invertebrates occurs on the areas of deepening from their damage as a result of mechanical influence. However, after completion of dredging works, benthic biocenoses are restored depending on the quality formation of biocenoses at the sites.

Following the cautionary approach and taking into account the spatial limit of dredging works according to expert assessment of IFME, it is not expected stable negative ecological consequences for the Danube ichthyofauna species which live within the specific water area and are spread near the coast of Romania. In particular, it concerns species classified such as ones that need special attention and protection according to the Convention on the conservation of European wildlife and natural habitats (Bern, September 19, 1979), Convention on international trade in endangered species of wild fauna and flora (CITES), and also species mentioned in the European red list of freshwater fish. Respectively, planned works will not affect on the fish productivity and biodiversity of the local ichthyofauna.

In the context of the analysis of the impact of dredging works, information from the Romanian side was also taken into account regarding local species of hydrobionts (fish and invertebrates) that require special attention and protection, in accordance with the list of species living within the Romanian nature protection areas, which are elements of the all-European network "Natura 2000".

In particular, it is confirmed that there will be no permanent negative impact and any short-term impact outside the area where the dredging will take place, regarding species such as Alosa immaculata, Alosa tanaica, Aspius aspius, Cobitis taenia, Romanogobio albipinatus, Gobio kessleri, Gymnocephalus baloni, Gymnocephalus schraetzer, Misgurnus fossilis, Pelecus cultratus, Rhodeus sericeus amarus, Sabanejewia aurata, Umbra krameri, Zingel streber, Zingel zingel, Anisus vorticulus, Coenagrion ornatum, Graphoderus bilineatus, Ophiogomphus cecilia, Theodoxus transversalis.

The damage affecting the aquatic living resources during operational dredging was

calculated according to the "Temporary damage assessment method.... [15], which is recommended for use by the Ministry of Environmental Protection and Natural Resources of Ukraine.

Preliminary calculation value of compensation payment for influence on the aquatic biological resources of the Danube river at carrying out of hydrotechnical works (dredging works) during construction of cargo berth on the river port water area in Izmail of Odesa region will be **23662.67** UAH (outside of ban during spawning – after 05.06.2022).

If dredging works are carried out during the period of ban during spawning (until 05.06.2022), the cost of the compensation payment will be **23767.86** UAH (deterioration of fish reproduction and fish-growing conditions).

Hydrotechnical works (dredging) can be carried out only in accordance with the requirements envisaged by measures for preservation of the normative state of the environment.

Carrying out of hydrotechnical works (dredging) leads to change of living conditions of hydrobionts, violation of conditions of reproduction of ichthyofauna, occurrence of interference on ways of migration of organisms, elimination or restriction of their forage base and conditions of reproduction. In order to preserve the normative state of the environment, in particular the plant and animal world, it is envisaged a set of measures, which are listed above.

The sound pressure level during operation of the self-propelled dredging vessel and or a floating crane at the dredging section of the river port in Izmail on the Danube river meets the standard for settlement zones in the daytime (38.0 dBA), and in the evening - much lower.

Thus, in compliance with the requirements provided by this scientific-biological substantiation, the planned activities, considering the expected impacts on the water biological resources, are designed with an acceptable level of environmental risk, taking into account a set of measures respecting the normative state of the natural environment and fishery protection measures.

To assess the actual impact and determine the residual effect of the work it is advisable to accompany with specialized scientific ecological monitoring with compensation of the corrected losses in accordance with the current legislation of Ukraine.

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Appendix A

Data for performance of work:

The planned activity involves the new construction of hydrotechnical structures of the Port (operational water area with an approach channel) on an area of 5.29 hectares in the developed part of the water area of the Danube River, which is located along the shipping channel "Vylkove - Izmail Ceatal" from 91.09 to 91.55 km and belongs to the water area of the Izmail seaport (Resolution of the CMU dated October 07, 2009 No. 1208 "Boundaries of the water area of the Izmail seaport").

Appendix B

Appendix C

ДЕРЖАВНЕ АГЕНТСТВО
МЕЛІОРАЦІЇ ТА РИБНОГО ГОСПОДАРСТВА УКРАЇНИ

ЧОРНОМОРСЬКЕ БАСЕЙНОВЕ УПРАВЛІННЯ ДЕРЖАВНОГО АГЕНТСТВА МЕЛІОРАЦІЇ ТА РИБНОГО ГОСПОДАРСТВА (ЧОРНОМОРСЬКИЙ РИБООХОРОННИЙ ПАТРУЛЬ)

НАКАЗ

від 14.04.2022 р. Одеса № 152

Про встановлення заборони вилову водних біоресурсів у зв'язку з їх нерестом на водних об'єктах підконтрольних Чорноморському рибоохоронному патрулю у 2022 році

На підставі статті 10 Закону України «Про рибне господарство, промислове рибальство та охорону водних біоресурсів», статті 38 Закону України «Про тваринний світ», відповідно до пунктів 8.1, 11.1.6, 11.2.3, 11.2.5, 11.2.6, 11.5, 14.7.6 та 14.7.8 Правил промислового рибальства в басейні Чорного моря, пунктів 3.14, 4.4, 4.14.1 Правил любительського і спортивного рибальства, Положення про Чорноморське басейнове управління Державного агентства меліорації та рибного господарства, затвердженого наказом Державного агентства рибного господарства України від 15.07.2016 №229 (зі змінами), враховуючи рекомендації ДП «ОдЦ ПівденНІРО» від 30.03.2022 №20/3 та від 05.04.2022 №23/3, з метою створення оптимальних умов відтворення водних біоресурсів,

НАКАЗУЮ:

1. Встановити заборону на промисловий та любительський вилов водних біоресурсів у зв'язку з їх нерестом на водних об'єктах підконтрольних Чорноморському басейновому управлінню Державного агентства меліорації та рибного господарства (далі - Чорноморський рибоохоронний патруль) в наступні терміни:

- у Дністровському лимані - з **15 квітня по 31 липня** (заборона не поширюється на спеціалізований промисел оселедця);
- у Шаболатському лимані (відносно срібного карася, який мігрує з Дністровського лиману) – **з 15 квітня по 15 червня;**
- у Кучурганському водосховищі - з **15 квітня по 15 червня**;

- у р. Дунай - **з 22 квітня по 05 червня** (заборона не поширюється на спеціалізований промисел оселедця);

- у придунайських озерах: оз. Ялпуг - Кугурлуй, оз. Кагул та озері Сасик **- з 15 квітня по 15 червня**;

- у Хаджибейському лимані **- з 15 квітня по 15 червня;**

- у верхній частині Каланчацького лиману відносно прісноводних видів риб з 15 квітня по 14 липня.

2. На період нересту риби заборонити:

- пересування будь-яких плавзасобів у заборонених для рибальства зонах (за винятком установлених судових ходів), а на ділянках, які оголошені нерестовищами - усіх плавзасобів, крім суден спеціально уповноважених органів, які здійснюють охорону водних біоресурсів;

- проводити у рибогосподарських водних об'єктах та в прибережних захисних смугах днопоглиблювальні, вибухові, бурові, сейсмологічні роботи, видобуток гравію та піщано - ракушкової суміші, проводити забір води без ефективних рибозахисних пристроїв.

- організацію змагань з рибальства та підводного полювання.

3. В нерестовий заборонений період, дозволити любительське рибальство з берега однією поплавковою або донною вудкою з одним гачком і спінінгом, на ділянках водойм зазначених у Переліку місць, визначених для любительського рибальства у період заборони вилову водних біоресурсів у зв'язку з їх нерестом на водних об'єктах підконтрольних Чорноморському рибоохоронному патрулю у 2022 році (додаток 1).

4. Користувачам водних біоресурсів, які здійснюють промисловий вилов водних біоресурсів в зоні контролю Чорноморського рибоохоронного патруля зняти з промислу знаряддя лову, заборонені для використання в місцях та у терміни, визначені пунктом 1 цього наказу.

5. Відділу іхтіології та регулювання рибальства Чорноморського рибоохоронного патруля:

- надавати щомісячну інформацію до 1 числа місяця наступного за звітним до Держрибагентства про хід нересту водних біоресурсів;

- довести зазначений наказ до відома користувачів водних біоресурсів, населення, підприємства, установи, організації, а також місцеві адміністрації про встановлення заборони на вилов водних біоресурсів шляхом розміщення інформації в засобах масової інформації та на офіційному сайті Чорноморського рибоохоронного патруля.

6. Керівникам відділів рибоохоронних патрулів №1,2,3,4 посилити охорону ділянок нерестовищ та контроль за ходом нересту риби шляхом проведення спільних рибоохоронних рейдів із залученням контролюючих органів, згідно планів спільних заходів.

7. Контроль за виконанням цього наказу залишаю за собою.

Т.в.о. начальника Чорноморського рибоохоронного патруля — Сергій ЧЕРНЯВСЬКИЙ

Додаток 1
до наказу Чорноморського рибоохоронного патруля
від «14» 04 2022 № 122

Перелік
місць, визначених для любительського рибальства у період заборони вилову водних біоресурсів у зв'язку з їх нерестом на водних об'єктах підконтрольних Чорноморському басейновому управлінню Державного агентства меліорації та рибного господарства у 2022 році

№ з/п	Назва водойми	Місце розташування ділянки
1	Дністровський лиман	Ділянка в межах м. Овідіополь – від пасажирського причалу в сторону с. Роксолани протяжністю 1,5 км
2		Ділянка в м. Білгород-Дністровський – розташована на правому березі Дністровського лиману з 1-го міського причалу в сторону с. Залиман довжиною 4 км по берегу
3	Річка Дунай	Затон Базарчук
4		Піщаний канал (ПМК-овський канал)
5		Білгородський канал в межах міста Вилкове
6		30-метрова прибережна смуга річки Дунай в межах м. Вилкове
7		75-77 км
8		96-97 км
9		103-105 км
10	Хаджибейський лиман	Від трамвайної зупинки в сторону очисних споруд протяжністю 200 м (для пільгової категорії громадян)
11		По лівій стороні лиману від північного краю с. Черняховське на протязі 1 км в сторону с. Маринівка

Appendix D

ДЕРЖАВНЕ АГЕНТСТВО РИБНОГО ГОСПОДАРСТВА УКРАЇНИ
УКРАЇНСЬКИЙ ДЕРЖАВНИЙ ІНСТИТУТ
ПО ПРОЕКТУВАННЮ ПІДПРИЄМСТВ РИБНОГО ГОСПОДАРСТВА ТА ПРОМИСЛОВОСТІ
«УКРРИБПРОЕКТ»

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в АТ «Фортуна-банк»,
в АТ «Фортуна-банк»,
МФО 380904, ЄДРПОУ 00468177.

18.12.2018 № 01/152

Голові Державного Агентства рибного господарства України (Держрибагентство України)
Бєлову Я.С.
Вул. Артема, 45 а, м. Київ, 04053
Тел./факс: (044) 272 20 32

Щодо надання інформації

Повідомляємо, що питомі капіталовкладення на 1 т риби-сирцю промповернення в цінах станом на 01.10.2018 року (без ПДВ) за проектами-аналогами становлять:

1. «Выростное хозяйство по выращиванию молоди частиковых рыб в Голопристанском районе Херсонской области» VI зона рибництва становлять – 467,30 тис. грн.;
2. «Рыбопитомник озерно-товарного хазяйства на водохранилище Днепро-Брагинском в Лоевском районе Гомельской области» III зона рибництва становлять – 636,30 тис. грн. Коефіцієнт економічної ефективності капіталовкладень – 0,06;
3. «Каневский рыбопитомник Черкасской области» IV зона рибництва становлять – 310,88 тис. грн. Коефіцієнт економічної ефективності капіталовкладень – 0,12;
4. «Рыбопитомник для зарыбления водохранилища им. Ленина в Новомосковском районе» V зона рибництва становлять – 806,39 тис. грн. Коефіцієнт економічної ефективності капіталовкладень – 0,12;
5. «Рыбопитомник для зарыбления Каховского водохранилища» VI зона рибництва становлять – 879,76 тис. грн. Коефіцієнт економічної ефективності капіталовкладень – 0,2;
6. «Рыбопитомник растительноядных риб рыбозавода «3й Решающий» VI зона рибництва становлять – 548,73 тис. грн. Коефіцієнт економічної ефективності

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капіталовкладень – 0,48 (0,18 з обліком благозасвоєння);

7. «Рыбопитомник по воспроизводству растительноядных рыб и карпа в Очаковском районе Николаевской области» VI зона рибництва становлять – 644,02 тис. грн. Коефіцієнт економічної ефективності капіталовкладень – 0,22;

8. «Морской нефтеперевалочный комплекс в районе г. Одессы» V зона рибництва становлять – 938,18 тис. грн. Коефіцієнт економічної ефективності – 0,16;

9. «Рыбоводный комплекс по выращиванию кефали-пелегаса» V зона рибництва становлять – 550,51 тис. грн. Коефіцієнт економічної ефективності – 0,18.

Питомі капіталовкладення на 1 т риби-сирцю промповернення станом на 01.10.2018 р. визначені з урахуванням додатку до листа Мінрегіонбуду України від 17.10.2018 № 7/15.3/10900-18 (відповідно до збірника "Ціноутворення в будівництві" Інституту "Інпроект, Київ, 2018, випуск 11).

Директор М. Д. Левченко

Comments and suggestions of the Romanian side	Answers and links to the EIA Report
The Notification mentions dredging works for obtaining the depths of 8,23 m in the future port/terminal in Izmail at the operating front, as well as a length of 460 m (between 91,09 to 91,55 river km) on a width of 115 m (page 3) which implies a volume of 112.000 m^3 of dredging material. On the other hand, the EIA documentation includes the following information: - At point 1.1 (page 9, penultimate paragraph) it is mentioned the fact that "the specified section of the Danube River water area stretches along the shipping channel "Vylkove - Izmail Ceatal" from 91,09 km to 91,55 km with a width from the boundary of the shipping channel to the left bank"; - At point 1.3/Construction works/ Stage V (page 13, last paragraph) it is mentioned that "dredging to a depth of 8,23 m from "0" of the Izmail port - if necessary, related to carrying out of dredging works by Ukraine on the shipping channel "Vylkove - Izmail Ceatal" on reaching its project depth of 8,23 m from "0" of the Izmail port, which was approved by the resolution of the Cabinet of Ministers of Ukraine of February 9, 2022 N 136 [28]." - At point 1.3.2. /Dredging works (...) (page 16 first and second paragraphs) it is mentioned that channel "Vylkove - Izmail Ceatal", in accordance with the resolution of the Cabinet of Ministers of Ukraine of February 9, 2022 N 136 [28] is an inland waterway of Ukraine with the approved design dimensions: length 95,445 km, width 120 m and depth 8,23 m.	The information is confirmed In the Report, the project decisions regarding the construction of buildings and structures of the operational water area of the future port/terminal in the city of Izmail correspond to the intentions published in the Notification of Planned Activities. The EIA report (subsection 1.1, subsection 1.3, subsection 1.3.2) specifies information on the location of the operational water area and its spatial characteristics, including successive reaching of its depths. The characteristics of the shipping channel Vylkove - Izmail Ceatal, along which the water area of is located (chapter 1.3.2. of the report), are given for reference

As a general context, we would also like to point out that the navigation on Danube is regulated by the Convention regarding the regime of navigation on the Danube (Belgrade Convention, 1948) to which both Romania and Ukraine are Parties. According to articles 20 and 22 of the Belgrade Convention, in 1953, an agreement was signed between the Governments of People's Republic of Romania and U.R.S.S. for the foundation of the Danube River Special Administration for performing hydrotechnical works for maintaining the navigable channel and regulating the navigation on the maritime sector of Danube (Braila-Sulina), composed of representatives of both states. In 1957, Moscow made a Bilateral Agreement between governments of R.P.R and U.R.S.S., based on which a protocol was signed to give the functions and commodities of the Danube River Special Administration to the Romanian Party, starting with 1 July 1957. Based on the above-mentioned agreements and in order to achieve the provisions of articles 3, 20, 23 and 31 of the Belgrade Convention, Romania founded a juridical person having the statute of autonomous regia, with headquarters in Galati, named Lower Danube River Administration Galati**,** organized and regulated according to Government Decision no. 492/2003. According to article 2 of GD no. 492/2003, the Lower Danube River Administration is the authority for waterways on the Romanian sector of Danube from the entrance in the country to km 1075 at the exit to Black Sea, on Sulina Arm, in road Sulina *(rada Sulina)*, on Danube's navigable arms, Borcea, Bala, Macin, Valciu, Caleia, on Chilia Arm with secondary arms, on Sfantul Gheorghe Arm with rectification channels and secondary arms of Sulina Channel, called Old Danube. Also, according to article 5 of GD no. 492/2003, the Lower Danube River Administration has responsibilities, in accordance with Belgrade Convention, both for the execution of hydrotechnical work and for the regulation of navigation. 1) According to article 2 of the Belgrade Convention, "the regime established by this Convention shall apply to the navigable part of the Danube River between Ulm and the Black Sea through the Sulina arm, with outlet to the sea through the Sulina channel."	<u>The information is noted and immediately implemented</u> References made by the Romanian side to the current international norms governing navigation on the Danube River have been carefully studied and accepted for undisputed implementation in the course of the planned activities, in particular, in the implementation of hydraulic engineering works and the development of operational documents for the regulation of navigation.

2) Also, according to article 3.05 **"**The gauge of vessels" from the Regulation on navigation on Danube on the Romanian sector - edition 2013 (RND), part II Special rules for navigation on the Danube sector from road Sulina ***(****rodo Sulina)* and Braila port (km 175): "1. On the maritime sector of Low Danube from Braila to road Sulina *(rada Sulina*), under normal conditions, all maritime vessels and river-maritime vessels will navigate with a draught in freshwater of 23 feet, which is 7.01 meters. The situation of depths will be communicated daily on a radio channel with national coverage which will be communicated to navigators through a notice to navigators. 2. On this sector the navigation is allowed, under normal conditions, for vessels with a maximum length of 180 m and floating construction with a maximum width of 40 m. 3. In some situations, considering the Danube water level, the Administration can: a) order the reduction or can approve to exceed the draughts provided by point 1; b) approve the navigation of vessels with a length greater than 180 m, but no more than 225 m; c) approve the navigation of floating construction with a width greater than 40 m, when the hydrometeorological condition allow for that." We point out that RND is based on the Fundamental Dispositions for Navigation on Danube River (DFND) adopted by the Danube Commission in 2010 and was approved by Order of ministry no. 859/2013. Keeping in mind the above information, the mouth and Sulina Channel, the main access way from Danube to Black Sea, with a navigable depth of 24 feet (7,32 m) assures, at present, on its entire route, with a length of 62,6 km, the navigation of maritime vessels with a capacity of no more than 25000 tdw.	
From the point of view of safety of navigation**,** for the normal development of the naval traffic, the carrying out of transports on the water, the physical integrity of the navigation personnel, passengers and cargoes, we inform you that the depths of 8.23 meters, planned to be carried out by dredging operations according to the project, are much higher than the draught of 23 feet (7.01 meters) allowed	<u>The information is included in the Environmental Impact Assessment Report.</u> NIBULON LLC fully agrees that dredging in one part of the Danube River, without general measures, will not have the necessary final effect and will only cause additional costs for individual business entities.

at the Sulina bar *(Bara Sulina)* according to art. 3.05 Cap. 3 second Part of the Regulation of navigation on the Danube in the Romanian sector. In conclusion, the ships which will be loaded at Izmail port will not be able to benefit from the depth obtained from the dredging of 8.23 meters, due to restrictions at Sulina bar *(Bara Sulina).*	Therefore, in this project, regular dredging works are planned in the operational water area of the port (terminal) of the NIBULON LLC with a limit of operating depths of 7.32 m from "0" of the Izmail Sea Port for the navigation of sea vessels from 7.01 m, which corresponds to the Recommendations of the Danube Commission and navigation depths, provided by the Lower Danube River Administration in Galati. The final stage of dredging works to reach the bottom mark of 8.23 m from the "0" of the Izmail Sea Port is postponed until the adoption of an intergovernmental agreed decision on the need to carry out relevant dredging works on the Vylkove - Izmail Ceatal shipping channel and their readiness from the point of view of the completeness of scientific justification, comprehensive study and development of nature protection and protective measures. The relevant information is provided in the Environmental Impact Assessment Report, which was submitted to the Romanian side for consideration (chapter 1.3.2. of the report).
Moreover, regarding the proposed project, since the Ukrainian Party intends to create depths of 8.23 m at the operating berths in the port of Izmail, we consider that it is not opportune to create this port with different depths than Sulina Channel and/or Chilia Arm and Bastroe, because the ships that will operate in Izmail port, if they will enter Sulina Arm and will navigate on the route Sulina Channel, Tulcea Arm, Izmail Ceatal, then Chilia Arm up to Izmail or directly through/to Bastroe, will need this depth of 8.23 m throughout the entire crossed sector. This situation is in contradiction with what is currently going on in this segment between Bara Sulina - Sulina Channel - Tulcea Arm - Ceatal Izmail, since, in compliance with the Danube Commission Recommendations, the Lower Danube River Administration Galati provides depths of 7.32 m for the navigation of maritime vessels with draughts of 7.01 m. Currently the navigation depths provided by the Lower Danube River Administration Galati are in accordance with the navigation gauges for which the Sulina Channel was designed, the present situation being directly proportional to the existing geomorphological conditions, the infrastructure of the banks and the port on this segment, between Bara Sulina and Ceatal Izmail. In the situation desired to be obtained with this project, which is to ensure	<u>The information is included in the Environmental Impact Assessment Report.</u> The planned activity does not envisage dredging up to the mark 8.23 from "0" of the Izmail Sea Port before the state of Ukraine carries out dredging works on the Vylkove - Izmail Ceatal shipping channel upon reaching its design depth of 8.23 m from the "0" of Izmail Sea Port, which was approved by the resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 No. 136. NIBULON does not intend to transfer to itself the functions of the state regarding the deepening of navigable waterways for public use. The implementation of the planned activity is foreseen at the expense of private investments and has a very local character - a new construction of a river port (terminal) on an area of 19.7 hectares with hydrotechnical structures (operational water area with an approach channel) located along the Vylkove - Izmail Ceatal shipping channel from 91.09 to 91.55 km wide from the border of the channel to the left bank (area 10.4357 hectares). The project depth of the hydrotechnical facilities of the port (terminal) of NIBULON LLC is 8.23 m from «0» of the Izmail Sea Port, adopted in accordance with the design depth

depths of 8.23 m in the berths of the port of Izmail, we consider that this cannot be achieved on the above-mentioned segment, namely from Bara Sulina to Ceatal Izmail, both from the geomorphological point of view, the criteria of current design, financial resources, existing equipment, as well as the fact that it is not necessary from the point of view of the Administration, which must ensure a depth of 7.32 m, according to the Recommendations of the Danube Commission, especially since this is the depth for which the Romanian upstream ports were projected. At the same time, the dredging of the whole lenght of Chilia Arm between the Black Sea and Izmail Port, following Bastroe Channel, for the depth of 8,23 m, would mandatory require the development of studies aiming to assess the direct and indirect effects on the shores, since we would like to point out the fact that there are sectors where the dredging will be performed on the frontier line, which mean that the Romanian shores might be affected. We would like to add that the depth in Sulina Arm and Sulina mouth depend directly on the Danube sediments supply. The bigger the Danube waters are, the more intense the alluvial depositing process is, and they influence the diminishing of the water depth. The more intense the dredging works are, the bigger the depths in channel are and vice- versa, which imply that the dredging is done during the year with a temporal delay from the regime of the Danube alluvial deposits.	of the shipping channel "Vylkove - Izmail Chatal " (Resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 N 136 with the clarification "the depth has not been reached in "due to non-completion of construction works under the project"), but the need to reach the project depth depends on the adoption of an intergovernmental agreed decision on the need to carry out appropriate dredging works on the Vylkove - Izmail Ceatal shipping channel and their readiness in terms of the completeness of scientific justification, comprehensive study and development of environmental protection and protective measures. A more detailed description of the dredging technology is provided in subsection 1.3.1 of this Report and Drawing 3. The information has been noted
Therefore, it is necessary that the following aspects of the project are analyzed: - Hydromorphological aspects: the speed variation of the water draft in more sections of the sector Sulina mouth, Sulina Channel, Tulcea Arm, Ceatal Izmail, followed by Chilia Arm up to Izmail and the influence on the hydrotechnical works existing on this sector, in the situation the dredging works from 7,32 m to 8,23 m are done; - Correlation with the new hydromorphological process appeared in relation to the problem of the development towards south of the Chilia secondary delta, - which refers to the formation due to the casting of coarse-grained alluvial deposits of a littoral strap that closes Musala golf at the Black	The information is included in the Environmental Impact Assessment Report. Clarification in the resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 No. 136 regarding the project depth of 8.23 m from "0" of the Izmail Port of the Vylkove - Izmail Chatal shipping channel "the depth has not been reached due to the non-completion of construction works under the project» implies the existence of another, larger-scale construction project with scientific research, the selection of advanced technologies for conducting works, as well as assessments of the impact of these works on environmental factors and the development of protective and environmental protection measures.

Sea, and which represents a risk to the navigation at Sulina mouth. There must be done an analysis of the degree in which the sedimentation rhythm will intensify at the mouth of the Sulina channel; - The dredging works from 7,32 m to 8,23 m and after that, the exploitation of this waterways will have important effects on the repartition of water and alluvial debits of Danube between Chilia Arm and Tulcea Arm; - The major dredging works will also negatively influence the water flow on the secondary arms of Chilia which supply with water the territory of Danube Delta and can majorly affect the Danube Delta Biosphere Reserve.	Meanwhile, bottom dredging operations in the warehouse of planned activities are characterized by modest results: bottom soil removal in the field is 112.0 thousand m3 on an area of 2.32 ha (at the time of bringing the depth to 8.23 m at the port of Izmail). In the river basin, natural depths are consistent with the declared project depth (Drawing 3). Execution of dredging works is planned in several stages, which is related to the sequence of construction of the object of the planned activity. The last step - reaching depths from 7.32m to 8.23m from "0" of the Izmail Sea Port will be implemented in the event that the state of Ukraine initiates dredging works on the shipping channel "Vylkove - Izmail Chatal " and downstream sections of the shipping route and water areas. More detailed information on the issue of dredging works, conducted studies and environmental impact assessment is given in subsections of this report: 1.3, 1.5.1, appendices 5, 6, 8.
In the situation pursued by the Ukrainian Party, which is having depths of 8,23 m, the area to be additionally dredged for obtaining the 8.23 m depth is situated between Bara Sulina and Ceatal Izmail (Mm43), at the critical points Bara Sulina, Mm31, Mm36, Mm40 and other intermediate areas, and the dredged material must be dumped at sea, which is the only dumping area accepted by the Romanian Water National Administration and in strict accordance with Danube Delta Biosphere Reserve Authority. From the measurements carried out, for a covering depth of -9.00 m, it results the necessity of dredging a volume of about 1,500,000 m^3, with annual periodical maintenance. This activity will result in adverse effects on the Sulina Channel, both on the bank defenses and on the bed, with enormous costs, unjustified, that will need to be covered by Romania both for the dredging, and for the problems regarding disequilibrium caused to the infrastructure of Sulina Channel and to the Danube Delta Biosphere Reserve. Also, we mention that Lower Danube River Administration Galati does not have additional equipment to carry out the above-mentioned works. At the present moment, the dredging activity is carried out using an absorbent upsetting dredging machinery bought in 2000. At the same time, in the case of dredging for the construction of the depths at the berths of the future Izmail seaport, we recommend the dumping areas to be	<u>The information is included in the Environmental Impact Assessment Report.</u> The planned activity involves alternate dredging works (Table 1.3.2.2 of the Report). According to the result of the III stage of construction, the total amount of bottom soil extraction is 85.0 thousand m3, the area of the bottom damage is 2.2 ha, the bottom mark is 7.32 m from the "0" of the Izmail Port for the navigation of sea vessels from 7.01 m, which corresponds to the Recommendations of the Danube commission and navigation depths provided by the Lower Danube River Administration in Galatsi. The design depth of the hydrotechnical facilities of the port (terminal) of NIBULON LLC is 8.23 m from "0" of the Izmail Sea Port and is adopted in accordance with the design depth of the shipping channel "Vylkove - Izmail Chatal " (approved by the resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 . N 136 with the clarification "the depth has not been reached due to the non-completion of construction works under the project"). In this case, the volume of bottom soil is 112,000 m3, the area of bottom damage is 2.32 ha. According to project decisions, the storage of soil in a coastal dump, which is organized on the territory leased for the construction and operation of the object of the planned activity, was adopted.

established as close as possible to the Ukrainian shore, to be periodically checked in order to monitor the quantity of alluvium dumped, and the dumping area to be respected in order to prevent their migration into the navigable channel, towards the Romanian side, avoiding the clogging of the navigable channel having a river character, maintained by the Romanian Party. Please note that at the present moment, the Romanian Party, through Lower Danube River Administration Galati, ensures for the Chilia Arm, on the segment from Ceatal Izmail to Periprava navigation conditions for river vessels for the transport of goods and passengers for the Romanian ports, for the area having a river character situated between the border line and the Romanian shore. Considering the critical current situation, due to war, the Ministry of Foreign Affairs of Romania, on 13.07.2022, allowed sea vessels with third flags to navigate on Chilia Arm, Stambulul Vechi and Bastroe, but in the future, it is possible that this will be prohibited, this being stipulated in the international legislation, in accordance with the Romanian- Ukrainian Border Treaty, article 9, point 1.	Currently, there is no feasibility of dredging to the design depth of 8.23 m, the need to achieve it depends on the adoption of an intergovernmental agreed decision on the need to carry out appropriate dredging on the Vylkove - Izmail Chatal shipping channel and their readiness from the point of view of the completeness of the scientific justification, comprehensive study and development of nature protection and protective measures. More detailed information on the issue of dredging works and their impact on the environment is given in subsections of the Report: 1.3, 1.5.1, appendices 5, 6, 8.
In case the Ukrainian Party will develop the Izmail Port with depths of 8,23 m, we propose that all vessels that will enter in operation through Bastroe Channel will also go to sea through this channel and not through Sulina Channel, which was projected for depths of 7,32 m according to the Recommendations of Danube Commission, as already shown. Considering the above information, the Lower Danube River Administration Galati expresses its concerns regarding Ukrainian's intention to develop Izmail port for depths of 8,23 m, since this activity will activate an additional alluvial input on Chilia Arm and will dramatically change the debit repartition in favor of this one and to the detriment of Sulina Channel and recommends to be taken into account that the future sea berths for the new port should provide depths for vessels with draughts in close correlation with the existing situation on Sulina Channel, respectively depths for navigation of sea vessels with draughts of 7,01 m.	The information is included in the Environmental Impact Assessment Report. The project, initiated by NIBULON LLC, involves dredging works in several stages to achieve depths: to 4.0 m; from 4.0 m to 7.32 m; the last stage of dredging works, from 7.32 m to the design depth of 8.23 m from the "0" of the Izmail sea port, will be implemented in the event that the state of Ukraine initiates dredging works on the shipping channel "Vylkove - Izmail Chatal " and downstream sections of the shipping route and water areas. As a result of the dredging works, a safe approach and maneuvering of the calculated type of vessel will be ensured to a depth of 7.32 m within the operational water area of the cargo berth of the object of the planned activity, which corresponds to the Recommendations of the Danube Commission, and the navigation depths provided by the Lower Danube River Administration in Galatians.
Also, considering the pressures listed in European Commission Directive EU 2017/845 of 17 May 2017, that the proposed activities exert on the aquatic	The proposals were included in the Environmental Impact Assessment Report.

