### ECO GENERAL CONSULT

### ADEQUATE ASSESSMENT STUDY

for the objective

# REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT

### for the objective

### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

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### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

### 1 INTRODUCTION

This adequate assessment study is developed within the environmental impact assessment procedure for the project "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT".

Its purpose is to assess the impact on the protected natural area of community interest located in the project area.

Environmental Protection Agency Teleorman decided, as a result of the meeting of the Technical Assessment Commission, that the project "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT" proposed to be located in the Bechet port area is subject to environmental impact assessment, is subject to adequate assessment and not subject to impact on bodies of water.

The decision of the framing stage is valid for the duration of the project, and in the situation where new elements, unknown at the time of issue, intervene, or the conditions that were the basis for issuing the decision change, the holder has the obligation to notify the issuing competent authority.

This Adequate Assessment Study is drawn up based on the guidance issued by the Environmental Protection Agency Teleorman as well as the provisions of:

- Directive 2014/52/EU of the Parliament European and the Council of April 16, 2014 amending Directive 2011/92/EU regarding the evaluation of the effects of certain public and private projects on the environment (including the annexes);
- Directive 92/43/EEC, The Habitats Directive relating to conservation natural habitats and flora and wildlife wild;
- Law no. 292/2018 regarding the assessment of the impact of certain public and private projects on the environment;
- Law no. 107/1996 Water Law, with amendments and Completion subsequent;
- GEO no. 57/2007 regarding the regime of natural protected areas, conservation of natural habitats, flora and fauna, with subsequent amendments and additions;
- OM no. 2387/2011 for the modification Order no. 1964/2007 regarding Institution of natural area regime protected sites of importance community, as an integral part of the network Ecology European Natura 2000 in Romania.
- Order no. 1682/2023 for the approval of the Methodological Guide regarding the adequate assessment of the potential effects of plans or projects on natural areas protected by community interest.

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### a) PP DESCRIPTION AND ANALYSIS SUBJECT TO APPROVAL

#### a.1. Presentation of PP

Considering the current situation of the Bechet port infrastructure, previously presented, the beneficiary, CN APDF SA Giurgiu, aims to carry out the necessary infrastructure works for the relaunch of the naval transport activity in the Bechet port, in correlation with the short-, medium-and long-term development plans long of the Ministry of Transport and Infrastructure and with the requirements of the European Union in the field of naval transport.

By rehabilitating the infrastructure of Bechet port and bringing the port to the technical-functional parameters of other ports located in the member states of the European Union, port and commercial activities in the area will be relaunched, contributing to regional development.

The main proposed works are:

- ➤ <u>Modernization of the Danube mooring front, including:</u>
- the execution of a vertical wharf, for which two variants were analyzed, namely: wharf made of weight blocks (variant 1 recommended) or of metal sheet piles (variant 2 alternative), with the height of the crest at +7.80 m compared to the local low water, with the cumulative length L = 650 ml, the resulting surface S = 10,918 sq m.

Compared to the current situation, where the existing mooring front, with a length of 650 m, is divided into 6 operating berths, in the feasibility study it is proposed to divide the mooring front into 5 berths, each having the recommended length for a river berth, of 130 m, resulting in the same length of the mooring front, of 650 m (5 berths x 130 m/berth). The 5 berths will be numbered, from upstream to downstream, with numbers 2, 3, 4, 5 and 6. Berth 1 will be a new servitude, which will be executed in the the solution berth floating, in upstream of the operating front, for relocating pontoons existing, having L = 75 ml;

- **concrete platforms** behind the wharf new (new berths 2-6), in width of approx. 20 m, with the possibility of placing cranes portico type Bocşa of 16 tf x 32 m, for which there are provided beams and running rails, or other machines established by common agreement with the economic operators that carry out their activity in the port and with the designer's opinion, S=17,222 sq m;
- the execution of a berths servitude floats, with a length of 75 m, according to the previous specifications.
  - > Rehabilitation of RO-RO ramp and access roads, including:
  - rehabilitation ramp ferry crossing point, S = 4,086 sq m;
  - rehabilitation and extending the directing breakwater ferry crossing point, S = 588 sq m;
- rehabilitation of precinct roads and platform from the area of the border crossing point, S = 12,410 sq m.
  - > Related works, including:
- dredging / excavations for the execution the vertical wharf, of the servitude berth and rehabilitation RO-RO ramp;
  - rehabilitation of the navigation signaling system for the whole work.
  - > Provision of utilities in the port, including:
    - water supply of the port through its connection to the drinking water network of Bechet, to ensure the water necessary for port activity and resupplying ships.

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Execution of the connection from the main network to the internal supply network, L = 25 00 ml;

- domestic wastewater collection network from the port, including its treatment;
- rainwater collection network, including its treatment;
- fire extinguishing installation;
- ➤ power supplyof the port, by connecting to the LEA existing in the area, at the entrance to the port, Toensure the electricity consumption of the port operators, the charging of electric cars, as well as the resupply of electricity to the ships stationed in the berths. A new PT and a connection network in length of approx. 1,500 ml;
- perimeter lighting system and port premises;
- video surveillance and access control system;
- demand analysis and the possibility of equipping the port with a fueling point for alternative fuels.

Next, the situation of the interventions and the components of the project proposed to be carried out and their position in relation to the sites of community importance in the site area are tabulated.

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Stage	Type of intervention	Compound	Location	Distance from the nearest ANPIC	Other additional information
	Organization and development of the construction site	Realization of site organization	Bechet port platform	In ROSCI0045 / ROSAP0023	Is not the case
	Modernization of the <b>Danube</b> mooring front	Execution of the vertical wharf and the concrete platforms behind the wharf			
		Execution of the easement berth for the relocation of the existing pontoons			
	Rehabilitation the ramp at the ferry crossing point and access roads	RO-RO ramp rehabilitation works			
Execution stage		Rehabilitation and expansion works at the beakwater			
		Rehabilitation and modernization works of the perimeter roads and platforms in the area of the border crossing point			
	Related works	Dredges to ensure the mooring depth at the wharf			
		Rehabilitation of the signaling system			
	Utilities insurance: networks and water-sewage	Drinking water supply for sanitary groups, for loading ships' tanks and for fire			
	installations	Execution of domestic sewerage			

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Stage	Type of intervention	Compound	Location	Distance from the nearest ANPIC	Other additional information
		Execution of rainwater drainage			
	Utilities insurance: electrical networks	Installation of a new transformer station			
		Rehabilitation of the lighting system inside the port			
		Ensuring the power supplyof wharf cranes and ships at berths			
		Rehabilitation of the electrical networks of the buildings in the premises			
		Installation of 3 double desks for charging electric cars			
	Video surveillance and access control system	Installation of 3 double desks for charging electric cars			

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### 1.1.1 General information on PP: name, owner, purpose and objectives

Project title:

### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECKET PORT "

Designer:

### BCPC Biroul de Consultanță Proiectare în Construcții SRL Bucharest

Address: : b-dul Alexandru Ioan Cuza no. 44, etaj 3, sector 1

Investment holder:

### CN Administrația Porturilor Dunării Fluviale SA

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Name of the contact person: Marius OLTEANU, Director General of CN APDF SA

The expected objectives by the achievement the investment are:

- · rehabilitation and modernization of the entire mooring front;
- building the platforms behind the berths, with their connection to the existing road;
- utility networks, upgrades for the centralized potable water supply system and ring fire network, including the installation of external hydrants by connecting this system to the water network of the city of Bechet;
- rainwater collection network in the port area, including their treatment;
- domestic wastewater collection network, including its treatment;
- supply of electricity to the port Toensure the consumption of economic operators, the supply of electricity to ships in the operating berths and charging stations for electric cars:
- port enclosure fencing, video surveillance, perimeter lighting;
- navigation signaling system;
- analyzing the possibility of placing a supply point for alternative fuels in the port.

# 1.1.2 Geographical and administrative localization with presentation on maps and presentation of GIS coordinates, specifying the coordinate system used (Pulkovo\_1942\_Adj\_58\_Stereo\_70, STEREO 70 Dealul\_Piscului\_1970)

The location of the project as well as its GIS data are Annexed to this study.

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### 1.1.3 Justification of the need for PP

The development of cargo traffic in the port of Bechet is mainly conditioned by the operating conditions of the cargo, the conditions for the ships to stay, the facilities that the port infrastructure can offer in any season and the connection of the port with the local and national road network. The rehabilitation of existing berths and the transition from reinforced wharfs to vertical wharfs will lead to the development of cargo traffic in the port.

Along with the rehabilitation and modernization of the port infrastructure, optimal working conditions and the running of specific activities under normal conditions will be ensured.

The perimeter in which the alluvial material to be dredged will be discharged into the Danube will be specified by the waterway administrator, respectively the Administrația Fluvială a Dunării de Jos SA Galati, outside the areas with critical depths for navigation.

Currently, due to the changes in the configuration of the bed and due to an intensive exploitation, correlated with the change of climatic conditions in recent years, there have been phenomena of instability and Damage to the existing hydrotechnical constructions.

Considering the current unfavorable conditions in the location and the objectives contained in the Romanian Government program according to the General Transport Master Plan, it is necessary to modernize the operating infrastructure in the port of Bechet, so that technical solutions for rehabilitation and redevelopment have been proposed, works that are the subject of this memory.

# 1.1.4 Description of the life cycle of the PP (construction, operation, decommissioning) and the interventions and activities associated with each stage, as well as the duration of the construction, operation, decommissioning of the PP and the phasing of implementation period of the PP

### 1.1.4.1 Existing situation

Bechet Port is located in Dolj County, UAT Bechet, being located on the left bank of the Danube River, in the area of km 678 - 681. The area of the port territory managed by CN APDF SA is 76,287 square meters. The length of the reinforced wharfs/vertical/natural shore under the administration of the beneficiary is 650 m. The port is of river type, allowing the berthing of barges of up to 2000 t.

Oreahovo Bulgaria Border Crossing Point also operates in Bechet Port. The border crossing infrastructure belongs to APDF and consists of RO-RO platform and ramp roads.

The port is connected to the local network and national road through DN54A, DN55 and DN55A.

The port does not have drinking water facilities and electricity at the berths, nor is it properly lit at night.

According to the specifications in the design theme drawn up by the beneficiary, due to the great age of the existing mooring constructions, with the standard service life expired, as well as due to an intensive exploitation, correlated with the change in climatic conditions in recent years, significant Damage to them is found, with negative consequences on all those who carry out port activities, respectively: degradation of joints, subsidence of the wall, gaps and deviations of the theoretically designed profile, important alluvial deposits in the area of berths, Damaged wharf accessories.

The infrastructure of Bechet port is presented as follows:

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Bechet Port offers a mooring front directly at the Danube, with a cumulative length of approx. 650 m, and a ramp for RO-RO ships that provides the connection with the Bulgarian port of Oreahovo, located in the mirror, on the right bank. The infrastructure of Bechet port is as follows:

Access to the wharfs is made directly from the navigable channel of the Danube, the depth required for mooring being at least 2.5 m compared to the local low water (+12.35 mMN75 - according to the data published by the Danube Commission), respectively the quota +9.85 mMN75. At present, this depth is not ensured at any of the berths of the port, as it results from the transversal profiles made. The usual barges operating at the wharf are 1,500 t or 2,000 t.

There is a very large variation in the quota of the crest of the existing wharf, along it, of almost 2 m (from 29.30 - 29.50) mMN75 on the upstream sector to 27.0 - 27.2 mMN75 downstream.

The mooring front in the port of Bechet was executed as a wall of rough-hewn stone masonry, which can be moored by means of a floating pontoon. The wall is executed on heights of approx. 5 - 6 m. At the base, the wall is founded on a simple concrete beam, founded, in turn, on oak piles. Under the foundation beam of the wall, the slope is protected with stone blocks on fascine mattresses.

At the crest, the wall is turned towards the platform, in certain areas presenting a crest beam made of stone blocks or concrete.

For the mooring of ships at the wharf, reinforced concrete bitts were provided locally, bollards places, rockfills for supporting the access gangways on the pontoons. On the reinforced wharfs, concrete or stone block stairs were profiled from place to place.

The width of the platforms behind the wharf, up to the road along the port, varies between 10 m next to berth 2 and 25-30 m downstream (berths 3–6).

The operating infrastructure of the port is deficient. Mooring to berths is done by means of floating pontoons. The port does not have taxiways for wharf cranes. Thus, due to the long distance of ships from the shore and the impossibility of operating with dedicated wharf cranes, operating in the port with mobile cranes is very difficult and conditioned by the water levels in the Danube. Under these conditions, two of the port operators, which operate at berths 1-4, (Cerealcom Dolj SRL and DMB Recycling SRL Craiova) have built platforms on which bunkers and conveyor belts have been mounted to allow the loading of ships (especially with cereals). Practically, at present, on the upstream and central sectors of the port, only loading operations are carried out on ships, unloading operations being difficult to carry out. The port operates, for the most part, on the flow of shipping goods.

The third operator, which operates on the downstream sector of the port, at berths 5 and 6, (Transport Trade Services SA), has installed a fixed crane on the wharf - at berth 5 and a conveyor belt at berth 6.

In the area of berth 2, where the width of the platform behind the wharf is very small (max. 10 m) and does not allow the use of the berth for operation, the pontoons AFDJ Galati, Căpităniei and The border police.

From the point of view of technical condition, the wharfs are presented as follows:

On the upstream sector, the rough stone wall wharf is turned 90° and closed in the bank. It is in good condition, but is covered by vegetation.

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In the alignment of the mooring front, at the first berth, the operator built a platform on which 3 grain storage silos were built, which communicates with the wharf with a bunker and a conveyor belt, used for loading ships with grain. With the construction of the concrete platform, the geometry of the slope was changed, the crest of the wharf being elevated and advanced to the water. At this berth, only grain loading activities are carried out on ships, through conveyor belts, the vicinity of the silos built on the platform behind the wharf not allowing the installation of a wharf crane.

Downstream, next to berth 2, loading/unloading operations cannot be carried out, due to the lack of space for the placement of machinery and the storage of material, as the road along the mooring front is very close to the crest of the wharf, as a result of the proximity to the buildings of the crossing the border.

In the area of berths 2 - 6, the pitching is destroyed in some places, subsidence, collapses, local caverns are observed and it is invaded by vegetation. The profile of the wall is variable, with different slopes.

The beam at the base of the wall is fractured or destroyed over extensive sectors.

The crest beam is missing, the wharf crest does not show a rigorous alignment. Concrete or stone block stairs are profiled in places in the wall, some of them in good condition. Locally, in the area of the connections with the stairs on the slope, local underwashing of the wall was found. There are improvised metal stairs rudimentarily placed on the slope.

Rockfills and the bollards places have been repaired over time, in empirical, inadequate solutions, some fulfill their functions, others are unusable.

In the area of berths 3 - 4, a car scale was built, an installation for loading grain into barges mounted on a trestle built over the reinforced wharf, to be closer to the barges, and a fixed concrete hall is being built armed that prevents the operation at the berth sector behind which it was executed.

Downstream of the hall built on the port platform, another reinforced concrete overpass, founded on columns, was built, which serves as a barge loading point.

The undeveloped land behind the wharf related to berth 5, but also the height of the crest, which is approx. 2.0 m below the low water of the rear road platform, has not allowed the use of the berth for operation until now. On this secor, the reinforced wharf is generally in good condition, with some fissures /cracks above the foundation beam. The protection with rockfills under the foundation beam of the wall is also in good condition.

In the area of berth 6, the quota of the wharf crest and the rear land was raised by the construction of a gabion wall filled with raw stone, reinforced with concrete buttresses and continued towards the territory with broken stone fillings. The rough-hewn stone piching is Damaged, cracked, the foundation beam is destroyed, pushed out of the site, towards the water, on extensive sectors. The bollards places are Damaged. The only operating equipment in the port, namely a fixed crane, was mounted on this berth.

On the downstream sector of the mooring front at the Danube, an alveolus made of vertical fixed elements was executed towards the water, for the connection with the upstream beakwater of the ramp where the RO-RO ships dock. On the upper part, the infrastructure of vertically fixed elements continues with a gabion wall, partially covered with concrete. At this alveolus, ships moor directly, but it offers a mooring front length of only 30 m. A mobile conveyor belt is mounted on this alveolus for loading grain into barges.

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At the downstream end of the port is located the ramp for the access of RO-RO ships that provides the connection between the ports of Bechet and Oreahovo. The upstream breakwater is made of raw stone, with a crest made of prefabricated reinforced concrete boxes. Some of these boxes are partially rotated/displaced, but the continuity of the crest is ensured. At the upstream end of the breakwater, a bright LED is mounted to signal at night/unfavorable visibility conditions.

The RO-RO ramp was made of simple monolithic concrete on the medium and high water variation area. The ramp is extended towards the water with prefabs made of reinforced concrete, on the low tide variation area. The concrete slabs were executed with casting joints between them. The platform of the ramp is functional, but it is affected by local destruction, breaks, fractures of the concrete.

<u>The road along the port</u> is in good condition, was recently rehabilitated, has a concrete superstructure. This road is separated by a metal fence from the access roads to the RO-RO ramp, which are Damaged. Both the exit road from the country and the entrance road were executed, for the most part, from concrete sleepers, which are not monolithic between them. The two roads are separated by a strip of grassy land.

### 1.1.4.2 Proposed works – work execution stage

### 1.1.4.2.1 Moderation the Danube mooring front

To modernize the existing mooring front at the Danube, 650 m long, (for berths numbered from 2 to 6, with lengths of 130 m each), it was proposed to build a vertical wharf, a variant in which ships will dock directly at wharf, at a distance of approximately 20 m towards the water from the alignment of the existing mooring front.