environment, there is a possibility that the marine environment might be affected in different ways. Thus, the works carried out in the project implementation area, could lead to the resuspension of some priority substances from the sediments in the water column**.** Moreover, the equipment and transport activities may represent additional pollution sources generating atmospheric emissions of priority hazardous substances (heavy metals, hydrocarbons, etc.), which may then be released into the aquatic environment, introducing contaminants into the marine area. Together with other pressures from the same activities, the cumulative impact might be a threat for the marine ecosystem. Therefore, we consider that a monitoring programme of the Black Sea ecosystem in front of the Danube mouths is mandatory, both during the project implementation period and after the completion of the works regarding the concentration of pollutants in all matrices: water, sediments and biota.	In the course of impact assessment, a study of subsoil samples was conducted in the area of its planned development, information is provided in subsection 3.3., measurement protocols - appendix 3 to this Report. A study of surface water samples of the Danube River was also conducted, the measurement protocol is Appendix 3 to the Report. The post-project monitoring program provides for conducting studies of soils (bottom sediments), as well as the state of surface waters (section 11, table 11.1)
In our response to the notification, we expressed some concerns regarding lack of data and information, and we asked for studies and assessments in order to assure that all posible effects are anticipated and measures can be taken. However, in Chapter 9 of the EIA documentation, at pages 135, 139 and 140, it is mentioned that the comments were not accepted, followed by the subsequent explanations: *"Implementation of the planned activity is foreseen at the expense of private investments, has a very local character and does not belong to the General Plan of LOGMOS. "* *"(...) the claims of the Romanian side that the planned activity creates risks, affecting the ecological balance of the Danube Delta biosphere reserve, are greatly exaggerated, and the demand for large-scale research and the creation of three-dimensional hydrodynamic and morphodynamic models is not justified";* *"the planned activity does not involve conducting dredging works that may cause hydrological changes of the Danube River (from the point of view of morphological conditions: depth and width of the channel, fairway, structure of the bottom and substrate, hydrological regime: amount of flow, disruption of the continuity of sediment transportation, speed of water movement, etc. "* The approach to possible impact on water/water bodies, especially on the	<u>The information is included in the Environmental Impact Assessment Report.</u> The section of the water area of the Danube River, where the planned construction of the operational water area with the approach channel of the NIBULON LLC is located in an industrially developed zone with intensive shipping, which creates unfavorable conditions for the reproduction of fish that belong to the lithophilic type of reproduction, such as beluga, sevryuga, sturgeon, sterlet, etc. species The area of damage to the bottom during the dredging works up to the mark 7.32 m from the "0" of the Izmail Sea Port is 2.2 ha, with a maximum width of the work site of about 100 m, which does not prevent the free movement of fish, because the width of the Danube River in this city is 470 m. On this stretch of the Danube, the way to the sea is overcome by viable individuals (linear dimensions from 13 cm and above), which are able to avoid places with unfavorable conditions. According to scientists (link to the document), after feeding in the waters of the Black Sea, sturgeon species of fish during the spawning migration enter the waters of the Danube River and, climbing far up the river, pass through the territories of five countries, ending their journey in the area of the dam of the

hydrodynamics and hydromorphology, with consequences on habitats and species (in particular on the migration of sturgeons), does not take into account the cumulative aspects with other projects which are mandatory for the viability of the present project, for example assuring depths of 8,23 m only for the port without any connection with the waterways on Chilia Arm and Bastroe which would need the same depths. Our affirmation is based on the following paragraphs from Chapter 9 of the EIA documentation, pages 128, 134, 136 and 139. *"However, the Report provides clarifications regarding the design depth of 8.23 m from "0" of the Izmail seaport - the last stage of dredging works - reaching depths from 7.32 m to 8.23 m will be realized in case if Ukraine initiates dredging works on the shipping channel "Vylkove - Izmail Ceatal" and downstream sections of the shipping route and water areas. "* *"Development of the Bystre Channel and Kiliya Arm do not concern a planned activity. "* *"The implementation of the planned activity is foreseen at the expense of private investments and has a very local character - a new construction of a river port (terminal) (...)" "The design depth of hydrotechnical structures is 8.23 m from "i0" of the Izmail Sea Port, which corresponds to the design depth of the shipping channel "Vylkove - Izmail Ceatal" (approved by the Resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 N 136 with the clarification "the depth has not been reached in "due to non-completion of construction works under the project"). "* The hydrodynamic aspects regarding the change in water debits and speeds in comparison to the state of reference that might affect the upstream migration on sturgeons on Chilia Arm which is essential to the migration of these fish are not properly assessed. The aspects on sturgeon migration were ignored, the word 'sturgeon' only appears a few times in the EIA documentation, which includes inadequate information about the location of sturgeon habitats, since it is mentioned that the first reproduction habitat is located at 600 km from Danube's mouths and that sturgeons prefer warm and shallow waters. Our affirmation is based on the following paragraphs from the EIA documentation, pages 275, 282. *"Spawning of migratory fish (herrings and sturgeon types of fish) occurs not*	hydroelectric power plant Jerdap - 2 (864 km of the Danube), below which the main spawning areas of these species are located on a short stretch of the river. During the migration of young sturgeon fish species from the spawning grounds to the Black Sea, the latter stays close to the surface of the water, in a water column that does not exceed 3.2 m. Meanwhile, dredging work will take place at a depth of 4 m, which according to scientific observations is no longer is used these years to overcome regular movements. The period of predicted sturgeon spawning in the estuaries of the Kili delta falls on the period July - October, therefore, in order to minimize the damage that may be caused to passing species of fish, NIBULON LLC will not conduct dredging operations during this period. The relevant information regarding the impact of the planned activity on sturgeon that come to spawn in the Danube River is included in the Scientific-biological justification "Assessment of the impact of hydrotechnical works on the state of fish stocks of the Danube River during the construction of a cargo berth with the operational water area of the river port in the city of Izmail Odesa region" (page 25 - 27, 35 - 37).

less than 600 km from the Danube mouth area" *"The aboriginal ichthyofauna of the Danube in its majority, according to the type of reproduction, consists of (...) lithophilous (sturgeon, starry sturgeon, sterlet, vimba, aspius, etc.) species. These groups of fish use the warmed shallow waters of backwaters and creeks for spawning, and lay their eggs on aquatic vegetation, roots and stones. "* *"According to the hydrological conditions that are formed in the areas of hydrotechnical works, they are not favorable for the reproduction of the ichthyofauna of the Danube River and are not considered as spawning grounds. "*	
Given that Ukraine asked for the adaptation of the indicative TEN-T network - waterways in order to include Chilia Arm (from Ceatal Izmail) and Bastroe Channel, we express out concerns regarding the development of project "Channel Vylkove - Izmail Ceatal" and we reiterate the fact that: - performing the dredging works from 7,32 m to 8,23 m between Ceatal Izmail and Vylkove and afterwards, exploitation of these waterways will have important effects on the repartition of water debits and alluvial deposits of Danube between the arms Chilia and Tulcea, respectively on Sulina Channel which, in time, will become inadequate for navigation in safety conditions; - navigation on Chilia Arm and on Stambulul Vechi with sea vessels of heavy duty and higher speeds will lead to strong erosion of the right side together with the loss of teritory, which will determine the need to perform consolidation works and defence of the shores; - the project is outside of the field of application of the Convention regarding the regime of navigation on the Danube (Belgrade Convention, 1948) which, at article 2 provides that: „The regime established by this Convention shall apply to the navigable part of the Danube River between Ulm and the Black Sea through the Sulina arm, with outlet to the sea through the Sulina channel. " Therefore, the project "Channel Vylkove - Izmail Ceatal" is not part of the conventional route of Danube; - we stand for maintaining Sulina Channel as the only channel for international navigation, which is a shorted and more viable route, carriageable, and which can be used also by the Ukrainian Party;	<u>The information is included in the Environmental Impact Assessment Report.</u> The project, initiated by NIBULON LLC, involves dredging works in several stages to achieve depths: up to 4.0 m; from 4.0 m to 7.32 m; the last stage of dredging works, from 7.32 m to the design depth of 8.23 m from "0" of the Izmail Sea Port. As a result of the dredging works, a safe approach and maneuvering of the calculated type of vessel will be ensured to a depth of 7.32 m within the operational water area of the cargo berth of the object of the planned activity, which corresponds to the Recommendations of the Danube Commission, and the navigation depths provided by the Lower Danube River Administration in Galatians. The last round of dredging works from 7.32 m to 8.23 m will be implemented in the event that the state of Ukraine initiates dredging works on the shipping channel "Vylkove - Izmail Chatal " and downstream sections of the shipping route and water areas.

- also, according to article 9, para. (1) of the Treaty between Romania and Ukraine on the Romanian-Ukrainian State border regime, collaboration and mutual assistance on border matters, signed at Cernaufi on June 17, 2003, ratified by Law no. 93/2004: “On navigable border rivers, the vessels of both contracting-parties have the right to navigate on the main fairway, regardless of the route of the state border line on there rivers. Other means of navigation are allowed to navigate the border waters only to the state border line.”	

Unofficial translate

МІНІСТЕРСТВО ЗАХИСТУ ДОВКІЛЛЯ ТА ПРИРОДНИХ РЕСУРСІВ УКРАЇНИ

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The Ministry of Environmental Protection and Natural Resources of Ukraine presents its compliments to the Ministry of Environment, Waters and Forests of Romania and informs on environmental impact assessments of the proposed activity of the «Nibulon» Limited Liability Company.

Following the results of expert consultations held on 29 March 2023 which concerns the proposed activity «New construction of a transport infrastructure object - a river port (terminal) in Izmail, Izmail district, Odesa region with a railway access track - adjacent to the Izmail station of the «Odesa Railway» regional branch» at the request of the Romanian side, we provide additional materials to the environmental impact assessment report of «NIBULON» LLC.

In addition, we submit for approval the draft minutes of expert consultations between Romania and Ukraine under transboundary EIA procedure of a new construction of a transport infrastructure object - a river port (terminal) in Izmail, Izmail district, Odesa region with a railway access track - adjacent to the Izmail station of the «Odesa Railway» regional branch».

The Ministry avails itself of this opportunity to renew to the Ministry of Environment, Water and Forests of Romania the assurances of its highest consideration.

Addition: 1. Scientific and biological ubstantiation «Assessment of the impact of hydrotechnical works on the state of fish stocks of the Danube River during the construction of a cargo berth with the operational water area of the river port in Izmail, Odesa Region» in English on 53 pages.
2. Action plan on detection, notification, localization and liquidation of pollution of surface water in the area of the Danube River of production activity of «Bessarabska» branch of NIBULON LLC in English on 17 pages.
3. Predictive calculations of the distribution of waters contaminated by oil products. Simulation of an emergency situation. Map of the spread of oil-contaminated waters in the water area of the Danube River during an emergency situation in English on 11 pages.

4. Report on scientific research work «Assessment of the impac of the planned activities of «NIBULON» LLC on the species and habitats of "Natura-2000" objects in the territory of Romania» in English on 18 pages.
5. Draft minutes of expert consultations between Romania and Ukraine under transboundary EIA procedure of a new construction of a transport infrastructure object - a river port (terminal) in Izmail, Izmail district, Odesa region with a railway access track - adjacent to the Izmail station of the «Odesa Railway» regional branch» in Ukrainian and English on 10 pages.

Olena Kramarenko
Deputy Minister

APPROVED BY

by order of the branch director
from 30.09.2022 No. 65

ACTION PLAN

on detection, notification, localization and liquidation of pollution of surface water in the area of the Danube River of production activity of "Bessarabska" branch of NIBULON LLC

Izmail, 2022

CONTENT

I. GENERAL PROVISITONS.

NORMATIVE REFERENCES AND SUPPORTING MATERIALS. TERMS AND DEFINITIONS.

Action plan on the detection, notification, localization and liquidation of surface water area pollution of the Danube River in the area of production activity of NIBULON LLC (hereinafter - the Plan) - a document defining measures to prevent spills of polluting substances, exchange of information between entities, state supervision and control bodies, the involvement of all possible forces and means, the implementation of coordinated actions of these subjects on the territory or in water area of NIBULON LLC for the purpose of immediate response to such a spill or the threat of its occurrence, as well as liquidation of consequences of pollutant substances spill.

This Plan covers "Bessarabska" branch of NIBULON LLC (for the period of construction of the company brach), provides for an action plan for the localization and liquidation of surface water pollution of the Danube River in the area of production activity of NIBULON LLC (hereinafter – the Water Area) and defines the rights and obligations of officials of NIBULON LLC, the procedure on their actions regarding the prevention of pollution of the Water Area in the process of production activity, localization and liquidation of the consequences of pollution of the Water Area occurred regardless of whether the source of pollution is related to production activity of the company or caused by external factors. This plan is a part of the Plan for Localization and Elimination of Emergency Pollutant Spills on the Territory and Water Area of the Izmail Sea Port (Annex 1) and expands the system of detection, notification and communication in organizing work in case of various options for pollution of the Danube River.

The main goal of the Plan is the prevention of pollution, as well as the implementation of necessary agreed actions aimed at reducing misunderstandings, mistakes and loss of time, which can lead to a worsening of the situation, and accordingly to an increase in damage to the environment.

The provisions of the Plan are mandatory for all officials involved in operations that may lead to pollution of the Water Area during operations related to refueling of vessels and transshipment of ship waste in the course of normal operation of ships.

The plan is a working document for managers, production staff of NIBULON LLC and crews of vessels owned by the company, as well as those are in the Water Area.

1.1 Regulatory references and supporting materials.

This Plan was developed in accordance with the requirements of regulatory documents:

1. International Convention on Prevention for the Pollution from Ships MARPOL 73/78
2. The Law of Ukraine "On Environmental Protection" enacted by the Resolution of the Verkhovna Rada of Ukraine dd. 26.06.1991 with amendments.
3. Merchant Shipping Code of Ukraine, 1994 with amendments and additions
4. The Water Code of Ukraine enacted by the Resolution of the Verkhovna Rada of Ukraine dd. 06.06.1995 with amendments and additions.
5. Rules on registration of operations with harmful substances on ships, marine facilities and in ports of Ukraine, approved by Order of the Ministry of Transport of Ukraine dd 10.04.2001 No. 205.
6. Rules on the protection of internal sea waters and the territorial sea of Ukraine from polltion and clogging, approved by the Resolution of the Cabinet of Ministers of Ukraine No. 269 on Februay 29, 1996, with amendedments.
7. Rules ontechnical operation of port hydraulic facilities, approved by Order No. 257 of the Ministry of Transport and Communications of Ukraine dd on May 27, 2005.
8. Resolusion on territorial and interregional territorial bodies of the State Environmental Inspection approved by the Order of the Ministry of Energy and Environmental Protection of Ukraine dd 07.04.2020. No. 230.

9. The Procedure on providing services to ensure the prevention and liquidationm of spills of polluting substances in seaports of Ukraine, approved by the Order of the Ministry of Infrastructure of Ukraine dd on August 21, 2013. No. 631.
10. Regulation on the procedure for investigating and recording transport events on the inland waterways of Ukraine, approved by the Order of the Ministry of Transport of Ukraine dd. 05.11.2003 No. 857.

In order to develop this Plan, the following supporting materials were used:

11. The Procedure on receiving and transferring ship waste, approved by the Order of the General Director of NIBULON LLC No. 1354 dd. on September 13, 2018. "On the Implementation of Waste Legislation at the Company, the Appointment of Responsible Persons in the Field of Waste Management and the Maintenance of Primary Accounting Documentation according to Standard Form No. 1-VT".
12. The Order of the General Director of NIBULON LLC dd on October 25, 2017. No. 1526 "On the Approval of the Instruction on the Organization of Works on Watercraft Refueling."
13. The Order of the Director of "Bessarabska" branch of the NIBULON LLC dd on July 8, 2022. No. 1 "On the Implementation of Environmental Protection Legislation at the Branch".
14. The Agreement with ME "Silkommungosp" No. 6 dd. 29.06.2022 regarding the provision of waste reception and disposal services.
15. The Agreement with Individual Entrepreneur POSTARNICHENKO P.P. No. NB-1461-22 dd 27.10.2022 regarding the providing of sanitation services.

1.2 Terms and Definitions

Water Area	a water body or its section, limited by natural, artificial or conventional boundaries, within which this Plan operates.
Vessel	a vessel of any type operated in a water body (transport vessels, tugs, floating cranes, hydromechanization means, hydrofoils, hovercrafts, submarines and other floating means, including stationary or floating platforms).
Oil	Oil in any form, including crude oil, fuel oil, oil-rich sludge, oil residues and refined petroleum products, subject to Rule No, 1 of Annex 1 to the Convention MARPOL 73/78.
Oil-water mixture	a mixture with any oil content, namely a mixture of water, oils, fuel (blige water) and oil residues (oil sludge from fuel separation).
Petroleum fuel	any oil used as fuel for the main engines and auxiliary mechanisms of the vessel on which such oil is transported.
Harmful substance	any substance which, when entering the sea, is capable of creating a danger to human health, causing damage to living resources, marine flora and fauna, disrupting the natural attractiveness of the sea as a place of recreation or interfering with other types of legitimate use of the sea and includes any substance , which is provided for in MARPOL 73/78. Harmful substances in this regulatory document include oil, oil residues, used lubricants, oil-containing bilge and ballast water, waste water, garbage and residues of chemical substances transported on vessels in bulk, in bulk and in packaging.
Incident	an event that caused or may cause the release of a harmful substance or effluents containing such substances into the water area.
Operations with harmful	actions carried out on vessels with fuel, cargo and ship waste in the

substances	course of normal operation, which may lead to sea pollution and are subject to registration in accordance with the Merchant Shipping Code of Ukraine, the Regulation on the Protection of Inland Sea Waters and the Territorial Sea from Pollution and Clogging as well as MARPOL 73 /78.
Discharge	any leakage, spillage, draining, or emptying from the ship into the water, regardless of the causes, of relatively harmful substances or sewages containing such substances.
Ship waste	waste oils and materials that are not needed or suitable for the maintenance of the ship, their unused residues or substances formed during the operation of the ship (solid and liquid), which are not subject to disposal on the ship itself and are subject to permanent or periodic removal from the ship.
Waste	means all types of food, household, and operational waste (except fresh fish and its remains) generated during the normal operation of the vessel and subject to permanent or periodic removal, with the exception of substances that are defined or listed in Annex V to MARPOL 73/78 and other Annexes to MARPOL 73/78.
Wastewater	sewage and other waste from all types of toilets, urinals, toilets, as well as scuppers located in public toilets; sewage from sinks, baths, showers, and scuppers located in medical facilities (outpatient clinics, infirmaries); sewage from premises where live animals are kept; other sewage, if they are mixed with those listed above.
Ballast water	overboard water taken on board to control trim, roll, draft, and stability of the ship.
Dirty ballast	ballast water (with oil or other pollutants) that is formed in untreated ship tanks (oil tanks) after receiving water ballast.

II. OPERATIONAL AREA OF THE PLAN. POTENTIAL SOURCES OF POLLUTION.

2.1. The operational area of the Plan extends to the developed part of the water area of the Danube River (Water Area) with a total area of 10.4357 hectares, which stretches along the shipping channel "Vylkove - Izmail Ceatal" from 91.09 to 91.55 km and is included in the water area of the Izmail seaport (Resolution of the CMU dated 07.10.2009 No. 1208 "Boundaries of the water area of the Izmail seaport").

2.2. Potential sources of ingress of harmful substances into the Water Area or wastewater containing them are the technological processes of ship maintenance:

- replenishment of the fuel supply for the operation of the ship's power plants;
- in-vessel operations with the oil-water mixture, sewage, ship waste, and waste, including when issuing them to floating or coastal structures.

Pollution of the water area can be caused by improper technical condition of pipelines, mechanisms, flanged connections of pipelines, control, and measuring devices, as well as violation of instructions and rules for technical operation of systems, Instructions on the organization of work on refueling watercraft, the procedure for receiving and transferring ship waste, approved by orders of the enterprise.

Therefore, production personnel and ship crews are responsible and obliged to take all necessary measures to minimize the risks of uncontrolled anthropogenic impact on the surrounding natural environment, especially during oil operations.

Depending on the amount of spilled oil, spills are divided into the smallest - up to 0.3 tons; small 0.3 - 1.0 t; medium 1.0 - 5.0 t; large 5.0 - 50.0 t; very large - more than 50.0 t.

The main processes that occur under the influence of external factors and change the amount, composition, and properties of spilled oil are evaporation, dissolution, photochemical oxidation, biodegradation, and emulsification. The processes of evaporation, emulsification, and dissolution of oil take place intensively in the initial period after the spill and are completed for light oil after 4-5 hours, for oil after 8-12 hours, and for heavy oil after 12 hours.

Approximate data on the change in the amount of oil spilled under the influence of external factors and depending on the time of their stay in the water after the spill (irreversible losses to the environment in % of the initial volume) are summarized in the table:

Oil	Time of stay of oil products in water from the moment of spillage, hour	Irreversible losses, %	Residue to be cleaned up,%
Gasoline	4-5	100	-
Kerosene	4-5	75	25
Diesel fuel	4-5	60	40
Crude oil	8-12	45	55
Mazut (low-quality heavy fuel oil)	over 12	25	75
Motor fuel	over 12	25	75

Thus, the damages accrued to the perpetrator of the accidental pollution of the internal waters of Ukraine depend on the efficiency of the pollution cleanup (the period of stay of the oil in the water from the beginning to the end of the cleanup) and due to insufficient organization of the work may be overestimated by 25% to 95%.

III.MEASURES TO PREVENT WATER AREA POLLUTION. PROVIDING MEANS OF LOCALIZATION AND ELIMINATION OF CONSEQUENCES.

3.1. Requirements for ships staying in the Water Area:

- the design, technical condition, composition of the crew and its suitability for the safe operation of the vessel must meet international requirements for pollution prevention and be confirmed by a full set of current ship documents reviewed and approved by the national classification society (shipping register of Ukraine);
- the vessel must be equipped with stationary or portable pallets installed at the places of flange connections to collect possible liquid leaks;
- the vessel must have sand, rags, sorbent in quantities sufficient to localize and eliminate possible contamination.

3.2 Equipping vessels of NIBULON LLC with an emergency warning system.

An emergency warning system (EWS) is installed on the vessels of NIBULON LLC, which includes:

–the central shield with the operator terminal in the engine room;

– the shield of the generalized EWS with a siren of a generalized sound alarm and flashing signal lamps in the engine room;

–light columns of a generalized group light signaling in the engine room with emergency warning signals;

–a video terminal with a panel of generalized group signaling in the navigation room;

–generalized signaling panels in the mess hall and mechanics' cabins for calling them to the engine room.

Level signaling devices are installed in the following places and tanks of the vessel:

–fuel overflow tank 75% full;

– overflow of fuel through the overflow pipe;

–fuel and oil leakage collection tank 80% full;

–fuel tank of the emergency diesel generator;

–separator sludge tank;

–cistern for collection of bilge water 80% full;

–sewage wells of the engine room;

–sewage tanks 80% full.

In addition, the EWS system is equipped with a subsystem for signaling the call of mechanics in the engine room and a system for monitoring the working condition of shift personnel in the engine room.

Thanks to the EWS system, the occurrence of an accident related to the leakage of oil and sewage on the vessels of the NIBULON LLC is unlikely.

3.3 Providing means of localization and liquidation of emergency consequences.

The "Bessarabska" branch of the NIBULON LLC, where operations with harmful substances or effluents containing them are carried out, is equipped with technical means for localization and liquidation of emergency consequences:

- boom fence around the vessel;
- mobile embankment around a tanker;
- fire shield in standard configuration.

Operations with oil according to the work options "car - ship", "ship - car", "ship-ship" are carried out under the condition of the MANDATORY installation of a boom fence around the vessel and mobile embankment around the fuel tank when bunkering a vessel with oil fuel from a tanker.

The place of permanent storage of booms, mobile embankment and pallets is in the immediate vicinity of the area of technological operations.

Different causes of the accident associated with oil discharge determine the different nature of the spread of oil pollution on the water surface of the Water Area:

а) if the tanks are damaged or overflowing, the oil will first fall on the ship's deck, and then spill over the sides into the Water Area. In this case, flow of oil can fall from the ship to the Water Area at a distance of about a meter from the ship's side, and the line of the drain, can reach several meters, which increases the speed of oil spreading in the Water Area. Under the action of gravitational force at the beginning of discharge and due to surface линия сброса tension, the spilled oil will spread in a thin film around the vessel and fill the water surface free of natural and artificial obstacles. In the presence of wind, oil pollution will spread in the direction of the wind;

б) in case of violation of the integrity of the ship's side or bottom, double hull or bottom of a specialized vessel, oil can enter the water to a depth of 4.5 meters. When oil floats at a speed of up to 4 mm/s, its rise to the surface can be carried out for up to 15-20 minutes. In the presence of underwater currents in the area of the ship's parking area, oil can float at a considerable distance from its side and the oil slick will be much larger than when discharged from the deck of the ship or the pier.

Taking into account the different nature of the spread of oil pollution on the water surface of the Water Area, when installing a containment boom around the vessel(s), a gap sufficient to ensure oil surfacing within the protected area of the Water Area should be provided. The area of the

protected section of the Water Area should be sufficient to exclude a large thickness of the oil layer and its leakage under the skirt of the booms in case of a large spill.

The list of technical means and resource materials for the liquidation of emergency consequences, which are equipped with the vessels of NIBULON LLC or coastal facilities where operations with oil are carried out:

– biological preparation for removing thin layers of oil, iridescent films;
– sand, sawdust, cleaning cloth;
– buckets, metal containers, scoop shovels, bags.

The use of dispersants (chemical sorbents) in the Water Area is PROHIBITED.

IV. PROCEDURE FOR CARRYING OUT OPERATIONS WITH HARMFUL SUBSTANCES IN THE PROCESS OF NORMAL OPERATION OF THE VESSEL.

4.1. Fueling operations for watercraft

Refueling operations are carried out in a specially prepared and equipped place, according to technological schemes:

- car – flexible hose – vessel;
- car – pump – flexible hose – vessel;
- vessel – pump – flexible hose – vessel.

Those responsible for the organization of these works are appointed by branch order [13].

Refueling of watercraft according to the scheme "vessel - pump - flexible hose - vessel" can be carried out only by a specialized vessel with appropriate registration documents, according to the schemes "car - flexible hose - vessel" and "car - pump - flexible hose - vessel" - using own capacities of the enterprise.

The instruction on the organization of work on refueling watercraft was approved by the order of NIBULON LLC and is subgect to unquestionable execution by all participants of these operations [12].

4.2. Liquid ship waste operations

The legislation of Ukraine prohibits the discharge from ships of water containing harmful substances, in particular:

- oil-water mixture from engine compartments (oil residues, oil sludge, bilge water);
- sewage and other waste from all types of toilets, urinals, toilets, scuppers located in public toilets, as well as sewage from galley and laundry equipment.

Operations with oil-water mixture (oil residues, bilge water, oil sludge from fuel separation) during normal operation of vessels are carried out according to the following schemes:

- vessel - pump - flexible hose - vessel;
- vessel - pump - flexible hose - car;

Operations related to the removal of the oil-water mixture (oil residues, oil sludge, bilge water) are carried out on the basis of contractual relations with a specialized organization that has a corresponding license.

Operations regarding the removal of wastewater from the vessel are carried out according to the scheme "vessel - pump - hose – car" with subsequent transfer of effluents on contractual basis to the communal enterprise that provides sewage services.

On the company's ships, oil-containing and waste water is collected in the appropriate ship tanks and, as the tanks fill, they are pumped out with the help of appropriate pumps through a branch pipe with a flange of the international standard into the reception facilities.

The engine room drainage system, the fuel separation system and the waste water system of the vessel are equipped with an emergency warning system that activates when the tanks are 80% full.

Before the output of liquid waste from vessels, the senior mechanic (senior shift mechanic) of the vessel checks the state of the deck bushings, the reliability of the vessel's mooring, the reliability of the hose connections, their protection from damage and other measures to prevent pollution from the vessels. The results of the check are recorded in the engine log sheets.

The hoses must stand on a special deck section. The part of the hose that is on the berth must be protected from damage in case of vibration and movement of the hose across the berth. It is not allowed to pinch the hose between the ship's board and the berth.

All ship equipment that is intended for the discharge of liquid waste must be constantly in working order and meet the requirements of current legislation on the prevention of water pollution. The captain (shift captain) and senior engineer (shift senior engineer) are responsible for pollution of the water environment caused by equipment malfunction, improper operation, violation of orders, instructions, rules, etc.

Each hose and hose connection (hereinafter - the hose) used for the transfer of liquid ship waste must meet the requirements of regulatory and technical documentation and have a marking and a certificate from the manufacturer, which indicates: the type of liquid that can be pumped by hose; date of manufacture; test pressure; the test date with the pressure indication during these tests. Hoses must be stored in appropriate premises or specially equipped places.

Hoses should be supplied and removed with the ends plugged.

Operations with liquid ship waste (oil-water mixture and sewage) are subject to mandatory registration in the ship's log with a description of the date, time and place of discharge; indication of the tanks that were pumped out, the amount of pumped liquid and its remains in the ship's tanks. Records of operations with wastewater containing harmful substances should be legible and concise. Making notes with a pencil, smearing or erasing the made notes is not allowed. The incorrect record is neatly crossed out, next to it it is reproduced in a corrected form, the inscription "Corrected to believe" is written and the correction is signed.

During the discharge of harmful substances to reception facilities, such an operation should be confirmed by a warrant or a certificate of the established model. Warrants or certificates on the discharge of liquid ship waste to reception facilities or floating collectors are kept on the ship that delivered the waste, along with other documents, for three years. This warant or certificate can be used by the captain of the vessel to confirm that vessel was not involved in a pollution incident.

The procedure for the preparation, organization and performance of work on the reception and transfer of liquid ship waste, the appointment of responsible persons, the drawing up of warrants for the acceptance of waste from the vessel in the form of the established model is approved by the order of NIBULON LLC [11] and is subject to unquestionable execution by all participants of these operations.

4.3.Operation with garbage.

During the normal operation of the vessel, food, household and operational waste is generated, which is defined as garbage (packaging, small products made of plastic and paper, glass, metal bottles, shards, food waste), which are subject to permanent or periodic disposal from the vessel to the shore.

For the collection and temporary storage of garbage, the company's ships are equipped with containers with appropriate markings ("Food waste", "Plastics", "Garbage"). Mixing different types of waste is FORBIDDEN!

Containers for waste collection should be painted with anti-corrosion paints, have lids that close tightly, be convenient for transportation, unloading, cleaning and disinfection.

To avoid air pollution, when loading containers with food and household waste, it is needed to use antiseptic and deodorizing substances regularly.

After the vessel is moored at the berth, the vessel's captain (shift captain) organizes the removal of waste from the vessel and its placement in containers installed on the facility for each type of waste. The person responsible at the facility for receiving waste from ships records the fact of reception and transfer of the ship waste in the shore log indicating the date, amount of waste and the name of the vessel from which this waste was received, and issues a warrant of the established model to the captain (shift captain) of the vessel.

Operations with garbage are subject to mandatory registration in the ship's log with a description of the date, time and place of discharge.

The procedure for the preparation, organization and performance of work on the reception and transfer of ship garbage, the appointment of responsible persons, the drawing up of warrants for the acceptance of waste from the ship in the form of the established model is approved by the order of the company №1354 dated on September 13, 2018 [11] and is subject to unquestionable execution by all participants of these operations.

V. DETECTION, WARNING AND COMMUNICATION SYSTEM.

5.1. Constant visual monitoring of the Water Area and the performing of works that may lead to pollution of the Water Area is performed by:

- responsible persons appointed by the order of the branch № 1 dated on July 08, 2022: the chief mechanic – responsible for the organization of fueling watercrafts works, the chief power engineering – responsible for the organization of the ships` maintenance (removal of sewage);
- members of the crew of vessels that are fueled, or holding anchorage, or perform operation in the Water Area;
- a driver of the refueler;
- guard and other production staff of the branch.

If an emergency situation is detected on a vessel or in the coastal zone, that may lead to a deterioration of the quality of the surface waters of the Water Area (visible floating particles, traces of oil, or other pollutants), the responsible person must stop work until the causes of unauthorized discharge of harmful substances into the Water Area or runoffs containing such substances are eliminated and informs the director of the branch by telephone.

If the notification of the incident was received by another official, this official should immediately transfer the content of the received message to the director of the branch.

5.2. The initial information about the incident that led to the discharge of harmful substances into the water body must contain (if possible):

- date and time of pollution detection, who informed;
- the possible source of discharge;
- type of pollutant;
- amount of discharged substance or size of the contaminated area;
- external indicators of a spill (separate iridescent stripes, separate spots and a gray film, spots and an oil film with bright colored stripes, oil covering large areas of the water surface that do not break when the water surface is agitated, a continuous layer of oil, the color is dark, dark - brown)
- additional information.

5.3. Upon receiving a notification of an incident in the territory under his control, the director of the branch must personally verify the validity of the received signal, clarify the location, nature, source and cause of pollution, in case of confirmation of the fact of pollution, he heads the management on localization and liquidation of the consequences of the incident.

5.4. If it is established that the source of pollution is outside the Water Area, officials of NIBULON LLC take all necessary measures to determine the possible source of pollution, taking into account the natural factors that contributed to its movement into the Water Area: the direction and strength of the wind, the direction of the current, waves.

5.5. When the director of branch receives initial information about the incident, he takes over the general management of the works on localization and liquidation of the emergency consequences that led to the pollution of the Water Area, and makes a decision on the need for prompt involvement of additional technical means of third-party organizations, in particular, he agrees the connection with the operator of the port fleet of Izmail branch of SE Ukrainian Sea Ports Authority for the involvement of oil skimmer (if available) (tel. 067-448-93-37), the local unit of the State Emergency Service etc.

5.6. The director of the branch, depending on the scale of the accident, makes a decision on warning third-party organizations about the pollution of the Water Area in accordance with the warning scheme and assists them in conducting an investigation of the incident that led to the discharge of harmful substances into the Water Area.

5.7. When carrying out operations according to the Plan, communication is carried out by all available means of communication: radio channel - 16, VHF radio telephones, mobile phones of operations managers at the place of action. The director of the branch is responsible for communication ensuring.

If the spot of pollution spreads beyond the borders of the Water Area, information about the spread of pollution is transmitted to other enterprises, whose interests may be violated in connection with the pollution of their Water Areas. In this situation, the Plan of SE Ukrainian Sea Ports Authority comes into effect.

VI. *MANAGEMENT OF PLAN OPERATIONS. ORGANIZATION OF WORKS ON LOCALIZATION AND LIQUIDATION OF EMERGENCY CONSEQUENCES.*

6.1. The director of the branch carries out the general management of works on liquidation of emergency consequences.

6.2. Management of priority actions to eliminate accident consequences is taken by the official who is responsible for organizing the works that caused the pollution of the Water Area:

- chief mechanic, who is according to the order of branch responsible for organization of works on fueling of watercrafts if the accident happened during the performance of fueling operations;

- chief power engineering who, in accordance with his job duties, manages the ship maintenance process, if the incident occurred during the maintenance of the company's ships.

6.3. If the incident that happened on board of the vessel did not cause pollution of the Water Area, liquidation of the consequences of the emergency situation on the vessel (without discharge into the Water Area) is carried out by the forces of the vessel's crew in accordance with the Ship's Plan of emergency measures to combat oil pollution.

6.4. Actions of the responsible person who took over the management of preliminary actions on localization and liquidation of emergency consequences:

- to stop ship operations (refueling, transfer of ship waste) in connection with an incident that caused or may cause the discharge of harmful substances or runoffs containing them into the Water Area;
- to disconnect the connecting pipelines, free them from the remains of harmful substance;
- to stop, and if it is not possible, then to reduce as much as possible the volume of emergency discharge of harmful substances into the Water Area or runoffs containing them;
- to clarify the cause of the incident, assess the situation and immediately report about the incident to the branch director.
- to organize proper lighting of the polluted area at night, a sufficient number of technical means for localization of pollution, uninterrupted supply of resource materials (fuel, water, oil, etc.) to the technical means involved, delivery of shift personnel to the work site, providing them with workwear, shoes, heating and food;
- to conduct constant visual monitoring of the state of the Water Area and the spread of pollution, every hour during the day to provide reports on the progress of the Plan implementation to the director of the branch, if the incident happened at the branch, to make a proposal to the

director of the branch, who carries out the general management of works on the elimination of emergency consequences, on the need to involve additional human resources and technical means for the effective implementation of operations to eliminate pollution, including to prevent the transfer of pollution beyond the borders of the Water Area, its spread to large water areas or its movement into other areas;

- to take a direct part in the liquidation of the incident and its consequences, to ensure the safety of technical means and service personnel participating in operations.

Males who have reached the age of 18, who have passed preliminary and periodic medical examinations, introductory and initial training on safety measures at the workplace and special training are allowed to work on the liquidation of pollution in the Water Area.

The personnel involved in the work must know the main qualities of the harmful substance and chemical preparations for its neutralization, must be experienced in safe methods of working with them, methods of providing first aid in case of poisoning, methods of using personal protective equipment, must strictly comply with the requirements of the rules, norms, instructions and guidelines on labor protection and fire safety.

The crews of the vessels involved in the operations of the Plan must be provided with personal protective equipment and appropriate workwear: working life jackets; universal filtering respirators in the amount that takes into account the reduction of the protective effect of respirators at the increased content of hydrocarbon vapors in the air; shoes with gasoline-oil-resistant soles on tacks fastening, which do not cause sparks and do not slide on oil-contaminated metal deck.

All fire-fighting equipment of the vessel and the shore facility where the incident occurred, the oil skimmer and the vessels involved, must be put in readiness for immediate operation.

Localization and liquidation of oil spills.

Liquidation of emergency oil pollution of the Water Area is carried out according to this Plan. The means of localization and liquidation of oil spills in the Water Area are mainly mechanical - with the use of technical means of NIBULON LLC, as well as, if necessary, units of the State Emergency Service and specialized vessels of other organizations.

When liquidating an oil spill, its burning is PROHIBITED.

At any oil spill the following measures are effective:

a) termination, and if it is not possible, then the maximum reduction of the amount of discharge;

b) prohibition of vessels shipping in the polluted area of the Water Area, all vessels should stay away from the accident site and reduce speed to a level that excludes the formation of waves;

c) localization of the discharge of oil by a boom fence, if necessary, the installation of a duplicating boom fence from the air side;

d) creation of a directed water barrier using a water jet from a fire barrel to move the oil spot towards the means of collection or the oil skimmer;

e) operational involvement of an oil skimmer to eliminate pollution, and in the coastal zone, where the depth is up to 0.5 m or the work of an oil skimmer is excluded, - personnel with buckets, bags, etc.

In case of a significant oil spill, in order to prevent its spreading across the Water Area, duplicate booming is applied, for which additional side barriers are installed on the leeward side, which are designed to block the places where oil is removed from/ under the booms. The engagement of an oil skimmer for the liquidation of the consequences of emergency oil discharges, as well as the installation of duplicative booming, is carried out by the SE Ukrainian Sea Ports Authority. To contact the Izmail branch of SE Ukrainian Sea Ports Authority tel. 067-448-93-37.

In case of an oil spill in the coastal zone, the effectiveness of the Oil Spill Emergency Plan (OSEP) can be increased by using water jets from fire barrels to move the oil spot towards the collection means or oil skimmer and creating a directed water barrier that prevents the spread of

spilled oil. Jets from fire barrels should be directed to the surface of the water at a distance of 1.0 m - 1.5 m from the border of the oil spot, and not directly on it.

A jet directed directly at the oil slick mixes it with water and promotes emulsification.

Oil recovery generally begins where the greatest thickness of pollution is observed. During the response of a major oil spill, it is necessary to organize round-the-clock work, for which must be provided:

−proper illumination of the polluted area at night;

−delivery of shift personnel to the place of OSEP;

−uninterrupted supply of resource materials (fuel, water, oil, etc.) to the technical facilities involved, providing workwear, shoes, heating and food to people who are involved of elimination of emergency consequences.

6.5. The decision to stop work in the Water Area is made by the Director of the Branch with the achievement of the following results: purification of the Water Area from solid films of oil and spots to level, which corresponds to 2 points and lower on the scale of visual assessment of the degree of pollution in the surface waters by oil. This level of pollution of the Water Area does not pose a danger to the operation of port facilities and ships, but the efficiency of oil recovery by floating oil skimmer is significantly reduced.

Further cleanup of the Water Area from oil to the "0 points" state can be achieved in the routine cleaning mode using biosorbent.

Oil Surface Water Pollution Rating Scale

Evaluation points	**Amount on surface g/m2**	**Appearance of the water surface**
0	-	Clean water surface. No signs of color under different lighting conditions.
1	0,1	Absence of film and spots, individual iridescent stripes, which are observed to regurgitate under the most favorable conditions of illumination and calm state of the water surface
2	0,2	Individual spots and gray film of silver plaque on the surface of the water, which are observed in a calm state of water surface, the appearance of the first signs of color.
3	0,4	Spots and film with bright colored stripes, which are observed with low agitation
4	1,2	Oil in the form of spots and a film covering significant areas of the water surface does not rupture during agitation, with the transition of color to dim-muddy-brown.
5	2,4	The surface of the water is covered with a continuous layer of oil, good visibility during agitation, the color is dark brown.

6.6. Upon completion of the work of the Plan, the means used in the elimination of contaminants are checked and cleaned. Detected malfunctions are eliminated, used materials that have become unusable and are not subject to repair are written off. Contaminated materials (rag, sand, etc.) are given to specialized enterprises for disposal.

The cost of troubleshooting, debited funds and materials, as well as the cost of fuel and lubricants are attributable to the total cost of eliminating emergency consequances.

6.7. When performing emergency response works, the ship's documents of the oil skimmer and other vessels involved in operations, as well as in the documents of other facilities, and all data is recoded for calculating the actual costs, including:

- amount of the collected harmful substance in m^3;
- consumption of time, fuel and other consumables;

– the number of service personnel involved in the operations to eliminate waste, and the time spent;

– costs of payment for the forces and means involved in the elimination of pollution;

– costs for repair and maintenance of technical means involved in operations to eliminate pollution;

– the cost of decommissioned funds that became unusable when eliminating pollution.

Such data will be needed to calculate the amount of damage that will be caused to the culprit for pollution of the Water Area, for their compensation in accordance with the legislation of Ukraine.

VII. PROCEDURE FOR INVESTIGATION OF WATER AREA POLLUTION CIRCUMSTANCES.

In each case of pollution of the Water Area, a departmental investigation is carried out, the purpose of which is to determine the causes, circumstances and consequences of pollution, assess the actions of the personnel of NIBULON LLC to prevent and eliminate pollution, identify the culprits of pollution and those involved in pollution, assess the damage caused to the state as a result of a violation of the environmental legislation.

The investigation should not impede emergency response and navigation recovery efforts.

The investigation of the incident is carried out by a specially created commission, which is headed by the director of the branch. The commission necessarily includes a representative of the environmental protection department of NIBULON LLC, as well as representatives of the State Environmental Inspectorate.

Investigating officials are entitled to:

a) to take written explanations and clarify the issues on the merits of the case from persons who are immediately, as witnesses, relevant to the incident;

b) require officials to produce the necessary documents and provide copies of them to clarify the circumstances of the accident.

Officials responsible for organizing the work that caused pollution of the Water Area must comprehensively facilitate the investigation and ensure the activities of the commission, transfer to the commission permits for this type of activity, logs, primary accounting documentation, order on the responsible persons, as well as other reliable data on the incident that led to the emergency discharge of harmful substance into the Water Area.

As a result of investigation of the pollution circumstances of the Water Area, the following shall be established:

- source of pollution;
- date, time and place of contamination;
- pollution characteristic (type of pollutant, nature and object of discharge);
- pollution criteria (assessment of the amount of contaminated substance discharged, the area of the contaminated water area);
- assessment of the consequences of pollution;
- culprits of pollution and persons involved in pollution;
- measures taken to localize and eliminate pollution and its consequences;
- results of elimination of pollution and main consequences;
- composition and amount of costs, number of personnel involved for pollution elimination.

Materials of departmental investigation of the pollution circumstances of the Water Area may be transferred to other regulatory and administrative authorities upon their request.

VIII. RESPONSIBILITIES OF THE OFFICIALS INVOLVED IN THE OPERATIONS OF THE PLAN.

The requirements of the Plan in the water area are mandatory for all officials. Persons guilty of failure to fulfill the obligations assigned by the Plan or of failure to provide reports and information

about emergency pollution of the Water Area, or this information is false, bear disciplinary or administrative responsibility in accordance with the current legislation of Ukraine.

Officials	Responsibilities of the officials involved in the operations of the Plan	Operational communication
Branch Director	- accepts notification about the incident and carries out general management of liquidation of the consequences of emergency - personally verify the reliability of the signal, clarify the location, nature, source and cause of contamination; - approves the procedure and organization of works; - organizes proper illumination of the polluted area at night, sufficient number of technical means to localize pollution, uninterrupted supply of resource materials (fuel, water, oil, etc.) to the involved technical means, delivery of shift personnel to the place of work, provide them with workwear, shoes, heating and food; - make a decision on the involvement of third-party auxiliaries (oil skimmer, watercraft, boom fences, etc.); - gives instructions to the relevant services of the Central Office on the notification of SE "USPA," the Main Directorate of the State Emergency Service of Ukraine in Odesa region, the State Environmental Inspectorate and the attraction of their means. - monitors the progress of the Plan implementation - make a decision on the termination of work on the elimination of the consequences of emergency pollution; - appoints and heads the commission to investigate the incident.	050-493-72-78
Chief Mechanic as responsible at the branch for organization of works on refueling of watercraft/Chief Power Engineer as responsible at the branch for organization of works on receiving liquid ship waste (blige and waste water) to onshore facilities	- continuous visual observation of the Water Area and performance of works that may lead to pollution of the Water Area; - management of priority actions for liquidation of the consequences of emergency; - organizes work to eliminate the incident and its consequences: stops ship operations (fueling, transfer of ship waste), gives instructions on disconnecting connecting pipelines, freeing them from the remains of harmful substance; - stops, and if impossible, reduces as much as possible the volume of emergency discharge of harmful substances into the Water Area or effluents containing them; - keeps a constant visual observation of the state of the Water Area and the spread of pollution, each hour during the day provides notification of the progress of the Plan implementation to the branch director; - takes a direct part in the elimination of the incident	050-499-88-06/ 050-493-87-58

	and its consequences, ensures the safety of technical means and service personnel participating in operations; - participates in the investigation of the accident.	
Chief Operator of the Shipping Company	- by decision of the director, notifies the operator of the port fleet of the Izmail branch of SE "USPA" (tel. 0674489337), - submits an application for an oil skimmer; - organizes communication between the participants of localization and liquidation of accident spill.	095-278-23-13
Head of Fire Safety Service of NIBULON LLC	- by the decision of the director notifies the Main Directorate of the State Emergency Service of Ukraine in the Odessa region (tel. 101); - applies for the involvement of their equipment and means; - organizes communication between the participants of localization and liquidation of accident spill.	050-394-59-22
Head of Environmental Protection Department of NIBULON LLC	- by decision of the Director notifies the State Environmental Inspection of the incident (tel. 0487283886); - organizes monitoring of the state of the water environment; - participates in the investigation of the accident and the calculation of losses by the state environmental inspectorate.	050-493-20-39

IZMAIL BRANCH OF THE STATE ENTERPRISE «UKRAINIAN SEA PORTS AUTHORITY» (ADMINISTRATION OF IZMAIL SEAPORT)

AGREED BY

Captain of Izmail seaport

of the Black Sea

Interregional Authority

Tykhonov M.M.

_____March 25 2020

APPROVED BY

Head of the Izmail branch

of SE «USPA» (Administration

of Izmail Seaport)

Laponoh S.I.

_____March 25 2020

PLAN

ON LOCALIZATION AND LIQUIDATION OF EMERGENCY SPILLS OF POLLUTANTS ON THE TERRITORY AND IN THE WATER AREA OF IZMAIL SEAPORT

IZMAIL

Predictive calculations of the distribution of waters contaminated by oil products. Simulation of an emergency situation

The performed calculations are simulations of emergency situations regarding the spread of oil-contaminated waters in the water area of the Danube River. The main characteristics of the water movement of the oil pollution zone include:

τ_{Cmax} - the time it takes for the zones with the maximum concentration of oil products to reach the given control point;

$C_{max,x}$ - the maximum concentration of oil products in a given control point;

$\tau_{x,фр}$, τ_x, the minimum time through which the frontal and tail parts of waters polluted by oil products reach the given control point;

$\tau_{x,c}$ - the length of time during which a concentration of oil products at a high pollution level can be expected in a given control point.

A number of assumptions were made when conducting predictive calculations of the spread of water contaminated with oil products:

- - the distribution of oil product concentration values in the zone of high pollution has approximately the same shape over the entire width;
- - the contours of the cross section are close to a rectangle;
- – vertical mixing of water occurs almost instantly.

These assumptions allow us to base the model on the well-known solution of the one-dimensional dispersion equation for a point discharge of a substance into a water stream:

$$C_{L,\tau} = \frac{m_в}{F(4\pi D_x \tau)^{0,5}} \exp\left[-\frac{(L_x - v\tau)^2}{4D_x\tau} - K\tau\right]$$

where $C_{L,x}$ the average concentration of the substance in the water flow at a distance L_x after time τ, g/m^3;

$m_в$ - the initial mass of the substance discharged into the watercourse, g;

F - cross-sectional area of the water flow, m^2;

D_x - longitudinal dispersion coefficient, m^2/s;

τ - the time elapsed from the beginning of the discharge of the substance into the watercourse, s;

K - coefficient of water self-purification rate from the discharged substance, 1/s.

To solve the problem, it is expedient to consider the longitudinal distribution of substance concentration values as the only set of such point discharges of substances. This condition allows us to transform the equation into the following form $C_{L,x} = C_{N,x} = C_ф + \sum_{n=1}^{N} C_{N,x}$,

where

$$C_{N,n} = \frac{(C_N - C_ф)v\Delta\tau_0}{2(\pi D_x \tau_{N,n})^{0,5}} \exp\left[-\frac{(L_x - v\tau_{N,n})}{4D_x\tau_{N,n}} - K\tau_{N,n}\right]$$

$$\tau_{N,n} = \frac{L_x}{\bar{v}} + (N-n)\Delta\tau_0$$

$C_{N,\tau}$ - the concentration of the substance in the Nth segment of the distribution of the concentration values of the substance in the given control point, taking into account the formation of the concentrations of the substance in all segments of this distribution of concentration values, g/m^3;

$C_{ф(к)}$ - concentration of a pollutant in a given control point before passing through it a zone of highly polluted waters, g/m^3;

C_{nn} - the concentration of a pollutant in a given control point of the river in the Nth segment (or time period) of the distribution of increased concentrations according to the recalculation of the concentration values of this substance from the Nth segment (without taking into account the influence of the formation of concentration values in neighboring segments, i.e. the Nth segment considered here in isolation from the last part of the distribution of concentration values), g/m^3;

C_N- - concentration of the pollutant in the N-th segment of the distribution of concentration values in the initial point of the water body, g/m3;

$\Delta_{\tau 0}$ - time step when dividing the distribution of increased values of substance concentration into segments in this zone of highly polluted waters;

N - number of the segment in the initial distribution of substance concentration values for which extrapolation calculations are performed;

n - the number of the next segment with concentration C_N, included in the calculations $C_{N,n}$;

N_c - the total number of segments taken to describe the distribution of substance concentration values (the number of segments in the initial and final sections should be the same).

The set of $C_{N,n}$ points allows you to reproduce the entire distribution of substance concentration values in a given control point of a water body.

To carry out prognostic calculations of the spread of highly polluted water zones by a water body, the following initial information is used:

- the total length of the section (sections) of the water body L_x (m) from the starting point to the given x-th control line, 500 m;

- the value of the concentration of the C_N pollutant (mg/dm^3) during passage through this point of the oil-contaminated zone is assumed to be 5 mg/dm3;

- approximate concentration of the pollutant $C_{ф(к)}$ (mg/dm^3) in the control point of the water body specified for the calculations before the accident, taken according to the data of laboratory studies 0.01 mg/dm^3;

- the value of time τ_N (s), starting from the moment when high concentrations of the pollutant were fixed, the corresponding value of C_N was obtained;

- duration τ_0 (s) (before the start of predictive calculations) of the presence of high concentrations of oil products in the water of a water body in the initial point;

- the value of the self-purification rate coefficient K (1/s) of the waters of the water body from oil products (in the absence of data, K = 0 1/s is taken);

- approximate time τ_c (s), during which self-purification of the water of the water body from oil products does not occur below the initial control point (in the absence of data, τ_c = 0 s is taken);

- average speed of water flow υcp,j (m/s) on the j-th selected characteristic area, taken as 0.5 m/s;

- the average depth of the water flow H_j (m) in the j-th selected characteristic area, 7.32 m;

- the average width of the water flow B_j (m) on the j-th selected characteristic area, 465 m;

- coefficient of roughness of the the channel of a water object, $n_{ш,j}$ on its j-th selected section, taken as 0.04;

- coefficient characterizing the tortuosity of the channel of the water body, taken equal to 1.1 and within the mixing of surface and polluted waters is the ratio of the distances along the fairway and the straight line;

- water discharge Q_j (m^3/s) in the j-th control point of the river, taken as 6430 m^3/s.

Calculations of the initial data are carried out as follows.

The expected minimum $\tau_{x,фр}$ time, when the frontal part of the zone of highly polluted waters will reach the given control point of the water object, is calculated according to the formula:

$$\tau_{x,фр} = \frac{1}{v^*}\left(L_x - 5{,}01\sqrt{D_x\tau_{cm}}\right)$$

If the initial data $t_к$ has the expected τ_x, the minimum time when the tail part of the zone of highly polluted waters will reach the control point of the water body, counting from the time $t_к$, is determined by the formula

$$\tau_{x,хв} = \frac{1}{v^*}\left(L_x + 5{,}01\sqrt{D_x\tau_{cm}}\right)$$

Calculations of the Chézy coefficient c are made according to the formula:

$$c = \frac{H^{2{,}5\sqrt{n_ш^*}-0{,}13-0{,}75\sqrt{H}(\sqrt{n_ш}-0{,}1)}}{n_ш^*}$$

$$c = \frac{7{,}32^{2{,}5\sqrt{0{,}04}-0{,}13-0{,}75\sqrt{7{,}32}(\sqrt{0{,}04}-0{,}1)}}{0{,}04} = 34{,}865$$

Longitudinal dispersion coefficients D_x are calculated according to the formula:

$$D_x = 43000 H v_x c^{-2{,}63}$$

$$D_x = 43000 \cdot 7{,}32 \cdot 0{,}5 \cdot 34{,}865^{-2{,}63} = 13{,}819$$

Calculations of the total number of the main segments N_c,, which are used to describe the longitudinal profile of the distribution of high concentrations of oil products in the original control point, are carried out according to the formulas:

$$N_c = \frac{\tau_0}{\Delta\tau_0} = 10$$

$$\Delta\tau_0 = \frac{0{,}1\tau_0}{1 + 0{,}001\tau_0},$$

at the same time, if $\frac{\tau_0}{\Delta\tau_0} < 50$, then it is assumed that $\Delta\tau_0 = \frac{\tau_0}{50}$; if $\frac{\tau_0}{\Delta\tau_0} < 1000$, then it is assumed that $\Delta\tau_0 = \frac{\tau_0}{1000} = 10$.

After calculating the number of main segments N_c in the zone of high concentrations of oil products in the initial point, each of them is given a serial number and the time that has passed since the beginning of registration in this point of concentrations at the level of $C_{вз}$. The temporal characteristics of the segments of the substance concentration distribution in the initial point will have the form $N_{\Delta\tau 0}$,, in the given control point after time $\tau_{ст} = (\tau_{ст} + N_{\Delta\tau 0})$, where N is the sequence number of the segment.

Calculations of the longitudinal profile of the concentration distribution of the pollutant in the zone of highly polluted waters when it passes through the specified control point are carried out according to the following stages.

Parameter definition $\tau_{N,n}$:

$$\tau_{N,n} = \tau_{cm} \pm n\Delta\tau 0,$$

where $\tau_{N,n}$ - the time value for calculating the change in the concentration of the substance in the n-x segments that "participate" in the formation of C_N values;

n is the serial number of the segment with C_N. concentration used for calculations of the $C_{N,n}$ value.

Parameter calculation $C_{N,n}$:

$$C_{N,n} = \frac{(C_N - C_\phi)\mathrm{v}\Delta\tau_0}{2(\pi D_x \tau_{N,n})^{0,5}} \exp\left[-\frac{(L_x - v\tau_{N,n})^2}{4D_x\tau_{N,n}} - K(\tau_{N,n} - \tau_з)\right]$$

Calculations of the pollutant concentration in N-x segments in the given control point of the river:

$$\mathrm{C_{N,n}} = C_\phi + \sum_{n=1}^{N} \mathrm{C_{N,n}}$$

The results of the calculations are given in tabular form

	1	**2**	**3**	**4**	**5**
τ'N,	29,09090	38,18180	47,27270	56,36360	65,45450
exp	0,22616	0,37549	0,53051	0,68846	0,84812
C'N	0,2797	0,2103	0,1618	0,1266	0,1001

	6	**7**	**8**	**9**	**10**
τ'N,	74,54540	83,63630	92,72720	101,81810	110,90900
exp	1,00886	1,17034	1,33233	1,49470	1,65735
C'N	0,0799	0,0642	0,0518	0,0420	0,0342

	11	**12**	**13**	**14**	**15**
τ'N,	119,9999	129,0908	138,1817	147,2726	156,3635
exp	1,82023	1,98327	2,14646	2,30976	2,47316
C'N	0,0280	0,0229	0,0188	0,0155	0,0128

	16	**17**	**18**	**19**	**20**
τ'N,	165,4544	174,5453	183,6362	192,7271	201,8180
exp	2,63663	2,80017	2,96377	3,12741	3,29109
C'N	0,0105	0,0087	0,0072	0,0060	0,0050

	21	**22**	**23**	**24**	**25**
τ'N,	210,9089	219,9998	229,0907	238,1816	247,2725
exp	3,45482	3,61857	3,78235	3,94616	4,10999
C'N	0,0041	0,0034	0,0028	0,0024	0,0020

	26	**27**	**28**	**29**	**30**
τ'N,	256,3634	265,4543	274,5452	283,6361	292,7270
exp	4,27384	4,43770	4,60159	4,76548	4,92939
C'N	0,0016	0,0014	0,0011	0,0010	0,0008

	31	**32**	**33**	**34**	**35**
τ'N,	301,8179	310,9088	319,9997	329,0906	338,1815
exp	5,09331	5,25725	5,42119	5,58514	5,74910
C'N	0,0007	0,0006	0,0005	0,0004	0,0003

	36	**37**	**38**	**39**	**40**
τ'N,	347,2724	356,3633	365,4542	374,5451	383,6360
exp	5,91307	6,07704	6,24103	6,40501	6,56901

C'_N	0,0003	0,0002	0,0002	0,0002	0,0001

	41	**42**	**43**	**44**	**45**
τ'_N,	392,7269	401,8178	410,9087	419,9996	429,0905
exp	6,73300	6,89701	7,06102	7,22503	7,38905
C'_N	0,0001	0,0001	0,0001	0,0001	0,0001

	46	**47**	**48**	**49**	**50**
τ'_N,	438,1814	447,2723	456,3632	465,4541	474,5450
exp	7,55307	7,71709	7,88112	8,04515	8,20918
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	51	**52**	**53**	**54**	**55**
τ'_N,	483,6359	492,7268	501,8177	510,9086	519,9995
exp	8,37322	8,53725	8,70130	8,86534	9,02938
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	56	**57**	**58**	**59**	**60**
τ'_N,	529,0904	538,1813	547,2722	556,3631	565,4540
exp	9,19343	9,35748	9,52153	9,68559	9,84964
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	61	**62**	**63**	**64**	**65**
τ'_N,	574,5449	583,6358	592,7267	601,8176	610,9085
exp	10,01370	10,17776	10,34182	10,50588	10,66994
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	66	**67**	**68**	**69**	**70**
τ'_N,	619,9994	629,0903	638,1812	647,2721	656,3630
exp	10,83401	10,99807	11,16214	11,32621	11,49028
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	71	**72**	**73**	**74**	**75**
τ'_N,	665,4539	674,5448	683,6357	692,7266	701,8175
exp	11,65435	11,81842	11,98249	12,14656	12,31064
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	76	**77**	**78**	**79**	**80**
τ'_N,	710,9084	719,9993	729,0902	738,1811	747,2720
exp	12,47471	12,63879	12,80286	12,96694	13,13102
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	81	**82**	**83**	**84**	**85**
τ'_N,	756,3629	765,4538	774,5447	783,6356	792,7265
exp	13,29510	13,45917	13,62325	13,78734	13,95142
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	86	87	88	89	90
τ'_N,	801,8174	810,9083	819,9992	829,0901	838,1810
exp	14,11550	14,27958	14,44366	14,60775	14,77183
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	91	92	93	94	95
τ'_N,	847,2719	856,3628	865,4537	874,5446	883,6355
exp	14,93591	15,10000	15,26408	15,42817	15,59226
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	96	97	98	99	100
τ'_N,	892,7264	901,8173	910,9082	919,9991	929,0900
exp	15,75634	15,92043	16,08452	16,24861	16,41269
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	101	102	103	104	105
τ'_N,	938,1809	947,2718	956,3627	965,4536	974,5445
exp	16,57678	16,74087	16,90496	17,06905	17,23314
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	106	107	108	109	110
τ'_N,	983,6354	992,7263	1001,8172	1010,9081	1019,9990
exp	17,39723	17,56132	17,72541	17,88951	18,05360
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	111	112	113	114	115
τ'_N,	1029,090	1038,181	1047,272	1056,363	1065,454
exp	18,21769	18,38178	18,54588	18,70997	18,87407
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	116	117	118	119	120
τ'_N,	1074,544	1083,635	1092,726	1101,817	1110,908
exp	19,03814	19,20224	19,36634	19,53043	19,69453
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	121	122	123	124	125
τ'_N,	1119,999	1129,090	1138,181	1147,272	1156,363
exp	19,85862	20,02272	20,18682	20,35091	20,51501
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	126	127	128	129	130
τ'_N,	1165,453	1174,544	1183,635	1192,726	1201,817
exp	20,67909	20,84319	21,00728	21,17138	21,33548
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	131	132	133	134	135
$\tau_{'N}$,	1210,908	1219,999	1229,090	1238,181	1247,272
exp	21,49958	21,66368	21,82777	21,99187	22,15597
$C_{'N}$	0,0000	0,0000	0,0000	0,0000	0,0000

	136	137	138	139	140
$\tau_{'N}$,	1256,362	1265,453	1274,544	1283,635	1292,726
exp	22,32005	22,48415	22,64825	22,81235	22,97645
$C_{'N}$	0,0000	0,0000	0,0000	0,0000	0,0000

	141	142	143	144	145
$\tau_{'N}$,	1301,817	1310,908	1319,999	1329,090	1338,181
exp	23,14055	23,30465	23,46875	23,63285	23,79695
$C_{'N}$	0,0000	0,0000	0,0000	0,0000	0,0000

	146	147	148	149	150
$\tau_{'N}$,	1347,271	1356,362	1365,453	1374,544	1383,635
exp	23,96103	24,12513	24,28923	24,45333	24,61743
$C_{'N}$	0,0000	0,0000	0,0000	0,0000	0,0000

	151	152	153	154	155
$\tau_{'N}$,	1392,726	1401,817	1410,908	1419,999	1429,090
exp	24,78153	24,94563	25,10973	25,27384	25,43794
$C_{'N}$	0,0000	0,0000	0,0000	0,0000	0,0000

	156	157	158	159	160
$\tau_{'N}$,	1438,180	1447,271	1456,362	1465,453	1474,544
exp	25,60202	25,76612	25,93022	26,09433	26,25843
$C_{'N}$	0,0000	0,0000	0,0000	0,0000	0,0000

	161	162	163	164	165
$\tau_{'N}$,	1483,635	1492,726	1501,817	1510,908	1519,999
exp	26,42253	26,58663	26,75073	26,91483	27,07894
$C_{'N}$	0,0000	0,0000	0,0000	0,0000	0,0000

	166	167	168	169	170
$\tau_{'N}$,	1529,089	1538,180	1547,271	1556,362	1565,453
exp	27,24302	27,40712	27,57123	27,73533	27,89943
$C_{'N}$	0,0000	0,0000	0,0000	0,0000	0,0000

	171	172	173	174	175
$\tau_{'N}$,	1574,544	1583,635	1592,726	1601,817	1610,908
exp	28,06353	28,22764	28,39174	28,55584	28,71995
$C_{'N}$	0,0000	0,0000	0,0000	0,0000	0,0000

	176	177	178	179	180
τ'_N,	1619,998	1629,089	1638,180	1647,271	1656,362
exp	28,88403	29,04813	29,21224	29,37634	29,54044
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	181	182	183	184	185
τ'_N,	1665,453	1674,544	1683,635	1692,726	1701,817
exp	29,70455	29,86865	30,03275	30,19686	30,36096
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	186	187	188	189	190
τ'_N,	1710,907	1719,998	1729,089	1738,180	1747,271
exp	30,52505	30,68915	30,85325	31,01736	31,18146
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	191	192	193	194	195
τ'_N,	1756,362	1765,453	1774,544	1783,635	1792,726
exp	31,34557	31,50967	31,67377	31,83788	32,00198
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

	196	197	198	199	200
τ'_N,	1801,816	1810,907	1819,998	1829,089	1838,180
exp	32,16607	32,33017	32,49428	32,65838	32,82249
C'_N	0,0000	0,0000	0,0000	0,0000	0,0000

Based on the above, the results of calculations that simulate an emergency situation of oil pollution of surface waters of the Danube River in the area of activity of "NIBULON" JV LLC are:

$\tau x_{,фр}$ = 833.24 s, or 14 min. - time after an emergency discharge of oil products, when the frontal part of the zone of waters polluted with oil products reaches the specified control point of the water body (500 m downstream);

$\tau_{C,max}$ = 1166.76 s, or 19 min. - time after an emergency discharge of oil products, when the maximum concentration of oil products will be observed in the control point;

0.2797 mg/dm^3 is the maximum concentration of oil products in the control point.