Moving the mooring front towards the water will ensure the creation of a port platform that allows operation at the wharf with Cranes portio type Bocşa, 16 tf x 32 m. At the same time, moving the front towards the water will ensure the depths necessary for direct mooring at the wharf, with minimal expenses for maintenance operations, respectively dredging.

### A. Execution vertical key and concrete platforms behind the wharf

In this variant, the wharf will be made of prefabricated weight blocks of plain concrete C35/45, placed on a 30 cm thick crushed stone foundation bed, for leveling, and a rough stone wharf support bed of 10- 50 kg/pc. The foundation quota of the wharf bed will be at quota of -7.00 m local low water (+14.86 MN75), and the foundation quota of the prefabricated blocks will be -4.50 m local low water (+17.36 MN75). After the weight blocks are put into operation, the gaps provided in them will be filled with crushed stone.

Behind the weight wharf will be a discharge prism made of raw stone 10-150 kg/piece. A geotextile filter of 400 gr/m<sup>2</sup> is placed between the discharge prism and the filling of granular material from the body of the platform, but also under the bed of the wharf.

At the upper part of the weight wharf, the last block, also considered a crest beam, will be cast monolithically from reinforced concrete C35/45. The beam will be executed in sections, between which are provided, at approx. 40 m, vertical joints of 2 cm extruded polystyrene support layer, with elastic putty. The crest of the beam will be carried out at +7.80 local low water (+29.66 MN75).

The crest beam is provided with a niche for the technological channel along the mooring front and will also act as a beam for the water side of the runway of the Bocşa type wharf crane of 16 tf x

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32 m, gauge 10.875 m, in dry conditions of the taxiway will be executed on running beams, indirectly founded on columns Ø 900 mm, arranged at interaxial distances of approx. 3.6 m and founded in the limestone horizon in gray sand binder at -11.00 local low water (+10.86 MN75). Considering the presence of water in the immediate vicinity, the solution of drilling columns with bentonite mud is not accepted.

On the rehabilitated wharf it will be possible to mount one crane for each operating berth, provided that a minimum distance between cranes of 50 m interaxle is observed. Mooring bollards of 25 tf will be mounted on the crest of the wharf made of sheet piles, at distances of approx. 20 m from each other. The edge facing the water of the crest beam will be protected with a metal plate fixed through gaps, along the entire length of the mooring front. The wharf is equipped with wharf shock absorbers made of rubber rolls positioned on three low waters, the fastening of which will be executed withdrawn from the vertical facing of the wharf.

The port platform will be made of:

- ballast base layer, 36 cm thick;
- broken stone foundation, 30 cm thick;
- platform clothing from BcR 4.5, 24 cm thick.

The road concrete platform is poured in longitudinal strips, between which constructive joints are made. Transverse expansion joints will be provided every 40 m, in correlation with the joints between the sections of the running beams of the wharf crane.

The length of the vertical key from weight blocks will be 650 ml. At the ends, the connections with the bank will be ensured.

### B. Execution of the easement for the location of the existing pontoons

Upstream of the vertical wharf, a floating berth (berth 1 – servitude berth) was planned to serve the vessels of the authorities operating in the port of Bechet, namely the Border Police, the Bechet Captaincy, the Lower Danube River Administration and the Maritime Danube Ports Administration, these vessels berth at the pontoon in the area of the existing berth 2. With the execution of the vertical mooring front, these pontoons will be relocated to the new upstream floating berth.

The floating servitude berth will be made of 2 floating access pontoons with concrete floats (L=35m/pc), they will be fixed in position with the help of hammered metal columns Ø1.00m (t=16mm, anti-corrosion protected) and the length of 26.50m. The connection between the floating access pontoons and the columns will be through metal columns that will allow free vertical movement of the pontoons depending on the water level. For access to the floating pontoons, a pedestrian walkway with a length of 25.00m has been provided, the walkway will be simply supported on an independent floating pontoon towards the water, and at the level of the crest, an embedment of reinforced concrete C35/45 will be executed.

The connection to the shore on the upstream area will be made of rockfills blocks 200-600 kg/pc, with a slope of 1:1.5. The quota at the crest will be +7.80 local low water (+29.66 MN75), the intermediate berm at quota +2.50 local low water and the minimum quota of -3.50 local low water at the base of the slope. The rockfills will be placed on a 400 gr/m2 geotextile filter at the top of the wall (dry) and the double geotextile mattress filled with 5500 gr/m2 sand from the level of the

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intermediate berm up to -3.50 local water low water. A C35/45 concrete beam will be constructed at the level of the berm at +2.50 local low water.

### 1.1.4.2.2 Rehabilitation ramp ferry crossing point and access roads

### A. RO - RO ramp rehabilitation works

The RO-RO ramp serves the border crossing point. The solution for its rehabilitation involves the laying, over the existing and partially Damaged concrete layer, of a new road concrete covering, with a thickness of 20 cm, between the level +7.80 and +4.40 local low water. This clothing will be reinforced with welded mesh and fixed to the existing road clothing by means of metal connectors. The concrete will be poured with transverse and longitudinal joints, respecting the position of the existing joints. At +4.40 local low water, the construction of a C35/45 reinforced concrete beam is planned. The surface of the ramp located between quota +4.40 and -2.00 local low water will be rehabilitated by installing prefabricated slabs of reinforced concrete C35/45 with dimensions of approx. 2.00 x 2.00 x 0.2 m. The prefabricated tiles will be placed over the existing tiles, after cleaning them of any material deposits.

At the base of the ramp, a prism of 200-600 kg/piece of rockfill will be built, leveled at the top with a 30 cm thick layer of broken stone, Tostrengthen the foot of the ramp. The downstream slope will be reprofiled and completed with rockfills of 200-600 kg/pc. On the side of the ramp there are 4 bitts of 25 tf.

### B. Rehabilitation works and extension of the directing breakwater

The upstream directing beakwater of the RO-RO ramp will be extended by 15 m towards the water, with a prism of 200-600 kg/piece rockfills, in the extension of the existing alignment. The concrete boxes on the crest of the beakwater will be repositioned after the broken stone foundation is restored. The slopes will be reprofiled with anchors 200-600 kg/pc.

At the upper part of the beakwater, after the concrete boxes have been reset on the broken stone layer, it is planned to rockfill the boxes with blocks from the rockfills to ensure better stability and resistance to the pushing force of the water current and ice fields.

The head of the directing beakwater will be signaled with the help of a mobile beacon, which will be located on the crest of the beakwater, depending on the water level.

### C. Rehabilitation and modernization of precinct roads and platforms in the PTF area

To ensure the safe exploitation of the surrounding roads and adjacent platforms, they will be raised at quota +7.80 local low water (+29.66 MN75). The elevation of the adjacent roads and platforms is necessary considering that they are currently below +7.33 local low water (10% insurance level), being floodable and inoperable.

The existing road system will be dismantled and, where appropriate, used as a foundation for the new road system. The structure of the new road system is similar to that of the operating platform from the new berths 2 - 6, respectively:

- filling from well-compacted local material;
- ballast base layer, 36 cm thick;
- broken stone foundation, 30 cm thick;

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platform clothing from BcR 4.5, 24 cm thick.

For the islands separating the traffic directions, a layer of topsoil with a thickness of 20 cm was provided at the top.

Each traffic direction will be served by two traffic lanes with a width of 3.50 m each. For each direction, road gutters will be constructed that will collect rainwater. The horizontal markings and the vertical signaling corresponding to the border crossing point will be executed.

A metal fence has been provided between the platforms behind the port's operating berths and the border crossing point.

### 1.1.4.2.3 Related works: dredging, rehabilitation of the signaling system

To carry out the previously specified works, it will be necessary to excavate/dredging the surplus material, according to the dimensions and quotas of the attached drawings.

Dredging will be carried out with absorbent-repelling dredges. The approximate dredging volume is approx. 134,000 m³, and AFDJ Galaţi, which is the authority that ensures navigation conditions on the Danube sector where Bechet port is located, will establish the unloading area of the dredged material. The working technology is as follows: the dredged material is loaded into the sleds moored next to the dredger, which transport it to the indicated unloading place. The material is unloaded in the Danube, by opening/folding the hatches of the barges.

The works that will be executed on water will require signaling throughout the duration of execution. Both the coastal signaling and the passive and luminous signaling of the work equipment will be ensured.

At the completion of the works, the final signage for navigation will be installed, with the necessary static warning, prohibition, and recommendation signals. The hydrometric gauge and the display in the port for the Danube water level will be rebuilt.

### 1.1.4.2.4 Provision of utilities in port

### 1.1.4.2.4.1 Water-sewage networks and installations

Port Bechet is not equipped with centralized drinking water supply and fire networks, respectively household sewage networks. The buildings in the port are supplied with local water, through wells, and the waste water is discharged through drains. The water for the fire is taken from the Danube with the fire brigade's mobile pumps. The drainage of rainwater has some deficiencies, the water pooling especially on the north side of the premises.

The adopted solutions are the following:

### A. Drinking water supply

The water supply for the existing sanitary groups of the port, for loading the drinking water tanks of the ships and for fighting the fire will be made from the public pipeline of the city of Bechet, located about 2500 m away from the port premises (the length of the water connection). The connection will be made to the public water network. In the port premises, a water management consisting of an above-soil storage tank  $V = 200 \text{ m}^3$  and a pump station and water pump mounted in a container will be built, according to the description below.

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The supply pipe will be made of PEHD 125 mm, P100, PN10, buried, parallel to the port access road. Line chimneys with valves from 500m to 500m will be built on the supply pipe. When crossing the existing valley, next to the existing footbridge, the pipeline will be photographed from the air, protected and thermally insulated. At the entrance to the premises, a valve chamber and water meter will be installed on the supply pipe.

To ensure the flow and pressure in the network, a water management was provided consisting of a water tank V = 200 mc ( D = 7.64 m; H = 4.88 m) and a pump station and water pump mounted in a container .

The tank, metal, above soil, is purchased as equipment, it is mounted on a concrete foundation and ensures the intangible fire reserve and the daily flow of water for household consumption and the supply of ships. The tank is provided with spigots for the supply from the source, for the suction pipes of the pumping groups for household consumption and fire, for overflow and emptying, as well as for the supply of mobile fire pumps. For frost protection, the tank will be supplied with a 3 kW electric heater.

The pump station and water pump is an above-soil container-type construction, with dimensions of 9.0m x 4.8m x 2.7m, consisting of two modules of 9.0m x 2.4m x 2.7m.

The station will be equipped with the following equipment:

Drinking water pumping group 2K55/200T having:

```
Q = 20 m^{3}/h;
H = 45 m CA;
P = 2 x 5.5 kW.
```

Fire water pumping group 2K40/400T having:

```
Q = 40 \text{ m}^3/\text{h};
H = 45 \text{ m CA};
P = 2 \times 7.5 \text{ kW}.
```

➤ Hydrophore container with membrane V = 500 I.

The station will be provided with 2 electric heaters with P = 2000 W each.

The water network in the premises, made of PEHD 125mm, P100, PN10, will ensure the water supply of the existing buildings, the hydrants supplying the ships and the fire hydrants. When under-crossing the crane tracks, the water pipes will be protected in steel pipes, between two valves. Hydrants for supplying ships will be provided with shut-off valves and flow meters.

The water network will be placed between protective layers of sand according to the manufacturer's instructions.

As an additional measure to ensure fire fighting on the port platforms, with water from the Danube, a fire hydrant made of sorb Dn 100mm, the vertical pipe made of galvanized steel pipe Dn 4", and a type A connection for the hydrant was provided at each berth. The necessary flow rate and pressure will be ensured by a mobile motor pump, kept in working order together with the PSI materials.

The motor pump will have the characteristics:

✓ maximum flow 1000l/min;

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- ✓ maximum pressure 10 bar;
- ✓ maximum suction depth 9m.

### B. Household sewage

The domestic waste water evacuation from the sanitary groups of the port buildings will be done through a network of PVC pipes Dn 250 mm and slope i = 0.008, to a domestic waste water pumping station located in the port access area.

The pumping station is an underground construction of prefabricated concrete elements, having Di = 1.80m and H = 6.0m. The station is purchased fully equipped with hydraulic, electrical and automation installations. The station is equipped with 1+1 electric pumps with Q = 5l/s; H = 16 mCA;  $P = 2 \times 2.5$  kW.

The evacuation of waste water from the premises will be done through a discharge pipe made of PEHD, P100, with a diameter of 125 mm and PN 6.

On the discharge pipe, chimneys will be built with a cleaning piece from 500m to 500m. When crossing the existing valley, next to the existing footbridge, the pipeline will be aerially photographed, protected and thermally insulated. The discharge pipe and the sewer network will be laid between protective layers of sand according to the manufacturer's instructions.

Household wastewater is collected in a wastewater pumping station and discharged through a 125 mm HDPE pipe, PN 6, into the city's domestic sewage network, 2500 m away.

### C. Rainwater drainage

To collect the rainwater from the premises, along the roads and platforms, gutters made of prefabricated concrete elements with a drain slope i = 0.005 were provided.

The gutter sections 2x20m each will be connected to the storm sewer network through spillways purchased together with the gutters.

The gutter elements have the following characteristics:

Length L = 1.0m; Nominal width I = 300 mm;

Load class E 600, heavy traffic

Cover with cast iron grates for heavy traffic, fastened with screws, L = 0.5m, I = 300 mm.

The discharge chambers have the following characteristics:

Length L = 0.5 m; Nominal width I = 300 mm;

Load class E 600, traffic hard

Cover with cast iron grates for heavy traffic, fastened with screws, L = 0.5m, I = 300 mm.

The channel sections will be reinforced in concrete according to the manufacturer's instructions.

The collection of rainwater from the sections of gutters will be done by means of a rainwater drainage network made of PVC pipes Dn 300 mm, Dn 400 mm, Dn 500 mm. The sewer network will be placed between protective layers of sand, according to the manufacturer's instructions.

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The storm sewer pipes will be made of PVC, SN8, and the sewer chimneys will be made of access chimneys made of prefabricated concrete elements, Dn 800 mm, on plain concrete foundations and will be covered with cast iron rockfill covers for class D roads 400.

Visiting fireplaces with bench depths greater than 2.0m will be executed with a working chamber made of concrete tubes Dn 1000 mm L = 2m, according to art. 2.2.1 of STAS 2448-82.

For the mechanical purification of rainwater discharged into the Danube, two sludge and hydrocarbon separators were provided, with coalescing filter and built-in by-pass, each with Q = 200/40 l/s characteristics.

Before the discharge into the Danube, a non-return valve will be installed on the final section of the sewer, in order not to allow water from the Danube to enter the sewer, in the event of its level rising above the level of the discharge opening.

The evacuation of water into the Danube will be done by remodeling the existing outlet.

### **Calculation summary**

### 1. Determining the flow of potable water for the sanitary groups from the existing buildings

The necessary water flow for 20 people (administrative staff), 10 people (port operation staff) and 100 people (drivers in traffic) will be ensured.

The water requirement for sanitary needs was determined according to STAS SR 1343/1/1995 with the relationship:

Qdi med =  $\Sigma$ qsp x Ni /1000 (mc/ day )

N1 = 10 persons (workers)

N2 = 20 persons (TESA)

N3 = 100 persons (drivers in traffic)

 $q_{sp1} = 50 \text{ l/ person/day (STAS 1478-90, table 4/19)}$ 

 $q_{sp2} = 20 \text{ l/ person/day (STAS 1478-90, table 4/2)}$ 

 $q_{sp3} = 5I/ person/day (STAS 1478-90, table 4/16)$ 

 $Q_{Yesy med} = (10 \times 50 + 20 \times 20 + 100 \times 5)/1000 = 1.4 \text{ m}^3/\text{day}$ 

The maximum daily flow will be:

 $Q_{Yesy max} = 1.20 x 1.4 = 1.68 m^3/day$ 

 $Q_{timetable max} = 5 \times 1.68/16 = 0.88 \text{ mc/h} = 0.53 \text{ l/s}$ 

### 2. Determination of the required fire water flow rate

On the platform, general goods can be stored in bulk, in stacks or in containers with the maximum dimensions  $L \times W \times H = 12.0 \text{ m} \times 2.5 \text{ m} \times 2.5 \text{ m}$ .

The volume of a container will be  $12 \times 2.5 \times 2.5 = 75$  cubic meters

Assimilating the container with a storage building with fire stability level IV - V, and medium fire risk, from Annex no. 8 of Regulation P118/2-2013, it results that for volumes below 2000 m3 the water flow for extinguishing from the outside of a fire is qie = 5l/s. The volume of 2000 mc also covers the storage solution of a group of stacked containers, respectively a group of 2000: 75 = 26.7 containers.

For open warehouses of logs with a volume between 101 cubic meters and 500 cubic meters (Annex no. 11 of Regulation P118/2-2013) or open warehouses of timber with a volume of between 51 cubic meters and 200 cubic meters (Annex no. 10 of Regulation P118/2-2013), the

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water flow for extinguishing the fire from the outside is Qie = 10 l/s, respectively two jets in simultaneous operation.

Also, ensuring the fire flow rate of 10l/s allows extinguishing the beginnings of fire on ships moored at the wharf, the total required fire flow being ensured with the fire installation on board, or, in the last instance, with the fire engines or the fire boat.

Tobe included in the insured flows, the beneficiary will limit the group of containers or the volume of the stacks to those considered.