Calculation of economic damage to the aquatic environment.

The discharge of pollutants into a water body in the event of an emergency is determined in accordance with the "Methodology for calculating the amount of compensation for damages caused to the state due to violations of the legislation on the protection and rational use of water resources", approved by order of the Ministry of Natural Resources No. 389 of 07.20.2009.

Calculation of the amount of compensation for damages caused to water bodies as a result of pollution by substances, in pure form as part of products or raw materials, in UAH, is carried out according to the formula:

$$C = K_c \cdot K_{кат} \cdot K_p \cdot k_з \cdot M_i \cdot \gamma_i ,$$

where $K_c = 1,5$ - a coefficient that takes into account the increase in damage caused to the aquatic ecosystem during an emergency discharge;

$K_{кат}$ - the coefficient that takes into account the category of the water body, for the Danube River, it is accepted as a water body for fishery use, $K_{кат} = 2.5$;

K_p - the regional coefficient of scarcity of water resources of surface water, which is determined in accordance with Appendix 3, for the Odesa region $K_p = 1,26$;

$k_з = 1,5$ - the coefficient of damage to the aquatic ecosystem;

M_i - the mass of the discharged pollutant into the water body as part of products or raw materials, we take 2.0 m^3 = 1.70 t;

γi - specific economic damage from water pollution, attributed to 1 ton of conditional pollutant, UAH/t, which is determined by the formula

$$\gamma i = \gamma \cdot A_i,$$

where γ is the indexed specific economic losses from the pollution of water resources in the current year, UAH/t, determined by the formula

$$\gamma = \gamma_{\ddot{I}} \cdot \frac{I}{100}$$

де $\gamma_П$ - where $\gamma_П$ - indexed specific economic losses from water pollution in the previous year, UAH/t;

Indexed specific economic losses from water pollution ($\gamma_П$) in 2011 amount to UAH 766.96/t.

I - inflation index (consumer price index), average annual growth rate for the previous year, the inflation index is: for 2011 – 104.6%, for 2012 – 99.8%,
for 2013 – 100.5%, for 2014 – 124.9%, for 2015 – 143.3%, for 2016 – 112.4%, for 2017 – 113.7%, for 2018 – 109 .8%, for 2019 – 104.1%, for 2020 – 105.0%, for 2021 – 110.0%,

A_i - dimensionless indicator of the relative danger of the i-th pollutant, which is determined from the ratio according to the formula: $A_i = \frac{1}{ГДК_I}$

where MPC_i is a dimensionless value numerically equal to the MPC_i of the pollutant in the water of the water body of the corresponding category.

For substances with MPC equal to one or more, a correction factor of 10 is entered in the numerator ($A_i = 10/MPC$).

Since 2012, the indexation of the specific economic loss from the pollution of water resources attributed to 1 ton of conditional pollutant has been carried out annually, UAH /t.

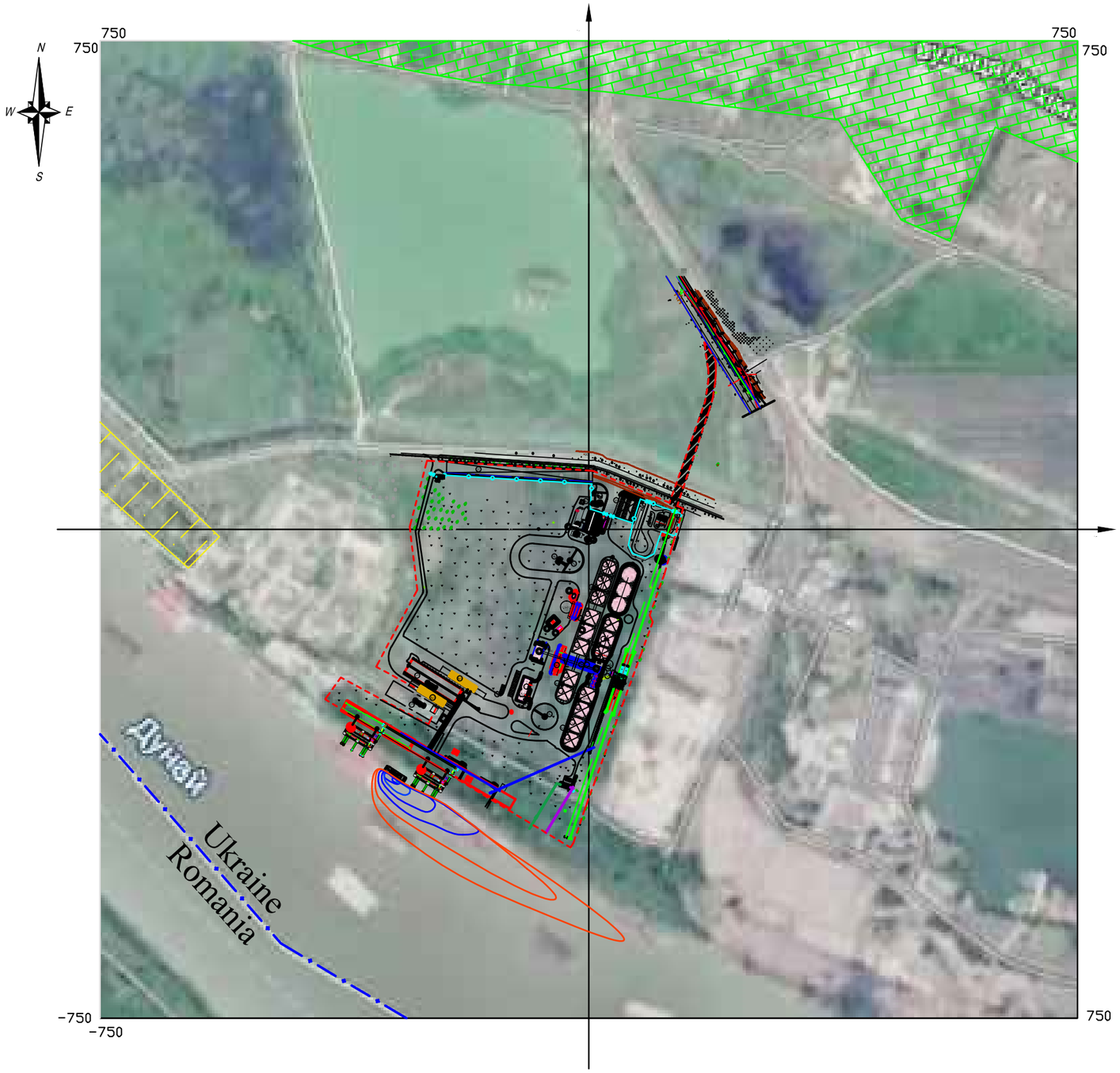
The result of the calculation of economic losses to the aquatic environment is shown in the table:

The name of the pollutant	The mass of the discharged pollutant into the water body, t	Indexed specific economic losses from water pollution in the current year, UAH /t	Value of MPC, mg/m^3	A dimensionless indicator of the relative danger of the i-th pollutant,A	Correction coefficients ($K_c \cdot K_{кат} \cdot K_p \cdot k_з$)	Amount of damages, UAH.
Oil products	1,70	2429,83	0,3	3,33	7,0875	***97490,46***

Based on the results of the calculations, it follows that in the event of an emergency situation associated with the discharge of 2 m^3 of oil into the Danube, the amount of economic damage to the environment is 97,490.46 UAH.

After the emergency release of oil products, water contaminated with oil products will reach the control point located 500 m downstream within 1 hour 46 min, while the maximum concentration of oil products in the control site will be 1.17470 mg/dm^3.

Map of the spread of oil-contaminated waters in the water area of the Danube River during an emergency situation
M 1 : 5 000



Legend

- NIBULON LLC territory
- the state border of Ukraine
- the residential buildings of Izmail
- recreation zone

Concentration of oil products

- 0,2797 - 0,0799 mg/dm3
- 0,0642 - 0,0518 mg/dm3

The Ministry of Environmental Protection and Natural Resources of Ukraine

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«___» _____ 2023

REPORT
ON SCIENTIFIC RESEARCH WORK

«Assessment of the impact of planned activities of the «NIBULON, Ltd» on the species and habitats of «Natura-2000» objects on the territory of Romania»

Contract № NB- 771-23 (1676/1.1) from 05.04.2023

Scientific director Vasenko O.G.

Responsible executor Klimov O.V.

2023

ASSESSMENT OF THE IMPACT OF THE PLANNED ACTIVITIES OF «NIBULON» Ltd SPECIES AND HABITATS OF NATURE 2000 SITE IN THE TERRITORY OF ROMANIA

Introduction

Based on the assessments made by the Customer (AIPA Report) and the results of monitoring studies of the institute on the Danube River, an assessment was made of the transboundary impact of planned activities on the types and settlements of «Natura 2000» facilities in Romania.

1 Main characteristics of planned activity

Planned activity – new construction of a transport infrastructure object – a river port (terminal) with a railway access track – abutment to the Izmail station of the Odesa Railway regional branch. The place of implementation of the planned activity is the city of Izmail, Izmail District, Odesa Region, the coast of the left bank of the Danube River (from 91.09 to 91.55 km).

The area of land acquisition is 19.7 hectares for the construction and operation of a transport infrastructure object – a river port (terminal), the category of land is transport land.

The area of the water area is 10.4357 hectares, located along the shipping channel «Vylkove - Izmailskyi Chatal» from 91.09 to 91.55 km and assigned to the water area of the Izmail sea port (CMU Resolution No. 1208 of 07.10.2009 «Boundaries of the Sea Port Water Area Izmail»).

The planned activity involves:

- dredging works for the arrangement of the water area and the approach channel of the Port with project characteristics: the volume of extracted soil is 112 thousand m^3, the area of the bottom damage is 2.32 ha, the bottom soil is stored in a coastal dump

- construction and operation of a transshipment complex for grain cargoes with design characteristics:

- throughput capacity – 3,100,000 tons of grain products per year;
- volume of simultaneous storage of grain products – 118.5 thousand tons;
- work schedule – three shifts, 365 days a year;
- number of employees - 100 units;
- volume of water intake from municipal networks – 5316.713 m^3/year;
- the volume of water intake from the Danube River to meet the technical needs of Porto - 14,450,000 m^3/year;
- volume of water drainage to municipal sewage networks - 4606.713 m^3/year;
- volume of treated surface runoff in the Danube River - 51,602.01 m^3/year.

Description of protected areas of their species and habitats likely to be affected by planned activities

The export of grain products from the city of Izmail with access to the Black Sea is possible using the Ukrainian and European inland waterways of the Danube River, namely the mouths of Bystre, Sulina and Chernovod. At the same time, species and habitats of the following territories of special protection zones «NATURA 2000» ROSCI0065, ROSCI0066, ROSPA0031, as well as ROSCI0022, ROSPA0002, ROSPA0017, ROSCI0006, ROSPA0121 may be affected.

A map of export routes of grain cargoes is attached.

The Danube Delta is an integral part of the European Natura 2000 ecological network in Romania and overlaps at the level of the Danube Delta with such Special Protection Areas (SPAs) and Sites of Community Importance (SCI) created under the Flora and Fauna Directive (92/43/ ЄEC) and birds (79/409/ ЄEC).

The closest to the object of the planned activity is the special protection zone of Romania **ROSCI0065**, which includes **ROSCI0066** and **ROSPA0031**. The species and habitats of these zones may be subject to a local impact during the construction and operation of the object of the planned activity

No	Name of SCI	Code	Surface of SCI (ha)	Biogeographical Region
1.	Delta Dunării	ROSCI0065	453.645,5	49,8% Steppe and 50,2^ Pontic
2.	Delta Dunării – zona marină	ROSCI0066	336.200,2	100% Black Sea marine area
No	**Name of SPA**	**Code**	**Surface of SCI (ha)**	**Biogeographical Region**
3.	Delta Dunării şi Complexul Razim-Sinoie	ROSPA0031	508.302,3	44,74% Steppe and 55,26% Pontic

ROSCI0065 Danube Delta, the area is 453,645.5 hectares

ROSCI0065 «Danube Delta» is intended for the conservation of species/habitats of Community interest:

-29 natural types of habitats (Table 1) that are of interest to the community, of which 8 habitats are of priority interest (Table 2) (71.24% of the surface of ROSCI0065 is occupied by Natura 2000 habitats);

-species listed in Annex II to the Council Directive 92/43/EEC: 5 species of plants (Table 3) and 36 species of animals (9 species of invertebrates, 15 species of fish, 2 species of amphibians, 3 species of reptiles, 7 species of mammals) (table 4)

Map of grain cargo export routes

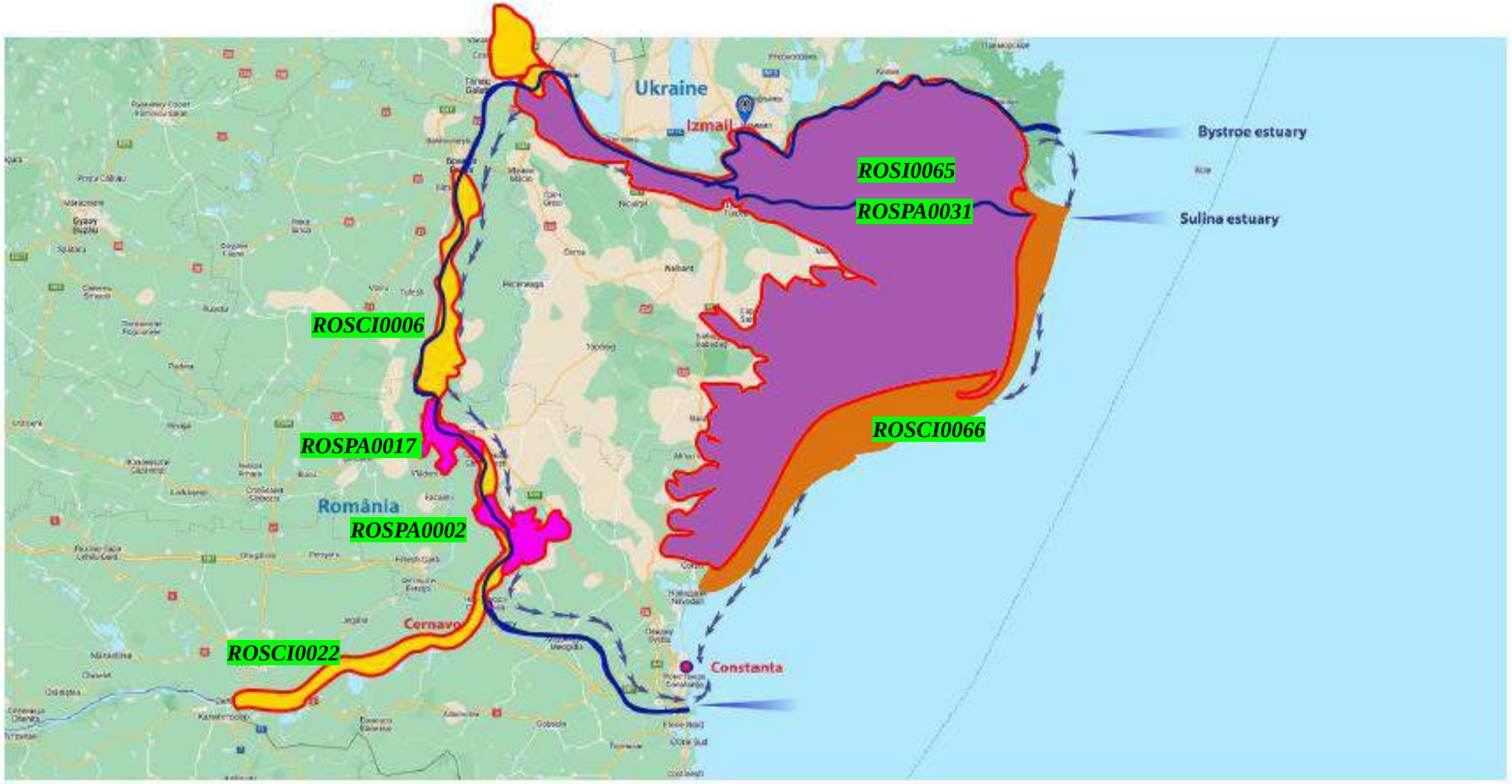

Table 1 Types of habitats presented on the ROSCI0065 site

Code	Name	
	Ukrainian	**English**
1110	Піщані прибережні обмілини, що постійно вкриті незначним шаром морської води	Sandbanks which are slightly covered by sea water all the time
1150	Узбережні лагуни	Coastal lagoons
1210	Однорічна рослинність лінії прибою	Annual vegetation of drift lines
1310	*Salicornia* та інші однорічники, які колонізують ділянки, де накопичується мул та пісок	*Salicornia* and other annuals colonizing mud and sand
1410	Середземноморські засолені луки *(Juncetalia maritimi)*	Mediterranean salt meadows (*Juncetalia maritimi*)
1530	Панонські засолені степи та засолені болота (марші)	Pannonic salt steppes and salt marshes
2110	Початкові стадії рухомих дюн	Embryonic shifting dunes
2130	Стабільні узбережні дюни з трав'яною рослинністю ('сірі дюни')	Fixed coastal dunes with herbaceous vegetation ('grey dunes')
2160	Дюни з *Hippophaë rhamnoides*	Dunes with *Hippophaë rhamnoides*
2190	Вологі міждюнні улоговини	Humid dune slacks
3130	Оліготрофні до мезотрофних непроточні (стрічкові) водойми з рослинністю *Littorelletea uniflorae* та/або *Isoeto-Nanojuncetea*	Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoeto-Nanojuncetea*
3140	Оліго-мезотрофні водойми з твердою (жорсткою) водою та бентосною рослинністю *Chara spp*	Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp
3150	Природні евтрофні озера з рослинністю типу *Magnopotamion* або *Hydrocharition*	Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* -type vegetation
3160	Природні дистрофні озера та стави	Natural dystrophic lakes and ponds
3260	Водотоки від рівнинних до монтанних поясів з рослинністю *Ranunculion fluitantis* та *Callitricho-Batrachion*	Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation
3270	Мулисті береги річок з рослинністю *Chenopodion rubri* p.p. та *Bidention* p.p.	Rivers with muddy banks with *Chenopodion rubri* pp and *Bidention* pp vegetation
40C0	Понтично-сарматські листопадні зарості	Ponto-Sarmatic deciduous thickets
6120	Трав'яні угруповання на сухих карбонатних пісках	Xeric sand calcareous grasslands
62C0	Понтично-сарматські степи	Ponto-Sarmatic steppes
6410	Луки з *Molinia* на вапнякових, торф'яних або глинисто-мулових ґрунтах *(Molinion caeruleae)*	*Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)
6420	Середземноморські вологі високотравні угруповання *Molinio-Holoschoenion*	Mediterranean tall humid grasslands of the *Molinio-Holoschoenion*
6430	Гідрофільні прибережні високотравні угруповання рівнин і від монтанного до альпійського висотних поясів	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
6440	Алювіальні луки річкових долин	Alluvial meadows of river valleys of the

	Cnidion dubii	Cnidion dubii
6510	Низинні викошувані луки *(Alopecurus pratensis, Sanguisorba officinalis)*	Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)
7210	Активні верхові (оліготрофні) болота	Calcareous fens with Cladium mariscus and species of the Caricion davallianae
91AA	Східні дубові ліси з *Quercus alba*	Eastern white oak woods
91F0	Прибережні мішані ліси з *Quercus robur, Ulmus laevis* та *Ulmus minor, Fraxinus excelsior* або *Fraxinus angustifolia* вздовж великих річок *(Ulmenion minoris)*	Riparian mixed forests of *Quercus robur, Ulmus laevis* and *Ulmus minor, Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers (*Ulmenion minoris*)
92A0	Галерейні ліси з *Salix alba* та *Populus alba*	*Salix alba* and *Populus alba* galleries
92D0	Південні прибережні річкові галереї та зарості (*Nerio-Tamaricetea* та *Securinegion tinctoriae*)	Southern riparian galleries and thickets (*Nerio-Tamaricetea* and *Securinegion tinctoriae*)

Table 2 Priority types of habitats of the site ROSCI0065

Code	**Name**	
	Ukrainian	**English**
1150	Узбережні лагуни	Coastal lagoons
1530	Панонські засолені степи та засолені болота (марші)	Pannonic salt steppes and salt marshes
2130	Стабільні узбережні дюни з трав'яною рослинністю ('сірі дюни')	Fixed coastal dunes with herbaceous vegetation ('grey dunes')
40C0	Понтично-сарматські листопадні зарості	Ponto-Sarmatic deciduous thickets
6120	Трав'яні угруповання на сухих карбонатних пісках	Xeric sand calcareous grasslands
62C0	Понтично-сарматські степи	Ponto-Sarmatic steppes
7210	Активні верхові (оліготрофні) болота	Calcareous fens with Cladium mariscus and species of the Caricion davallianae
91AA	Східні дубові ліси з *Quercus alba*	Eastern white oak woods

Table 3 Taxonomic composition of flora species of the ROSCI0065 site listed in Annex II of Directive 92/43/ЄЕС

Species			**Protection status**	
Group	**Code**	**Name**	**Red List IUCN**	**European Red List**
Class:FERNS (POLYPODIOPSIDA) Order: Salviniales (Salviniales) Family:Marsileaceae (Marsileaceae)				
P	1428	*Marsilea quadrifolia* Four-leaf clover	LC	VU
FLOWERING PLANTS (ANGIOSPERMAE) Class Dicotyledons (Magnoliopsida**)**				
Family: Asteraceae (Asteraceae)				
P	2253	*Centaurea jankae* Cornflower janki	–	VU
P	2255	*Centaurea pontica*	–	DD

		Pontic cornflower		
Family: Boraginaceae (Boraginaceae)				
P	4067	*Echium russicum* Red feathers	–	LC
Family: Sundew (Droseraceae)				
P	1516	*Aldrovanda vesiculosa* Waterwheel plant	EN	DD

Notes: Protection status. Categories Red List IUCN and Red List European: EN – endangered species, NT – Near Threatened , EN – Endangered, VU – vulnerable, LC – Least Concern, DD – Data Deficien

Table 4 Taxonomic composition of fauna species of the ROSCI0065 site listed in Annex II of Directive 92/43/ЄЕС

Kind			**Protection status**	
Grope	**Code**	**Name**	**Red List IUCN**	**European Red List**
INVERTEBRATES (INVERTEBRATES)				
Type MOLLUSKS (MOLLUSCA)				
Class GASTROPODA (GASTROPODA)				
Order Lung-bearing snails (Pulmonata)				
Family Ram's horn snails (Planorbidae)				
I	4056	*Anisus vorticulus* The little whirlpool ramshorn snail	NT	NT
Class Insect (INSECTA)				
Order Coleoptera (Coleoptera)				
Family Hydroscaphidae (Dytiscidae)				
I	1082	*Graphoderus bilineatus* The graphoderus bilineatus	VU	-
Family Longhorn beetles (Cerambycidae)				
I	1089	**Morimus funereus** The morimus funereus	VU	-
Order Lepidoptera (Lepidoptera)				
		Family Owlet moths (Noctuidae)		
I	4027	*Arytrura musculus* Arytrura musculus	LC	-
		Family Cossidae (Cossidae)		
I	4028	*Catopta thrips* Paracossulus thrips	-	-
		Family Pieridae (Pieridae)		
I	4036	*Leptidea morsei* The Fenton's wood white	-	NT
Family The gossamer-winged butterflies (Lycaenidae)				
I	1060	*Lycaena dispar* The large copper	NT	LC
Order Dragonfly (Odonata)				
Family Coenagrion (Coenagrionidae)				
I	4045	*Coenagrion ornatum* The ornate bluet	LC	NT

Family Club-tailed dragonflies (Gomphidae)				
I	1037	*Ophiogomphus cecilia* The green club-tailed dragonfly	LC	LC
Type Chordata (CHORDATA)				
Superclass Fish (PISCES)				
Class Actinopterygii (ACTINOPTERYGII)				
Infraclass Teleostei (Teleostei)				
Order Ray-finned fishes (Clupeiformes)				
Family Clupeidae (Clupeidae)				
F	4125	*Alosa immaculate* The pontic shad	VU	VU
F	4127	*Alosa tanaica* The azov shad	LC	LC
Order Salmonidae (Salmoniformes)				
Family Umbra (Umbridae)				
F	2011	*Umbra krameri* The European mudminnow	VU	VU
Order Cypriniformes (Cypriniformes)				
Family Cyprinidae (Cyprinidae)				
F	1130	*Aspius aspius* The asp	LC	LC
F	1124	*Gobio albipinnatus* The white-finned gudgeon	LC	LC
F	2511	*Gobio kessleri* The Kessler's gudgeon	LC	LC
F	2522	*Pelecus cultratus* The ziege	LC	LC
F	1134	*Rhodeus sericeus amarus* The Amur bitterling	LC	LC
Family True loaches (Cobitidae)				
F	1149	*Cobitis taenia* The spined loach	LC	LC
F	1146	*Sabanejewia aurata* The golden loaches	LC	LC
F	1145	*Misgurnus fossilis* The weatherfish	LC	LC
Order Perciformes (Perciformes)				
Family Percidae (Percidae)				
F	2555	*Gymnocephalus baloni* Balon's ruffe	LC	LC
F	1157	*Gymnocephalus schraetzer* The striped ruffe	LC	LC
F	1160	*Zingel streber* The streber	LC	LC
F	1159	*Zingel zingel* The Zingel zingel	LC	LC
Class Amphibia (AMPHIBIA)				
Order Tailed (Caudata)				
Family Salamanders (Salamandridae)				
A	1993	*Triturus dobrogicus* The Danube crested newt	NT	NT

Order Tailless (Anura)				
Family Fire-bellied toads (Bombinatoridae)				
A	1188	*Bombina bombina* The European fire-bellied toad	LC	LC
Class Reptile (REPTILIA)				
Order Turtles (Testudines)				
Family Freshwater turtles (Emydidae)				
R	1220	*Emys orbicularis* The European pond turtle	NT	NT
R	1219	*Testudo graeca* The Greek tortoise	VU	VU
Order Squamata (Squamata)				
Infraorder Snakes (Serpentes)				
Family Vipers (Viperidae)				
R	1298	*Vipera ursinii* The Orsini viper	VU	VU
Class Mammal (MAMMALIA)				
Superorder Rodents (Rodentia)				
Order Mouse-like rodents (Muriformes)				
Family Castoridae (Castoridae)				
M	1337	*Castor fiber* The Eurasian beaver	LC	LC
Family Cricetidae (Cricetidae)				
M	2609	*Mesocricetus newtoni* The Romanian hamster	LC	NT
Family Sciuridae (Sciuridae)				
M	1335	*Spermophilus citellus* The European ground squirrel	VU	VU
Order: Carnivora (Carnivora)				
Family Mustelidae (Mustelidae)				
M	1355	*Lutra lutra* The Eurasian otter	NT	NT
M	2633	*Mustela eversmanii* The Steppe polecat	LC	LC
M	1356	*Mustela lutreola* The European mink	CR	EN
M	2635	*Vormela peregusna* The marbled polecat	VU	VU

Notes: Protection status. Categories Red List IUCN and Red List European: CR – Critically Endangered, EN – endangered species, VU – vulnerable, NT – near-threatened, LC – Least Concern.

Ecological features of the biota of the ROSCI0065 Special Protection Area

On the territory of the Romanian Special Protection Area **ROSCI0065**, there are Red List and European Red List species of flora and fauna, whose populations are easily and quickly exposed to external influences:

- two species of Red List flora: VU (Vulnerable) - Marsilea quadrifolia and Centaurea jankae;

- 14 species of fauna of the European Red List category, including:

with EN (Endangered) protection status - European mink (Mustela lutreola);

VU (Vulnerable) status - Black Sea herring (Alosa immaculate), common umber (Umbra krameri), Greek tortoise (Testudo graeca), steppe viper (Vipera ursinii), European polecat (Spermophilus citellus), common quail (Vormela peregusna);

NT (Near Threatened) status - wrapped keelless coil (Anisus vorticulus), Morse's squirrel (Leptidea morsei), decorated arrow (Coenagrion ornatum), Danube newt (Triturus dobrogicus), European marsh turtle (Emys orbicularis), Newton's hamster (Mesocricetus newtoni), river otter (Lutra lutra).

ROSCI0022, ROSPA0002, ROSPA0017, ROSCI0006, ROSPA0121

Special Protection Zones of Romania **ROSCI0022, ROSPA0002, ROSPA0017, ROSCI0006, ROSPA0121** are adjacent to possible export routes of grain cargoes. Species and settlements of these zones may be affected by increased traffic of vessels along the Danube River waterways

No	**Name of SCI**	**Code**	**Surface of SCI (ha)**	**Biogeographical Region**
4.	Canaralele Dunării	ROSCI0022	26109,9	100.00 % Steppic
5.	Balta Mică a Brăilei	ROSCI0006	20665,5	100.00 % Steppic
No	**Name of SPA**	**Code**	**Surface of SCI (ha)**	**Biogeographical Region**
6.	Allah Bair - Capidava	ROSPA0002	11715,7	100.00 % Steppic
7.	Canaralele de la Hârșova	ROSPA0017	7304.8	100.00 % Steppic
8.	Lacul Brateș	ROSPA0121	0,0	100.00 % Steppic

Special Protection Area **ROSCI0022 "Canaralele Dunării", with an area of 26109.9 ha**, is intended for the conservation of species/habitats of Community interest:

- 15 natural habitat types (Table 5);

- species listed in Annex II to Council Directive 92/43/EEC: 2 species of plants (Table 5) and 22 species of animals (1 species of invertebrates, 14 species of fish, 2 species of amphibians, 2 species of reptiles, 3 species of mammals) (Table 6).