### 3. Determination the flow of potable water for supplying ships

The supply of potable water to the tanks of ships moored at the wharf will be done through wharf hydrants equipped with metering devices.

In the most unfavorable situation, it is considered that 3 ships from those anchored at the wharf are simultaneously supplied with water, each with a tank of about 10 m<sup>3</sup>.

During a day with intense activity, 6 ships can be fed.

Qdi med =  $2 \times 3 \times 10 \text{ mc} = 60 \text{ mc/day}$ 

The water network is assimilated with the street network with distribution through the splits.

Kzi = 1.40 ( table 1 from SR 1343-1/2006)

Q day max =  $1.4 \times 60 = 84 \text{ mc/day}$ 

Korar = 2.8 ( table 3 of SR 1343-1/2006)

Q timetable max =  $2.8 \times 84/24 = 9.8 \text{ mc/h} = 2.7 \text{ l/s}$ 

### 4. Determination of the simultaneous flow of potable water for the supply of ships for the sizing of the pipes and the calculation of the pressure required at the connection

Through the PEHD 125 mm network, the flow for filling three tanks, half of the total flow and the flow for fire fighting, will flow simultaneously.

$$Qc = 1.35 \text{ l/s} + 10 \text{ l/s} = 11.3 \text{ l/s}$$

At flow rate Q = 11.35 l/s, the linear load loss through the 125 mm PEHD pipe (PE 100, PN10 at) will be: i = 14mCA/km

The total load loss on the route will be:

hp lin + loc =  $1.2 \times 0.65 \text{ km} \times 14 \text{mCA/km} = 10.92 \text{m CA} = 11 \text{ mCA}$ 

Hg = 10 m CA (height stacks of materials on the platform)

Hu = 13.40 m CA (Use pressure at fire hydrants)

Hpf = 5 mCA (pressure losses in the hose)

The calculation is made for the most unfavorable situation, namely fire extinguishing.

 $\label{eq:hamiltonian} Hnec = Hg + Hu + Hpf + hplin + loc = 10mCA + 13.4m CA + 5.6 mCA + 11.0m CA = 40 mCA$ 

### 5. Storage tank sizing

Vrez = Vcomp + Vinc (STAS 4165/88, point 2.1.1)

Vcomp = aV

a = 1 (tall pressure, SR 1343/1/2006)

V = Qzi max = 1.68 mc/day + 84 mc/day = 85.68 mc/day

 $Vcomp = 1 \times 85.68 = 85.68 mc$ 

Vinc = Tie (a Qorar max + 3.6 n Qie ) + 3.6 Qii know

Tie = 3 hours (STAS SR 1343/1/2006, note 5 in table 4)

a = 1

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Qie = 10 l/s Qii = 0 l/s Vinc = 3  $(1 \times 2.7 + 3.6 \times 1 \times 10) = 116.1$  mc Vrez = 85.68 + 116.1 = 201.78 m3

### 6. Determination of water flow at the source

A water tank V = 200 mc will be built.

QIC – Water flow from the source up to the tank (SR 1343/1/2006, art.7.1)

QI = Kp x Ks x Qzi max + Kp x Ks x 24 Qri

Qri = Vri /Tri

Tri = 36 hours (SR 1343/1/2006, table 6)

Kp = 1.10

Ks = 1.02

Qri = 116.1/ 36 = 3.22 mc/h

QIC = 1.10 x 1.02 x 85, 68 + 1.1 x 1.02 x 24 x 3.22 = 182.73 mc/day = 2.11 l/s

### 7. Determining the flow rate of returned domestic wastewater

The flow of returned domestic wastewater was determined according to SR 1846-1/2006, point 4.2.1 with the relationship:

Qu = Qs, where:

Qs is the characteristic supply flow of the water demand.

 $Q_{u Yesy med} = 1.4 m3/day$ 

 $Q_{u Yesy max} = 1.68 mc/day$ 

 $Q_{u \text{ hourly max}} = 0.88 \text{ mc/h} = 0.53 \text{ l/s}$ 

### 8. Calculation of rainwater flows

Calculation of the maximum flow produced by the calculation rain with the possibility of exceeding

p % was made according to STAS 1846/2 -2007 with the relationship:

 $Q_{\text{max p }\%} = m \times W \times \emptyset \times i_{\text{p }\%}$  (I/s):

m = 0.8 flow rate reduction coefficient

S = the surface of the sewage basin, (ha)

 $\emptyset$  = leakage coefficient afferent of the surface  $S_i$  dimensionless (table 2)

i<sub>p%</sub> = average rain intensity (I/s.ha)

The calculation was carried out at the level of the entrance to the sludge and hydrocarbon separator, located near the ferry mooring ramp.

S1= Technological road surfaces and concrete parking platforms

S2 = Grassy surfaces

S1 = 3.6 ha

S2 = 0.8 ha

 $\emptyset$ 1 = 0.85 (concrete surfaces)

 $\emptyset$ 2 = 0.10 (grassy surfaces)

tcs = superficial concentration time = 10 min (seat zone)

I = 600 m (the longest route of the water in the channel)

t = t cs + I/v = 10 + 600/50 = 22 min.

According to STAS 9470-73: i  $_{p\,\%}$  = 140 l/ s.ha (zone 9, Bechet, t = 22 min., f =  $\frac{1}{2}$ ) m = 0.8

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 $Q_{\text{max p}\%} = 0.8 \text{ x} (3.6 \text{ x} 0.85 + 0.8 \text{ x} 0.1) \text{ x} 140 = 352 \text{ l/s}$ 

For the flow rate of 352 l/s, two sludge and hydrocarbon separators with built-in by-pass and coalescing filter are chosen, each having a flow rate of Q = 200/40 l/s

The sewage pipe from PAFSIN Dn 600 mm can take the flow rate of 352 l/s at a slope i = 0.004. The PVC tube Dn 500 mm can take over at the slope i = 0.003 a maximum flow rate Q = 200 l/s.

### 1.1.4.2.4.2 Electrical networks

### A. Energy Data

Installed electrical power: Pi =3008.5 kW;
 Absorbed electrical power: Pa =2106.0 kW;
 Apparent power post transformation: 2 x 2000 kVA;
 Supply voltage: 400 / 230 Vc.a.;

Working frequency: 50 Hz;Power factor: 0.9.

### B. Description of electrical installations

The power supply is designed from a new transformer station, fully equipped for 2 transformers of 2000 kVA/pc., 20 / 0.4 kV, from which all the consumers provided in this documentation will be supplied from within the port of Bechet.

The consumers provided in this documentation for power supplyare:

- indoor lighting, made with 12 lighting poles of 20m height, equipped with 8 400W LED lighting devices each;
- feeding 5 wharf cranes, each of which has an installed power of 325kW and a total maximum absorbed power of 220kW;
- power supply 5 wharf sockets of 50kW each/pieces located in the immediate access area to the bridge connecting with the ship;
- supply 3 double charging desks for electric cars of 22kW each;
- supply buildings in the premises.

The electric cables are provided to be of the CYAbY type, with the section calculated at the rated current of the protection upstream of the consumer's power supplycircuit, as well as checked for the voltage drop depending on the length of the electric circuit route.

The dimensioning of each cable was done considering that the upstream protection (switch), at its nominal current and not at the regulation current, must also protect the power cable, not only the powered consumer. The dimensions of the electrical cables related to the existing buildings were calculated as estimates because the Beneficiary did not provide any information related to them. If the electrical powers are different from the existing ones, the dimensions of the cables will be redone in the next design phase.

The check of the conductor section of the power cable was done at the voltage drop, depending on the length of the power cable. The value of the voltage drop must not exceed 3% for the supply of general electrical panels and 5% for the supply of final consumers (secondary circuits).

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The electric cables are provided to be protected along the entire route with corrugated tubes with a diameter of 160 mm.

Electric cables that pass through impassable areas (without the possibility of car traffic) are placed directly in the soil, in a layer of sand of at least 40 cm high.

In the underpass areas of the roads for cars and trucks as well as the concrete platforms, the cables will be placed in a 40cm high concrete bed.

Railway underpasses are made by horizontal directional drilling, with specially designed equipment.

When changing the direction of the electric cable route, pulling cameras were provided, but also intermediate at the distances between two pulling cameras that exceed the length of 100m (according to the rules and regulations in force, a reinforced electric cable cannot be placed for a length longer than 100m high).

The lighting is provided to be achieved with 12 lighting pylons with mobile nacelle, each 20m high, each equipped with 8 lighting devices of 400W each, mounted symmetrically on the mobile nacelle of the lighting pylons.

The lighting pylons are additionally provided with an element to capture lightning strikes.

Each lighting pole is provided with an electric protection and control panel (supplies included in the lighting pole), located at the base of the pole, above the fire chamber specially made to feed the electrical panel related to the pole.

The electrical switchboards for powering wharf cranes are equipped with one 630A three-pole automatic switch each, set at a current of 500A.

For the proposed traffic road, 29 street lighting poles of 10m height, equipped with 2 lighting devices of 250W, fully equipped, have been provided.

The electrical switchboards for powering ships anchored at the wharf are equipped with one 63A three-phase socket and one 25A single-phase socket, thermo-magnetic protections for each socket and all related materials for a good operation of the electrical switchboard.

All electrical panels are made of metal treated against corrosion due to atmospheric conditions in the area where they are located.

All electrical switchboards will have a door with a 1800 opening, provided with a locking system with a lock, lock or any other blocking system against the access of unauthorized personnel inside the electrical switchboard.

All cable routes will be accompanied by the 40x4mm Ol-Zn plate that is part of the soiling installation of the premises. All the metal masses in the electrical and non-electrical installations that are not currently under voltage, but which can cause a potential change accidentally, are connected to this flatband.

To complete the earth socket, soiling electrodes of Ol-Zn 2 ½" diameter and 3m long will be installed, in the immediate vicinity of the lighting pylons, the lighting poles, in the immediate vicinity of the crane power supply and ship loading panels, as well as around the transformer post.

The dispersion resistance of the earth socket must not exceed the value of 1 ohm. Otherwise, additional measures will be taken, approved by the designer, so as to obtain a value lower than that imposed by the provisions of the rules and regulations in force.

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### 1.1.4.2.4.3 Video surveillance and access control system

### A. Structure Sistema integrated video surveillance and address public

The role of the system is to ensure the capture of images from areas of interest, their processing and recording on specialized equipment, the visualization of images through the LAN network, allowing the staff dedicated to monitoring the operation of the system to take quick action in case of malfunctions or unwanted events at the monitored points. Access restriction will be achieved with the help of a car barrier. Access will be by card.

The system is made up of cameras, video cameras, loudspeakers, network switches, NVR and monitoring station. The video surveillance system covers all areas of interest. The entrance to the premises is also supervised by a video camera that offers the possibility of recognizing the car's registration number. The surveillance system includes real-time recording equipment and will be connected to the LAN network for access to images. The NVR will be provided with HDDs that allow the recording of signals from all cameras for at least 20 days and will be connected to the LAN network (if it exists), being able to be accessed remotely. The system ensures fast real-time searching and allows for further expansion.

By integrating loudspeakers with IP, the system allows the broadcasting of scheduled announcements, backsoil music, warning or emergency messages, either individually, on zones or on all loudspeakers at the same time.

The video cameras will be of 4 types:

- Bullet-type outdoor video camera, IP66 degree of protection, built-in IR, with IP and PoE, minimum color illumination 0.2 lux, minimum AN illumination 0 lux, resolution 1920x1080p, 25/30 fps, CMOS image sensor 1/2.8, WDR, horizontal angle 115gr, vertical angle 64gr, operating temperature -30 50grC;
- LPR outdoor video camera, anti-vandal IK10, protection degree IP66, built-in IR, with IP and PoE, minimum color illumination 0.16 lux, minimum AN illumination 0 lux, resolution 1920x1080p, 50/60 fps, security function does not accept access unauthorized, CMOS image sensor 1/2.8, WDR, horizontal angle 16-2.3gr, vertical angle 9.6-1.3gr, remote zoom, operating temperature -30 50grC;
- Dome type video cameras, outdoor, anti-vandal IK10, protection degree IP66, with IP and PoE, built-in optimized IR, minimum color illumination 0.1 lux, minimum AN illumination 0 lux, HDTV 1920x1080p, 50/60 fps, depending on security - does not accept unauthorized access, CMOS image sensor 1/2.8, WDR, horizontal angle 100-36gr, vertical angle 53-20gr, remote zoom, remote focus, operating temperature -30 - 50grC;
- Panoramic video camera, outdoor, anti-vandal IK10, degree of protection IP66, with IP and PoE, minimum color illumination 0.16 lux, minimum AN illumination 0.05 lux, resolution 5120x2560p, 50/60 fps, security function does not accept unauthorized access, CMOS image sensor 1/2.8, WDR, horizontal angle 180gr, vertical angle 90gr, operating temperature -30 50grC;
- The recording of the images will be done on a 1U rack-able NVR, with management software included, license for 32 cameras, HDD included 16TB, supported RAID levels 0, 1, 5, 6, 10, recording speed 384 Mbit/s.
- The images will be viewed on an operating station with an Intel® Core™ i5 processor, 8GB memory, video card, RJ45 network, interface for 4 monitors, mouse, keyboard, minimum 2

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27-inch monitors. The license will be installed on the operating station for viewing the images from all video cameras, as well as for controlling the speakers. Also, a microphone was provided for broadcasting messages.

- The speakers will be suitable for outdoor installation, with IP66 degree of protection, RJ45 connection, PoE, security function, internal memory.
- Provisions have been made for the communication infrastructure:
- Switches with 4 Ethernet ports, PoE, 1 SFP port, degree of protection IP67, for outdoor mounting, power supply 100–240 Vac, 50/60 Hz, HTTPS, 10 Gbps, MAC table 8K, rockfills 10Kb, with management software;
- Switch with 16 Ethernet ports, PoE, 1 SFP port, power supply 100–240 Vac, 50/60 Hz, DHCP server included, 36 Gbps, MAC table 8K, rockfills 9216 Bytes, rack-able, with software management;
- Switch FO 16 100/1000BASE-X mini GBIC/SFP slots, with 19" rack mounting system, with management, equipped with SFP 1000BASE-SX/LX.
- A 6KVA rack-able UPS will be used to power the video surveillance system;
- The above equipment will be mounted in a 19" rack.
- The wiring of the system will be done like this:
- Utp cat6 cable for connecting cameras and speakers in outdoor switches, as well as
- for connecting the NVR and the operating station in the switch.
- Fiber cable.

### Video surveillance areas

No. crt.	Equipment type	Supervised area		
1	LPR outdoor video camera	Car entrance to the area		
2	Panoramic video camera  Dome video camera	Platform BAC crossing		
3	Outdoor bullet type video cameras	Customs		
4	Outdoor bullet type video cameras	Main access in buildings		
5	Dome video camera	Scale		
6	Dome video cameras	Danube's shore		

The video surveillance system will be powered from its own service power supply panels, via UPS.

### B. Access control system

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The restriction of car access to the premises will be achieved with the help of two car barriers, mounted on both directions (entrance - exit). Access will be done with an RFID card. A number of cards will be defined for employees and visitors.

The structure of the access control system will be as follows:

- car barriers with 3m arm, controller for 2 inductive loops;
- controller for 2 doors (or 2 master-slave controllers), for connecting two readers, 2 control
  relays;
- RFID readers:
- power source;
- semaphorus.

### 1.1.4.3 Operation stage

The purpose of this project is to rehabilitate the Bechet port platform to facilitate the development of the activity, through the development of naval traffic and not only of goods.

Along with the rehabilitation and modernization of the port infrastructure, optimal working conditions and the running of specific activities under normal conditions will be ensured.

### 1.1.4.4 Demolition / decommissioning stage

Decommissioning works are not provided for in the project that is the subject of this documentation.

### 1.1.4.5 Duration of project execution

The execution of the works involves the completion of the following stages:

- preparation of studies, technical project and execution details, technical quality control of the project, documentation for approvals, agreements;
- handover of the site and layout of the works, arrangements for the protection of the environment and bringing it to the initial state, relocation works / protection of the utilities;
- execution of construction works assembly for the basic investment;
- works for the provision of utilities necessary for the objective, namely the water canal and electrical networks;
- consultancy, technical assistance;
- site organization, various and unforeseen;
- drafting Construction Technical Books, the reception at the end of the works.

The duration of the investment was staggered over a period of approx. 24 months, of which the actual execution was estimated at approx. 21 calendar months.

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# 1.1.5 The natural resources necessary for the implementation of the PP (water abstraction, renewable resources, non-renewable resources, others) with the highlighting of those that will be exploited within the ANPIC

To carry out the works, the following will be used: granular material for the construction of the platforms, ballast, raw stone of different sizes and thicknesses.

During the execution of the works provided for in the project, the main sources of energy will be fuels necessary for the operation of the construction machinery for the commissioning of the designed works.

### 1.1.6 Information on the production being carried out, information on the raw materials, substances or chemical preparations used

### 1.1.6.1 Profile and production capacity

Considering the current situation of the Bechet port infrastructure, previously presented, the beneficiary, CN APDF SA Giurgiu, aims to carry out the necessary infrastructure works for the relaunch of the naval transport activity in the Bechet port, in correlation with the short-, medium-and long-term development plans long of the Ministry of Transport and Infrastructure and with the requirements of the European Union in the field of naval transport.

By rehabilitating the infrastructure of Bechet port and bringing the port to the technical-functional parameters of other ports located in the member states of the European Union, port and commercial activities in the area will be relaunched, contributing to regional development.

The works proposed for the rehabilitation of the Bechet port infrastructure and bringing it to the technical-functional parameters are:

### Modernization of the Danube mooring front, including :

- the execution of a vertical wharf, for which two variants were analyzed, namely: wharf made of weight blocks (variant 1 recommended) or of metal sheet piles (variant 2 alternative), with the height of the crest at +7.80 m compared to the local low water, with the cumulative length L = 650 ml, the resulting surface S = 10,918 sq m.
- Compared to the current situation, where the existing mooring front, with a length of 650 m, is divided into 6 operating berths, in the feasibility study it is proposed to divide the mooring front into 5 berths, each having the recommended length for a river berth, of 130 m, resulting in the same length of the mooring front, of 650 m (5 berths x 130 m/berth). The 5 berths will be numbered, from upstream to downstream, with numbers 2, 3, 4, 5 and 6. Berth 1 will be a new servitude, which will be executed in the the solution berth floating, in upstream of the operating front, for relocating pontoons existing, having L = 75 ml;
- o concrete platforms platforms behind the new wharf new (new berths 2 6), in width of approx. 20 m, with the possibility of placing cranes portico type Bocşa of 16 tf x 32 m, for which there are provided beams and running rails, or other machines established by common agreement with the economic operators that carry out their activity in the port and with the designer's opinion, S = 17,222 sq m;
- execution of a berths servitude floats, with a length of 75 m, according to the previous specifications.

### Rehabilitation of RO-RO ramp and access roads, including:

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- rehabilitation of the ferry crossing ramp, S = 4,086 sq m;
- o rehabilitation and expansion of the ferry crossing beakwater, S = 588 sq m;
- rehabilitation of precinct roads and platforms in the area of the border crossing point, S
   = 12,410 sq m.

### Related works, including:

- dredging/excavations for the execution of the vertical wharf, of the servitude berth and ramp rehabilitation RO-RO;
- o rehabilitation of the navigation signaling system for the entire work.

### Provision of utilities in the port, including :

- water supply of the port through its connection to the drinking water network of the city of Bechet, Toensure the water necessary for port activity and resupplying ships.
   Execution of the connection from the main network to the internal supply network, L = 2500 ml;
- o domestic wastewater collection network from the port, including its treatment;
- o rainwater collection network, including its treatment;
- fire extinguishing installation;
- o power supply of the port, by connecting to the LEA existing in the area, at the entrance to the port, Toensure the electricity consumption of the port operators, the charging of electric cars, as well as the resupply of electricity to the ships stationed in the berths. A new PT and a connection network in length of approx. 1,500 ml;
- o perimeter lighting system and port area;
- video surveillance and access control system;
- demand analysis and the possibility of equipping the port with a fueling point for alternative fuels.

They will be described in the following chapters of this presentation memorandum.

### 1.1.6.2 Description of the installation and existing technological flows on site

Bechet Port is located in Dolj County, UAT Bechet, being located on the left bank of the Danube River, in the area of km 678 - 681. The area of the port territory managed by CN APDF SA is 76,287 square meters. The length of the walled/vertical/natural wharfs under the administration of the beneficiary is 650 m. The port is of the fluvial type, allowing the berthing of barges of up to 2000 t.

The Bechet - Oreahovo Bulgaria Border Crossing Point also operates in Bechet Port. The border crossing infrastructure belongs to APDF and consists of RO-RO platform and ramp roads.

The port is connected to the local and national road network through DN54A, DN55 and DN55A. The port does not have drinking water facilities and electricity at the berths, nor is it properly lit at night.

Due to the great age of the existing mooring constructions, with the standard service life expired, as well as due to an intensive exploitation, correlated with the change in climatic conditions in recent years, their significant Damage is observed, with negative consequences for all those who carry out port activities, respectively: degradation of the joints, settlement of the wall, gaps and

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deviations of the theoretically designed profile, important alluvial deposits in the area of the berths, Damaged wharf accessories.

Regarding the infrastructure of the Bechet port, it offers a mooring front directly at the Danube, with a cumulative length of approx. 650 m, and a ramp for RO-RO ships that ensures the connection with the Bulgarian port of Oreahovo, located in the mirror, on the right bank.

Access to the wharfs is made directly from the navigable channel of the Danube, the depth required for mooring being at least 2.5 m compared to the local low water (+12.35 mMN75 - according to the data published by the Danube Commission), respectively the quota +9.85 mMN75. At present, this depth is not ensured at any of the berths of the port, as it results from the transversal profiles made. The usual barges operating at the wharf are 1,500 t or 2,000 t.

There is a very large variation in the quota of the crest of the existing wharf, along it, of almost 2 m (from 29.30 – 29.50) mMN75 on the upstream sector to 27.0 – 27.2 mMN75 downstream.

<u>The mooring front in the port of Bechet</u> was executed as a wall of rough-hewn stone masonry, which can be moored by means of a floating pontoon. The wall is executed on heights of approx. 5 - 6 m. At the base, the wall is founded on a simple concrete beam, founded, in turn, on oak piles. Under the foundation beam of the wall, the slope is protected with stone blocks on fascine mattresses.

At the crest, the wall is turned towards the platform, in certain areas presenting a crest beam made of stone blocks or concrete.

For the mooring of ships at the wharf, reinforced concrete bitts were provided locally, places for bollards, rockfills for supporting the access gangways on the pontoons. On the reinforced wharfs, concrete or stone block stairs were profiled from place to place.

The width of the platforms behind the wharf, up to the road along the port, varies between 10 m next to berth 2 and 25-30 m downstream (berths 3–6).

The operating infrastructure of the port is deficient. Mooring to berths is done by means of floating pontoons. The port does not have taxiways for wharf cranes. Thus, due to the long distance of ships from the shore and the impossibility of operating with dedicated wharf cranes, operating in the port with mobile cranes is very difficult and conditioned by the water levels in the Danube. Under these conditions, two of the port operators, which operate at berths 1-4, (Cerealcom Dolj SRL and DMB Recycling SRL Craiova) have built platforms on which bunkers and conveyor belts have been mounted to allow the loading of ships (especially with cereals). Practically, at present, on the upstream and central sectors of the port, only loading operations are carried out on ships, unloading operations being difficult to carry out. The port operates, for the most part, on the flow of shipping goods.

The third operator, which operates on the downstream sector of the port, at berths 5 and 6, (Transport Trade Services SA), has installed a fixed crane on the wharf - at berth 5 and a conveyor belt at berth 6.

In the area of berth 2, where the width of the platform behind the wharf is very small (max. 10 m) and does not allow the use of the berth for operation, the pontoons AFDJ Galati, Căpităniei and The border police.

From the point of view of technical condition, the wharfs are presented as follows:

On the upstream sector, the rough stone wall wharf is turned 90° and closed in the bank. It is in good condition, but is covered by vegetation.

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In the alignment of the mooring front, at the first berth, the operator built a platform on which 3 grain storage silos were built, which communicates with the wharf with a bunker and a conveyor belt, used for loading ships with grain. With the construction of the concrete platform, the geometry of the slope was changed, the crest of the wharf being elevated and advanced to the water. At this berth, only grain loading activities are carried out on ships, through conveyor belts, the vicinity of the silos built on the platform behind the wharf not allowing the installation of a wharf crane.

Downstream, next to berth 2, loading/unloading operations cannot be carried out, due to the lack of space for the placement of machinery and the storage of material, as the road along the mooring front is very close to the crest of the wharf, as a result of the proximity to the buildings of the crossing the border.

In the area of berths 2 - 6, the pitching is destroyed in some places, subsidence, collapses, local caverns are observed and it is invaded by vegetation. The profile of the wall is variable, with different slopes.

The beam at the base of the wall is fractured or destroyed over extensive sectors.

The crest beam is missing, the wharf crest does not show a rigorous alignment. Concrete or stone block stairs are profiled in places in the wall, some of them in good condition. Locally, in the area of the connections with the stairs on the slope, local underwashing of the wall was found. There are improvised metal stairs rudimentarily placed on the slope.

Rockfills and the bollards places have been repaired over time, in empirical, inadequate solutions, some fulfill their functions, others are unusable.

In the area of berths 3 - 4, a car scale was built, an installation for loading grain into barges mounted on a trestle built over the reinforced wharf, to be closer to the barges, and a fixed concrete hall is being built armed that prevents the operation at the berth sector behind which it was executed.

Downstream of the hall built on the port platform, another reinforced concrete overpass, founded on columns, was built, which serves as a barge loading point.

The undeveloped land behind the wharf related to berth 5, but also the height of the crest, which is approx. 2.0 m below the low water of the rear road platform, has not allowed the use of the berth for operation until now. On this secor, the reinforced wharf is generally in good condition, with some fissures /cracks above the foundation beam. The protection with anchorages under the foundation beam of the wall is also in good condition.

In the area of berth 6, the quota of the wharf crest and the rear land was raised by the construction of a gabion wall filled with raw stone, reinforced with concrete buttresses and continued towards the territory with broken stone fillings. The rough-hewn stone piching is damaged, cracked, the foundation beam is destroyed, pushed out of the site, towards the water, on extensive sectors. The bollards places are damaged. The only operating equipment in the port, namely a fixed crane, was mounted on this berth.

On the downstream sector of the mooring front at the Danube, an alveolus made of vertical fixed elements was executed towards the water, for the connection with the upstream pier of the ramp where the RO-RO ships dock. On the upper part, the infrastructure of vertically fixed elements continues with a gabion wall, partially covered with concrete. At this alveolus, ships moor directly, but it offers a mooring front length of only 30 m. A mobile conveyor belt is mounted on this alveolus for loading grain into barges.

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At the downstream end of the port is located the ramp for the access of RO-RO ships that provides the connection between the ports of Bechet and Oreahovo. The upstream breakwater is made of raw stone, with a crest made of prefabricated reinforced concrete boxes. Some of these boxes are partially rotated/displaced, but the continuity of the crest is ensured. At the upstream end of the breakwater, a bright LED is mounted to signal at night/unfavorable visibility conditions.

The RO-RO ramp was made of simple monolithic concrete on the medium and high water variation area. The ramp is extended towards the water with prefabs made of reinforced concrete, on the low tide variation area. The concrete slabs were executed with casting joints between them. The platform of the ramp is functional, but it is affected by local destruction, breaks, fractures of the concrete.

<u>The road along the port</u> is in good condition, was recently rehabilitated, has a concrete superstructure. This road is separated by a metal fence from the access roads to the RO-RO ramp, which are damaged. Both the exit road from the country and the entrance road were executed, for the most part, from concrete sleepers, which are not monolithic between them. The two roads are separated by a strip of grassy land.

Regarding the provision of utilities in the port, Bechet port is not equipped with centralized drinking water supply and fire networks, respectively household sewage networks. The buildings in the port are supplied with local water, through wells, and the waste water is discharged through drains. The water for the fire is taken from the Danube with the fire brigade's mobile pumps.

The drainage of rainwater has some deficiencies, the water pooling especially on the north side of the premises.

Also, at the moment, the Bechet port area does not have any video surveillance and access control components or systems installed.

### 1.1.6.3 Profile and production capacity

Considering the current situation of the Bechet port infrastructure, previously presented, the beneficiary, CN APDF SA Giurgiu, aims to carry out the necessary infrastructure works for the relaunch of the naval transport activity in the Bechet port, in correlation with the short-, medium-and long-term development plans long of the Ministry of Transport and Infrastructure and with the requirements of the European Union in the field of naval transport.

By rehabilitating the infrastructure of Bechet port and bringing the port to the technical-functional parameters of other ports located in the member states of the European Union, port and commercial activities in the area will be relaunched, contributing to regional development.

## 1.1.7 Emissions of physical, chemical and biological pollutants generated by the interventions of PP activities (atmospheric pollutants, noise, artificial lighting, pollutants entering the aquatic environment, other emissions)

All raw materials, construction materials will be stored in specially arranged spaces within the organization of the construction site/work point, without creating stocks. It is recommended to store small quantities to be put into use. Also, they will be handled with care, so that there are no emissions in the environment and the risk of affecting the species and habitats for whose protection the protected natural areas existing in the analyzed area is reduced / eliminated.

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### 1.1.7.1 Water emissions

During the execution of the works, the sources of pollution are represented by:

- the works carried out and by site traffic.
- lucrări de manipulare a solului care determina antrenarea unor particule de praf în apele de suprafață. Manevrarea materialelor de construcții precum piatra spartă, agregatele constituie sursă de emisii;
- construction site traffic to and from the work fronts or the areas from which construction materials are brought (borrow pits);
- accidental spills of chemicals, fuels and oils from the operation of machinery involved in construction works or due to faulty handling of transport vehicles;
- improper handling and putting into operation or storage of materials used in the execution of the works that may reach surface waters by entrainment by rainwater;
- timproper storage and management of household waste water resulting from sanitary groups within the construction site organization, the management being properly ensured by means of authorized operators;
- washing of machines and means of transport at the site organization level.

A source of indirect pollution can be constituted by the entrainment of pollutants resulting from the movement of transport vehicles and machinery on the site or access roads by rainwater.

To reduce the potential impact on underground and surface water bodies, during the implementation of the project, the following water protection measures will be adopted:

- performing periodic repairs and overhauls to the machines, vehicles and equipment used in the project;
- the refueling of machines and means of transport will only be carried out in specially arranged spaces;
- the technological flows related to the organization of the site, such as the parking of machinery, the storage of waste, etc., will be carried out on concrete platforms equipped with drainage systems to avoid infiltration into soilwater and surface water;
- waste collection will be done separately, by type of waste, in specially designed spaces, in bins or sealed containers to avoid possible spills or accidental spills;
- periodic emptying of ecological toilets with authorized companies;
- avoiding washing vehicles near surface water. Vehicles will be sanitized on concrete platforms equipped with drains to collect potentially contaminated water or at authorized car washes.
- site organizations will be provided with sewerage, purification and evacuation systems for waste water generated on site for domestic, sanitary and rain water.

Within the organization of the site, the executor of the works will ensure the necessary drinking water for the execution staff intended for the assembly construction works, according to those established with the beneficiary (typically, commercial water in plastic containers, or by connecting to the existing source). Due to the specifics of the works to be executed, the quantities of water used are reduced. This will be used mainly for spraying the working fronts (if applicable), with the aim of reducing the particle emissions that may occur and the seeded surfaces. As a result of

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carrying out such works, practically no waste water will result, which requires its treatment and evacuation from the construction site.

It is estimated that the emissions resulting from the execution period of the project resulting from the organization of the site, the transport and handling of materials, waste, respectively the execution of rehabilitation works, which could be discharged directly or indirectly into surface or underground waters are not in significant quantities and does not change the quality category of the concerned waters.

By complying with the imposed measures, the works carried out during the execution period of the project cannot cause a significant impact on the water environment factor.

<u>Exploitation stage</u>. During the operation period of the port, the resulting household wastewater will be collected through the internal network and discharged to a wastewater pumping station located in the port access area.

To collect the rainwater from the premises, along the roads and platforms, gutters made of prefabricated concrete elements with a drain slope i = 0.005 were provided.

The gutter sections 2x20m each will be connected to the storm sewer network through spillways purchased together with the gutters.

For the mechanical purification of rainwater discharged into the Danube, two breakwater and hydrocarbon separators were provided with a coalescing filter and built-in by-pass with Q = 200/40 l/s characteristics each.

Before the discharge into the Danube, a non-return valve will be installed on the final section of the sewer, in order not to allow water from the Danube to enter the sewer in the event that its level rises above the level of the discharge mouth.

### 1.1.7.2 Soil emissions

<u>Construction stage</u>. The main sources of project pollution and soil and subsoil degradation, during the execution period, can be represented by:

- uncontrolled storage of waste and materials used in construction, respectively from the improper management of domestic and technological waste water within the site organizations;
- accidental spills of oils and fuel from the vehicles, machines and equipment used to carry out the project;
- infiltrations as a result of accidental spills of petroleum products and chemical substances at the level of work areas within the organization of the construction site;
- degradation of soil quality through improper handling/storage of excavated/excavated material;
- pollution determined by the traffic of vehicles and machines used for the realization of the project.

Part of the atmospheric pollutants (SO2, NOx, heavy metals) resulting from their operation can be deposited on the soil and can change its characteristics.

<u>Exploitation stage</u>. During the exploitation period of the port, there will be no sources of soil pollution except in the event of accidents that occur with spills of products containing dangerous substances.

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### 1.1.7.3 Air emissions

During the execution period, Tocarry out the works necessary to implement the project, the main sources of atmospheric emissions will be represented by the following sources of stationary pollution:

- activities of handling earth masses (excavation of fertile soil, excavations, fillings, leveling, loading, unloading, transport), of some construction materials (sand, earth, ballast) and the temporary storage of construction materials that can cause dust to be entrained in wind suspension;
- wind erosion on disturbed or unvegetated land surfaces;
- construction site traffic determined by the activity of machinery and equipment used to carry out the project. Pollutant and dust emissions vary depending on the capacity and age of the engine used, the amount and type of fuel, the type of activity carried out, the area on which the activity is carried out, the distances covered, the specifics of the operation or the atmospheric conditions.

By carrying out the execution works established by the project, it is estimated that the maximum permissible concentrations of suspended dust, SO2, NO2, CO, Pb established by Law 104/2011 on ambient air quality and other applicable regulations will not be exceeded.

Taking into account the above, it is estimated that the execution works provided by the project cannot cause a significant impact on the environmental factor, air, due to the local and temporary nature of the works to the extent that the protective measures provided and the requirements will be respected provided by the applicable legislation.