Special Protection Areas **ROSPA0002 "Allah Bair - Capidava", ROSPA0017 "Canaralele de la Hârșova", ROSPA0121 "Lacul Brateș"** are intended for the conservation of species of Community interest: 100 bird species (Table 6).

Special Protection Area **ROSCI0006 "Balta Mică a Brăilei", 20665.5 ha**, is designated for the conservation of species/habitats of Community interest:

- 9 natural habitat types (Table 5);

- 16 species of animals listed in Annex II to Council Directive 92/43/EEC: 12 fish species, 2 amphibian species, 1 reptile species, 1 mammal species) (Table 6)

Table 5. Habitat types represented at sites ROSCI0022 and ROSCI0006.

Code	Name	
	Ukrainian	**English**
ROSCI0022		
40C0	Понто-сарматичні широколистяні зарості	Ponto-Sarmatic deciduous thickets
62C0	Понто-сарматичні степи	Ponto-Sarmatic steppes
91F0	Прибережні змішані ліси Quercus robur, Ulmus laevis і Ulmus minor, Fraxinus excelsior або Fraxinus angustifolia, уздовж великих річок (Ulmenion minoris)	Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia, along the great rivers (Ulmenion minoris)
91I0	Євро-сибірські степові ліси з Quercus spp	Euro-Siberian steppic woods with Quercus spp
91M0	Панонсько-балканські дубово-дубові ліси	Pannonian-Balkanic turkey oak –sessile oak forests
91AA	Східний білий дуб	Eastern white oak woods
92A0	Галереї Salix alba і Populus alba	Salix alba and Populus alba galleries
92D0	Південні прибережні галереї та зарості (Nerio-Tamaricetea та Securinegion tinctoriae)	Southern riparian galleries and thickets (Nerio-Tamaricetea and Securinegion tinctoriae)
3130	Оліготрофні та мезотрофні стоячі води з рослинністю Littorelletea uniflorae та/або Isoeto-Nanojuncetea	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoeto-Nanojuncetea
3140	Жорсткі олігомезотрофні води з донною рослинністю Chara spp	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp
3150	Природні евтрофні озера з рослинністю типу Magnopotamion або Hydrocharition	Natural eutrophic lakes with Magnopotamion or Hydrocharition -type vegetation
3270	Річки з мулистими берегами з рослинністю Chenopodion rubri pp і Bidention pp	Rivers with muddy banks with Chenopodion rubri pp and Bidention pp vegetation
6430	Гідрофільні високі трав'янисті угруповання на рівнинах і від гірських до альпійських рівнів	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
6440	Алювіальні луки річкових долин Cnidion dubii	Alluvial meadows of river valleys of the Cnidion dubii
6510	Сінокоси низинні (Alopecurus pratensis, Sanguisorba officinalis)	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)
ROSCI0006		
91F0	Прибережні змішані ліси Quercus robur, Ulmus laevis і Ulmus minor, Fraxinus excelsior або Fraxinus angustifolia, уздовж великих річок (Ulmenion minoris)	Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia, along the great rivers (Ulmenion minoris)
92A0	Галереї Salix alba і Populus alba	Salix alba and Populus alba galleries
92D0	Південні прибережні галереї та зарості (Nerio-Tamaricetea та Securinegion tinctoriae)	Southern riparian galleries and thickets (Nerio-Tamaricetea and Securinegion tinctoriae)
3130	Оліготрофні та мезотрофні стоячі води з рослинністю Littorelletea uniflorae та/або Isoeto-Nanojuncetea	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoeto-Nanojuncetea
3270	Річки з мулистими берегами з рослинністю Chenopodion rubri pp і Bidention pp	Rivers with muddy banks with Chenopodion rubri pp and Bidention pp vegetation
6410	Молінієві луки на вапняних, торф'янистих або глинисто-мулистих ґрунтах (Molinion caeruleae)	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)

6430	Гідрофільні високі трав'янисті угруповання на рівнинах і від гірських до альпійських рівнів	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
6440	Алювіальні луки річкових долин Cnidion dubii	Alluvial meadows of river valleys of the Cnidion dubii
6510	Сінокоси низинні (Alopecurus pratensis, Sanguisorba officinalis)	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)

Table 6: Taxonomic composition of flora and fauna species listed in Annex II of Directive 92/43/EEC, according to the data of ROSCI0022, ROSPA0002, ROSPA0017, ROSCI0006, ROSPA0121

Species			Protection status	
Group	**Code**	**Group**	**Code**	**Group**
ROSCI0022				
A	1188	Bombina bombina	LC	LC
A	1993	Triturus dobrogicus	NT	NT
F	4125	Alosa immaculata	EN	VU
F	4127	Alosa tanaica	LC	LC
F	1130	Aspius aspius	LC	LC
F	6963	Cobitis taenia Complex	LC	LC
F	2484	Eudontomyzon mariae	LC	LC
F	2555	Gymnocephalus baloni	LC	LC
F	1157	Gymnocephalus schraetzer	LC	LC
F	1145	Misgurnus fossilis	LC	LC
F	2522	Pelecus cultratus	LC	LC
F	5339	Rhodeus amarus	LC	LC
F	6143	Romanogobio kesslerii	LC	LC
F	5329	Romanogobio vladykovi	LC	LC
F	5347	Sabanejewia bulgarica	LC	LC
F	1160	Zingel streber	LC	LC
F	1159	Zingel zingel	LC	LC
I	4056	Anisus vorticulus	NT	NT
M	1355	Lutra lutra	NT	NT
M	2609	Mesocricetus newtoni	NE	NE
M	1335	Spermophilus citellus	VU	VU
P	2236	Campanula romanica	LC	DD
P	2079	Moehringia jankae	DD	DD
R	1220	Emys orbicularis	NE	NE
R	1219	Testudo graeca	NE	NE
ROSPA0002, ROSPA0017				
B	A019	Pelecanus onocrotalus	LC	LC
B	A021	Botaurus stellaris	LC	LC
B	A030	Ciconia nigra	LC	LC
B	A031	Ciconia ciconia	LC	LC
B	A041	Anser albifrons	LC	LC
B	A072	Pernis apivorus	LC	LC
B	A073	Milvus migrans	LC	LC
B	A075	Haliaeetus albicilla	LC	LC
B	A080	Circaetus gallicus	LC	LC
B	A081	Circus aeruginosus	LC	LC
B	A082	Circus cyaneus	LC	NT
B	A083	Circus macrourus	EN	NT
B	A084	Circus pygargus	LC	LC
B	A086	Accipiter nisus	LC	LC

B	A087	Buteo buteo	LC	LC
B	A089	Aquila pomarina	LC	LC
B	A092	Hieraaetus pennatus	LC	LC
B	A097	Falco vespertinus	VU	NT
B	A113	Coturnix coturnix	LC	LC
B	A133	Burhinus oedicnemus	LC	LC
B	A177	Larus minutus	NE	LC
B	A179	Larus ridibundus	LC	LC
B	A193	Sterna hirundo	LC	LC
B	A196	Chlidonias hybridus	LC	LC
B	A197	Chlidonias niger	LC	LC
B	A207	Columba oenas	LC	LC
B	A208	Columba palumbus	LC	LC
B	A210	Streptopelia turtur	NT	LC
B	A212	Cuculus canorus	LC	LC
B	A215	Bubo bubo	LC	LC
B	A221	Asio otus	LC	LC
B	A224	Caprimulgus europaeus	LC	LC
B	A229	Alcedo atthis	VU	VU
B	A230	Merops apiaster	LC	LC
B	A231	Coracias garrulus	LC	LC
B	A232	Upupa epops	LC	LC
B	A234	Picus canus	LC	LC
B	A236	Dryocopus martius	LC	LC
B	A238	Dendrocopos medius	LC	LC
B	A242	Melanocorypha calandra	VU	LC
B	A243	Calandrella brachydactyla	LC	LC
B	A244	Galerida cristata	LC	LC
B	A246	Lullula arborea	LC	LC
B	A247	Alauda arvensis	LC	LC
B	A249	Riparia riparia	LC	LC
B	A251	Hirundo rustica	LC	LC
B	A253	Delichon urbica	NE	LC
B	A255	Anthus campestris	LC	LC
B	A256	Anthus trivialis	LC	LC
B	A262	Motacilla alba	LC	LC
B	A275	Saxicola rubetra	LC	LC
B	A276	Saxicola torquata	NE	LC
B	A283	Turdus merula	LC	LC
B	A284	Turdus pilaris	VU	LC
B	A285	Turdus philomelos	LC	LC
B	A286	Turdus iliacus	VU	NT
B	A287	Turdus viscivorus	LC	LC
B	A307	Sylvia nisoria	LC	LC
B	A309	Sylvia communis	LC	LC
B	A310	Sylvia borin	LC	LC
B	A311	Sylvia atricapilla	LC	LC
B	A320	Ficedula parva	LC	LC
B	A321	Ficedula albicollis	LC	LC
B	A338	Lanius collurio	LC	LC
B	A339	Lanius minor	LC	LC
B	A340	Lanius excubitor	VU	VU
B	A351	Sturnus vulgaris	LC	LC
B	A363	Chloris chloris	LC	LC

B	A364	Carduelis carduelis	LC	LC
B	A365	Carduelis spinus	LC	LC
B	A366	Carduelis cannabina	LC	LC
B	A379	Emberiza hortulana	LC	LC
B	A383	Emberiza calandra	LC	LC
B	A393	Phalacrocorax pygmeus	LC	LC
B	A397	Tadorna ferruginea	NT	LC
B	A402	Accipiter brevipes	LC	LC
B	A403	Buteo rufinus	LC	LC
B	A429	Dendrocopos syriacus	LC	LC
B	A459	Larus cachinnans	LC	LC
B	A511	Falco cherrug	VU	VU
B	A533	Oenanthe pleschanka	LC	LC
ROSPA0017				
B	A043	Anser anser	LC	LC
B	A103	Falco peregrinus	LC	LC
B	A163	Tringa stagnatilis	EN	LC
B	A168	Actitis hypoleucos	NT	LC
B	A214	Otus scops	LC	LC
B	A233	Jynx torquilla	LC	LC
B	A260	Motacilla flava	LC	LC
B	A271	Luscinia megarhynchos	LC	LC
B	A273	Phoenicurus ochruros	LC	LC
B	A277	Oenanthe oenanthe	LC	LC
B	A299	Hippolais icterina	LC	LC
B	A337	Oriolus oriolus	LC	LC
B	A435	Oenanthe isabellina	LC	LC
ROSCI0006				
A	1188	Bombina bombina	LC	LC
A	1993	Triturus dobrogicus	NT	NT
F	4125	Alosa immaculata	EN	VU
F	4127	Alosa tanaica	LC	LC
F	1130	Aspius aspius	LC	LC
F	2555	Gymnocephalus baloni	LC	LC
F	1157	Gymnocephalus schraetzer	LC	LC
F	1145	Misgurnus fossilis	LC	LC
F	2522	Pelecus cultratus	LC	LC
F	5339	Rhodeus amarus	LC	LC
F	6143	Romanogobio kesslerii	LC	LC
F	5329	Romanogobio vladykovi	LC	LC
F	1160	Zingel streber	LC	LC
F	1159	Zingel zingel	LC	LC
M	1355	Lutra lutra	NT	NT
R	1220	Emys orbicularis	NT	NT
ROSPA0121				
B	A052	Anas crecca	LC	LC
B	A050	Anas penelope	VU	LC
B	A053	Anas platyrhynchos	LC	LC
B	A041	Anser albifrons	LC	LC
B	A396	Branta ruficollis	NT	NT
B	A196	Chlidonias hybridus	LC	LC
B	A197	Chlidonias niger	LC	LC
B	A097	Falco vespertinus	VU	LC
B	A125	Fulica atra	LC	LC

B	A459	Larus cachinnans	LC	LC
B	A179	Larus ridibundus	LC	LC
B	A019	Pelecanus onocrotalus	LC	LC

2. Description of the impact of planned activities within the environmental protection area.

Based on the results of the environmental impact assessment (AIPA Report), it is possible to state the following: the main probable sources of impact on species and habitats of NATURA 2000 are air pollution by emissions of pollutants into the atmosphere and the noise action of mechanisms, as well as discharges of pollutants into the surface waters of the Danube River, including during dredging.

Air pollution. Based on the calculations, it was determined that the area of influence of the planned activity on the quality of atmospheric air is the area in the radius of 673m around the point "0" of the coordinate system of the industrial site, corresponding to the scattering area of the summation group 31 (sulfur dioxide and nitrogen oxides (in terms of nitrogen dioxide [NO + NO2]). The area of the impact zone is 142.23 hectares.

Considering the above estimates, we believe that the natural territories of Romania are outside the zone of influence of the planned activity on the state of atmospheric air (radius 673 m from the point "0" of the coordinate system of the industrial site), accordingly, in Romania the contribution of the planned activity to air pollution does not exceed 0.05 MPC.

Based on the above analysis, the cross-border impact of the planned activity on the state of the Romanian atmospheric air was assessed as absent.

Surface water pollution of the Danube River.

During construction, pollution of surface water may occur as a result of:

- deposition of emissions of suspended particles, not differentiated by composition, on the open surface of the water body during earthworks, pouring and storage of loose building materials;
- increase in surface water turbidity during dredging due to the transition of the finely dispersed bottom soil component to a suspended state and its loss;
- pollution of surface water in the event of an accident, in particular, accidental spillage of oil products and their entry into the water body.

All these impacts on the aquatic environment are local in nature, limited by the place and time of performance of works: construction and installation - 3 months, dredging - 52 days. According to the calculations presented in the AIPA Report, the impacts on the surface waters of the Danube River are minimized and do not exceed regulatory limits thanks to the measures provided for in the project, a clear list of which is given in section 7 of the AIPA Report.

In particular, the pollution of surface water during dredging operations is minimized due to the use of modern hydraulic engineering and the storage of soil in a coastal dump with the organized release of clarified water from alluvial maps. According to the calculations of the AIPA Report, the impact of dredging works does not go beyond the port water area - the maximum length of the turbidity plume spread is 69.23m, the maximum time for the water environment to return to the standard state is 1.0 hours.

During the implementation of the planned activity, the potential factors of surface water pollution of the Danube River are:

- return water of Port surface wastewater (rainwater, meltwater and irrigation-washing water) collected by the storm water drainage systems, undergoes treatment at local storm water treatment facilities and is diverted to the waters of the Danube River through the coastal outlet;
- suspended particles, not differentiated by composition, settling on the open surface of a water body as a result of technological operations with agricultural products;
- possible emergency situations during operations with oil products or oil wastes, which are connected with their getting into water.

The impact on the surface waters of the Danube River is minimized and does not exceed the regulatory limits due to the adopted project decisions regarding the organization of household and industrial water use and drainage in the Port using municipal water supply and sewage networks, as well as the implementation of protective measures, the main of which are:

- cleaning in local sewage treatment plants of the entire volume of surface runoff from the territory of the object of the planned activity before discharge to the Danube River;
- organization of facilities for receiving ship waste (domestic and fecal wastewater, bilge water and household waste) with their subsequent transfer to specialized organizations under signed contracts;
- the use of a tugboat fleet for the cargo transportation equipped with closed systems for the accumulation of sewage - fecal and bilge water with an installed emergency warning signaling system (EWS).

According to the results of the calculations of the dilution of the return water discharge of the object of the planned activity, which are given in the Report of the AIPA, in the compliance point of the Danube River 500 m below the outlet, the concentration of pollutants does not exceed the established standards.

Chapter 8 of the AIPA Report examines the scenarios of possible emergency situations, including those related to the sinking of the vessel and spillage of oil products. A list of measures aimed at prevention, diversion, avoidance, reduction, elimination of significant impact on the

environment in the event of accidents is also provided. With the implementation of preventive measures, the development of an accident related to the leakage of oil and oil waste is unlikely.

Taking into account the above, the impact on the state of the water area of the Danube River is considered minimal, and according to indicators of water quality - absent.

More details about the cross-border impact of the planned activity are provided in subsection 5.8. Report from AIPA.

3. Conclusions regarding the scale of the impact of planned activities on the animal and plant life of nature-protected areas

The impact on the flora and fauna of protected areas is caused by the deterioration of the living conditions of its organisms, which is manifested by pollution of the atmospheric air, water environment and soils of the territory where their species and habitats are located. According to the relevant sections of this report, the specified types of impacts do not exceed regulatory limits and are compensated by measures and project solutions aimed at reducing emissions, discharges and ensuring their regulatory cleaning, as well as measures to reduce noise impact on the environment and greening the territory.

According to the above-mentioned assessments of the impacts of the planned activities of «NIBULON» Ltd, which were carried out in the AIPA Report, and according to the results of the institute's monitoring studies on the Danube River, we believe the following.

The closest to the object of the planned activity are the territories of special protection zones «NATURA 2000» of Romania ROSCI0065, ROSCI0066 and ROSPA0031. The impact of the planned activity (local) on the species and habitats of these territories is considered absent, since none of the environmental factors are affected, the level of atmospheric air, water environment and soil pollution remains within regulatory limits, accordingly, the living conditions of living organisms in these territories remain unchanged.

However, the export of grain products is carried out by waterways of the Danube River through the Bystre, Sulina, Chernovod estuaries, passing through the territories of the «NATURA 2000» special protection zones **ROSCI0022, ROSPA0002, ROSPA0017, ROSCI0006, ROSPA0121**.

The species and habitats of these territories are already adapted to natural changes in their environment, in particular, seasonal changes in water level, changes in hydroclimatic and hydrobiological indicators, as well as to man-made types of influences associated with the movement of transport vessels.

The planned activity will not lead to the appearance of additional types of man-made impact on the species and habitats of protected areas, but with the implementation of the planned activity,

the intensity of vessel traffic will increase. At the same time, the impact of the planned activity on the species and habitats of these territories can be considered minimal based on the following:

- the planned activity does not involve carrying out dredging works on navigable waterways of public use;

- the transportation of grain cargoes from the object of the planned activity is provided for by the existing navigable waterways of general use;

- transportation of grain cargoes will be carried out using the company's modern fleet, which meets international requirements for the prevention of environmental pollution and shipping safety, which is confirmed by the relevant set of valid shipping documents reviewed and approved by the national classification society (Shipping Register of Ukraine);

- the construction of vessels and their provision with means of combating emergency spills of oil products and fighting for the survivability of the vessel: emergency and rescue and fire-fighting means in accordance with the National and International requirements and in accordance with the Rules of the Shipping Register of Ukraine, provides a sufficient level of their protection against flooding under conditions of normal operation and management.

In connection with the above, we believe that the increase in the intensity of vessel traffic caused by the planned activity will not lead to a change in the quantitative and qualitative indicators of impacts on representatives of the biota that are characteristic of these territories. Accordingly, the living conditions of representatives of flora and fauna in the Danube Delta will not deteriorate.

Unofficial translation

Протокол експертних консультацій Румунії та України у рамках процедури оцінки транскордонного впливу на довкілля нового будівництва об'єкта транспортної інфраструктури – річкового порту (терміналу) в м. Ізмаїл Ізмаїльського району Одеської області з під'їзною залізничною колією – прилеглої до станції Ізмаїл регіональної філії «Одеська залізниця».

29 березня 2023 рік у форматі відеоконференції

Minutes of expert consultations between Romania and Ukraine under transboundary EIA procedure of a new construction of a transport infrastructure object - a river port (terminal) in Izmail, Izmail district, Odesa region with a railway access track - adjacent to the Izmail station of the «Odesa Railway» regional branch».

March 29, 2023 in the format of a video conference

У зустрічі приймали участь: **<u>З румунської сторони:</u>** 1. Іонуц - Сорін БАНЧІУ, державний секретар Міністерства захисту навколишнього середовища, вод та лісів Румунії; 2. Доріна МОКАНУ, заступник генерального директора Генерального директорату з оцінки впливу, контролю забруднення та зміни клімату; 3. Анка АПРЕУТЕСЕЙ, керівник відділу оцінки впливу Генерального директорату з оцінки впливу, контролю забруднення та зміни клімату; 4. Георге КОНСТАНТІН, заступник генерального директора Генеральної дирекції вод; 5. Кармен НЕАГУ, старший радник Генеральної дирекції вод; 6. Коріна АЛДЕА, заступник генерального директора Генерального директорату з міжнародних відносин та європейських справ; 7. Ніколета САМОЙЛЕ, старший радник Генерального директорату з міжнародних відносин та європейських справ; 8. Джон – Самад СМАРАНДА, старший радник, Генеральний директорат з біорізноманіття;	**The meeting was attended by:** **<u>From the Romanian side:</u>** 1. Ionut - Sorin BANCIU, State Secretary of the Ministry of Environmental Protection, Water and Forests of Romania; 2. Dorina MOKANU, Deputy General Director of the General Directorate for Impact Assessment, Pollution Control and Climate Change; 3. Anka APREUTESEI, Head of the Impact Assessment Unit Department of the General Directorate for Impact Assessment, Pollution Control and Climate Change; 4. Gheorghe CONSTANTIN, Deputy General Director of the General Directorate of Water; 5. Carmen NEAGU, senior advisor of the General Water Directorate; 6. Corina ALDEA, Deputy General Director of the General Directorate for International Relations and European Affairs; 7. Nicoleta SAMOILA, senior advisor to the General Directorate for International Relations and European Affairs; 8. John - Samad SMARANDA, Senior Advisor, Directorate General for Biodiversity; 9. Elena TUCHIU, director of the National Water Administration; 10. Cristian Rusu, expert of the National Water Administration;

9. Олена ЦУЧІУ, директор Національного водного управління; 10. Крістіан Русу, експерт Національного водного управління; 11. Граціела Джула, експерт Національного водного управління. **З української сторони**: 1. Крамаренко Олена Володимирівна – заступник Міністра захисту довкілля та природних ресурсів України; 2. Шимкус Марина Олександрівна - директор Департаменту екологічної оцінки Міністерства захисту довкілля та природних ресурсів України; 3. Бонь Олександр Віталійович – заступник директора департаменту – начальник відділу інтеграції екологічних оцінок у галузеві політики Департаменту екологічної оцінки Міністерства захисту довкілля та природних ресурсів України; 4. Вадатурський Андрій – генеральний директор ТОВ СП «НІБУЛОН»; 5. Різак Михайло – заступник генерального директора по взаємодії з органами влади ТОВ СП «НІБУЛОН»; 6. Ізмєстьєва Алла – начальник відділу охорони навколишнього середовища ТОВ СП «НІБУЛОН»; 7. Морозов Віктор – тимчасово виконуючий обов'язки директора Дунайської гідрометеорологічної обсерваторії; 8. Дем'яненко Костянтин - заступник директора з наукової роботи Інституту рибного господарства та екології моря (ІРЕМ). **Місце проведення:** відеоконференція. **Мета**: проведення експертних консультацій щодо оцінки транскордонного впливу на довкілля нового будівництва об'єкта транспортної інфраструктури – річкового порту (терміналу) в м. Ізмаїл Ізмаїльського району Одеської області з під'їзною залізничною колією – прилеглої до станції Ізмаїл регіональної філії «Одеська залізниця».	11. Gratiela Jula, expert of the National Water Administration. **From the Ukrainian side:** 1. Olena Kramarenko - Deputy Minister of Environmental Protection and Natural Resources of Ukraine; 2. Maryna Shymkus - director of the Department of Environmental Assessment of the Ministry of Environmental Protection and Natural Resources of Ukraine; 3. Oleksandr Bon - Deputy Director of the Department - Head of the Department of Integration of Environmental Assessments into Sector Policies of the Department of Environmental Assessment of the Ministry of Environmental Protection and Natural Resources of Ukraine; 4. Andriy Vadaturskyy - general director of "NIBULON" LLC; 5. Mykhailo Rizak - deputy general director for interaction with authorities of "NIBULON" LLC; 6. Alla Izmiestieva - head of the environmental protection department of "NIBULON" LLC; 7. Viktor Morozov - temporary acting director of the Danube Hydrometeorological Observatory; 8. Kostiantyn Demianenko - deputy director for scientific work of the Institute of Fisheries and Marine Ecology (IREM). **Venue:** video conference. **Purpose:** conducting expert consultations on the assessment of the transboundary impact on the environment of the new construction of a transport infrastructure object - a river port (terminal) in the city of Izmail, Izmail district of the Odesa region with an access railway track - adjacent to the Izmail station of the Odesa Railway regional branch.

Зустріч відкрили вітальними виступами Олени Крамаренко, заступник Міністра захисту довкілля та природних ресурсів України та Сорін БАНЧІУ, державний секретар Міністерства захисту навколишнього середовища, вод та лісів Румунії.	The meeting was opened with welcoming speeches by Olena Kramarenko, Deputy Minister of Environmental Protection and Natural Resources of Ukraine, and Sorin BANCHIU, State Secretary of the Ministry of Environmental Protection, Water and Forests of Romania.
п. Іонуц - Сорін БАНЧІУ у вступній промові висловив цілковиту підтримку Румунською стороною України у її протистоянні повномасштабній збройній агресії рф, а також підтримку реалізації Україною інфраструктурного проєкту, що є предметом зазначених транскордонних консультацій, в контексті забезпечення глобальної продовольчої безпеки та дотримання вимог Конвенції Еспо; розповів про процес громадського обговорення проєкту Румунською стороною.	Mr. Ionut - Sorin BANCHIU, in his opening speech, expressed the full support of the Romanian side of Ukraine in its opposition to the full-scale armed aggression of the Russian Federation, as well as support for Ukraine's implementation of the infrastructure project, which is the subject of the mentioned transboundary consultations in the context of ensuring global food security and compliance with the requirements of the Espoo Convention; described about the process of public discussion of the project by the Romanian side.
Зазначив на важливості транскордонних консультацій за проєктом як в контексті подальшого розвитку двостороннього транскордонного співробітництва в розвиток нещодавно підписаної Урядами України та Румунії Угоди про імплементацію Конвенції Еспо, так із огляду на особливу чутливість суспільства до реалізації проєктів на р. Дунай.	He noted the importance of transboundary consultations on the project both in the context of the further development of bilateral cross-border cooperation in the development of the Agreement on the Implementation of the Espoo Convention recently signed by the Governments of Ukraine and Romania, and in view of the special sensitivity of society to the implementation of projects on the Danube River.
Висловив сподівання на швидке завершення Україною національних процедур для набрання чинності Угоди про імплементацію Конвенції Еспо для України та про організацію процедури оцінки транскордонного впливу на довкілля щодо інфраструктурних проєктів Румунії, які знаходяться на розгляді України.	He expressed hope that Ukraine will quickly complete the national procedures for the entry into force of the Agreement on the Implementation of the Espoo Convention for Ukraine and the organization of the procedure for assessing the transboundary impact on the environment regarding the infrastructure projects of Romania, which are under consideration by Ukraine.
п. Олена Крамаренко подякувала Румунській стороні за підтримку та запевнила в належній організації процедури оцінки транскордонного впливу на довкілля щодо інфраструктурних проєктів Румунії, які знаходяться на розгляді України.	Mrs. Olena Kramarenko thanked the Romanian side for its support and assured of the proper organization of the cross-border environmental impact assessment procedures regarding the infrastructure projects of Romania, which are under consideration by Ukraine.
Відповідно до пункту 1 Порядку денного Українською стороною (Вадатурський А., Ізмєстьєва А.) представлені презентації стосовно планованої діяльності щодо якої проводяться консультації у рамках процедури оцінки транскордонного впливу на довкілля, а саме:	In accordance with point 1 of the Agenda, the Ukrainian side (A. Vadaturskyy, A. Izmiestieva) presented presentations regarding the planned activity regarding which consultations are held within the framework of the transboundary environmental impact assessment procedure, namely:
- Ізмаїл – символ стійкості;	- Ishmael is a symbol of stability;

- оцінка впливу на навколишнє середовище нового будівництва об'єкта транспортної інфраструктури – річкового порту (терміналу) в м. Ізмаїл Ізмаїльського району Одеської області з під'їзною залізничною колією – прилеглої до станції Ізмаїл регіональної філії «Одеська залізниця».	- assessment of the impact on the environment of the new construction of a transport infrastructure object - a river port (terminal) in the city of Izmail, Izmail district, Odesa region, with an access railway track - adjacent to the Izmail station of the Odesa Railway regional branch.
У презентації представники ТОВ «НІБУЛОН» значили, що планована діяльність здійснюватиметься в межах акваторії існуючого порту Ізмаїл на р. Дунай на площі 19,7 Га, до діючого судноплавного каналу «Вилкове – Ізмаїльський Чатал» на ділянці від 91.09 до 91,55 км. Територія планованої діяльності знаходиться на значному віддаленні від Румунського берега, державного кордону, поза межами природоохоронних територій, пам'яток архітектури, історії та культури, не є природним коридором та не входить до територій Смарагдової мережі. Ділянка, на якій здійснюватиметься будівництво знаходиться в промислово освоєній зоні та зоні інтенсивного судноплавства.	In the presentation, the representatives of "NIBULON" LLC said that the planned activity will be carried out within the water area of the existing Izmail port on the Danube River on an area of 19.7 hectares, to the existing shipping channel "Vylkove - Izmailskyi Chatal" in the section from 91.09 to 91.55 km. The territory of the planned activity is located at a considerable distance from the Romanian coast, the state border, outside the boundaries of nature conservation areas, monuments of architecture, history and culture, is not a natural corridor and is not included in the territories of the Emerald Network. The site on which the construction will be carried out is located in an industrially developed zone and a zone of intensive shipping.
Район проведення робіт знаходиться на значній відстані від традиційних природних нерестовищ осетрових видів риб (район дамби ГЕС Jerdap – 2), що розташована на відстані 864 км р. Дунай та за межами основного шляху природньої міграції риб.	The work area is located at a significant distance from the traditional natural spawning grounds of sturgeon fish species (the area of the Jerdap HPP dam - 2), which is located at a distance of 864 km from the Danube River and beyond the main natural migration route of fish.
Мінімальна відстань до найближчого поселення на Румунській стороні – села Plauru визначається радіусом у 993 метри від точки «0» системи координат промислового майданчика планованої діяльності, у той час як потенційний вплив на якість атмосферного повітря розповсюджується на територію лише в радіусі 673 метри від точки «0» системи координат промислового майданчика планованої діяльності.	The minimum distance to the nearest settlement on the Romanian side - the village of Plauru is determined by a radius of 993 meters the "0" point of the coordinate system of the industrial site of the proposed activity, while the potential impact on the quality of atmospheric air extends to the territory only in a radius 673 meters from the "0" point of the coordinate system of the industrial site of the planned activity.
Планована діяльність передбачає застосування сучасних передових технологій, дружніх до довкілля, та обладнання, зокрема, суден оснащених відповідно до вимог Конвенції про запобігання забрудненню і суден (МАРПОЛ 73/78) та з дотриманням вимог відповідних європейських та міжнародних стандартів.	The proposed activity involves the use of modern advanced technologies, friendly to the environment, and equipment, in particular, ships equipped in accordance with the requirements of the Convention on the Prevention of Pollution and Ships (MARPOL 73/78) and in compliance with the requirements of the relevant European and international standards.
Планована діяльність також передбачає проведення моніторингових досліджень під час будівництва та під час експлуатації об'єкта.	The proposed activity also provides for conducting monitoring studies during the construction and operation of the facility.