Exploitation stage. During the operation period of the port, there are no sources of air pollution that produce a significant impact. The sources of pollution come from car and naval traffic in the port area, but they will not be greater than those existing at the moment, especially since the rehabilitation works of the port also provide for the development of the platform where it will take place car traffic in the port area, thus avoiding the acceleration and braking of vehicles that will transit the area.

### 1.1.7.4 Noise and vibration emissions

The main sources of noise during the execution period will be represented by:

- car traffic from the site organization area and from the access roads;
- activities provided by the project, construction, excavation, handling of ballast materials, respectively their loading and unloading;
- operation of the machines used in the construction process (transporters, heavy-duty trucks, concrete mixers, excavators, cranes, bulldozers, compressors).

The effects of these noise sources are superimposed on the noise produced by existing activities in the area such as traffic on existing roads in the vicinity of the site. In the project area there are a number of sensitive receptors that may be affected by the noise sources associated with the project and are represented by natural areas where fauna species are present - ROSCI0045 Jiului Corridor / ROSPA0023 Jiu - Danube Confluence.

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The location of the pyritic ash dumps that are the subject of this project is located more than 3500 m from the first houses in the Bechet town so that the rehabilitation works of the port infrastructure in the port of Bechet will not create an impact or discomfort for the population in the area in terms of noise and vibrations.

To reduce the level of noise and vibrations throughout the construction site's existence, the most modern and efficient equipment and installations will be used, which produce low noise and vibrations, Toavoid the possible negative impact on the execution staff, the staff who carry out their current activity in the vicinity of the construction site or human settlements in the immediate vicinity. The machines and equipment specific to the works performed on the construction site must comply with the rules in force so as not to affect the health of the execution personnel.

Other measures proposed to limit noise:

- avoiding the carrying out of construction works in sensitive periods for the species protected by the fauna located in the areas adjacent to the embankment in the Natura 2000 areas ROSCI0045 Jiului Corridor/ ROSPA0023 Jiu - Danube Confluence (deposition of bridges and nesting: April-May);
- training the staff to stop the engines of the machines when performing operations of unloading materials or reducing the height of unloading construction materials;
- establishing access routes/roads outside inhabited areas (bypassing localities) with materials necessary for the realization of the project;
- limiting the speed of movement of machinery and vehicles (about 20 km/h), especially in areas where access through localities cannot be avoided;

It is expected that the implementation of the project does not substantially change the noise level compared to the current noise level.

Taking into account the local and temporary nature of the works and the measures expected to be adopted during the execution period of the works, it is estimated that the level of noise and vibrations will fall within the limits imposed by the legislation in force, *Order no. 119/2014 for the approval of the Hygiene and Public Health Norms regarding the living environment of the population, respectively STAS no. 10009/2017/C91:2020 3 Urban Acoustics.* 

Exploitation stage. On the site of the Bechet port, after the completion of the rehabilitation works, the level of noise and vibrations will not be higher than the existing one. It will be generated by car traffic, ship traffic, loading/unloading of goods from/to ships. The noise level at the boundary of the premises will respect the maximum values provided by STAS no. 10009/2017/C91:2020 3 Urban Acoustics, of 65 dB, the area being an industrial one.

### 1.1.7.5 Radiation emissions

During the activities carried out during the execution of the project, as well as during the operation period, no radioactive substances will be used and/or transported. Therefore, it is not necessary to adopt measures for protection against radiation.

### 1.1.8 Waste geenrated by PP and how to manage it

### 1.1.8.1 Execution stage

During the construction period, the following categories of waste are generated:

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- earth and excavated materials (stone, stone chips, concrete); category 17;
  - code 17 01 01 concrete;
  - code 17 01 04 earth and excavated materials;
- ❖ waste of mixed construction materials; category 17,
  - code 17 01 07 concrete mixtures, bricks, tiles and ceramic materials without the content of dangerous substances;
  - code 17 02 01 17 02 03: wood, glass, plastic materials;
  - code 1705 00 earth and excavated or dredged materials;
  - code 17 09 00 mixed waste of construction materials;
  - code 17 04 07 metals (including their alloys), metal mixtures;
  - code 17 04 11 waste from making the electrical connection;
  - code 17 04 metals (including their alloys): code 17 04 05 iron and steel; code 17 04 07 metallic mixtures.
- recyclable waste: categories 15 and 20,
  - code 15 01 01 paper-cardboard packaging;
  - code 15 01 02 plastic packaging;
  - code 15 01 03 wooden packaging;
  - code 15 01 07 glass packaging;
  - code 20 01 01 paper and cardboard waste;
  - code 20 01 08 biodegradable waste from kitchens and canteens;
  - code 20 01 39 plastic materials;
  - code 20 01 38 wood
- used oil waste:
  - code 13 07 01 synthetic motor oils;
- ❖ mixed municipal waste (household waste): category 20, code 20 03 01.

To ensure an adequate level of protection for people and the environment, the technical revisions of the machines/means of transport used during the construction period (oil changes, replacement of oil filters, brake fluid, antifreeze, replacement of used accumulators, used tires) will be performed in authorized specialized service workshops.

The waste generated during the execution of the designed construction works is waste that can be recovered (wood material waste, metal waste), inert waste (soil and stones from excavation that can be recovered for fillings); mixed municipal waste will be disposed of by authorized economic agents specialized in sanitation.

### 1.1.8.2 Exploitation stage

During the operating period, the generated waste will be taken over by the CN APDF SA administrator or the operators (from the commercial port area) by authorized operators for the types of waste generated and transported for disposal / recovery depending on the type of waste, both from the commercial port area especially from the passenger port area. The storage of the generated waste will be done on waterproof (concrete) platforms, in the bins intended for each type of waste, labeled with the code of the stored waste, sized according to the quantities of waste that can be generated to prevent their non-compliant storage outside the bins. A monthly record of the quantities/types of waste generated, handed over for disposal/recovery will be maintained

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and will be reported either at the request of the environmental authorities, or at the deadline established by the regulatory acts, or annually (according to the provisions of GEO 92/2021 regarding the regime refuse).

## The waste management plan

Waste management must be carried out without affecting human health and the environment and without generating risks for air, water, soil, subsoil, fauna and flora.

The prevention or reduction of the production of the amount of waste generated as a result of the execution stage will be possible through: reuse/recovery of waste (metal, soil from excavation or other waste that can be reused) through recycling, recovery or any other process through which materials are obtained secondary premiums.

The disposal of waste resulting from the use of chemical products will be carried out by companies authorized in terms of environmental protection.

The waste management plan involves the collection/storage/disposal of both solid waste and hazardous and non-hazardous liquid waste. In this sense, the waste generated during execution periods is managed as follows:

- textile waste (clothes) are collected in sealed containers and are taken over under a contract with an authorized company;
- household waste is pre-collected in containers (bins) located in the site organization area.
   The disposal and storage of household waste is done by an authorized company;
- hazardous chemical packaging waste will be collected in large bags and recycled based on contracts with authorized companies;
- used oils will be collected in metal barrels and recycled through authorized companies.

Employees will be trained on waste handling as well as how to sort them by category, in the containers specially provided for each category of waste. The delivery of waste generated to the extent of its generation will be pursued Toavoid the production of stocks that could harm environmental factors.

The contractor will prepare and keep records of the recovered quantities in accordance with the provisions of GD 856/2002 and GEO No. 92/2021 regarding the waste regime, with subsequent amendments and additions.

The contractor will ensure that it complies with the requirements of the National Waste Management Plan and the National Waste Prevention Plan.

The principle of the "<u>waste hierarchy</u>", which classifies the different waste management options, will be put into practice and priority will be given to waste prevention, waste minimization, waste reuse, recycling, energy recovery and, finally, disposal by incineration or storage.

1.1.9 Requirements related to the use of the land, necessary for the execution of the PP (category of land use, the land surfaces that will be temporarily / permanently occupied by the PP, for example access roads, technological, road embankment, trenches and retaining walls, drainage effects, others)

The total area (built area) on which the port infrastructure rehabilitation works will be carried out is:

Modernization of the Danube mooring front 28140 sq m of which 10918 sq m (vertical wharf)
 + 17222 sq m (concrete platforms behind the wharf).

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- rehabilitation of the RO-RO ramp and access roads 17,084 sq.m. of which 4,086 sq.m. rehabilitation of the ferry crossing ounct ramp, 588 sq.m. rehabilitation and expansion of the breakwater directing the ferry crossing point and 12,410 sq.m. rehabilitation of perimeter roads and platforms in the area of the crossing point of the border.

The current destination of the land is preserved, the planned works being the rehabilitation of the existing wharfs, the rehabilitation of the existing roads and platforms in the port, the restoration of the water supply system of the berths and the rainwater drainage system. The land is located in the suburbs of the city of Bechet and belongs to the public domain of the Romanian State concessionaire to CN APDF SA Giurgiu according to Concession Agreement no. 3898 of 15.10.2008 issued by the Ministry of Transport and CN APDF SA Giurgiu conf CF no. 30104 of 18.01.2022.

Current use and destination according to PUG:

- The area of naval communication roads with an area of 76,537.00 square meters.

The total area of the land is 76537 sq m.

S hydrotechnical constructions, platforms and roads - 49024 sq m

S existing buildings that are not part of the project - 3150 sq m.

According to PUG approved with HCL no. 11/2021, the location is located in the area of naval communication routes with height regime P+1-2E+M, POT max – 80% and CUT max – 3.2.

The dominant function – the area of naval communication routes.

# 1.1.10 Additional services required by the implementation of the PP (decommissioning / replacement of pipelines, high voltage lines, necessary construction means), respectively the way in which accessing these additional services can affect the integrity of ANPIC

The works that are the subject of this documentation (rehabilitation of the port infrastructure in the Bechet port area) will not lead to the emergence of other activities compared to the existing ones. The aim is to improve the conditions for receiving/transmitting activities, loading/unloading goods from/to cargo ships, to facilitate the transit of various categories of goods using naval transport.

The project takes place inside an existing industrial platform. The natural resources used in the execution stage are water and granulometric material necessary for the execution of the works as described in the previous chapters. Water consumption will be strictly limited to the hygienic-sanitary needs and for the execution of the works provided for in the project.

The drinking water required by the work execution staff will be provided by the executor, through the purchase of dispensers.

The location on which the works will be carried out is an anthropized one, whose current use is that of an industrial units area. No additional areas of land will be occupied compared to those that exist at the moment.

During the execution of the works, no other temporary land surfaces will be occupied. The site organization will be set up inside the port platform, the platform that is already concreted and waterproofed, so protection against any environmental incidents (accidental leaks, spills, etc.) will be ensured.

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The location of the Bechet port completely overlaps with the Natura 2000 sites ROSPA0023 Jiu – Danube Confluence / ROSCI0045 Jiului Corridor.

The project does not aim to use biodiversity either during the implementation of the works related to the investment, or in the period after their completion. Raw materials and materials will not be procured from the Natura 2000 site area, but will be brought from operators authorized for this activity.

Considering the previously presented aspects, there are no other factors or other related developments that could lead to the Damage of the existing protected natural area in the analyzed area.

## 1.1.11 Activities generated as a result of PP implementation

With the implementation of this project, an economic development of the area and implicitly of the Bechet locality will be ensured, but also a fluidization of the car and naval traffic in the area, thus reducing the noxious emissions from the exhaust gas and the noise level.

## 1.1.12 Description of PP's technological processes

The technology and activities through which the project will be carried out are described in the previous chapters (*Chapter 1.1.6. - Information on the production being carried out, information on the raw materials, substances or chemical preparations used*).

## 1.1.13 Existing PP characteristics, proposed or approved, that may generate cumulative impact with the PP that is in the assessment procedure and that may affect ANPIC

To carry out the analysis of the cumulative impact of the proposed project with other investments, the information from the main sources regarding the possible projects was checked, respectively the sites of the Dolj Environmental Protection Agency, the website of the National Agency for Environmental Protection, Bechet City Hall or the internal information of the Designer and of the drafter of the environmental studies (EA, RIM). On the site of these institutions, no projects under implementation were identified that would contribute to generating the cumulative impact in the area adjacent to the investment project. Considering the distance of 3,500 km to the locality of Bechet, the zonal projects currently being implemented/proposed to be carried out within the locality do not have a cumulative impact with the activities proposed by the port infrastructure rehabilitation project in the port of Bechet.

### 1.1.14 Other information requested by ACPM

It is not the case.

### 1.1.15 Summary of the effects generated by the implementation of PP

The implementation of the project will not generate a significant negative impact on the species and habitats of the protected natural area located in the area of influence, respectively *ROSPA0023 Jiu – Danube Confluence / ROSCI0045 Jiului Corridor*, even more so with the site area, even though it is in the area of the two sites Natura 2000 is an industrial, anthropized area where, and at the moment, activities similar to those proposed to be carried out during the

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execution period are carried out, there is car traffic, naval traffic, human presence in the area, etc. so that the realization of this project does not will generate a significant impact on the species in the area of the sites neither during the period of execution of the works nor during the period of operation, all the more since this study proposes measures that must be taken into account.

## 1.1.16 Synthesis maps of all interventions that have the potential to affect ANPIC

The maps with the situation plan, the proposed works on the dumps (sections through the dumps, etc.), are attached to this documentation.

## a.2. Effects generated by PP

The effects generated by the implementation of the PP are presented in a table, for each of the interventions of the project regarding the closing works of the 5 pyrite ash dumps on the site of Donau Chem SRL.

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## Table no. 1 - Summary of the effects generated by the implementation of the PP

Stage	Effects	Type/types of intervention that generate the effect	Method of quantification	Quantification of effects	Distance to which the effects are felt	ANPIC potentially affected	Other additional information
	Emissions generated	The use of vehicles, the operation of machinery and equipment necessary for the execution of the works	Emission	For the assessment of the level of emissions, the situation with an average traffic level in the area of the		Sites in the	
	by the execution of works	Loading / unloading of materials used in the execution of works	level calculations	construction site, the operation in the most unfavorable situation with all the machines in operation, was taken into account	Maximum 100- 200 m	ROSCI0045 / ROSPA0023 project area	It's not the case
Execution period	The	Execution of the works proposed by the project	Calculations	Toevaluate the level of noise generated by the execution of the project, a situation as unfavorable as possible was considered, i.e. the	Manian ma 000	Sites in the	lika mat tha
	generation of noise and vibrations	The operation of the equipment, machines and means of transport necessary for the execution of the works	of the generated noise level	operation of all the equipment and machinery involved in the construction activities, in a work front with a length of 1 km located in the area of the nearest town	Maximum 200 – 300 m	ROSCI0045 / ROSPA0023 project area	It's not the case
		The operation of the equipment, machinery and means of		Depending on the machines with which	450 – 500 m, depending on	Sites in the ROSCI0045 /	

Stage	Effects	Type/types of intervention that generate the effect	Method of quantification	Quantification of effects	Distance to which the effects are felt	ANPIC potentially affected	Other additional information
	Emissions in water	transport necessary for the execution of the works and which may generate accidental spills of petroleum products, accidental spills of petroleum products from the dredger used for dredging	Propagation distance calculations	the works will be carried out in the site area	the speed of the water flow	ROSPA0023 project area	It's not the case
		Inadequate management of household water within the site organization					
Operating	Generation of emissions	Operation of goods transport vehicles	Emission level calculations / pollutant dispersion modeling	For the assessment of the level of emissions, the situation with an average traffic level in the site area was taken into account	Maximum 100- 200 m	Sites in the ROSCI0045 / ROSPA0023 project area	
period	Noise generation	Operation of equipment / vehicles / ships for carrying out current port activities	Emission level calculations	For the assessment of the level of emissions, the situation with an average traffic level in the site area was taken into account	Maximum 100- 200 m	Sites in the ROSCI0045 / ROSPA0023 project area	

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## a.3. Other PPs with which the analyzed PP can generate cumulative impact

Tocarry out the analysis of the cumulative impact of the proposed project with other investments, the information from the main sources regarding the projects that may be implemented, respectively the sites of the Dolj Environmental Protection Agency, the website of the National Agency for Environmental Protection, Bechet City Hall or the internal information of The designer and developer of environmental studies (EA, RIM). On the site of these institutions, no projects under implementation were identified that would contribute to generating the cumulative impact in the area adjacent to the investment project.

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## b) INFORMATION REGARDING THE NATURAL AREA OF COMMUNITY INTEREST AFFECTED BY THE IMPLEMENTATION OF PP

## b.1. Yesta regarding the natural area protected by community interest

The "Rehabilitation and modernization of port infrastructure in Bechet port" project aims to improve the environmental aspects and improve the infrastructure conditions in the Bechet port area.

Considering the current situation of the Bechet port infrastructure, the beneficiary, CN APDF SA Giurgiu, proposes to carry out the necessary infrastructure works for the relaunch of the naval transport activity in the Bechet port, in correlation with the short, medium and long term development plans of the Ministry Transport and Infrastructure and with the requirements of the European Union in the field of naval transport.

By rehabilitating the infrastructure of Bechet port and bringing the port to the technical-functional parameters of other ports located in the member states of the European Union, port and commercial activities in the area will be relaunched, contributing to regional development.

According to the information we have and the legislation in force, respectively:

- GEO no. 57/2007 (supplemented and amended by GEO no. 154/2008) regarding the regime of natural protected areas, conservation of natural habitats, flora and fauna;
- GD no. 1143/2007 regarding the establishment of new protected areas;
- Law no. 5/2000 on the approval of the national territory development plan Section III Protected areas.

The analyzed project is located in the area of Natura 2000 sites of community importance:

• ROSCI0045 Jiului Corridorsi respectiv ROSPA0023 Jiu – Dunare care se suprapun cu zonele deservite de portul Bechet (asa cum se poate observa si din figura de mai jos).