Замовником планованої діяльності представлений план заходів, спрямований на мінімізацію можливого несприятливого впливу на довкілля, зокрема, у транскордонному контексті. Транскордонного впливу планованої діяльності на стан атмосферного повітря на території Румунії не відбуватиметься. Оцінка транскордонного впливу на довкілля планованої діяльності включає як оцінку операційної діяльності будівництва об'єкту, так і днопоглиблювальних робіт. За результатом проведеної оцінки транскордонного впливу на довкілля планованої діяльності не виявлено потенційних негативних впливів на довкілля у транскордонному контексті. У рамках консультацій обговорено такі питання: 1. Румунською стороною відзначено, що в звіті з оцінки впливу на довкілля відображено, що днопоглиблювальні роботи будуть проводитись в 3 етапи: перший від 0 до 4 м, другий від 4 до 7,32 м, третій від 7,32 до 8,23 м. У зв'язку із цим Українській стороні було поставлене питання: Чи остаточне рішення про плановану діяльність включатиме всі три етапи днопоглиблювальних робіт? У відповідь Українська сторона підтвердила, що дійсно у проєктній документації зазначено про проведення робіт у три етапи. Водночас, лише роботи за першим та другим етапами пов'язані із новим будівництвом. Днопоглиблювальні роботи, передбачені у рамках 3-го етапу – це днопоглиблення, яке здійснюватиметься з метою досягнення проєктних глибин, визначених у рішенні Уряду від 09.02.2022 № 136 від 7,32 до 8,23 м від «0» порту Ізмаїл, які проводитимуться лише у разі проведення днопоглиблення діючого судноплавного каналу «Вилкове – Ізмаїльський Чатал» та на нижніх ділянках судноплавного шляху акваторії. Українською стороною зазначено, що рішенням про провадження планованої діяльності буде дозвіл на виконання будівельних робіт, який не включатиме днопоглиблювальні роботи в рамках реалізації 3-го етапу.	The developer of the proposed activity presented a plan of measures aimed at minimizing the possible adverse impact on the environment, in particular, in the transboundary context. There will be no transboundary impact of the proposed activity on the state of atmospheric air in the territory of Romania. The assessment of the transboundary impact on the environment of the proposed activity includes both an assessment of the operational activity of construction the object and dredging works. Based on the results of the transboundary environmental impact assessment of the proposed activity, no potential negative environmental impacts in the cross-border context were identified. The following issues were discussed as part of the consultations: 1. The Romanian side noted that the environmental impact assessment report indicated that dredging works will be carried out in 3 stages: the first from 0 to 4 m, the second from 4 to 7.32 m, the third from 7.32 to 8.23 m. In this connection, the Ukrainian side was asked the question: Will the final decision on the planned activity include all three stages of dredging works? In response, the Ukrainian side confirmed that indeed the project documentation states that the work will be carried out in three stages. At the same time, only the works of the first and second stages are related to new construction. The dredging works provided for in the framework of the 3rd stage are dredging that will be carried out in order to achieve the project depths specified in the decision of the Government of February 9, 2022 No. 136 from 7.32 to 8.23 m from "0" of the Izmail port, which will be carried out only in the case of dredging of the existing shipping channel "Vylkove - Izmailskyi Chatal" and in the lower sections of the shipping route of the water area. The Ukrainian side stated that the final decision on the proposed activity will be a permit for the construction works, which will not include dredging works as part of the implementation of the 3rd stage.

Румунська сторона запросила копію постанови Кабінету Міністрів України від 09.02.2022 № 136 «Про затвердження переліку внутрішніх морських вод і внутрішніх водних шляхів, віднесених до категорії судноплавних» та попросила надати відповідь, чи відповідає зазначена постанова вимогам Конвенції Еспо. Українська сторона наголосила, що рішення Уряду від 09.02.2022 № 136 не містить положень, які суперечать вимогам Конвенції Еспо, оскільки стосується лише визначення переліку внутрішніх морських вод і внутрішніх водних шляхів, віднесених до категорії судноплавних із зазначенням їх проєктних глибин. Текст рішення Уряду від 09.02.2022 № 136 було одразу передано Румунській стороні засобами електронного зв'язку.	The Romanian side requested a copy of the resolution of the Cabinet of Ministers of Ukraine dated 09.02.2022 No. 136 "On approval of the list of inland sea waters and inland waterways classified as navigable" and asked for an answer as to whether the specified resolution meets the requirements of the Espoo Convention. The Ukrainian side emphasized that the Government's decision No. 136 of 02/09/2022 does not contain provisions that contradict the requirements of the Espoo Convention, as it concerns only the definition of the list of inland sea waters and inland waterways classified as navigable with an indication of their future design depths. The text of the Government's decision dated February 9, 2022 No. 136 was immediately transmitted to the Romanian side via email.
2. Румунською стороною зазначено, що в звіті з оцінки впливу на довкілля відсутня оцінка кумулятивного впливу щодо реалізації 3-го етапу планованої діяльності. Українська сторона вкотре наголосила, що днопоглиблювальні роботи на ділянці «Вилково – Ізмаїльський Чатал» до глибин 8,23 не проводитимуться. Даною процедурою оцінено кумулятивний вплив планованої діяльності на атмосферне повітря з урахуванням функціонування діючого порту Ізмаїл, що відповідає вимогам Конвенції Еспо.	2. The Romanian side stated that the environmental impact assessment report does not include an assessment of the cumulative impact regarding the implementation of the 3rd stage of the planned activity. The Ukrainian side once again emphasized that dredging works on the section "Vilkovo - Izmailskyi Chatal" will not be carried out to a depth of 8.23 m. This procedure assessed the cumulative impact of the proposed activity on atmospheric air, taking into account the functioning of the existing port of Izmail, which meets the requirements of the Espoo Convention.
3. Румунською стороною зазначено, що в розділі звіту з оцінки впливу на довкілля щодо оцінки можливого транскордонного впливу не згадується вплив на види флори і фауни на Румунській стороні під час будівництва об'єкта та під час його експлуатації, зокрема на території та об'єкти NATURA 2000 біля дельти Дунаю з Румунської сторони. З порушеного питання Українська сторона відзначила: – звіт з оцінки впливу на довкілля відповідає вимогам Конвенції Еспо, містить розділи щодо оцінки впливу на довкілля як будівництва, так і під час реалізації проєкту планованої діяльності; – в звіті з оцінки впливу на довкілля вказано про відсутність значного впливу на флору та фауну, у тому числі транскордонного. Це	3. The Romanian side states that the section of the environmental impact assessment report regarding the assessment of possible transboundary impact does not mention the impact on the species of flora and fauna on the Romanian side during the construction of the facility and during its operation, in particular on the territory and facilities NATURA 2000 near the Danube Delta from the Romanian side. On the raised issue, the Ukrainian side noted: – the environmental impact assessment report meets the requirements of the Espoo Convention, contains sections on the environmental impact assessment both during construction and during the implementation of the planned activity project;

зумовлено, тим, що планована діяльність, з огляду на розташування об’єкта планованої діяльності в зоні промислового навантаження діючого порту Ізмаїл, масштаб будівництва, характер проведення днопоглиблювальних робіт та технологію складування ґрунтів днопоглиблення, обмеження впливу строком проведення робіт, не створюватиме нових умов для проживання видів флори та фауни, оселищ, охоронюваних Бернською конвенцією, та не справлятиме значного несприятливого впливу на довкілля, у тому числі на Румунській стороні; – незначний вплив на довкілля, зокрема на флору та фауну, прогнозується не від операційної діяльності ТОВ СП «НІБУЛОН», а внаслідок виконання днопоглиблювальних робіт. При цьому, вплив днопоглиблювальних робіт не виходитиме за межі об’єкту планованої діяльності та буде обмежений часом виконання робіт, який за розрахунковими даними становить 52 доби (Максимальна довжина шлейфу каламутності згідно розрахунків становить 69 метрів, а максимальний час, протягом якого стан водного середовища повертається до нормативного, становить 1 годину); – підтвердження результатів оцінки впливу на довкілля та оцінка ймовірного впливу на флору та фауну протягом реалізації планованої діяльності здійснюватиметься за результатами моніторингу; – у рамках даної процедури Румунською стороною не висувалось вимоги щодо проведення оцінки впливу на оселища, розташовані безпосередньо уздовж Румунського узбережжя р. Дунай. Також Українською стороною зазначено на відсутність можливості проведення запитуваних досліджень на Румунській стороні. 4. Румунською стороною було зазначено на відсутності у звіті з оцінки впливу на довкілля заходів, передбачених у випадку надзвичайних ситуацій. Українська сторона запевнила, що представить Румунській стороні заходи на випадок надзвичайних ситуацій. 5. Румунською стороною наголошено на необхідності оцінити додатково вплив на оселища NATURA 2000 на Румунській стороні,	– the EIA report indicates that there is no significant impact on flora and fauna, including transboundary impact. This is due to the fact that the proposed activity, taking into account the location of the object of the proposed activity in the industrial load zone of the existing port of Izmail, the scale of construction, the nature of dredging works and the technology of dredging soil storage, the impact is limited only by the duration of the work and will not create new conditions for the habitat of species of flora and fauna, habitats protected by the Berne Convention, and will not have a significant adverse impact on the environment, including on the Romanian side; – insignificant impact on the environment, in particular on flora and fauna, is predicted not from the operational activities of JV "NIBULON" LLC, but as a result of dredging works. At the same time, the impact of dredging works will not go beyond the object of the proposed activity and will be limited by the time of execution of the works, which according to the calculation data is 52 days (The maximum length of the plume of turbidity according to the calculations is 69 meters, and the maximum time during which the state of the water environment returns to the standard, is 1 hour); – confirmation of the results of the assessment of the impact on the environment and the assessment of the likely impact on flora and fauna during the implementation of the planned activity will be carried out based on the results of monitoring; – within the framework of this procedure, the Romanian side did not put forward a requirement to carry out an impact assessment on settlements located directly along the Romanian coast of the Danube River. Also, the Ukrainian side indicated the lack of possibility of conducting the requested studies on the Romanian side. 4. The Romanian side pointed out the lack of emergency measures in the environmental impact assessment report. The Ukrainian side assured that it would present emergency measures to the Romanian side. 5. The Romanian side emphasized the need to additionally assess the impact on NATURA 2000 habitats on the Romanian side, to assess the impact on their livelihoods during the construction works and operation of the object

оцінити вплив на їх життєдіяльність протягом будівельних робіт та експлуатації об’єкту планованої діяльності. За результатом такої оцінки сформувати перелік заходів з мінімізації ймовірного впливу планованої діяльності на оселища, розташовані на Румунській стороні. Крім того внесена пропозиція розміщення двох постів моніторингу на території порту в м. Ізмаїл. Українська сторона відповідно до вимоги Румунської сторони погодилась надати результати досліджень щодо проведених розрахунків і оцінок, за якими встановлено відсутність впливу планованої діяльності на оселища NATURA 2000, розташовані на Румунській стороні; надати дослідження оцінки впливу щодо оселищ та види, розташованих на Румунській стороні згідно наданого додатково Румунською стороною переліку; представити розроблений за результатом оцінки план заходів з мінімізації ймовірного впливу на види та оселища, розташовані на Румунській стороні. На пропозицію розмістити два пости моніторингу на території порту Ізмаїл Українська сторона зазначила, що це питання є предметом окремих двосторонніх зустрічей поза даною процедурою транскордонних консультацій, оскільки рішення щодо розміщення постів моніторингу на території порту має прийматися урядами країн. Українська сторона за результатом транскордонних консультацій узагальнила аргументацію свою позицію, яка полягає у тому, що: 1. Планована діяльність здійснюватиметься у межах діючого порту, який на сьогодні є максимально навантаженим у контексті прийому суден. 2. В рамках оцінки впливу на довкілля встановлено, що найбільший вплив на довкілля, зокрема на флору та фауну, буде відбуватися внаслідок проведення днопоглиблювальних робіт. Представлені заходи з мінімізації впливу на довкілля є повними. 3. Планована діяльність знаходиться на значній відстані від об’єктів NARURA 2000 та об’єктів Смарагдової мережі. Розрахунки, здійснені ТОВ «НІБУЛОН» і, які вказують на відсутність впливу, будуть представлені Румунській стороні додатково.	of the planned activity. Based on the result of such assessment, form a list of measures to minimize the likely impact of the planned activity on the settlements located on the Romanian side. In addition, a proposal was made to place two monitoring posts on the territory of the port in the city of Izmail. The Ukrainian side, in accordance with the demand of the Romanian side, agreed to provide the results of studies on the calculations and assessments carried out, according to which it was established that there is no impact of the planned activity on the NATURA 2000 habitats located on the Romanian side; carry out an additional assessment of the impact on the settlements and species located on the Romanian side according to the list additionally provided by the Romanian side; present a plan of measures developed based on the results of the assessment to minimize the likely impact on species and habitats located on the Romanian side. Regarding the proposal to establish two monitoring posts on the territory of the Izmail port, the Ukrainian side noted that this issue is the subject of separate bilateral meetings outside this procedure of transboundary consultations, the decision to establish monitoring posts on the territory of the port should be taken by the governments of the countries. As a result of the transboundary consultations, the Ukrainian side summarized the argumentation of its position, which consists in the fact that: 1. The proposed activity will be carried out within the existing port, which is currently the most loaded in the context of receiving ships. 2. As part of the environmental impact assessment, it was established that the greatest impact on the environment, particularly on flora and fauna, will occur as a result of dredging operations. The presented measures to minimize the impact on the environment are complete. 3. The planned activity is located at a significant distance from the NARURA 2000 areas and the Emerald Network areas. Calculations made by "NIBULON" LLC, which indicate no impact, will be presented to the Romanian side additionally.

За результатом процедури транскордонних консультацій:	**According to the result of the cross-border consultation procedure:**
1. Румунською стороною озвучено, а Українською стороною надано відповіді на питання, які виникли за результатом обговорення із громадськістю та в експертному середовищі Румунії матеріалів з оцінки впливу на довкілля у транскордонному контексті при новому будівництві об'єкта транспортної інфраструктури – річкового порту (терміналу) в м. Ізмаїл Ізмаїльського району Одеської області з під'їзною залізничною колією – прилеглої до станції Ізмаїл регіональної філії «Одеська залізниця».	1. The Romanian side announced, and the Ukrainian side provided answers to the questions from the Romanian public and experts after the public consultations on transboundary EIA of project «The new construction of a transport infrastructure object - a river port (terminal) in Izmail, Izmail district, Odesa region, with an access railway track - adjacent to the Izmail station, of the Odesa Railways regional branch».
2. На запит Румунської сторони Українською стороною надано засобами електронної комунікації постанову Кабінету Міністрів України від 09.02.2022 № 136 «Про затвердження переліку внутрішніх морських вод і внутрішніх водних шляхів, віднесених до категорії судноплавних».	2. At the request of the Romanian side, the Ukrainian side provided via email the resolution of the Cabinet of Ministers of Ukraine dated 09.02.2022 No. 136 "On approval of the list of inland sea waters and inland waterways classified as navigable".
3. Українська сторона надасть додатково результати досліджень щодо проведених розрахунків і оцінок, за якими встановлено відсутність впливу планованої діяльності на оселища NATURA 2000, розташовані на Румунській стороні.	3. The Ukrainian side will additionally provide the results of studies on the calculations and assessments carried out, according to which it was established that there is no impact of the planned activity on the NATURA 2000 habitats located on the Romanian side.
4. Українська сторона надасть моделювання аварійної ситуації.	4. The Ukrainian side will provide a simulation of the emergency situation.
Українська сторона запропонувала направити зазначені документи разом з направленням на погодження проєкту протоколу. Підписання протоколу сторонами вважатиметься завершенням транскордонних консультацій в рамках Конвенції Еспо.	The Ukrainian side offered to send the mentioned documents along with sending the draft protocol for approval. The signing of the protocol by the parties will be considered the completion of transboundary consultations within the framework of the Espoo Convention.
Румунська сторона погодилася, що підписання протоколу проведеного засідання буде вважатися завершенням консультацій в рамках Конвенції Еспо та звернулася до української сторони з	The Romanian side agreed that the signing of the protocol of the held meeting will be considered the completion of the consultations within the framework of the Espoo Convention and asked the Ukrainian side to provide, outside of

проханням про надання, поза межами консультацій, додаткових матеріалів, а також надала пропозиції для врахування, а саме: 1. Румунська сторона надасть перелік видів флори та фауни (Natura 2000), які можуть зазнати негативного впливу під час здійснення планованої діяльності. 2. Румунська сторона просить зазначити що 3 етап днопоглиблювальних робіт до позначки 8,23 м не входить до переліку питань, що були обговорені та затверджені в рамках оцінки транскордонного впливу на довкілля нового будівництва об'єкта транспортної інфраструктури – річкового порту (терміналу) в м. Ізмаїл Ізмаїльського району Одеської області з під'їзною залізничною колією – прилеглої до станції Ізмаїл регіональної філії «Одеська залізниця». 3. Румунська сторона наголосила на необхідності надання рішення про провадження планованої діяльності після його отримання суб'єктом господарювання.	the consultations, additional materials, and also provided proposals for consideration, namely: 1. The Romanian side will provide a list of species of flora and fauna (Natura 2000) that may be negatively affected during the implementation of the planned activity. 2. The Romanian side requests to note that the 3rd stage of dredging works up to the mark of 8.23 m is not included in the list of issues that were discussed and approved as part of the assessment of the transboundary impact on the environment of the new construction of the transport infrastructure object - the river port (terminal) in .Izmail of the Izmail district of the Odesa region with an access railway track - adjacent to the Izmail station of the Odesa Railway regional branch. 3. The Romanian side emphasized that Ukraine need to provide to Romania the final decision for the proposed activity after it has been received by the developer.
З Румунської сторони **З Української сторони:** **заступник Міністра захисту довкілля** **та природних ресурсів України** Олена Крамаренко «29» березня 2023 р.	**From the Romanian side:** **From the Ukrainian side:** Deputy Minister OLENA KRAMARENKO March 29, 2023

Протокол експертних консультацій Румунії та України у рамках процедури оцінки транскордонного впливу на довкілля нового будівництва об'єкта транспортної інфраструктури – річкового порту (терміналу) в м. Ізмаїл Ізмаїльського району Одеської області з під'їзною залізничною колією – прилеглої до станції Ізмаїл регіональної філії «Одеська залізниця».

29 березня 2023 рік у форматі відеоконференції

Minutes of expert consultations between Romania and Ukraine under transboundary EIA procedure of a new construction of a transport infrastructure object - a river port (terminal) in Izmail, Izmail district, Odesa region with a railway access track - adjacent to the Izmail station of the «Odesa Railway» regional branch».

March 29, 2023 in the format of a video conference

У зустрічі приймали участь: **З румунської сторони:** 1. Іонуц - Соріи БАНЧІУ, державний секретар Міністерства захисту навколишнього середовища, вод та лісів Румунії; 2. Доріна МОКАНУ, заступник генерального директора Генерального директорату з оцінки впливу, контролю забруднення та зміни клімату; 3. Анка АПРЕУТЕСЕЙ, керівник відділу оцінки впливу Генерального директорату з оцінки впливу, контролю забруднення та зміни клімату; 4. Георге КОНСТАНТІН, заступник генерального директора Генеральної дирекції вод; 5. Кармен НЕАГУ, старший радник Генеральної дирекції вод; 6. Коріна АЛДЕА, заступник генерального директора Генерального директорату з міжнародних відносин та європейських справ; 7. Ніколета САМОЙЛЕ, старший радник Генерального директорату з міжнародних відносин та європейських справ; 8. Джон – Самад СМАРАНДА, старший радник, Генеральний директорат з біорізноманіття;	**The meeting was attended by:** **From the Romanian side:** 1. Ionuț - Sorin BANCIU, State Secretary of the Ministry of Environment, Waters and Forests of Romania; 2. Dorina MOCANU, Deputy General Director of the General Directorate for Impact Assessment, Pollution Control and Climate Change; 3. Anca APREUTESEI, Head of the Impact Assessment Unit Department of the General Directorate for Impact Assessment, Pollution Control and Climate Change; 4. Gheorghe CONSTANTIN, Deputy General Director of the General Directorate of Water; 5. Carmen NEAGU, senior advisor of the General Water Directorate; 6. Corina ALDEA, Deputy General Director of the General Directorate for International Relations and European Affairs; 7. Nicoleta SAMOILĂ, senior advisor to the General Directorate for International Relations and European Affairs; 8. John - Samad SMARANDA, Senior Advisor, Directorate General for Biodiversity; 9. Elena ȚUCHIU, director of the National Water Administration; 10. Cristian Rusu, expert of the National Water Administration;

9. Олена ЦУЧІУ, директор Національного водного управління;
10. Крістіан Русу, експерт Національного водного управління;
11. Граціела Джула, експерт Національного водного управління.
12. Фелікс Захарія, директор, Договірний офіс Міністерства закордонних справ.

З української сторони:

1. Крамаренко Олена Володимирівна – заступник Міністра захисту довкілля та природних ресурсів України;
2. Шимкус Марина Олександрівна - директор Департаменту екологічної оцінки Міністерства захисту довкілля та природних ресурсів України;
3. Бонь Олександр Віталійович – заступник директора департаменту – начальник відділу інтеграції екологічних оцінок у галузеві політики Департаменту екологічної оцінки Міністерства захисту довкілля та природних ресурсів України;
4. Вадатурський Андрій – генеральний директор ТОВ СП «НІБУЛОН»;
5. Різак Михайло – заступник генерального директора по взаємодії з органами влади ТОВ СП «НІБУЛОН»;
6. Ізмєстьєва Алла – начальник відділу охорони навколишнього середовища ТОВ СП «НІБУЛОН»;
7. Морозов Віктор – тимчасово виконуючий обов'язки директора Дунайської гідрометеорологічної обсерваторії;
8. Дем'яненко Костянтин - заступник директора з наукової роботи Інституту рибного господарства та екології моря (ІРЕМ).

Місце проведення: відеоконференція.

Мета: проведення, відповідно до Конвенції Еспо, експертних консультацій щодо оцінки транскордонного впливу на довкілля нового будівництва об'єкта транспортної інфраструктури – річкового порту (терміналу) в м. Ізмаїл Ізмаїльського району Одеської області з під'їзною залізничною колією – прилеглої до станції Ізмаїл регіональної філії «Одеська залізниця».

Зустріч відкрили вітальними виступами Олени Крамаренко, заступник Міністра захисту довкілля та природних ресурсів України та

11. Gratiela Jula, expert of the National Water Administration.
12. Felix Zaharia, Director, Treaty Office, Ministry of Foreign Affairs

From the Ukrainian side:

1. Olena Kramarenko - Deputy Minister of Environmental Protection and Natural Resources of Ukraine;
2. Maryna Shymkus - director of the Department of Environmental Assessment of the Ministry of Environmental Protection and Natural Resources of Ukraine;
3. Olcksandr Bon - Deputy Director of the Department - Head of the Department of Integration of Environmental Assessments into Sector Policies of the Department of Environmental Assessment of the Ministry of Environmental Protection and Natural Resources of Ukraine;
4. Andriy Vadaturskyy - general director of "NIBULON" LLC;
5. Mykhailo Rizak - deputy general director for interaction with authorities of "NIBULON" LLC;
6. Alla Izmiestieva - head of the environmental protection department of "NIBULON" LLC;
7. Viktor Morozov - temporary acting director of the Danube Hydrometeorological Observatory;
8. Kostiantyn Demianenko - deputy director for scientific work of the Institute of Fisheries and Marine Ecology (IREM).

Venue: video conference.

Purpose: conducting, in accordance with the Espoo Convention, expert consultations on the assessment of the transboundary impact on the environment of the new construction of a transport infrastructure project - a river port (terminal) in the city of Izmail, Izmail district of the Odesa region with an access railway track - adjacent to the Izmail station of the Odesa Railway regional branch.

The meeting was opened with welcoming speeches by Olena Kramarenko, Deputy Minister of Environmental Protection and Natural Resources of Ukraine, and Sorin BANCIU, State Secretary of the Ministry

Соріп БАНЧІУ, державний секретар Міністерства захисту навколишнього середовища, вод та лісів Румунії. п. Іонуц - Сорін БАНЧІУ у вступній промові висловив цілковиту підтримку Румунською стороною України у її протистоянні повномасштабній збройній агресії рф, а також підтримку реалізації Україною інфраструктурного проєкту, що є предметом зазначених транскордонних консультацій, в контексті забезпечення глобальної продовольчої безпеки та дотримання вимог Конвенції Еспо; розповів про процес громадського обговорення проєкту Румунською стороною. Зазначив на важливості транскордонних консультацій за проєктом як в контексті подальшого розвитку двостороннього транскордонного співробітництва в розвиток нещодавно підписаної міністрами екології України та Румунії Угоди про імплементацію Конвенції Еспо, так із огляду на особливу чутливість румунського суспільства до реалізації проєктів в дельті річки Дунай. Висловив сподівання на швидке завершення Україною національних процедур для набрання чинності Угоди про імплементацію Конвенції Еспо для України та про організацію процедури оцінки транскордонного впливу на довкілля щодо інфраструктурних проєктів Румунії, які знаходяться на розгляді України. п. Олена Крамаренко подякувала Румунській стороні за підтримку та запевнила в належній організації процедури оцінки транскордонного впливу на довкілля щодо інфраструктурних проєктів Румунії, які знаходяться на розгляді України. Відповідно до пункту 1 Порядку денного Українською стороною (Вадатурський А., Ізмєстьєва А.) представлені презентації стосовно планованої діяльності щодо якої проводяться консультації у рамках процедури оцінки транскордонного впливу на довкілля, а саме: - Ізмаїл – символ стійкості; - оцінка впливу на навколишнє середовище нового будівництва об'єкта транспортної інфраструктури – річкового порту (терміналу) в м. Ізмаїл Ізмаїльського району Одеської області з під'їзною залізничною колією – прилеглої до станції Ізмаїл регіональної філії	of Environment, Waters and Forests of Romania. Mr. Ionut - Sorin BANCIU, in his opening speech, expressed the full support of the Romanian side of Ukraine in its opposition to the full-scale armed aggression of the Russian Federation, as well as support for Ukraine's implementation of the infrastructure project, which is the subject of the mentioned transboundary consultations in the context of ensuring global food security and compliance with the requirements of the Espoo Convention; described about the process of public discussion of the project by the Romanian side. He noted the importance of transboundary consultations on the project both in the context of the further development of bilateral cross-border cooperation in the development of the Agreement on the Implementation of the Espoo Convention recently signed by the ministers of environment from Ukraine and Romania, and in view of the special sensitivity of the Romanian society to the implementation of projects in the Danube Delta. He expressed hope that Ukraine will quickly complete the national procedures for the entry into force of the Agreement on the Implementation of the Espoo Convention for Ukraine and the organization of the procedure for assessing the transboundary impact on the environment regarding the infrastructure projects of Romania, which are under consideration by Ukraine. Mrs. Olena Kramarenko thanked the Romanian side for its support and assured of the proper organization of the cross-border environmental impact assessment procedures regarding the infrastructure projects of Romania, which are under consideration by Ukraine. In accordance with point 1 of the Agenda, the Ukrainian side (A. Vadaturskyy, A. Izmiestieva) presented the planned activity for which consultations are held within the framework of the transboundary environmental impact assessment procedure, namely: - Izmail is a symbol of stability; - assessment of the impact on the environment of the new construction of a transport infrastructure object - a river port (terminal) in the city of Izmail, Izmail district, Odesa region, with an access railway track - adjacent to the Izmail station of the Odesa Railway regional branch.

«Одеська залізниця».

У презентації представники ТОВ «НІБУЛОН» значили, що планована діяльність здійснюватиметься в межах акваторії існуючого порту Ізмаїл на р. Дунай (Кілійське гирло) на площі 19,7 Га, до діючого судноплавного каналу «Вилкове – Ізмаїльський Чатал» на ділянці від 91.09 до 91,55 км.

Ділянка, на якій здійснюватиметься будівництво знаходиться в промислово освоєній зоні та зоні інтенсивного судноплавства. Мінімальна відстань від центроїду промислового майданчика планованої діяльності до кордону Румунії – 586 м в південно-західному напрямку;

Територія планованої діяльності знаходиться поза межами природоохоронних територій, пам'яток архітектури, історії та культури, не відноситься до територій реалізації проекту "Смарагдова мережа" та Natura 2000, утім акваторія р. Дунай є природним коридором для міграції осетрових та інших видів риб.

З метою посилення охорони середовища існування риб днопоглиблювальні роботи у період нерестової заборони проводитись не будуть.

Мінімальна відстань до найближчого поселення на Румунській стороні – села Plauru визначається радіусом у 993 метри від точки «0» системи координат промислового майданчика планованої діяльності, у той час як потенційний вплив на якість атмосферного повітря розповсюджується на територію лише в радіусі 673 метри від точки «0» системи координат промислового майданчика планованої діяльності.

Планована діяльність передбачає застосування сучасних передових технологій, дружніх до довкілля, та обладнання, зокрема, суден та земснарядів, оснащених відповідно до вимог Конвенції про запобігання забрудненню і суден (МАРПОЛ 73/78) та з дотриманням вимог відповідних європейських та міжнародних стандартів.

Планована діяльність також передбачає проведення моніторингових досліджень під час будівництва та під час експлуатації об'єкта.

Замовником планованої діяльності представлений план заходів,

In the presentation, the representatives of "NIBULON" LLC said that the planned activity will be carried out within the water area of the existing Izmail port area on the Danube River (Kilia estuary arm) on an area of 19.7 hectares, to the existing shipping channel "Vylkove - Izmailskyi Chatal" in the section from 91.09 to 91.55 km.

Theplanned activity is located in an industrially developed area and an area of intensive shipping. The minimum distance from the centroid of the industrial site of the planned activity to the Romanian border is 586 meters in the southwestern direction;

The territory of the planned activity is located outside the protected areas, architectural, historical and cultural monuments, and does not belong to the Emerald Network and Natura 2000 project areas, however, the Danube River water area is a natural corridor for the migration of sturgeon and other fish species.

In order to enhance the protection of the habitat of fish, dredging operations will not be carried out during the spawning season.

The minimum distance to the nearest settlement on the Romanian side - the village of Plauru is determined by a radius of 993 meters the "0" point of the coordinate system of the industrial site of the proposed activity, while the potential impact on the quality of atmospheric air extends to the territory only in a radius 673 meters from the "0" point of the coordinate system of the industrial site of the planned activity.

The proposed activity involves the use of modern advanced technologies, friendly to the environment, and equipment, in particular, ships and dredgers equipped in accordance with the requirements of the Convention on the Prevention of Pollution and Ships (MARPOL 73/78) and in compliance with the requirements of the relevant European and international standards.

The proposed activity also provides for conducting monitoring studies during the construction and operation of the facility.

The developer of the proposed activity presented a plan of measures

спрямований на мінімізацію можливого несприятливого впливу на довкілля, зокрема, у транскордонному контексті.

Транскордонного впливу планованої діяльності на стан атмосферного повітря на території Румунії не відбуватиметься.

Оцінка транскордонного впливу на довкілля планованої діяльності включає як оцінку операційної діяльності будівництва об'єкту, так і днопоглиблювальних робіт.

За результатом проведеної оцінки транскордонного впливу на довкілля планованої діяльності не виявлено потенційних суттєвих негативних впливів на довкілля у транскордонному контексті.

У рамках консультацій обговорено такі питання:

1. Румунською стороною відзначено, що в звіті з оцінки впливу на довкілля відображено, що днопоглиблювальні роботи будуть проводитись в 3 етапи: перший від 0 до 4 м, другий від 4 до 7,32 м, третій від 7,32 до 8,23 м. У зв'язку із цим Українській стороні було поставлене питання: Чи остаточне рішення про плановану діяльність включатиме всі три етапи днопоглиблювальних робіт?

У відповідь Українська сторона підтвердила, що дійсно у проєктній документації зазначено про проведення робіт у три етапи. Водночас, лише роботи за першим та другим етапами пов'язані із новим будівництвом. Днопоглиблювальні роботи, передбачені у рамках 3-го етапу – це днопоглиблення, яке здійснюватиметься з метою досягнення проєктних глибин, визначених у рішенні Уряду від 09.02.2022 № 136 від 7,32 до 8,23 м від «0» порту Ізмаїл, які проводитимуться лише у разі проведення днопоглиблення діючого судноплавного каналу «Вилкове – Ізмаїльський Чатал» та на нижніх ділянках судноплавного шляху акваторії.

Українською стороною зазначено, що рішенням про провадження планованої діяльності буде дозвіл на виконання будівельних робіт, який не включатиме днопоглиблювальні роботи в рамках реалізації 3-го етапу.

Румунська сторона запросила копію постанови Кабінету Міністрів України від 09.02.2022 № 136 «Про затвердження переліку внутрішніх морських вод і внутрішніх водних шляхів, віднесених до

aimed at minimizing the possible adverse impact on the environment, in particular, in the transboundary context.

There will be no transboundary impact of the proposed activity on the state of atmospheric air in the territory of Romania.

The assessment of the transboundary impact on the environment of the proposed activity includes both an assessment of the operational activity of construction the object and dredging works.

Based on the results of the transboundary environmental impact assessment of the proposed activity, no potential significant negative environmental impacts in the cross-border context were identified.

The following issues were discussed as part of the consultations:

1. The Romanian side noted that the environmental impact assessment report indicated that dredging works will be carried out in 3 stages: the first from 0 to 4 m, the second from 4 to 7.32 m, the third from 7.32 to 8.23 m. In this connection, the Ukrainian side was asked the question: Will the final decision on the planned activity include all three stages of dredging works?

In response, the Ukrainian side confirmed that indeed the project documentation states that the work will be carried out in three stages. At the same time, only the works of the first and second stages are related to new construction. The dredging works provided for in the framework of the 3rd stage are dredging that will be carried out in order to achieve the project depths specified in the decision of the Government of February 9, 2022 No. 136 from 7.32 to 8.23 m from "0" of the Izmail port, which will be carried out only in the case of dredging of the existing shipping channel "Vylkove - Izmailskyi Chatal" and in the lower sections of the shipping route of the water area.

The Ukrainian side stated that the final decision on the proposed activity will be a permit for the construction works, which will not include dredging works as part of the implementation of the 3rd stage.

The Romanian side requested a copy of the resolution of the Cabinet of Ministers of Ukraine dated 09.02.2022 No. 136 "On approval of the list of inland sea waters and inland waterways classified as navigable" and asked

категорії судноплавних» та попросила надати відповідь, чи відповідає зазначена постанова вимогам Конвенції Еспо.

Українська сторона наголосила, що рішення Уряду від 09.02.2022 № 136 не містить положень, які суперечать вимогам Конвенції Еспо, воно не є рішенням прийнятим в рамках Конвенції Еспо та стосується лише визначення переліку внутрішніх морських вод і внутрішніх водних шляхів, віднесених до категорії судноплавних із зазначенням їх проєктних глибин.

Текст рішення Уряду від 09.02.2022 № 136 було одразу передано Румунській стороні засобами електронного зв'язку.

2. Румунською стороною зазначено, що в звіті з оцінки впливу на довкілля відсутня оцінка кумулятивного впливу щодо реалізації 3-го етапу планованої діяльності та майбутніх робіт на ділянці «Вилкове – Ізмаїл Чатал».

Щодо 3 етапу Українська сторона вкотре наголосила, що днопоглиблювальні роботи на ділянці «Вилково – Ізмаїльський Чатал» до глибин 8,23 не проводитимуться. Даною процедурою оцінено кумулятивний вплив планованої діяльності на атмосферне повітря з урахуванням функціонування діючого порту Ізмаїл, що відповідає вимогам Конвенції Еспо.

Щодо майбутніх робіт на ділянці «Вилкове – Ізмаїл Чатал» Українська сторона вкотре наголосила, що це питання знаходиться поза цією процедурою транскордонних консультацій і буде предметом окремих двосторонніх процедур транскордонних консультацій в рамках Конвенції Еспо у майбутньому.

3. Румунською стороною зазначено, що в розділі звіту з оцінки впливу на довкілля щодо оцінки можливого транскордонного впливу не згадується вплив під час будівництва об'єкта та під час його експлуатації на види флори і фауни територій, що охоплені природоохоронними директивами ЄС та міжнародними конвенціями, ратифікованими Україною, зокрема на території та об'єкти NATURA 2000 в дельті Дунаю.

for an answer as to whether the specified resolution meets the requirements of the Espoo Convention.

The Ukrainian side emphasized that the Government's decision No. 136 of 02/09/2022 does not contain provisions that contradict the requirements of the Espoo Convention, as it is not a decision taken in the framework of the Convention and concerns only the definition of the list of inland sea waters and inland waterways classified as navigable with an indication of their future design depths.

The text of the Government's decision dated February 9, 2022 No. 136 was immediately transmitted to the Romanian side via email.

2. The Romanian side stated that the environmental impact assessment report does not include an assessment of the cumulative impact regarding the implementation of the 3rd stage of the planned activity and future works on the section "Vilkovo - Izmail Chatal".

Regarding the 3rd stage the Ukrainian side once again emphasized that dredging works on the section "Vilkovo - Izmailskyi Chatal" will not be carried out to a depth of 8.23 m. This procedure assessed the cumulative impact of the proposed activity on atmospheric air, taking into account the functioning of the existing port of Izmail, which meets the requirements of the Espoo Convention.

Regarding the future works on the section "Vylkove - Izmail Chatal", the Ukrainian side once again noted that this issue is outside this procedure of transboundary consultations and will be subject of separate bilateral procedures of transboundary consultations within the framework of the Espoo Convention in the future.

3. The Romanian side states that the section of the environmental impact assessment report regarding the assessment of possible transboundary impact does not mention the impact on the species of flora and fauna on the Romanian side during the construction of the facility and during its operation, of species of flora and fauna, habitats protected by on the territories covered by the EU Nature Directives and international conventions ratified by Ukraine, in particular, on the territory and objects of

З порушеного питання Українська сторона відзначила:

– звіт з оцінки впливу на довкілля відповідає вимогам Конвенції Еспо, містить розділи щодо оцінки впливу на довкілля як будівництва, так і під час реалізації проєкту планованої діяльності;

– в звіті з оцінки впливу на довкілля вказано про відсутність значного впливу на флору та фауну, у тому числі транскордонного. Це зумовлено, тим, що планована діяльність, з огляду на розташування об'єкта планованої діяльності в зоні промислового навантаження діючого порту Ізмаїл, масштаб будівництва, характер проведення днопоглиблювальних робіт та технологію складування ґрунтів днопоглиблення, обмеження впливу строком проведення робіт, не створюватиме нових умов для проживання видів флори та фауни, оселищ, охоронюваних Бернською конвенцією, та не справлятиме значного несприятливого впливу на довкілля територій, що охоплені природоохоронними директивами ЄС та міжнародними конвенціями, ратифікованими Україною, зокрема на території та об'єкти NATURA 2000 в дельті Дунаю;

– незначний вплив на довкілля, зокрема на флору та фауну, прогнозується не від операційної діяльності ТОВ СП «НІБУЛОН», а внаслідок виконання днопоглиблювальних робіт. При цьому, вплив днопоглиблювальних робіт не виходитиме за межі об'єкту планованої діяльності та буде обмежений часом виконання робіт, який за розрахунковими даними становить 52 доби (Максимальна довжина шлейфу каламутності згідно розрахунків становить 69 метрів, а максимальний час, протягом якого стан водного середовища повертається до нормативного, становить 1 годину);

– підтвердження результатів оцінки впливу на довкілля та оцінка ймовірного впливу на флору та фауну протягом реалізації планованої діяльності здійснюватиметься за результатами моніторингу;

– у рамках даної процедури Румунською стороною не висувалось вимоги щодо проведення оцінки впливу на оселища, розташовані безпосередньо уздовж Румунського узбережжя р. Дунай.

Також Українською стороною зазначено на відсутність можливості проведення запитуваних досліджень на Румунській стороні.

NATURA 2000 in the Danube Delta.

On the raised issue, the Ukrainian side noted:

– the environmental impact assessment report meets the requirements of the Espoo Convention, contains sections on the environmental impact assessment both during construction and during the implementation of the planned activity project;

– the EIA report indicates that there is no significant impact on flora and fauna, including transboundary impact. This is due to the fact that the proposed activity, taking into account the location of the object of the proposed activity in the industrial load zone of the existing port of Izmail, the scale of construction, the nature of dredging works and the technology of dredging soil storage, the impact is limited only by the duration of the work and will not create new conditions for the habitat of species of flora and fauna, habitats protected by the Berne Convention, and will not have a significant adverse impact on the environment by on the territories covered by the EU Nature Directives and international conventions ratified by Ukraine, in particular, on the territory and objects of NATURA 2000 in the Danube Delta;

– insignificant impact on the environment, in particular on flora and fauna, is predicted not from the operational activities of JV "NIBULON" LLC, but as a result of dredging works. At the same time, the impact of dredging works will not go beyond the object of the proposed activity and will be limited by the time of execution of the works, which according to the calculation data is 52 days (The maximum length of the plume of turbidity according to the calculations is 69 meters, and the maximum time during which the state of the water environment returns to the standard, is 1 hour);

– confirmation of the results of the assessment of the impact on the environment and the assessment of the likely impact on flora and fauna during the implementation of the planned activity will be carried out based on the results of monitoring;

– within the framework of this procedure, the Romanian side did not put forward a requirement to carry out an impact assessment on settlements located directly along the Romanian coast of the Danube River.

Also, the Ukrainian side indicated the lack of possibility of conducting the requested studies on the Romanian side.

4. Румунською стороною було зазначено на відсутності у звіті з оцінки впливу на довкілля заходів, передбачених у випадку надзвичайних ситуацій. Українська сторона запевнила, що представить Румунській стороні заходи на випадок надзвичайних ситуацій.	4. The Romanian side pointed out the lack of emergency measures in the environmental impact assessment report. The Ukrainian side assured that it would present emergency measures to the Romanian side.
5. Румунською стороною наголошено на необхідності оцінити додатково вплив на оселища NATURA 2000 на Румунській стороні, оцінити вплив на їх життєдіяльність протягом будівельних робіт та експлуатації об'єкту планованої діяльності. За результатом такої оцінки сформувати перелік заходів з мінімізації ймовірного впливу планованої діяльності на оселища, розташовані на Румунській стороні. Крім того внесена пропозиція розміщення двох постів моніторингу на території порту в м. Ізмаїл. Українська сторона відповідно до вимоги Румунської сторони погодилась надати результати досліджень щодо проведених розрахунків і оцінок, за якими встановлено відсутність впливу планованої діяльності на оселища NATURA 2000, розташовані на Румунській стороні; надати дослідження оцінки впливу щодо оселищ та видів, розташованих на Румунській стороні згідно наданого додатково Румунською стороною переліку; представити розроблений за результатом оцінки план заходів з мінімізації ймовірного впливу на види та оселища, розташовані на Румунській стороні. На пропозицію розмістити два пости моніторингу на території порту Ізмаїл Українська сторона зазначила, що це питання є предметом окремих двосторонніх зустрічей поза даною процедурою транскордонних консультацій, оскільки рішення щодо розміщення постів моніторингу на території порту має прийматися урядами країн.	5. The Romanian side emphasized the need to additionally assess the impact on NATURA 2000 habitats and species on the Romanian side, to assess the impact on their livelihoods during the construction works and operation of the object of the planned activity. Based on the result of such assessment, form a list of measures to minimize the likely impact of the planned activity on the settlements located on the Romanian side. In addition, a proposal was made to place two monitoring posts on the territory of the port in the city of Izmail. The Ukrainian side, in accordance with the demand of the Romanian side, agreed to provide the results of studies on the calculations and assessments carried out, according to which it was established that there is no impact of the planned activity on the NATURA 2000 habitats and species located on the Romanian side; carry out an additional assessment of the impact on the settlements and species located on the Romanian side according to the list additionally provided by the Romanian side; present a plan of measures developed based on the results of the assessment to minimize the likely impact on species and habitats located on the Romanian side. Regarding the proposal to establish two monitoring posts on the territory of the Izmail port, the Ukrainian side noted that this issue is the subject of separate bilateral meetings outside this procedure of transboundary consultations, the decision to establish monitoring posts on the territory of the port should be taken by the governments of the countries.
6. Румунська сторона поцікавилася збільшенням судноплавства, спричиненим новим портовим об'єктом, і впливом такого збільшення на навколишнє середовище. За словами інвестора, новий портовий об'єкт не призведе до збільшення суднопотоку. Це, з одного боку, сприятиме впорядкуванню і так сильно зрослого руху морських суден річкою, спричиненого	6. The Romanian side inquired into the increase of ship traffic generated by the new port facility and the environmental impact of such increase. According to the developer, the new port facility will not lead to an increase of ship traffic. It will, on one hand, contribute to the streamlining the already highly increased traffic of maritime ships on the river, caused by the

блокадою/окупацією українських чорноморських портів. З іншого боку, новий порт розрахований насамперед на річковий рух із застосуванням сучасних природоохоронних та енергозберігаючих технологій навантаження.

Українська сторона за результатом транскордонних консультацій узагальнила аргументацію свою позицію, яка полягає у тому, що:

1. Планована діяльність здійснюватиметься у межах діючого порту, який на сьогодні є максимально навантаженим у контексті прийому суден.

2. В рамках оцінки впливу на довкілля встановлено, що найбільший вплив на довкілля, зокрема на флору та фауну, буде відбуватися внаслідок проведення днопоглиблювальних робіт. Представлені заходи з мінімізації впливу на довкілля є повними.

3. Найближчою до Планової діяльності є територія Біосферного заповідника "Дельта Дунаю", що перетинається зі спеціальними природоохоронними зонами, що визначені Рамсарською конвенцією про водно-болотні угіддя, Директивами «Про збереження природних оселищ …» та «Про захист диких птахів», але всі ці території, як і території об'єктів NATURA 2000 та об'єктів Смарагдової мережі знаходяться поза зоною впливу об'єкта планованої діяльності (територія в радіусі 673м навколо точки «0» системи координат промислового майданчика). Розрахунками доведено, що вплив планованої діяльності (точковий) на види та оселища цих територій вважається відсутнім, оскільки жодний із факторів довкілля не зазнають впливів, рівень забруднення атмосферного повітря, водного середовища та ґрунтів залишається в нормативних межах, відповідно і умови життя живих організмів на цих територіях залишаються незмінними.

За результатом процедури транскордонних консультацій:

1. Румунською стороною озвучено, а Українською стороною надано відповіді на питання, які виникли за результатом обговорення із громадськістю та в експертному середовищі Румунії матеріалів з оцінки впливу на довкілля у транскордонному контексті при новому будівництві об'єкта транспортної інфраструктури – річкового порту (терміналу) в м. Ізмаїл Ізмаїльського району Одеської області з

blockade/occupation of Ukrainian Black Sea ports. On the other hand, the new port is designed primarily for river traffic using modern environmentally friendly and energy-saving loading technologies.

As a result of the transboundary consultations, the Ukrainian side summarized the argumentation of its position, which consists in the fact that:

1. The proposed activity will be carried out within the existing port, which is currently the most loaded in the context of receiving ships, and it will not lead to a substantial increase in the number of ships using the port.

2. As part of the environmental impact assessment, it was established that the greatest impact on the environment, particularly on flora and fauna, will occur as a result of dredging operations. The presented measures to minimize the impact on the environment are complete.

3. The closest to the planned activity is the territory of the Danube Delta Biosphere Reserve, which overlaps with special protection areas defined by the Ramsar Convention on Wetlands, the Directives on the Conservation of Natural Habitats " and "On the Protection of Wild Birds", but all these territories, as well as the territories of Natura 2000 sites and Emerald Network sites, are outside the zone of impact of the planned activity (the area within a radius of 673 meters around the point "0" of the industrial site coordinate system). The calculations proved that the impact of the planned activity (point) on the species and habitats of these territories is considered absent, since none of the environmental factors are affected, the level of air, water and soil pollution remains within the regulatory limits, and, accordingly, the living conditions of living organisms in these areas remain unchanged.

According to the result of the cross-border consultation procedure:

1. The Romanian side announced, and the Ukrainian side provided answers to the questions from the Romanian public and experts after the public consultations on transboundary EIA of project «The new construction of a transport infrastructure object - a river port (terminal) in Izmail, Izmail district, Odesa region, with an access railway track - adjacent to the Izmail

під'їзною залізничною колією – прилеглої до станції Ізмаїл регіональної філії «Одеська залізниця».	station, of the Odesa Railways regional branch».
2. На запит Румунської сторони Українською стороною надано засобами електронної комунікації постанову Кабінету Міністрів України від 09.02.2022 № 136 «Про затвердження переліку внутрішніх морських вод і внутрішніх водних шляхів, віднесених до категорії судноплавних».	2. At the request of the Romanian side, the Ukrainian side provided via email the resolution of the Cabinet of Ministers of Ukraine dated 09.02.2022 No. 136 "On approval of the list of inland sea waters and inland waterways classified as navigable".
3. Українська сторона надасть додатково результати досліджень щодо проведених розрахунків і оцінок, за якими встановлено відсутність впливу планованої діяльності на оселища NATURA 2000, розташовані на Румунській стороні.	3. The Ukrainian side will additionally provide the results of studies on the calculations and assessments carried out, according to which it was established that there is no impact of the planned activity on the NATURA 2000 habitats located on the Romanian side.
4. Українська сторона надасть моделювання аварійної ситуації.	4. The Ukrainian side will provide a simulation of the emergency situation.
Українська сторона запропонувала направити зазначені документи разом з направленням на погодження проєкту протоколу. Підписання протоколу сторонами вважатиметься завершенням транскордонних консультацій в рамках Конвенції Еспо.	The Ukrainian side offered to send the mentioned documents along with sending the draft protocol for approval. The signing of the protocol by the parties will be considered the completion of transboundary consultations within the framework of the Espoo Convention.
Румунська сторона погодилася, що підписання протоколу проведеного засідання буде вважатися завершенням консультацій в рамках Конвенції Еспо та звернулася до української сторони з проханням про надання, поза межами консультацій, додаткових матеріалів, а також надала пропозиції для врахування, а саме:	The Romanian side agreed that the signing of the protocol of the held meeting will be considered the completion of the consultations within the framework of the Espoo Convention and asked the Ukrainian side to provide, outside of the consultations, additional materials, and also provided proposals for consideration, namely:
1. Румунська сторона надасть перелік видів флори та фауни (Natura 2000), які можуть зазнати негативного впливу під час здійснення планованої діяльності.	1. The Romanian side will provide a list of species of flora and fauna (Natura 2000) that may be negatively affected during the implementation of the planned activity.
2. Румунська сторона просить зазначити що 3 етап днопоглиблювальних робіт до позначки 8,23 м не входить до переліку питань, що були обговорені та затверджені в рамках оцінки транскордонного впливу на довкілля нового будівництва об'єкта транспортної інфраструктури – річкового порту (терміналу) в м. Ізмаїл Ізмаїльського району Одеської області з під'їзною залізничною колією – прилеглої до станції Ізмаїл регіональної філії «Одеська залізниця».	**2. The Romanian side requests to note that the 3rd stage of dredging works up to the mark of 8.23 m is not included in the list of issues that were discussed and approved as part of the assessment of the transboundary impact on the environment of the new construction of the transport infrastructure object - the river port (terminal) in Izmail of the Izmail district of the Odesa region with an access railway track - adjacent to the Izmail station of the Odesa Railway regional branch.**
3. Румунська сторона підкреслила, що-завершення консультацій	3. The Romanian side emphasized that completion of the consultation does

не означає завершення процедури транскордонної оцінки впливу на довкілля, для якої необхідно здійснити інші кроки, включаючи передачу Україною остаточного рішення щодо планованої діяльності.	not mean the completion of the transboundary environmental impact assessment procedure, for which other steps need to be taken, including the transmittal by Ukraine of the final decision for the proposed activity.
З РУМУНСЬКОЇ СТОРОНИ **Підпис** **ІОНУЦ - СОРІН БАНЧІУ** **Державний секретар Міністерства захисту навколишнього середовища, вод та лісів Румунії**	**FROM THE ROMANIAN SIDE:** **Signature** **IONUȚ SORIN BANCIU** **State Secretary of the Ministry of Environment, Waters and Forests of Romania**
З УКРАЇНСЬКОЇ СТОРОНИ: **Підпис** **ОЛЕНА КРАМАРЕНКО** **Заступник Міністра захисту довкілля та природних ресурсів України** «29» березня 2023 р.	**FROM THE UKRAINIAN SIDE:** **Signature** **OLENA KRAMARENKO** **Deputy Minister of Environmental Protection and Natural Resources of Ukraine** March 29, 2023

APPROVED BY
Minister of Environmental Protection and Natural Resources
Chairman of the Interagency Council
Ruslan STRILETS

PROTOCOL NO. 1
of the meeting of the Interagency Coordination Council on the implementation of the of the Convention on Environmental Impact Assessment in a transboundary context

July 03, 2023

time: from 10:00
(videoconference mode using the WEBEX)

The meeting was attended by:

STRILETS Ruslan Oleksandrovych	Minister of Environmental Protection and Natural Resources of Ukraine, Chairman of the Interagency Council
KRAMARENKO Olena Volodymyrivna	Deputy Minister of Environmental Protection and Natural Resources of Ukraine
SHYMKUS Maryna Oleksandrivna	Director of the Environmental Assessment Department of the Ministry of Environmental Protection and Natural Resources of Ukraine, Secretary of the Interagency Council
BON Oleksandr Vitaliyovych	Deputy Director of the Department - Head of the Division for Integration of Environmental Assessments into Sectoral Policies of the Department of Environmental Assessment
BIGUN Nadiia Valeriivna	Deputy Minister of Economy of Ukraine
KROPYVNYTSKYI Roman Vitaliyovych	Director of the Department for Development of the Real Sector of Economy of the Ministry of Economy of Ukraine
Mykola Oleksandrovych KOLYSNIK	Deputy Minister of Energy of Ukraine

Alexander Volodymyrovych TARASENKO	Head of the Expert Group on European and Euro-Atlantic Integration of the Directorate for Strategic Planning and European Integration of the Ministry of Energy of Ukraine
Alexandra Konstantinovna AZARKHINA	Deputy Minister of Development of Communities, Territories and Infrastructure of Ukraine
Borys Volodymyrovych BURKINSKYI	Director of the Institute of Market and Economic and Environmental Research of the National Academy of Sciences of Ukraine
Vyacheslav Anatolyevich MAZUR	National Coordinator for the Implementation of the Convention on Transboundary Impact, Deputy Director of the Department –
Evgeny Vladimirovich MORSCH	Head of the Technological Safety Directorate of the Department of Emergency Prevention of the State Emergency Service of UkraineNational Coordinator for the Implementation of the Convention on Transboundary Impact, Chief Inspector of the Emergency Services and Interaction with Executive Authorities Division of the Technological Safety Directorate of the Department of Emergency Prevention of the State Emergency Service of Ukraine
Viktor Nikolaevich MOROZOV	Acting Director of the Danube Hydrometeorological Observatory

THE SPEAKERS WERE

Ruslan STRILETS, Minister of Environmental Protection and Natural Resources of Ukraine, made an opening speech, informed the audience about the Agreement signed in November 2022 with the Government of Romania on the implementation of the Convention on Environmental Impact Assessment in a Transboundary Context and noted that this meeting of the Interagency Coordinating Council is aimed at ensuring the fulfillment of international obligations under the Espoo Convention, and the project that is the subject of consideration by the Interagency Coordinating Council is important for the

implementation of the Grain Initiative proclaimed by the President of Ukraine Volodymyr Zelenskyy.

In accordance with the third paragraph of clause 6 of the Regulation on the Interagency Coordination Council, approved by the Resolution of the Cabinet of Ministers of Ukraine No. 295 dated 02.04.2008, the updated personal composition of the Interagency Coordination Council, formed as a result of the submitted proposals, was submitted for discussion and approval.

IT WAS DECIDED

To approve the personnel composition of the Interagency Coordination Council for the Implementation of the Convention on Environmental Impact Assessment in a Transboundary Context in Ukraine (Annex 1 to the Protocol).

THE SPEAKERS WERE

Olena Kramarenko, Deputy Minister of Environmental Protection and Natural Resources of Ukraine, focused on the organizational and legal aspects of the Interagency Coordination Council.

In order to ensure consultations with Romania as an affected Party on the potential transboundary impact of the planned activities under the project for the new construction of a transport infrastructure facility - a river port (terminal) in Izmail, Izmail district, Odesa region. Izmail, Izmail district, Odesa region, with an access railway track - adjacent to the station Izmail of the regional branch of the Odesa Railways (LLC NIBULON), and measures to reduce or eliminate its impact, and the formalization of the results of consultations, Ukraine has ensured, in accordance with the requirements of Articles 5 and 6 of the Espoo Convention, that making a decision on the implementation of a transboundary environmental impact assessment in accordance with the Procedure approved by the Resolution of the Cabinet of Ministers of Ukraine No. 877 dated 23.09.2020; organization of consultations with the Romanian side within the framework of the transboundary environmental impact assessment procedure and formalization of their results by signing a joint protocol; ' organizing a meeting of the Interagency Coordination Council.

Based on the results of consultations with the Romanian party within the framework of the procedure for transboundary environmental impact assessment of the NIBULON JV LLC project, the proposals and comments of the Romanian party based on the results of public discussion were taken into account in full, which was confirmed by the signed joint protocol.

Based on the results of the meeting of the Interagency Coordination Council, in accordance with clause 9 of the Regulation on the Coordination Council, the Ministry of Environment should approve a decision to take into account the results of the transboundary environmental impact assessment and issue an environmental impact assessment conclusion.

The decision of the Interagency Coordination Council, the environmental impact assessment conclusion and the joint protocol based on consultations with the Romanian party will be uploaded to the Unified Environmental Impact Assessment Register.

After approval, the decision will be sent to the Romanian party, which will mean the final completion of the procedure in accordance with the requirements of the Espoo Convention.

THE SPEAKERS WERE

Maryna SHYMKUS, Director of the Department of Environmental Assessment of the Ministry of Environmental Protection and Natural Resources of Ukraine, informed the Interagency Coordination Council about the comments and suggestions received from the Romanian

party on the planned activities under the project of new construction of a transport infrastructure facility - a river port (terminal) in Izmail, Izmail district, Odesa region, with an access railway track - adjacent to the Izmail station of the regional branch of the Odesa Railways (NIBULON LLC), and which were the subject of expert consultations, as well as on the way they were taken into account.

She noted that all the comments and suggestions of the Romanian side received as a result of the public discussion were taken into account in full, and all the requested additional information was provided. A joint protocol was signed following the consultations.

During the discussion, Yevhen Morshch, Chief Inspector of the Emergency Services and Interaction with Executive Authorities Division of the Technogenic Safety Directorate of the Emergency Prevention Department of the State Emergency Service of Ukraine, noted that Ukraine is a Party to the Convention on the Transboundary Effects of Industrial Accidents, according to Article 4 of which, in cases where hazardous activities are subject to environmental impact assessment in accordance with the Convention on Environmental Impact Assessment in a Transboundary Context and such assessment includes an analysis of transboundary impacts, the EIA report should be submitted to the State Emergency Service of Ukraine.

At the same time, in the EIA report, in order to assess the environmental hazard, it was necessary to identify the high-risk object in accordance with the procedure established by the Resolution of the Cabinet of Ministers of Ukraine No. 1030 "Some issues of identification of high-risk objects" dated 13.09.2022.

He also noted that the emergency modeling considered only the fire hazard due to a grain drying fire and oil spills, while not considering the fire of oil products and systems, the spread of oil combustion products, etc., which affects the environmental impact assessment, underestimating the potential environmental impact.

Maryna SHYMKUS, Director of the Environmental Assessment Department of the Ministry of Environmental Protection and Natural Resources of Ukraine, in her response to the SES representative, noted that the environmental impact assessment of the planned activity is carried out at the initial stage, when the decision to carry out the activity has not yet been made and the permits have not yet been received. Based on the results of the environmental impact assessment procedure, the EIA conclusion defines environmental conditions and restrictions on the implementation of the planned activity, therefore, the assessment of a high-risk facility can be defined as a condition in the EIA conclusion.

DECIDED

The Interagency Coordinating Council for the Implementation of the Convention on

Environmental Impact Assessment in a Transboundary Context in Ukraine, following the discussion, taking into account the joint protocol of expert consultations on March 29, 2023, signed by the Ukrainian and Romanian

the results of the transboundary environmental impact assessment for the new construction of a transport infrastructure facility - a river port (terminal) in Izmail, Izmail district, Odesa region, with an access railway track - adjacent to the Izmail station of the regional branch of the Odesa Railways (NIBULON LLC) were taken into account in full.

To the Ministry of Environmental Protection and Natural Resources to recommend:

- publish the decision of the Interagency Coordination Council on the Ministry's website;

- to include the decision of the Interagency Coordination Council and the environmental impact assessment conclusion on the planned activity in the Unified Register of Environmental Impact Assessment.

The minutes were drawn up by
Director of the Department of
Environmental Assessment
of the Ministry of Environmental Protection
and Natural Resources of Ukraine, Secretary
of the Interagency Coordination Council **Maryna SHYMKUS**

CONSIDERATION OF QUESTIONS, COMMENTS AND PROPOSALS SUBMITTED DURING THE TRANSBORDER CONSULTATIONS WITH THE PARTIES INVOLVED IN THE CONTEXT OF THE TRANSBORDER ENVIRONMENTAL IMPACT ASSESSMENT OF THE PLANNED ACTIVITY "NEW CONSTRUCTION OF A TRANSPORT INFRASTRUCTURE FACILITY STRUCTURES - RIVER PORT (TERMINAL) IN THE MUNICIPALITY OF IZMAIL, IZMAIL DISTRICT, ODESA REGION WITH A RAILWAY APPROACH BY TRACK - ADJACENT TO ISMAIL STATION OF THE ODESA RAILWAY REGIONAL BRANCH"			
Article/ clause	**Issue content, comments, proposals**	**Implementation method**	**Review Information**
1	In the Notice specifies dredging works to reach depth of 8,23 m for the future port/terminal in Izmail city on the operational area, as well as on the length 460 m (between 91,09 and 91,55 by river km) and width 115 m (page 3) corresponding to 112,000 m^3 of excavated material. On the other hand, EIA documentation includes the following information: - In the clause 1.1 (page 9, the penultimate paragraph) it is indicated, that "defined water area of the Danube river extends along the shipping Canal Vylkove – Ismail Catal from 91,09 km to 91,55 km with the width from border of the shipping Canal to the left coast". - In the clause 1.3 I Construction works I Line V (page 13, the last paragraph) it is indicated, that "dredging to the depths of 8,23 m from the "0" of the Izmail sea port – if necessary, related to dredging by Ukraine on the shipping Canal Vylkove – Izmail Catal with the achievement of its project depths of 8,23 m from the "0" of Izmail port, which was approved by Resolution of Cabinet of Ministry of Ukraine dated 9th February, 2022 No.136 [28]." - In the clause 1.3.2 /Dredging works (…) (page 16, the first and the second paragraphs) it is indicated, that Canal Vylkove – Izmail Catal in the compliance with Resolution	**Implemented in full**	In the Report, the project decisions regarding the construction of the operational water area of the future port/terminal in the city of Izmail correspond to the intentions published in the Notice of Planned Activities. The EIA report (clause 1.1, clause 1.3, clause 1.3.2) specifies information on the location of the operational water area and its spatial characteristics, including successive reaching of its depths. The characteristics of the shipping Canal Vylkove – Izmail Catal, along which the water area of NIBULON LLC is located (section 1.3.2. of the Report), are given for reference. According to the EIA Report, dredging works are planned to be carried out in three stages, which correspond to the construction phases given in table 1.3.2.2 of the EIA Report. However, in the course of consultations with Romania, it was decided that dredging works to a depth of 8.23 m will not be carried out as part of the implementation of this planned activity. In addition, the conclusion of the environmental impact assessment established the ecological condition::

	of Cabinet of Ministry of Ukraine dated 09.02.2022 No. 136 [28] is an inland waterway of Ukraine with confirmed project dimensions: length 95,445 km, width 120 m and depth 8,23 m.		– not to carry out dredging operations of the third stage, namely at depths from 7,32 m to 8,23 m from the "0" of the Izmail port.
2	For general information, we would also like to note that navigation on the Danube river is governed by the Convention on the Regime of Navigation on the Danube River (Belgrade Convention, 1948), to which Romania and Ukraine are parties. In accordance with Articles 20 and 22 of the Belgrade Convention, in 1953 an agreement was signed between the Government of the Romanian People's Republic and the USSR on the establishment of the Danube River Special Administration for the implementation of hydrotechnical works, the support of the shipping Canal and the regulation of navigation on the sea section of the Danube (Braila-Sulina), which consists of representatives of both states. In 1957, a Bilateral Agreement was concluded in Moscow between the governments of the Romanian People's Republic and the USSR, on the basis of which a protocol was signed on the transfer of functions and material assets of the Danube River Special Administration to the Romanian side, starting from July 1, 1957. Based on the above agreements and in order to achieve the provisions of Articles, 3, 20, 23 of the Belgrade Convention, Romania established a legal entity with the status of an autonomous directorate with its headquarters in Galața and the name Lower Danube River Administration in Galața, which is organized and regulated by Government Decision No. 492 / 2003. According to Article 2 of the Government Decision No. 492/2003, the Lower Danube River Administration is the authority responsible for the waterways of the Romanian sector of the Danube from the entrance to the country to	**Implemented in full**	References made by the Romanian side to the current international norms governing navigation on the Danube River have been carefully studied and accepted for undisputed implementation in the course of the planned activities, in particular, in the implementation of hydraulic engineering works and the development of operational documents for the regulation of navigation. In addition, the conclusion of the environmental impact assessment established the ecological condition: - not to carry out dredging operations of the third stage, namely at depths from 7,32 m to 8,23 m from the "0" of the Izmail port.