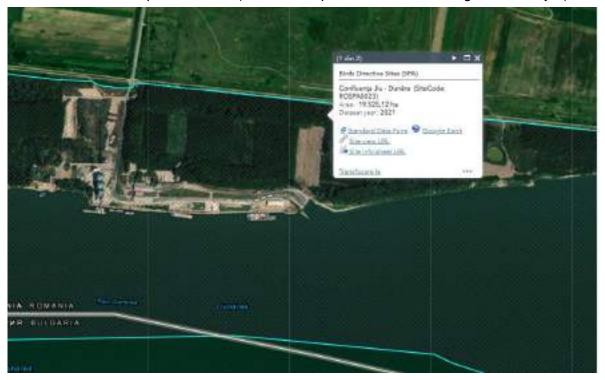


Figure no. 1 - Location of the objective and the Natura 2000 areas

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Other protected natural areas located both on the territory of Romania and on the territory of the neighboring state, Bulgaria, located at a distance of up to approximately 20 km from the site (as can be seen from the figure below) are:

- **BG0000614 Reka Ogosta** located on the Bulgarian shore, approximately 3.5 km in the south-west direction from the Bechet port platform.
- **BG00000334 Ostrov** identified at a distance measured on the plan of approximately 3.9 km south-east from the Bechet port platform.



Figure no. 2- Objective location in relation to Natura 2000 sites

The STEREO 70 coordinates of the location are:

х	у
415812,512	250439,136
415822,214	250415,691
416467,376	250400,330
416499,714	250380,118

In the overlapping area of the project with the sites ROSCI0045 The Jiului Corridor and respectively ROSPA0023 Jiu – Danube, as can be seen from the figure below, the area is anthropized, being an industrial area.

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Figure no. 3 – The site area overlapped with the ROSCI0045/ROSAP0023 area





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Figure no. 4 – The area of the site at the border with the project location

The location and identification of sensitive areas in the project area is based on the technical documentation, situation plans, STEREO 70 coordinates of the project.

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## Table no. 2 – Yesta on ANPIC affected by PP implementation

Name and ANPIC code	Area (ha)	Importance/ Role	Management plan and no. OM by which it was approved	Decision/ Note of approval of the conservation objectives of ANPIC	The biogeographical region/regions in which ANPIC is located	Ecosystem types	Overlap with other ANPIC or AP	ANPIC's relations with other ANPIC	Other particularities
ROSCI0045 Corridor - Jiului	71452	Ensuring or maintaining, where necessary, a favorable state of conservation for species and habitats of community interest and representative of the biogeographical region in which they fall	It has PM approved by OMMAP no. 1645/2016	Decision no. 657/03.12.2021 for the completion of Annex 1 (Specific conservation objectives for the habitats and species in ROSCI0045 Jiului Corridor) to Decision no. 404/11.09.2020 regarding the approval of the methodological norms regarding the implementation of the conservation objectives from the Annex to Order no. 1645/2016 regarding the	Continental (100%)	Flowing waters, stagnant waters, continental steppes, sand dunes, natural grasslands, xerophilous, humid, mesophilic, temperate forests, agricultural ecosystems, horticulture, built-up areas, industrial sites, habitat complexes	ROSAP0023 Jiu - Danube Confluence	In the site area, the site ROSCI0045 Jiului Corridoroverlaps with ROSPA0023 Jiu - Danube Confluence	-

Name and ANPIC code	Area (ha)	Importance/ Role	Management plan and no. OM by which it was approved	Decision/ Note of approval of the conservation objectives of ANPIC	The biogeographical region/regions in which ANPIC is located	Ecosystem types	Overlap with other ANPIC or AP	ANPIC's relations with other ANPIC	Other particularities
				approval The management plan and the Regulation of protected natural areas ROSCI0045 Jiului Corridor, ROSPA0023 Jiu - Danube Confluence , ROSAP0010 Bistret and Natural Reserves Dranic Fossil Lake - 2391 and Zaval Forest - IV.33					
ROSAP0023 Jiu - Danube Confluence	19800	Ensuring or maintaining, where necessary, a favorable state of conservation for species and habitats of community	It has PM approved by OMMAP no. 1645/2016	Decision no. 404/11.09.2020 regarding the approval of the Methodological Norms regarding the implementation of conservation	Continental (100%)	Flowing waters, stagnant waters, continental steppes, sand dunes, natural grasslands,	ROSCI0045 Corridor - Jiului	In the location area, the site overlaps ROSPA0023 Jiu - Danube Confluence with ROSCI0045 Jiului Corridor	

Name and ANPIC code	Area (ha)	Importance/ Role	Management plan and no. OM by which it was approved	Decision/ Note of approval of the conservation objectives of ANPIC	The biogeographical region/regions in which ANPIC is located	Ecosystem types	Overlap with other ANPIC or AP	ANPIC's relations with other ANPIC	Other particularities
		interest and representative		objectives from the Annex to		xerophilous, humid,			
		of the		Order no.		mesophilic,			
		biogeographical		1645/2016		temperate			
		region in which		regarding the		forests,			
		they fall		approval of the		agricultural			
				Management		ecosystems,			
				Plan and the		horticulture,			
				Regulation of		built-up			
				the protected		areas,			
				natural areas		industrial			
				ROSCI0045		sites,			
				Jiului Corridor, ROSPA0023		habitat			
				Confluenta Jiu -		complexes			
				Danube,					
				ROSPA0010					
				Bistret and					
				Natural					
				Reserves					
				Dranic Fossil					
				Lake - 2391 and					
				Zaval Forest -					
				IV.33					

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## b.2 Yesta on habitats / species in ANPIC possibly affected by PP - ROSCI0044 Corabia – Turnu Măgurele

The Data were taken from the Management Plan approved by OMMAP no. 1645/2016, Decision no. 657/03.12.2021 for the completion of Annex 1 (Specific conservation objectives for the habitats and species in ROSCI0045 Jiului Corridor) to Decision no. 404/11.09.2020 regarding the approval of the methodological norms regarding the implementation of the conservation objectives from the Annex to Order no. 1645/2016 regarding the approval The management plan and the Regulation of protected natural areas ROSCI0045 Jiului Corridor, ROSPA0023 Jiu - Danube Confluence, ROSAP0010 Bistret and Natural Reserves Dranic Fossil Lake - 2391 and Zaval Forest - IV.33, Decision no. 404/11.09.2020 regarding the approval of the Methodological Norms regarding the implementation of conservation objectives from the Annex to Order no. 1645/2016 regarding the approval of the Management Plan and the Regulation of the protected natural areas ROSCI0045 Jiului Corridor, ROSPA0023 Jiu - Danube Confluence, ROSPA0010 Bistret and Natural Reserves Dranic Fossil Lake - 2391 and Zaval Forest - IV.33 issued by MMAP - ANANP, geo-references spatial, field studies and other relevant sources.

Data on species and habitats possibly affected by PP are presented according to the table below.

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## Table no. 3 - Yesta on species and habitats possibly affected by PP

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
Habitats											
1530* - Meadows and Pannonian salt marshes	The habitat is not found in the project area	-	-	-	-	648	Favorable	Maintaining the state of preservation	-	It's not the case, the location is not in the habitat area	-
2130* - Coastal dunes with herbaceous vegetation - gray dunes	The habitat is not found in the project area	-	-	-	-	367	Favorable	Maintaining the state of preservation	-	It's not the case, the location is not in the habitat area	-
2190 - Humid interdunal depressions	The habitat is not found in the project area	-	-	-	-	210	Unfavorable - inadequate	Improving the state of conservation	-	It's not the case, the location is not in the habitat area	-
3130 - Oligotrophic to mesotrophic stagnant waters, with Littorelletea uniflorae and/or Isoëto- Nanojuncetea vegetation	The habitat is not found in the project area	-	-	-	-	17,90	Unfavorable - inadequate	Improving the state of conservation	-	It's not the case, the location is not in the habitat area	-
3140 - Strongly oligo- mesotrophic waters with benthic	The habitat is not found in the project area but in its	-	-	-	-	0,88	Favorable	Maintaining the state of preservation	-	It's not the case, the location is not in the habitat area	-

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species		Perspectives - climate change
vegetation of Chara species	immediate vicinity										
3150 - Natural eutrophic lakes with Magnopotami on or Hydrocharitio n vegetation	The habitat is not found in the project area but in its immediate vicinity	-	-	-	-	32	Favorable	Maintaining the state of preservation	-	It's not the case, the location is not in the habitat area	-
3260 - Watercourses from the plain area to the mountain floor, with vegetation of Ranunculion fluitantis and Callitricho- Batrachion	The habitat is not found in the project area but in its immediate vicinity	-	-	-	-	0,350	Favorable	Maintaining the state of preservation	-	It's not the case, the location is not in the habitat area	-
3270 - Rivers with wet banks, with vegetation of Chenopodion rubri p.p. and Bidention p.p	The habitat is not found in the project area but in its immediate vicinity	-	-	-	-	15,30	Favorable	Maintaining the state of preservation	-	It's not the case, the location is not in the habitat area	-
6120* - Xeric and calciphilous grasslands on sands	The habitat is not found in the project area but in its	-	-	-	-	1610	Unfavorable - inadequate	Improving the state of conservation	-	It's not the case, the location is not in the habitat area	-

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species		Perspectives - climate change
	immediate vicinity										
6240* - Subpannonia n steppe meadows	The habitat is not found in the project area but in its immediate vicinity	-	-	-	-	121	Unfavorable - inadequate	Improving the state of conservation	-	It's not the case, the location is not in the habitat area	-
6260* - Pannonian steppes on sand	The habitat is not found in the project area but in its immediate vicinity	-	-	-	-	3101	Unfavorable - inadequate	Improving the state of conservation	-	It's not the case, the location is not in the habitat area	-
with hygrophilous tall grasses from plains to	The habitat is not found in the project area but in its immediate vicinity	-	-	-	-	1,85	Favorable	Maintaining the state of preservation	-	It's not the case, the location is not in the habitat area	-
6440 - Alluvial meadows of river valleys with Cnidion dubii	The habitat is not found in the project area but in its immediate vicinity	-	-	-	-	127	Favorable	Maintaining the state of preservation	-	It's not the case, the location is not in the habitat area	-

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species		Perspectives - climate change
6510 - Low altitude hay (with Alopecurus pratensis, Sanguisorba officinalis)	The habitat is not found in the project area but in its immediate vicinity	-	-	-	-	252	Unfavorable - inadequate	Improving the state of conservation	-	It's not the case, the location is not in the habitat area	-
9130 - Asperulo- Fagetum type beech forests	The habitat is not found in the project area but in its immediate vicinity	-	-	-	-	1786	Unfavorable - inadequate	Improving the state of conservation	-	It's not the case, the location is not in the habitat area	-
9170 - Galio- Carpinetum type hornbeam oak forests	The habitat is not found in the project area but in its immediate vicinity	-	-	-	-	3700	Unfavorable - inadequate	Improving the state of conservation	-	It's not the case, the location is not in the habitat area	-
91E0* - Alluvial forests of Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	The habitat is not found in the project area but in its immediate vicinity	-	-	-	•	257	Unfavorable - inadequate	Improving the state of conservation	-	It's not the case, the location is not in the habitat area	-

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species		Perspectives - climate change
91F0 - Mixed meadow forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia along large rivers (Ulmenion minoris)	The habitat is not found in the project area but in its immediate vicinity	-	,	-		4333	Unfavorable - inadequate	Improving the state of conservation	-	It's not the case, the location is not in the habitat area	-
91I0* - Euro- Siberian steppe forests of Quercus spp.	The habitat is not found in the project area but in its immediate vicinity	-	-	-		3157	Favorable	Maintaining the state of preservation	-	It's not the case, the location is not in the habitat area	-
91M0 - Balkan- Pannonian forests of sky and gorun	The habitat is not found in the project area but in its immediate vicinity	-	-	-	-	10125	Favorable	Maintaining the state of preservation	-	It's not the case, the location is not in the habitat area	-
91Y0 - Dacian forests of oak and hornbeam	The habitat is not found in the project area	-	-	-	-	2958	Unfavorable - inadequate	Improving the state of conservation	-	It's not the case, the location is not in the habitat area	-

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species		Perspectives - climate change
	but in its immediate vicinity										
92A0 - Gallery forests with Salix alba and Populus alba	The habitat is not found in the project area but in its immediate vicinity	-	-	1		6172	Unfavorable - inadequate	Improving the state of conservation	-	It's not the case, the location is not in the habitat area	-
Mammals											
- Furasian otter	The species can be found in the project area	unknown	-	unknown	At least 14889,98 ha si 225,20 km	-	Favorable	Maintaining the state of preservation	-	The species is not found in the project implementation area	Stable
citellus - European soil	The species can be found in the project area	unknown	-	unknown	unknown	-	Favorable	Maintaining the state of preservation	-	The species is not found in the project implementation area	Stable
Amphibians and	reptiles										
European fire-	The species can be found in the project area	unknown	-	unknown	unknown	-	Favorable	Maintaining the state of preservation	-	The species is not found in the project implementation area	Stable
1193 – Bombina variegata	The species can be found in the project area	unknown	-	unknown	unknown	-	Favorable	Maintaining the state of preservation	-	The species is not found in the project implementation area	Stable

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
1166 Triturus cristatus	The species can be found in the project area	unknown	-	unknown	unknown	-	Favorable	Maintaining the state of preservation	-	The species is not found in the project implementation area	Stable
1993 Triturus dobrogicus	The species can be found in the project area	unknown	-	unknown	unknown	-	Favorable	Maintaining the state of preservation	-	The species is not found in the project implementation area	Stable
orbicularis	The species can be found in the project area	unknown	-	unknown	unknown	-	Favorable	Maintaining the state of preservation	-	The species is not found in the project implementation area	Stable
Invertebrates											
1044 – Coenagrion mercuriale	The species can be found in the project area and not in the site area based on the substantiation studies	_	-	-	-	-	-	-	-	-	-
4048 – Isophya costata	The species can be found in the project area and not in the site area based on the substantiation studies		-	-	-	-	-	-	-	-	-

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
4054 – Coenagrion ornatum	The species can be found in the project area and not in the site area based on the substantiation studies		-	-	-	-	-	-	-	-	-
1042 – Leicorrhinia pectoralis	The species can be found in the project area and not in the site area based on the substantiation studies		-	-	-	-	-	-	-	-	-
4013 – Carabus hungaricus	The species can be found in the project area		-	unknown	unknown	ı	Unfavorable - inadequate	Improving the state of conservation	-	The species is not found in the project implementation area	Stable
1083 -Lucanus	The species can be found in the project area		-	unknown	unknown	-	Unfavorable - inadequate	Improving the state of conservation	-	The species is not found in the project implementation area	Stable
1089 – Morimus funereus	The species can be found in the project area		-	unknown	At least32669	-	favorable	Maintaining the state of preservation	-	The species is not found in the project implementation area	Stable
4014-Carabus variolosus	The species can be found in the project area		-	unknown	unknown	-	unknown	Maintenance or Improving	-	The species is not found in the project	Stable

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
								the state of conservation		implementation area	
1088 – Cermbyx	The species can be found in the project area	unknown	-	unknown	At least24273	-	Unfavorable - inadequate	Improving the state of conservation	-	The species is not found in the project implementation area	Stable
1060 – Lycaena	The species can be found in the project area		-	unknown	unknown	-	favorable	Maintaining the state of preservation	-	The species is not found in the project implementation area	Stable
Euphydryas	The species can be found in the project area		-	unknown	unknown	-	favorable	Maintaining the state of preservation	-	The species is not found in the project implementation area	Stable
1032 – Unio	The species can be found in the project area		-	unknown	unknown	-	unknown	Maintenance or Improving the state of conservation	-	The species is not found in the project implementation area	Stable
Fish											
immaculata	The species can be found in the project area	5000 indivizi	-	-	500-1000 ha	-	Nefavorable	Improving the state of conservation	-	The species is not found in the project implementation area	Stabile
1130 – Aspius aspius (avat)	The species can also be found in the project area	unknown	-	unknown	At least 73,20 km	-	Unfavorable - inadequate	Improving the state of conservation	-	Low sensitivity by observing the measures	Stable

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
1160 – Zingel streber (fusar)	The species cannot be found in the project area	unknown	-	unknown	At least 20,33km	-	Unfavorable - inadequate	Improving the state of conservation	-	The species is not found in the project implementation area	Stable
1159 – Zingel zingel (fusarul mare)	The species can also be found in the project area	unknown	-	unknown	At least 165 km	-	Unfavorable - inadequate	Improving the state of conservation	-	Low sensitivity by observing the measures	Stable
1145 – Misgurnus fossilis (tipar)	The species cannot be found in the project area	unknown	-	unknown	unknown	-	Unfavorable - inadequate	Improving the state of conservation	-	The species is not found in the project implementation area	Stable
1149 – Cobitis taenia (zvarluga)	The species cannot be found in the project area	unknown	-	unknown	At least 73,20 km	-	Unfavorable - inadequate	Improving the state of conservation		The species is not found in the project implementation area	Stable
4125 – Alosa immaculata	The species can also be found in the project area	unknown	-	unknown	unknown	-	Favorable	Maintaining the state of preservation	-	Low sensitivity by observing the measures	Stable
1124 – Gobio albipinnatus	The species cannot be found in the project area	unknown	-	unknown	At least 171 km	-	Unfavorable - inadequate	Improving the state of conservation	-	The species is not found in the project implementation area	Stable
2511- Gobio kessleri	The species cannot be found in the project area	unknown	-	unknown	At least 171 km	-	Unfavorable - inadequate	Improving the state of conservation	-	The species is not found in the project implementation area	Stable

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
1138 – Barbus meridionalis	The species cannot be found in the project area	unknown	ı	unknown	At least 20,33 km	-	Unfavorable - inadequate	Improving the state of conservation	-	The species is not found in the project implementation area	Stable
5085 – Barbus barbus	The species cannot be found in the project area	unknown	ı	unknown	At least 152 km	-	Unfavorable - inadequate	Improving the state of conservation	-	The species is not found in the project implementation area	Stable
2555 Gymnocephalus baloni	The species can be found in the project area and not in the site area based on the substantiation studies		-	-	-	-	-	-	-	-	-
Gymnocephalus	The species can also be found in the project area	unknown	-	unknown	At least 73,20 km	-	Unfavorable - inadequate	Improving the state of conservation	-	Low sensitivity by observing the measures	Stable
2522 – Pelecus cultratus (sabita)	The species can also be found in the project area	unknown	-	unknown	At least 73,2km	-	Unfavorable - inadequate	Improving the state of conservation	-	Low sensitivity by observing the measures	Stable
	The species can be found in the project area	10000 indivizi	-	-	200-300 ha	-	Favorable	Maintaining the state of preservation	-	The species is not found in the project implementation area	Stable
1134 Rhodeus sericeus amarus	The species can also be	unknown	-	unknown	unknown	-	Unfavorable - inadequate	Improving the state of conservation	-	Low sensitivity by observing the measures	Stable

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
	found in the project area										
Flora	project area										
1428 Marsile a quadrifolia (Four-leaf clover, Water clover)	The species can be found in the project area and not in the site area based on the substantiatio n studies	-	-	-	-	-	-	-	-	-	-
Avifauna											
A060 Aythya nyroca	The species can be found in the project area	unkno wn	-	Increasi ng	Unknown	-	Unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementatio n area	Stable
A056 – Anas clypeata	The species can be found in the project area	At least1 25	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stable
A052 – Anas crecca	The species can be found in the project area	At least4 00	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stable

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
A050 – Anas Penelope	The species can be found in the project area	At least1 25	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	1	The species is not found in the project implementatio n area	Stable
A055 – Anas querquedula	The species can be found in the project area	At least4 00	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stable
A051 – Anas strepera	The species can be found in the project area	At least1 25	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	1	The species is not found in the project implementation area	Stable
A041 – Anser albifrons	The species can be found in the project area	At least 350	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stable
A043-Anser anser	The species can be found in the project area	At least 350	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stable
A059 Aythya ferina	The species can be found in the project area	At least 25 p si 300 i	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stable
A061 -Aythya fuligula	The species can be found in the project area	At least 125	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of	-	The species is not found in the project	Stable

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
								preservati		implementatio	
		Δ.			A ( ) (			on		n area	
A459 – Larus cachinnans	The species can be found in the project area	At least 55 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stable
A179 – Larus ridibundus	The species can be found in the project area	At least 55 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stable
A053- Anas platyrhynchos	The species can be found in the project area	At least 400 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stable
A125 Fulica atra	The species can be found in the project area	At least 250 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stable
A017 Phalacrocora x carbo	The species can be found in the project area	At least 175 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stable
A005 – Podiceps cristatus	The species can be found in the project area	At least 175 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stable

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
A004 – Tachybaptus ruficollis	The species can be found in the project area	unkno wn	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stable
A029 Ardea purpurea	The species can be found in the project area	At least 20 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A021 Botaurus tellaris	The species can be found in the project area	At least 3 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	1	The species is not found in the project implementation area	Stabile
A196 Chlidonias hybridus	The species can be found in the project area	At least 75 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A197 Chlidonias niger	The species can be found in the project area	At least 75 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A027 Egretta alba	The species can be found in the project area	At least 40 p	-	Increasi ng	At least 2500 ha	1	Favorable	Maintaini ng the state of preservati on	1	The species is not found in the project implementation area	Stabile
A026 Egretta garzetta	The species can be found in the project area	At least 30 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of	-	The species is not found in the project	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
								preservati on		implementatio n area	
A022 Ixobrychus minutus	The species can be found in the project area	At least 60 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A177 Larus minutus	The species can be found in the project area	At least 90 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A020 Pelecanus crispus	The species can be found in the project area	unkno wn	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A393 Phalacrocora x	The species can be found in the project area	At least 27 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A195 Sterna albifrons	The species can be found in the project area	At least 22 p	-	Increasi ng	At least 2500 ha	ı	Favorable	Maintaini ng the state of preservati on	1	The species is not found in the project implementatio n area	Stabile
A193 Sterna hirundo	The species can be found in the project area	At least 22 p	-	Increasi ng	At least 2500 ha	•	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
A229 Alcedo atthis	The species can be found in the project area	At least 50 p	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementation area	Stabile
A131 Himantopus Himantopus	The species can be found in the project area	At least4 0 p	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementation area	Stabile
A034 Platalea leucordia	The species can be found in the project area	Necus nocut	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementation area	Stabile
A032 Plegadis falcinellus	The species can be found in the project area	Necus nocut	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementation area	Stabile
A132 Recurvirostra avosetta	The species can be found in the project area	At least 27 p	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of	-	The species is not found in the project implementation area	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
								conservat ion			
A166 Tringa glareola	The species can be found in the project area	At least 125 i	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementatio n area	Stabile
A161 Tringa erythropus	The species can be found in the project area	Necus nocut	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementatio n area	Stabile
A156 Limosa limosa	The species can be found in the project area	At least 65 i	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementatio n area	Stabile
A271 Luscinia megarhyncho s	The species can be found in the project area	At least 200 p	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementatio n area	Stabile
A249 Riparia riparia	The species can be found in the project area	At least 750 p	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state	-	The species is not found in the project	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
								of conservat ion		implementatio n area	
A147 Calidris ferruginea	The species can be found in the project area	Necus nocut	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementation area	Stabile
A145 Calidris minuta	The species can be found in the project area	Necus nocut	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementation area	Stabile
A146 Calidris temminckii	The species can be found in the project area	Necus nocut	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	1	The species is not found in the project implementation area	Stabile
A136 Charadrius dubius	The species can be found in the project area	Necus nocut	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementatio n area	Stabile
A137 Charadrius hiaticula	The species can be	Necus nocut	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving	-	The species is not found in the project	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
	found in the project area							the state of conservat ion		implementatio n area	
A153 Gallinago gallinago	The species can be found in the project area	At least 85 i	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementation area	Stabile
A291 Locustella fluviatilis	The species can be found in the project area	At least 75 p	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementation area	Stabile
A292 Locustella lusciniodes	The species can be found in the project area	At least 75 p	-	Increasi ng	At least 2500 ha	1	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementation area	Stabile
A164 Tringa nebularia	The species can be found in the project area	Necus nocut	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementation area	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
A165 Tringa ochropus	The species can be found in the project area	At least 125 i	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	1	The species is not found in the project implementation area	Stabile
A142 Vanellus vanellus	The species can be found in the project area	At least 125 p	-	Increasi ng	At least 2500 ha	-	unknown	Maintena nce or Improving the state of conservat ion	-	The species is not found in the project implementatio n area	Stabile
A081 Circus aeruginosus	The species can be found in the project area	At least 4 p	-	Increasi ng	At least 2500 ha	-	good	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A028 Ardea cinerea	The species can be found in the project area	At least 40 p	-	Increasi ng	At least 2500 ha	-	good	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A298 Acrocephalus arundinaceus	The species can be found in the project area	At least 75 p	-	Increasi ng	At least 2500 ha	-	good	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A296 Acrocephalus palustris	The species can be found in the project area	At least 75 p	-	Increasi ng	At least 2500 ha	-	good	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
A295 Acrocephalus schoenobaen us	The species can be found in the project area	The 75 p	-	Increasi ng	At least 2500 ha	-	good	Maintaini ng the state of preservati on	1	The species is not found in the project implementation area	Stabile
A297 Acrocephalus scirpaceus	The species can be found in the project area	At least 75 p	-	Increasi ng	At least 2500 ha	-	good	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A336 Remiz pendulinus	The species can be found in the project area	unkno wn	-	Increasi ng	At least 2500 ha	-	good	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A260 Motacilla flava	The species can be found in the project area	At least 250 p	-	Increasi ng	At least 2500 ha	-	good	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A255 Anthus campestris	The species can be found in the project area	At least 65 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A133 Burhinus oedicnemus	The species can be found in the project area	At least 30 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A031 Ciconia ciconia	The species can be found in the project area	At least 100 p	-	Increasi ng	At least9250 ha	-	Favorable	Maintaini ng the state of	-	The species is not found in the project	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species		Perspectives - climate change
								preservati on		implementatio n area	
A231 Coracias garrulus	The species can be found in the project area	At least 50 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A122 Crex crex	Specia poate fi regasita in aprobeakwa tere de zona proiectului	At least 30 p	-	Increasi ng	At least1500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A338 Lanius collurio	The species can be found in the project area	At least 155 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A247 Alauda arvensis	The species can be found in the project area	At least 375 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A258 Anthus cervinus	The species can be found in the project area	unkno wn	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A257 Anthus pratensis	The species can be found in the project area	At least 115 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
A259 Anthus spinoletta	The species can be found in the project area	unkno wn	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A256 Anthus trivialis	The species can be found in the project area	At least 90 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A366 Carduelis cannabina	The species can be found in the project area	At least 65 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	1	The species is not found in the project implementation area	Stabile
A364 Carduelis carduelis	The species can be found in the project area	At least 300 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A113 Coturnix coturnix	The species can be found in the project area	At least 155 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A340 Lanius excubitor	The species can be found in the project area	At least 25 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	1	The species is not found in the project implementation area	Stabile
A230 Merops apiaster	The species can be found in the project area	At least 50 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of	-	The species is not found in the project	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
								preservati on		implementatio n area	
A383 Miliaria calandra	The species can be found in the project area	At least 155 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A262 Motacilla alba	The species can be found in the project area	At least 275 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A275 Saxicola rubetra	The species can be found in the project area	At least 175 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A351 Sturnus vulgaris	The species can be found in the project area	At least 900 p	-	Increasi ng	At least9250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A310 Sylvia borin	The species can be found in the project area	At least 250 p	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of preservati on	1	The species is not found in the project implementation area	Stabile
A309 Sylvia communis	The species can be found in the project area	At least 200 p	-	Increasi ng	At least4250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
A232 Upupa epops	The species can be found in the project area	At least 175 p	-	Increasi ng	At least7500 ha	-	Favorable	Maintaini ng the state of preservati on	1	The species is not found in the project implementation area	Stabile
A089 Aquila pomarina	The species can be found in the project area	At least 7 i	-	Increasi ng	At least9250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A403 Buteo rufinus	The species can be found in the project area	At least 3 p	-	Increasi ng	At least9250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A224 Caprimulgus europaeus	The species can be found in the project area	At least 75 p	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A090 Ciconia nigra	The species can be found in the project area	unkno wn	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A238 Dendrocopos medius	The species can be found in the project area	At least 125 p	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A429 Dendrocopois syriacus	The species can be found in the project area	At least 125 p	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of	-	The species is not found in the project	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
								preservati on		implementatio n area	
A321 Ficedula albicollis	The species can be found in the project area	At least 125 p	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A075 Haliaeetus albicilla	The species can be found in the project area	At least 1 p	-	Increasi ng	At least 2500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A246 Lullua arborea	The species can be found in the project area	At least 115 p	-	Increasi ng	At least4500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A073 Milvus migrans	The species can be found in the project area	unkno wn	-	Increasi ng	At least9250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A072 Pernis apivorus	The species can be found in the project area	At least 7 p	-	Increasi ng	At least9250 ha	•	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A221 Asio otus	The species can be found in the project area	At least 125 p	-	Increasi ng	At least9250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
A207 Columba oenas	The species can be found in the project area	At least 45 p	-	Increasi ng	At least4500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A208 Columba palumbus	The species can be found in the project area	At least 325p	-	Increasi ng	At least4500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A212 Cuculus canorus	The species can be found in the project area	At least 250 p	-	Increasi ng	At least9250 ha	-	Favorable	Maintaini ng the state of preservati on	1	The species is not found in the project implementation area	Stabile
A269 Erithacus rubecula	The species can be found in the project area	At least 400 p	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A099 Falco subbuteo	The species can be found in the project area	At least 20 p	-	Increasi ng	At least9250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A096 Falco tinnuculus	The species can be found in the project area	At least 65 p	-	Increasi ng	At least9250 ha	-	Favorable	Maintaini ng the state of preservati on	1	The species is not found in the project implementation area	Stabile
A359 Fringilla coelebs	The species can be found in the project area	At least 400 p	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of	-	The species is not found in the project	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
								preservati on		implementatio n area	
A283 Turdus merula	The species can be found in the project area	At least 400 p	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A319 Muscicapa striata	The species can be found in the project area	At least 125 p	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A277 Oenanthe oenanthe	The species can be found in the project area	At least 160 p	-	Increasi ng	At least3500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A337 Oriolis oriolus	The species can be found in the project area	At least 75 p	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A274 Phoenicurus phoenicurus	The species can be found in the project area	At least 150 p	-	Increasi ng	At least4500 ha	-	Favorable	Maintaini ng the state of preservati on	1	The species is not found in the project implementation area	Stabile
A315 Phylloscopus collybita	The species can be found in the project area	At least 400 p	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile

Name of species/habitat	Location of habitats & species	Populati on size	Quantified information regarding the presence of individuals	Population dynamics	The surface of the species' habitat	Habitat area (ha)	Conservatio n status	Trends	Ecolog y of the species	Sensitivity to the effects generated by PP	Perspectives - climate change
A311 Sylvia atricapilla	The species can be found in the project area	At least 275 p	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A308 Sylvia curruca	The species can be found in the project area	At least 250 p	-	Increasi ng	At least8250 ha	1	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A285 Tursu philomelos	The species can be found in the project area	At least 75 p	-	Increasi ng	At least8250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A273 Phoenicurus ochruros	The species can be found in the project area	At least 150 p	-	Increasi ng	At least4500 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile
A253 Delichon urbica	The species can be found in the project area	At least 650 p	-	Increasi ng	At least9250 ha	1	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementatio n area	Stabile
A251 Hirundo rustica	The species can be found in the project area	At least 900 p	-	Increasi ng	At least9250 ha	-	Favorable	Maintaini ng the state of preservati on	-	The species is not found in the project implementation area	Stabile

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According to the distribution maps from the Natura 2000 site management plan ROSCI0045 and respectively ROSPA0023, the Bechet port area is mentioned as the distribution area of bird species dependent on forest habitats, but no observation points were mentioned for any of avifaunistic species.

Among the habitats for which the ROSCI0045 site was designated, none was identified in the port platform area (the project area), both according to the distribution maps of the plan and from the field visits.

Among the other faunal species for which the ROSCI004r,I site was designated in the area of the Bechet project / port platform, the following species can be found:

- <u>fish</u>: Aspius aspius, Zingel zingel, Alosa immaculata, Gymnocephalus schraetzer, Pelecus cultratus, Rhodeus sericeus amarus
- mammals : Lutra lutra, Spermophilus citellus

# Data on the faunal species for which the site ROSCI0045 Confluence Jiu – Danube was designated for protection

The presence of some species in a location is determined both by the characteristics of the habitat and the requirements of each species related to the habitat, as well as by the availability of food resources.

We present below data on the habitats specific to the species of fauna for whose protection ROSCI0045 Confluence Jiu – Danube was designated, as well as whether the respective species were identified in the project site. The relevance of the site for each species for the protection of which ROSCI0045 Jiu - Danube Confluence was designated was presented above.

### > 1352\* Lutra lutra – Eurasian otter



The otter is an amphibious carnivore located at the top of the food chain and in the ROSCI0045 Jiu - Danube Confluence . The otter's preferred habitat in the site consists of layered riparian habitats and aquatic systems containing fish and amphibians.

Resident species, widespread in the site. The species occupies 100% of the optimal habitats within the site: the entire course of the Jiu to which is added the Jiul Mort and the irrigation canals, the entire course of the Danube and all the lakes and canals in the floodplain of the river.

Species in a favorable state of conservation, with adequate habitat extended as a surface, with a stable population, slightly higher than the size of the reference population for the favorable state in the protected natural area. Likewise, the structure of the population by age groups, mortality and birth rates do not deviate from normal. The population is naturally self-regulating, there being no significant external pressures from biotic and abiotic factors.

### Species localization

The otter is found in all the aquatic habitats on the site, especially along the Danube and Olt rivers. The otter (*Lutra lutra*) was identified in the following UATs in the site: Traian, Turnu Magurele, Islaz, Gârcov, Corabia, Orlea and Gura Padini.

The favorite habitats for the species are wetlands, especially those located along the Danube River, Sîiu River, Olt River, Geraiului Puddle, Gârcov Puddle, Silistioara Puddle.

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### Present in the location area:

According to the above, this species can be present in the project area, especially according to the distribution maps and habitat types in the project area.

Thus, the works proposed to be carried out will not induce an impact on the *Lutra lutra* species and none of the parameters mentioned in the decision issued by the MMPA (population size, species habitat expansion, fragmentation elements for fish species - the trophic base of the video, fragmentation elements for the otter, riparian vegetation, the ecological state of water bodies) will not be affected, the impact will be nil regarding this species.