	1075 km at the exit to the Black Sea, on the branch of Sulina, on the way of Sulina (rada Sulina), on the navigable estuaries of the Danube, Borča, Bala, Mečín, Vilča, Kaleja, on the Chilia branch with secondary tributaries, on the Sfintu Gheorghe branch with rectification Canals and secondary estuaries of the Sulina Canal, called the Old Danube. Also, in accordance with Article 5 of Government Decision No. 492/2003, the Lower Danube River Administration has obligations under the Belgrade Convention both in the performance of hydrotechnical works and in the regulation of shipping. 1) According to Article 2 of the Belgrade Convention, "the regime established by this Convention shall apply to the navigable part of the Danube between the city of Ulm and the Black Sea through the Sulina Arm with access to the sea through the Sulina Canal." 2) Also, according to the article "Vessel Indicator" from the Regulations for Navigation on the Romanian Section of the Danube - Version 2013 (RSD), Part II Special Rules for Navigation on the Danube Section from the route of Sulina (rada Sulina) and the port of Braila (175 km): "1. In the sea sector of the Lower Danube from Braila to the Sulina route (rada Sulina), under normal conditions, all seagoing and river-sea vessels move with a draft in fresh water of 23 feet, which is equal to 7,01 meters. The depth situation is reported daily on a radio Canal with national coverage, which will be communicated to shippers by means of a notice to shippers. 2. In this sector, navigation is allowed, under normal conditions, for vessels with a maximum length of 180 m and floating structures with a maximum width of 40 m. 3. In some situations, depending on the water level of the Danube, the Administration may:		

	a) establish a reduction or may approve an increase in the sediment specified in paragraph 1; b) agree to the navigation of ships with a length of more than 180 m, but not exceeding 225 m; c) approve the navigation of floating structures with a width of more than 40 m, when hydrometeorological conditions allow it." We note that the Regulation of shipping on the Danube section is based on the Basic Rules of Navigation on the Danube (DFND) adopted by the Danube Commission in 2010 and approved by Ministerial Decree No. 859/2013. Considering the above, the Sulina branch and Canal as the main access Canal from the Danube to the Black Sea with a navigable depth of 24 feet (7,32 m) currently provides the navigation of marine vessels with a gross tonnage of no more than 25 thousand tons along the entire route of 62,6 km.		
3	From the point of view of the safety of shipping, for the normal development of maritime traffic, the implementation of water transportation, the physical integrity of shipping personnel, passengers and cargo, we inform you that the dredging planned according to the project to 8,23 m is significantly higher than the draft of 23 feet (7,01 meters) allowed at Bara Sulina (Bara Sulina) in accordance with Article 3,05 of Chapter 3, Part Two of the Navigation Regulations on the Romanian Sector of the Danube. As a conclusion, vessels that will be loaded in Izmail Port will not be able to use the resulting dredging depth of 8,23 m, due to the restrictions of Bara Sulina.	**Implemented in full**	NIBULON LLC fully agrees that dredging in one part of the Danube River, without general measures, will not have the necessary final effect and will only cause additional costs for individual business entities. Therefore, in this project, regular dredging works are planned in the operational water area of the port (terminal) of NIBULON LLC with a limit of operating depths of 7,32m from the “0” of the Izmail Port for the navigation of sea vessels with a draft of 7,01m, which corresponds to the Recommendations of the Danube Commission and navigation depths provided by the Lower Danube River Administration in Galatii. The final stage of dredging works to reach the bottom mark of 8.23 m from the "0" of the Izmail port is postponed until the adoption of an intergovernmental agreed decision on the need to carry out relevant dredging works on the Vylkove - Izmail Catal shipping Canal and their readiness from the point of view of the

			completeness of scientific justification, comprehensive study and development of nature protection and protective measures. The relevant information is provided in the Environmental Impact Assessment Report, which was provided for consideration by the Romanian side (section 1.3.2). According to the EIA Report, dredging works are planned to be carried out in three stages, which correspond to the construction phases given in table 1.3.2.2 of the EIA Report. However, in the course of consultations with Romania, it was decided that dredging works to a depth of 8.23 m will not be carried out as part of the implementation of this planned activity. In addition, the conclusion of the environmental impact assessment established the following environmental condition: - not to carry out dredging operations of the third stage, namely at depths from 7,32 m to 8,23 m from the “0” of the Izmail port.
4	In addition, with regard to the proposed project, since the Ukrainian side intends to create a depth of 8,23 m at the working berth in the port of Izmail, we do not think it is appropriate to form this port with a depth different from the depths of the Sulina Canal and/or Chilia branch and Bystra, because vessels , which will operate in the port of Izmail, when they enter the mouth of Sulina and pass through the Canal of Sulina, Tulcea arm, Izmail Catal, and then through the Chilia branch to Izmail or directly through/to Bystre will require a depth of 8,23 m in the entire sector crossing . This situation is contrary to what is currently happening in the area of Bara Sulina – Sulina Canal – Tulcea arm – Izmail Catal, since in accordance with the Recommendations of the Danube Commission, the River Administration of the Lower Danube in Galati provides a	**Implemented in full**	The planned activity does not envisage dredging up to the mark 8,23 from the “0” of the Izmail port before the state of Ukraine carries out dredging works on the Vylkove - Izmail Catal shipping Canal upon reaching its design depth of 8,23 m from the "0" of Izmail of the port, which was approved by the resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 No.136. NIBULON company does not intend to transfer to itself the functions of the state regarding the deepening of navigable waterways for public use. The implementation of the planned activity is foreseen at the expense of private investments and has a very local character - a new construction of a river port (terminal) on an area of 19,7 hectares with hydrotechnical structures (operational water area with an approach Canal) located along the Vylkove - Izmail Catal shipping Canal from

	depth of 7,32 m for the navigation of sea vessels from 7,01 m. At the moment, the navigation depths provided by the Lower Danube River Administration in Galati correspond to the navigation dimensions for which the Sulina Canal was designed, the current situation is directly proportional to the existing geomorphological conditions, the infrastructure of the banks and the port in this section between Bara Sulina and Izmail Catal. In the situation required by this project to ensure a depth of 8,23 m at the berths of the Port of Izmail, we believe that this cannot be achieved in the above section, namely from Bar Sulina to Izmail Catal, both from a geomorphological point of view, the criteria of the current design, financial resources, available equipment, and because it is not necessary from the point of view of the Administration, which must ensure a depth of 7,32 m, according to the Recommendations of the Danube Commission, especially since this is the depth for which the upstream Romanian ports were designed. At the same time, the dredging along the entire length of the Chilia Arm between the Black Sea and the Port of Izmail, after the Bystre Canal, to a depth of 8,23 m, will necessarily require the implementation of studies to assess the direct and indirect impact on the shores, as we would like to note that there are areas, where the dredging will be carried out on the border line which means that the Romanian coasts may be affected. We would also like to add that the depths in the Sulina Arm and Sulina Mouth directly depend on sediment formation. The more water in the Danube, the more intensive is the process of sediment washing and its effect on the reduction of water depths. The more intensive the dredging, the greater the depth of the Canal and vice versa,		91.09 to 91.55 km wide from the border of the Canal to the left bank (area 10.4357 hectares). The design depth of the hydrotechnical facilities of the port (terminal) of NIBULON LLC is 8,23 m from the “0” of the Izmail sea port, adopted in accordance with the design depth of the shipping Canal Vylkove - Izmail Catal (approved by the resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022, No. 136 with the clarification "the depth has not been reached due to the non-completion of construction works under the project"), but the need to achieve the design depths depends on the adoption of an intergovernmental agreed decision on the need to carry out relevant dredging works on the Vylkove - Izmail Catal shipping Canal and their readiness with from the point of view of the completeness of scientific substantiation, comprehensive study and development of environmental protection and protective measures. A more detailed description of the dredging technology is provided in subsection 1.3.1 of this Report and Drawing 3. Clarification in the resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 No. 136 regarding the project depth of 8.23 m from the “0” of the Izmail Port of the Vylkove - Izmail Catal shipping Canal "the depth has not been reached due to the non-completion of construction works under the project » implies the existence of another, larger-scale construction project with scientific research and searches, the selection of advanced technologies for conducting works, as well as assessments of the impact of these works on environmental factors and the development of protective and environmental protection measures. Meanwhile, dredging works as part of the planned activity are characterized by very modest results: excavation of bottom soil in the volume of 112,0 thousand m^3 on an area of 2,32 hectares (in the case of bringing depths to 8,23m from the “0” of

	which means that dredging is carried out throughout the year with a time lag from the regime of the Danube alluvial deposits. That is why it is necessary to analyze the following aspects of the project: - hydromorphological aspect: fluctuations in the speed of water flow in most areas of the Sulina branch, Sulina Canal, Tulcea branch, Izmail Catal, then Chilia branch to Izmail and their impact on the existing hydrotechnical works in this sector, in the case of dredging works from 7,32 m to 8,23 m; - correlation with a new hydromorphological process that arises in connection with the problem of the development of the secondary delta south of Chilia, which is associated with the formation of flowing coarse-grained alluvial accumulations of coastal strips closer to the Musal current in the Black Sea, which is a risk for navigation in the Sulina branch. It is necessary to conduct an analysis of the degree of strengthening of the rhythm of the sediment at the mouth of the Sulina Canal; - dredging from 7,32 m to 8,23 m and, subsequently, the exploitation of this waterway will have an important impact on the distribution of water flows and flows of the Danube wash between the Chilia and Tulcea branch; - large volumes of dredging operations will negatively affect the flow of water on the secondary branches of the Chilia, which supply water to the territory of the Danube Delta, and may significantly affect the Danube Delta Biosphere Reserve.		the Izmail port). In the rest of the water area, the natural depths correspond to the declared design depths (Drawing 3). Execution of dredging works is planned in several stages, which is related to the sequence of construction of the object of the planned activity. The last step - reaching depths from 7.32m to 8.23m from the “0” of the Izmail seaport will be implemented in the event that the state of Ukraine initiates dredging works on the shipping Canal Vylkove - Izmail Catal and downstream sections of the shipping route and water areas. More detailed information on the issue of dredging works, conducted studies and environmental impact assessment is given in subsections of this report: 1.3, 1.5.1, appendices 5, 6, 8. According to the EIA Report, dredging works are planned to be carried out in three stages, which correspond to the construction phases given in table 1.3.2.2 of the EIA Report. However, in the course of consultations with Romania, it was decided that dredging works to a depth of 8.23 m will not be carried out as part of the implementation of this planned activity. In addition, the conclusion of the environmental impact assessment established the following environmental condition: not to carry out dredging operations of the third stage, namely at depths from 7.32 m to 8.23 m from the “0” of the Izmail port.
5	In the situation carried out by the Ukrainian side to obtain depths of 8,23 m, the area that requires additional dredging to reach depths of 8,23 m is located between the Sulina Canal and Izmail Catal (43 mm), in the critical points of 31 mm, 36 mm, 40 mm and other intermediate zones, the material extracted during dredging operations can be	**Implemented in full**	The planned activity involves alternate dredging works (Table 1.3.2.2 of the Report). According to the result of the III stage of construction, the total amount of bottom soil removal is 85,0 thousand m^3, the area of the bottom damage is 2,2 ha, the bottom mark is 7,32 m from the "0" of the Izmail Port for the navigation of sea vessels from 7.01 m, which corresponds to the

	dumped into the sea - the only dumping zone accepted by the National Water Administration of Romania according to the decision of the Administration of the Biosphere Reserve of the Danube River Delta. According to the measurements made for the existing coverage depth – 9,00 m, it follows the need for dredging works in the volume of about 1 500 000 m^3 with annual additional maintenance. These works will lead to negative consequences in the Sulina Canal, namely for the coastal defense structures and the bottom of the Canal, and problems will arise due to the large unjustified monetary costs that Romania will have to allocate for dredging and establishing the balance, which will be destroyed in the infrastructure of the Sulina Canal and biosphere reserve in the Danube Delta. It is worth noting that the River Administration of the Lower Danube in Galati does not have additional equipment for the above-mentioned works. At the moment, dredging works are carried out with the help of absorbent and sedimentary dredging equipment, purchased in 2000. At the same time, in case of dredging works for the construction of depths near the moorings of the future sea port of Izmail, we recommend establishing discharge zones as close as possible to the Ukrainian shore and periodically checking the amount of discharged sediment and the area of such discharge in order to prevent the migration of waste into the shipping Canal towards the Romanian side. as well as the prevention of clogging of the navigable Canal of a river nature, which is under the control of Romania. Please note that at the moment, the Romanian side, through the Lower Danube River Administration in Galati, provides for the Chilia branch in the section from Izmail Catal to Periprava, navigation conditions for river vessels for the transportation of cargo and passengers to Romanian ports, where the territory of a river nature, located between		Recommendations of the Danube Commission and navigation depths provided by the Lower Danube River Administration in Galati. The design depth of the hydrotechnical facilities of the port (terminal) of NIBULON LLC is 8.23 m from "0" of the Izmail Sea Port and is adopted in accordance with the design depth of the shipping channel Vylkove - Izmail Chatal (approved by the resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 No. 136 with the clarification "the depth has not been reached due to the non-completion of construction works under the project"). In this case, the volume of bottom soil is 112,0 thousand m3, the area of bottom damage is 2,32 ha. According to project decisions, the storage of soil in a coastal dump, which is organized on the territory leased for the construction and operation of the object of the planned activity, was adopted. Currently, there is no feasibility of dredging to the design depth of 8.23 m, the need to achieve it depends on the adoption of an intergovernmental agreed decision on the need to carry out appropriate dredging on the Vylkove - Izmail Chatal shipping channel and their readiness from the point of view of the completeness of the scientific justification, comprehensive study and development of nature protection and protective measures. More detailed information on the issue of dredging works and their impact on the environment is given in subsections of the Report: 1.3, 1.5.1, appendices 5, 6, 8. The project, initiated by NIBULON LLC, involves dredging works in several stages to achieve depths: up to 4,0 m; from 4,0 m to 7,32 m; the last stage of dredging works, from 7,32 m to the design depth of 8,23 m from the "0" of the Izmail sea port, will be implemented in the event that the state of Ukraine initiates dredging works on the shipping channel Vylkove - Izmail Chatal and downstream sections of the shipping route and

	the border line and the Romanian coast. Considering the current critical situation caused by the war, the Ministry of Foreign Affairs of Romania on 13.07.2022 allowed sea vessels under the third flag to sail in the Cilicia, Istanbul and Bystro estuaries, but it is possible that in the future, this will be prohibited, as these actions are provided for by international law, respectively to the Treaty on the Ukrainian Border, Article 9, Clause 1. In the event that the Ukrainian side will promote the development of the Izmail port with a depth of 8.23 m, our recommendation is that all vessels that will be put into operation through the Bystre Canal should also enter the sea through this Canal, and not through the Sulina Canal, which was designed for depths of 7,32 m according to the Recommendations of the Danube Commission, as already defined. Taking into account the above information, the Lower Danube River Administration in Galati expresses its concern about the intentions of Ukraine to develop the port of Izmail at a depth of 8.23 m, since this activity will activate additional alluvium deposition in the Chilia branch and will drastically change the debit distribution in favor of this and to the detriment of the Sulina Canal, also recommends taking into account that the future sea moorings for the new port should provide depths for vessels with drafts in close relation to the existing situation on the Sulina Canal, therefore vessels for sea navigation should have a draft of 7.01 m.		water areas. As a result of the dredging works, a safe approach and maneuvering of the calculated type of vessel will be ensured to a depth of 7,32 m within the operational water area of the cargo berth of the object of the planned activity, which corresponds to the Recommendations of the Danube Commission, and the navigation depths provided by the Lower Danube River Administration in Galati city. According to the EIA Report, dredging works are planned to be carried out in three stages, which correspond to the construction phases given in table 1.3.2.2 of the EIA Report. However, in the course of consultations with Romania, it was decided that dredging works to a depth of 8,23 m will not be carried out as part of the implementation of this planned activity. In addition, the conclusion of the environmental impact assessment established the following environmental condition: - not to carry out dredging operations of the third stage, namely at depths from 7,32 m to 8,23 m from "0" of the Izmail port.
6	Given the pressures set out in the European Commission Directive EU 2017/845 of 17 May 2017, the proposed activity has an impact on the aquatic environment, and there is also the possibility that the marine environment may be affected differently. Thus, the works carried out in the territory of the project implementation may lead to the	**Implemented in full**	In the course of impact assessment, a study of subsoil samples was conducted in the area of its planned development, information is provided in subsection 3.3., measurement protocols - appendix 3 to this Report.

	resuspension of some priority substances from the sediment in the water column. In addition, equipment and transport activities can be additional sources of pollution, which will lead to emissions of priority hazardous substances (heavy metals, hydrocarbons, etc.) into the atmosphere, which can then enter the aquatic environment, introducing pollutants into the marine water area. Together with other burdens from the same activity, the cumulative impact can pose a threat to the marine ecosystem. Therefore, we believe that the monitoring program for the concentration of pollutants in all matrices: water, sediments and biota of the Black Sea ecosystem in front of the mouths of the Danube is mandatory, both during the project implementation period and after the completion of the works.		A study of surface water samples of the Danube River was also conducted, the measurement protocol is Appendix 3 to the Report. The post-project monitoring program provides for conducting studies of soils (bottom sediments), as well as the state of surface waters (section 11, table 11.1). According to the Report on Environmental Protection, the planned activity is characterized by an impact on the aquatic environment, which can be manifested both during the construction and operation of the object of the planned activity, in particular: during construction - deposition of dust emissions, undifferentiated by composition, on the surface waters of the Danube during the pouring and storage of loose construction materials, increase in the turbidity of surface waters in the dredging zone due to the transition of the finely dispersed subsoil component to a suspended state and its loss; during operation - deposition of dust emissions, undifferentiated by composition, on the surface waters of the Danube during the transshipment of grain cargoes, volumes of water intake and drainage of purified surface runoff from the territory of the object of the planned activity, possible emergency situations during operations with oil products or oil waste related to their getting into the water. The implementation of the adopted decisions is not expected to affect the water quality and water content of the Danube River, since the volumes of water intake are insignificant. The pumping equipment is equipped with a cassette-type fish protection device. The planned activity involves the implementation of measures to minimize pollution of the Danube waters by: - cleaning of the entire volume of surface runoff before discharge in local treatment facilities, which ensure the

			efficiency of cleaning from suspended substances at the level of 97,5%, from oil products – 99,9%; - reduction of the volume of treated surface runoff to the Danube River due to the use of treated surface runoff for the technical needs of the object of the planned activity: watering green areas, washing roads and sidewalks, dust suppression. For this, two concrete storage tanks with a volume of 200m3 and 60m3 are provided as part of the storm sewer system of the object of the planned activity; - organizations in the coastal zone of the object of the planned activity of structures for receiving ship waste (economic and fecal sewage, sewage and household waste) with their subsequent transfer to specialized organizations according to concluded contracts; - the use of a tug fleet for the transportation of goods equipped with closed systems for the accumulation of waste-fecal and liquid water with an installed warning alarm system (APS). All of the company's vessels, including hydraulic vessels, meet the requirements of the International Convention on the Prevention of Pollution from Ships of 1973 MARPOL 73/78 and have the Certificate "On Prevention of Oil, Wastewater, Garbage and Atmosphere Pollution" issued by the Register of Shipping of Ukraine. Thus, thanks to the implemented measures, the impact on the condition of the water area of the Danube River because of the discharge of surface runoff from the territory of the object of the planned activity will be minimal, and according to water quality indicators, it will be absent. Dust emissions of undifferentiated composition are deposited on the water surface of the Danube River in volumes that, according to calculations, are: - during construction – 0,54637 t; - during operation – 15,93939 t/year.

			The EIA report provides for measures to localize and minimize dust emissions into the atmosphere and, as a result, reduce its deposition on the surface waters of the Danube River. Provided measures are taken regarding the organization of the coastal dump of the bottom soil with settling zones, discharge pipes and embankment dams, the removal of clarified water from the pulp to the Danube River through an organized release, the increase in the turbidity of the surface water of the water body during dredging does not exceed regulatory limits and is minimal. Considering the speed of the current, the distance of carrying suspended particles will be 69 m, which will not allow the turbidity spreading zone to go beyond the water area of the planned activity. The settling time of the turbidity plume is 1 hour. The impact of the activity is characterized as local in place and time and does not go beyond the water area of the planned activity. In addition, the conclusion of the environmental impact assessment established the following environmental conditions: - carry out physico-chemical and microbiological analyzes of bottom soils (1 time during each stage of dredging works); - to monitor the condition of surface waters at the place of dredging works and at the edge of the turbidity plume by the content of suspended substances (1 time during each stage of dredging works); - to monitor the state and quantitative indicators of phytoplankton, zooplankton, zoobenthos, ichthyoplankton, ichthyofauna in the zone of influence of dredging works (constantly during dredging works); - to carry out laboratory-instrumental control of emissions of pollutants from stationary organized sources of emissions (quarterly);

			- monitor the state of the atmospheric air at the border of the sanitary protection zone and the nearest residential building (quarterly); - monitor the level of noise from the planned activity at the edge of the nearest residential building (quarterly); - monitor the quality of return water discharged into the Danube River (quarterly); - to monitor the state of surface water at the point of discharge of return water and in control structures (quarterly); - to monitor the state of aquatic biological resources in the zone of influence of the object of the planned activity (every six months).
7	In our response to the notice, we expressed some concern about the lack of data and information, and we asked for research and assessments to be made to ensure that all potential impacts are anticipated and actionable. However, Section 9 of the EIA document on pages 135, 139 and 140 states that comments were not accepted, with the following explanations: - "Implementation of the planned activity is envisaged at the expense of private investments, has a very local character and does not belong to the General Plan of LOGMOS." - "(...) the statements of the Romanian side that the planned activity creates risks, affecting the ecological balance of the Danube Delta biosphere reserve, are greatly exaggerated, and the demand for large-scale research and the creation of three-dimensional hydrodynamic and morphodynamic models is not justified"; - "the planned activity does not involve carrying out dredging works that may cause hydrological changes of the Danube River (from the point of view of morphological conditions: depth and width of the Canal, fairway, structure of the bottom and substrate, hydrological regime: amount of	**Implemented in full**	The section of the water area of the Danube River, where the planned construction of the operational water area with the approach Canal of the NIBULON LLC is located in an industrially developed zone with intensive shipping, which creates unfavorable conditions for the reproduction of fish that belong to the lithophilic type of reproduction, such as beluga, sevruga, sturgeon, sterlet, etc. species. The area of damage to the bottom during dredging works up to the mark 7,32 m from the "0" of the Izmail seaport is 2,2 hectares with a maximum width of the work area of about 100 m, which does not prevent the free movement of fish, because the width of the Danube River in this city is 470 m. On this stretch of the Danube, the way to the sea is overcome by viable individuals (linear dimensions from 13 cm and above), which are able to avoid places with unfavorable conditions. According to scientists (link to the document), after feeding in the waters of the Black Sea, sturgeon species of fish during the spawning migration enter the waters of the Danube River and, climbing far up the river, pass through the territories of five countries, ending their journey in the area of the dam of the hydroelectric power plant Jerdap - 2 (864 km of the Danube),

	flow, disruption of the continuity of sediment transport, speed of water movement etc". - The approach to possible impacts on water/water bodies, especially on hydrodynamics and hydromorphology, with consequences for habitats and species (in particular for sturgeon migration), does not take into account the cumulative aspects with other projects, which are mandatory for the viability of the current project, for example, providing a depth of 8,23 m only for the port without any connection to the waterways at Chilia branch and Bystra, which would require the same depths. Our contention is based on the following paragraphs from Chapter 9 of the EIA document, pages 128, 134, 136 and 139. "However, the Report provides an explanation regarding the design depth of 8,23 m from the "0" of the Izmail seaport - the last stage of dredging works - reaching depths from 7,32 m to 8,23 m will be realized if Ukraine starts dredging works to the shipping Canal Vylkove - Izmail and the lower sections of the shipping route and water area". - "The development of the Bystre Canal and Chilia branch is not a planned activity." - "Implementation of the planned activity is envisaged at the expense of private investments and has a purely local character - a new construction of a river port (terminal) (...)" - "The design depth of hydrotechnical structures is 8,23 m from the "0" of Izmail. of the seaport, which corresponds to the design depth of the shipping Canal Vylkove-Izmail Catal (approved by the Resolution of the Cabinet of Ministers of Ukraine dated February 9, 2022 No. 136 with the clarification "the depth has not been reached due to non-completion of construction works according to the project)".		below which the main spawning areas of these species are located on a short stretch of the river. During the migration of young sturgeon fish species from the spawning grounds to the Black Sea, the latter stays close to the surface of the water, in a water column that does not exceed 3,2 m. Meanwhile, dredging work will take place at a depth of 4 m, which according to scientific observations is no longer is used these years to overcome regular movements. The period of predicted sturgeon spawning in the estuaries of the Chilia delta falls on the period July - October, therefore, in order to minimize the damage that may be caused to passing species of fish, NIBULON LLC will not conduct dredging operations during this period. The relevant information regarding the impact of the planned activity on sturgeon that come to spawn in the Danube River is included in the Scientific-biological justification "Assessment of the impact of hydrotechnical works on the state of fish stocks of the Danube River during the construction of a cargo berth with the operational water area of the river port in the city of Izmail Odesa region" (pp. 25 - 27, 35 - 37). In addition, the conclusion of the environmental impact assessment established the following environmental conditions: - not to carry out dredging operations of the third stage, namely at depths from 7,32 m to 8,23 m from the "0" of the Izmail port; - in order to reduce the negative impact of dredging on the state of biological resources, it is prohibited to carry out hydrotechnical works during the period of mass spawning of the main commercial fish. The terms of the prohibited periods are established by the fish protection authorities; - the terms of carrying out dredging works and the technical means used should be determined taking into account the natural

	Hydrodynamic aspects related to changes in water discharges and velocities compared to baseline, which may affect the upstream migration of sturgeon in the Chilia branch, which is important for the migration of these fish, are not adequately assessed. Aspects of sturgeon migration have been ignored, the word "sturgeon" appears only a few times in the EIA documentation, which contains incomplete information on the location of sturgeons, as it is mentioned that the first habitat of sturgeons is located 600 km from the mouth of the Danube and that sturgeons prefer warm currents and shallow waters . Our statement is based on the following paragraphs from the EIA documentation, pages 275, 282. - "Spawning of migratory fish (herring and sturgeon species) takes place no closer than 600 km from the mouth of the Danube"; - "The aboriginal ichthyofauna of the Danube in its majority, according to the type of reproduction, consists of (...) lithophilous (sturgeon, starry sturgeon, sterlet, vimba, aspius, etc.) species. These groups of fish use the warmed shallow waters of backwaters and creeks for spawning, and lay their eggs on aquatic vegetation, roots and stones."; "Given the hydrological conditions in the areas of hydrotechnical works, they are not favorable for reproduction of the ichthyofauna of the Danube River and are not considered spawning grounds."		biological rhythms in the work production area (spawning, fish migration, etc.); - to carry out comprehensive environmental monitoring, with compensation for damages caused to the surrounding natural environment and aquatic biological resources, based on the actually performed works, which are calculated in accordance with the procedure established by law; - to monitor the condition and quantitative indicators of phytoplankton, zooplankton, zoobenthos, ichthyoplankton, and ichthyofauna in the area affected by dredging (continuously during dredging operations); - to monitor the state of aquatic biological resources in the zone of influence of the object of the planned activity (every six months).
8	Considering that Ukraine has requested to adapt the indicative waterways of the TEN-T network to include the Chilia branch (from Izmail Catal) and the Bystre Canal, we express concern about the development of the Vylkove Canal - Izmail Catal project and reiterate the fact that: - execution of dredging works from 7,32 m to 8,23 m between Izmail Catal and Vylkove, and after that, the exploitation of these waterways will have an important	**Implemented in full**	The project, initiated by NIBULON LLC, involves dredging works in several stages to achieve depths: up to 4,0 m; from 4.0 m to 7,32 m; the last stage of dredging works, from 7,32 m to the design depth of 8,23 m from the “0” of the Izmail seaport. As a result of the dredging works, a safe approach and maneuvering of the calculated type of vessel will be ensured to a depth of 7,32 m within the operational water area of the cargo berth of the object of the planned activity, which corresponds to

	impact on the redistribution of water flows and alluvial deposits of the Danube between the branches of the Chilia branch and Tulcea, and accordingly, on Sulina Canal, which will eventually become unsuitable for navigation in safe conditions; - navigation on the Chilia branch and on the Istanbul Vech by sea vessels with a large cargo capacity and at high speed will lead to severe erosion of the right bank along with the loss of territory, which will require the implementation of works on strengthening and protecting the shores; - the project is outside the scope of the Convention on the Regime of Navigation on the Danube (Belgrade Convention, 1948), which in Article 2 provides that: "The regime established by this Convention shall apply to the navigable part of the Danube River between Ulm and the Black Sea through the Sulina branch , with access to the sea through the Sulina Canal. Thus, the Vylkove Canal - Izmail Catal project is not part of the traditional waterway of the Danube; - we are advocating the preservation of the Sulina Canal as the only Canal for international shipping, which is short and more viable, passable, which can be used by Ukraine as well; - also in accordance with Clause 9 of Art. (1) Treaty between Romania and Ukraine on the regime of the Romanian-Ukrainian state border, cooperation and mutual assistance in border matters, signed in the city of Chernivtsi on June 17, 2003, ratified by Law No. 93/2004: "On navigable border rivers", vessels of both Contracting Parties The parties have the right to sail along the main fairway regardless of the state border line on these rivers. Other means of navigation are allowed to sail in border waters only up to the state border line."		the Recommendations of the Danube Commission, and the navigation depths provided by the Lower Danube River Administration in Galati. The last round of dredging works from 7,32 m to 8,23 m will be implemented in the event that the state of Ukraine initiates dredging works on the shipping Canal Vylkove - Izmail Catal and downstream sections of the shipping route and water areas. According to the EIA Report, dredging works are planned to be carried out in three stages, which correspond to the construction phases given in table 1.3.2.2 of the EIA Report. However, in the course of consultations with Romania, it was decided that dredging works to a depth of 8.23 m will not be carried out as part of the implementation of this planned activity. In addition, the conclusion of the environmental impact assessment established the following environmental condition: – not to carry out dredging operations of the third stage, namely at depths from 7,32 m to 8,23 m from the “0” of the Izmail port.