The area being an anthropized one, during field visits the presence of the species was not reported in the site area (the habitat of the species is not favorable in the area of the port platform), the impact on the species will be an Insignificantly negative one.

### > 1335 Spermophilus citellus - European soil squirrel

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The European soil squirrel has a very specific habitat, namely the steppe, with low and very low grassy vegetation (pastures and areas with well-drained soil), where it makes its galleries. For

galleries, look for slopes, ridges, dykes, gentle slopes. It was also reported in cultivated land, especially with perennial plants (to prevent the risk of destroying the galleries). In Romania it is spread from sea level up to approx. 450 m altitude, but in Bulgaria it even rises to 2500 m. The extra-Carpathian distribution area includes Breakwaterdova (almost only in the space between Prut and Siret), Muntenia, Oltenia (the entire Danube meadow, from at Turnu Severin in Galati) and Dobrogea. Another spreading area is in Crişana and Banat (between Halmeu, in the north, and Foeni, in the south). With the exception of Dobrogea, where it also rises in the Măcin Mountains, in all other provinces it occupies the plain and the hilly area.



Spermophilus citellus is the westernmost species of the 13

species of the genus Spermophillus that are present in the Palearctic, being endemic to Central and South-Eastern Europe. The range of the species is disjoint, the two parts being separated by the Carpathian Mountains and the Danube Gorge at Cazane. The north-western subarea includes SW Germany, NW Austria, the Czech Republic, Slovakia, SE Poland, Hungary, northern Serbia and the Western Plain of Romania. The southeastern subarea includes SW Ukraine, the Republic of Moldova, eastern and southeastern Romania, Bulgaria, Macedonia, Greece and Continental Turkey.

The European soil squirrel is a diurnal species. It is a territorial species, the size of the territory being very variable according to the density and the trophic offer. The galleries are temporary and permanent (wintering galleries). It is an omnivorous species, with a relatively wide trophic spectrum: seeds, roots, flowers, buds, large terrestrial arthropods, etc. Hibernation is mandatory, and in very hot summers an aestivation (summer sleep) can also take place. The average prolificacy is 4-5 pups, with only one reproductive cycle per year. The hibernation period is from September or mid-October to the end of May or mid-April, depending on latitude, altitude and climate.

Multiannual population fluctuations are large, determined by access to reproduction, food, parasites, etc., which can lead to the resorption of up to 50% of the embryos. The reproduction period begins in the spring immediately after coming out of hibernation, when fights between males are frequent (March - April).

The European soil squirrel is considered to be both a crop and soil security pest. This rodent degrades meadows and hayfields through their network of galleries and contributes to soil erosion and weakening of levees. Moreover, the animal is a reservoir of pathogenic germs and parasites. Their fur, successfully marketed in some countries, is poorly exploited here.

Resident species, widespread in the site. The highest densities are found between Craiova and Bechet on the high banks guarding the Jiul and on the sand dunes in the Danube meadow. Lower densities are also found in the low meadow of the Jiului, especially along the dykes, roads and agricultural lands that are in the safe zone, i.e. non-flooding.

Species in a favorable state of conservation, with a stable population, although smaller than the reference population for a favorable state of conservation, with a specific habitat smaller than the habitat suitable for the species at the site level and with low impacts related to direct persecution,

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degradation of optimal habitats represented by pastures or intensive agriculture. Despite the continuous persecution on agricultural lands, the species manages to survive in areas with pastures, borders of agricultural plots, degraded lands, edges of human settlements and roads, practically wherever it finds land that is not subject to flooding and alteration by specific agricultural methods.

According to the distribution map in the Management Plan of the area of the species Spermophilus citellus, it inhabits the southern vicinity of the works.



The species feeds on herbs, roots, seeds, but also consumes insects, snails, larvae, etc. it temporarily stores food without making provisions for the winter and hibernates relying on fat deposits, the overlapping area of the ecological requirements of the soecia appears at the level of meadow and pasture habitats in the east and northeast of the site.

It lives exclusively in areas with well-drained soils, covered with short grasses (steppe, pastures), on the slopes of steppe areas, plains and hills.

The species is threatened by anthropogenic factors and agricultural activities. Puppies and subadults are extremely exposed to the attack of dogs without owners or unsupervised ones.

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According to the data in the standard form of the species:

- the size and density of the population are not appreciated at the site level
- the degree of preservation of the habitat features are not important for the species and the possibilities of restoration are not appreciated.

In the project area, the land being characteristic of industrial, humanized areas, the species cannot be found.

### 1130 – Aspius aspius (avat)



Medium-large fish (up to 80 cm) with elongated body, moderately compressed laterally, large, terminal mouth, oblique upwards, deeply hollow tail, with lobes with sharp tips. Dorsally olive-dark, silvery sides and white ventral. The coat is elongated, slightly laterally compressed, the maximum height in adults is 23-28% of the length of the body without caudal, and the thickness is 40-57% of the height.

Nectonic freshwater species, preferring large, slow-flowing sessian rivers, marshes and brackish waters.

In the summer, when the water level begins to balance, the avat looks for its hunting spots next to the sandbanks, at the heated water where the brood gathers, but the preferred places remain the mouths of the rivers or the Danube, of the garles and canals. Rarely, it can still be found in puddles. In autumn, as the waters cool, they go down to the bottom.

The most intensive feeding period is April - October. Primavera can be found in the vicinity of the rapids, which bring the debris taken by the current, but also in the areas where the clear water of the pond meets the cloudy water of the rivers.

Resident species, common in the site, present only in the river sector. Isolated specimens can enter the Jiu estuary in the Danube. It is a rheophilic-stagnophilous freshwater species, frequently found in lowland to hilly rivers, ponds, freshwater or brackish lakes.

Species in a state of favorable conservation, with a stable population, with a current habitat relatively equal in value to the surface of the suitable habitat in the site and with low and medium intensity impacts aimed at extracting mineral aggregates from the bed, poaching, deficient water purification or interventions on the natural dynamics of water courses.

In the project area, this species can be present in the water of the Danube river.

The proposed works are mostly on the port platform, but dredging works are also being carried out. This type of work can generate a potential impact on the ichthyofauna species Aspius aspius. Toprevent/reduce this potential impact, a series of measures are proposed, especially regarding the execution period that is outside the reproduction period, measures that will be found in the chapters below.

#### > 1159 – Zingel zingel (Zingel)

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Medium-small fish (up to 50 cm) with a fusiform body and large head, large, subterminal mouth, 2 dorsals (the first with spines, the second with divided rays) relatively far apart from each other. Caudal peduncle short, thick, rounded in section. Dorsally brownishgrey, with 5 indistinct blackish transversal bands or transformed into a dark marmot, ventrally yellowish.

It is mainly found in the Danube basin as well as in the Danube Delta and on the big rivers Olt, Tisa, Somes, Mures, Bega, Timis, Arges, Crisul Repede, Crisul Negru. Prefer gravel or sand areas.

Resident species, with a common presence in the site, widespread in the river sector and in the lower sector of the Jiu. It prefers large and relatively deep rheophilic aquatic ecosystems with gravel, sand or clay facies/substrate, coexisting with fusarium.

Species in unfavorable-inadequate conservation status, with stable population, smaller than the reference population for favorable conservation status, with current habitat relatively equal in value to the area of suitable habitat in the site and with medium and low intensity impacts aimed at activities extraction of mineral aggregates from the bed, poaching, poor water purification, the use of biocidal products on agricultural land or interventions on the natural dynamics of watercourses. Critical periods: breeding periods (spring: March - April).

Habitat: prefers areas with deep water and stony, sandy or clay bottom. It only enters the swamps of the floodplains accidentally, during floods.

In Romania, it can be found in the Danube and in large and relatively deep rivers, on sandy, gravel or clay bottoms, it rarely reaches the Danube marshes.

Reproduction takes place in March - April in full flow, the eggs being deposited on stones. It feeds on aquatic insects, crustaceans, eggs and small fish. On the special national territory, it has an average area compared to other fish species. The area is in slight decline in the last decades. In this territory it can be considered as a medium vulnerability species. The species is protected by the Bern Convention (annex 3), the Habitats Directive (annex 5), the IUCN Red List, Law 462/2001 (annexes 3A and 4A) regarding the regime of protected natural areas, the conservation of natural habitats, flora and fauna.

Toprotect this species, it is necessary to preserve the quality of the water, to carry out hydrotechnical improvement constructions with the consultation of conservationists, to keep the natural conditions close to the natural ones in certain sectors of the river.

The biotope of this species is represented by the sections with hard substrate, the large sess and hill rivers, in the sections where the flow speed is moderate, and the substrate consists of sand, clay or gravel. It is a resident species, widely distributed.

In the project area, this species can be present in the water of the Danube river.

The proposed works are mostly on the port platform, but dredging works are also being carried out. This type of work can generate a potential impact on the ichthyofauna species Aspius aspius. Toprevent/reduce this potential impact, a series of measures are proposed, especially regarding the execution period that is outside the reproduction period, measures that will be found in the chapters below.

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### 1157 – Gymnocephalus schraetzer (Schraetzer)



Small fish (up to 25 cm), with an elongated body, moderately compressed laterally and a large head, elongated snout, small mouth, terminal, protactile, dorsal fin with spines in the anterior part, with divided rays in the posterior part. Yellow dorsal coloration with 3 blackish longitudinal stripes that can be partially interrupted, white ventral, on the spiny side of the dorsal round black spots.

It can be distinguished from the other species of *Gymnocephalus* by the longitudinal stripes, the elongated snout.

Species dulcicola, refila, benthophagous, preferring rivers and big rivers with slow current. It also prefers areas with a gravel or sand bottom.

Critical periods: breeding periods (spring - summer).

Habitat: lives exclusively in flowing waters with a moderate water speed, in areas with a subtraction of sand, occasionally of gravel.

In rivers, it lives in groups of several tens or hundreds of individuals, sometimes mixed with other more or less rheophilic species. In general, avoid river bends with standing water. It appears in some marshes of the Danube accidentally. It can undertake short migrations. Reproduction takes place in the spring, in April - May. Inks are adhesive and are deposited in wide strips, on a hard bottom, in the current.

The food consists of benthic invertebrates and rarely fish roe and fry.

The ecological conditions of this species are satisfied by the respective rivers, rivers with a moderate to slow current and stony or sandy bottom.

Resident species, with common presence in the site. It is present only in the river sector. It prefers rheophilic aquatic ecosystems - it reaches the hilly area and occasionally in stagnophilic, respectively brackish aquatic ecosystems with hard, sandy, stony or clayey facies.

Species in an unfavorable-inadequate state of conservation, with a much smaller current population - about 10 times smaller than the reference population for a favorable state of conservation, with a current habitat relatively equal in value to the area of suitable habitat in the site, but with impacts of low and medium intensity aimed at extracting mineral aggregates from the riverbed, deficient water purification, the use of biocidal products on agricultural land or interventions on the natural dynamics of watercourses.

It is a resident, isolated species.

In the project area, this species can be present in the water of the Danube river.

The proposed works are mostly on the port platform, but dredging works are also being carried out. This type of work can generate a potential impact on the ichthyofauna species Aspius aspius. Toprevent/reduce this potential impact, a series of measures are proposed, especially regarding the execution period that is outside the reproduction period, measures that will be found in the chapters below.

### 2522 - Pelecus cultratus (sabrefish)

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Above medium height (up to 50 cm), with elongated body, strongly compressed laterally, small, upper mouth, lateral line with irregular route. The body profile is very characteristic, dorsally straight, ventrally convex, with very long and pointed pectorals. Blue-greenish or blue dorsal coloration, silvery sides and white ventral.

Stagnophilous-rheophilic species, common in the site, but with a small population, present only in the Danube. Sweet and occasionally brackish species, nektonic, preferring slow-flowing big sess rivers, marshes and brackish waters.

Basita lives in shoals on the surface of the water of ses rivers, in many lakes in the interior of the country, in littoral lakes, including brackish ones. Each bank, smaller or larger, has as its leader a larger, older sabita. The reproduction period corresponds to the months of May - June, when the 3-4-year-old specimens, which have reached sexual maturity, gather in shoals for reproduction.

It eats plankton, small fish and invertebrates. At first, the fry feed on phytoplankton, then on zooplankton, insects that have fallen on the surface of the water, and aquatic insects, and the old specimens sometimes become consumers of fry.

Critical periods: breeding periods (spring - summer).

Habitat: lives in rivers and streams, as well as in many large inland lakes. Frequent in coastal estuaries and lakes, as well as in the sweetened parts of the seas.

The overlapping area of the ecological requirements of the species is represented by smooth flowing rivers, flood ponds of the Danube, brackish waters or estuaries from the coastal area.

Species in an unfavorable-inadequate state of conservation, with a much smaller current population - about 10 times smaller than the reference population for a favorable state of conservation, with a current habitat relatively equal in value to the area of suitable habitat in the site, but with impacts of low and medium intensity aimed at extracting mineral aggregates from the riverbed, deficient water purification, the use of biocidal products on agricultural land or interventions on the natural dynamics of watercourses. It is a resident species, widely distributed. In the project area, this species can be present in the water of the Danube river.

The proposed works are mostly on the port platform, but dredging works are also being carried out. This type of work can generate a potential impact on the ichthyofauna species Aspius aspius. Toprevent/reduce this potential impact, a series of measures are proposed, especially regarding the execution period that is outside the reproduction period, measures that will be found in the chapters below.

## <u>1134 – Rhodeus sericeus amarus (European bitterling)</u>



Small fish (up to 8 cm) with a tall body, strongly laterally compressed, small, terminal mouth, very short lateral line, located only in the anterior third of the body. Dorsally greyish-yellowish or greyish-greenish, lateral and ventral white. The male "in wedding clothes" becomes intensely colored, usually in violet hues and the red feathers. The females are paler, being surprised with the extended ovipayator.

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The species is the smallest representative of the cyprinids in our country, it is a fish spread throughout Europe, as its development is conditioned by the existence of certain clams (especially Unio crassus). It lives only in rivers and lakes where there is also the respective clam. In Romania, it can be found in all waters, with the exception of salt lakes and alpine lakes located in the mountains, at high altitudes.

Resident species, widespread in the site, both in the river sector, as well as in Jiu and Gilort, respectively in the stagnophilic aquatic systems adjacent to Jiu. The species prefers stagnant or smoothly flowing waters, but it is also frequently encountered in full currents reaching even the trout area, respectively the mountain area.

It is a dulcicola species specific to ponds and slow-flowing portions of the river. Dependent for reproduction on unionid clams from the genera Unio and Anodonta. The female lays her eggs in the gill cavity of the clams where the fry develop up to a size of 7-8 mm.

Species in a state of unfavorable-inadequate conservation, with a stable population, with a current habitat relatively equal in value to the surface of the suitable habitat in the site and with impacts of medium and low intensity aimed at extracting mineral aggregates from the bed, deficient water purification, the use of biocidal products on agricultural land or interventions on the natural dynamics of watercourses.

Critical periods: breeding periods (spring - summer).

Habitat: it prefers to live in slow-flowing rivers with gravel-covered beds. It also likes places with abundant vegetation in dead arms or in lakes and river overflow pools, where it swims in groups, in the late evening hours, as well as early in the morning, it also ventures into open areas of water, also swimming in groups. In case of danger, they quickly take refuge in places where the vegetation offers them the opportunity to hide.

It consumes plant planktonic organisms, but it also eats pieces of decomposing plants on the bottom of the river or the small animals that populate the waters.

The overlapping area of the ecological requirements is strictly represented by fresh waters, portions of rivers with a smooth current or puddles. Species dependent for reproduction on unionid clams from the genus *Unio* and *Anodonta*. It is a resident, isolated species.

State of preservation: not assessed.

In the project area, this species can be present in the water of the Danube river.

The proposed works are mostly on the port platform, but dredging works are also being carried out. This type of work can generate a potential impact on the ichthyofauna species Aspius aspius. Toprevent/reduce this potential impact, a series of measures are proposed, especially regarding the execution period that is outside the reproduction period, measures that will be found in the chapters below.

### b.3 The structural and functional relationships that create and maintain integrity of ANPIC

The conservation or maintenance of structural and functional integrity, within the stability domain of a natural or semi-natural ecological system, implies to the same extent, maintaining the natural course of the dynamics of the compartments of the hydrogeomorphological unit and the dynamics of the associations of plant and animal species that populate these compartments, such as and the dynamics of interactions between them.

The connectivity between the different types of natural and semi-natural ecosystems, ensured through natural corridors or obtained through "ecological reconstruction" works, is a fundamental

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condition for achieving the objectives regarding the conservation of the diversity of habitats and biological systems." (Sustainable Development – Theory and Practice, Volume I – Angheluţă Vădineanu, Ed. University of Bucharest, 1998).

The diversity of the faunal elements is closely correlated with the floristic peculiarities and phytocenological associations (habitat peculiarities), with the relief elements and the geological characteristics as well as the microclimate of the area. The combination and interaction of all these determining factors establishes the distribution of faunal elements, as well as the delimitation of the borders of local populations, thus contributing to the spread of species, varying from a uniform spread to an insular one, depending on the adaptability of each species.

Also, the availability of feeding and nesting sites is closely related to the result of the combinations of these factors.

The structural and functional relationships that create and maintain the integrity of a protected natural area are related to the conditions of feeding, shelter and reproduction of fauna species, on the one hand, and on the other hand, to the anthropic pressure and all the external factors that may affect integrity.

Maintaining the integrity of protected natural areas involves preserving the balance established between biotope and biocenosis and is achieved by preventing and/or minimizing any actions that could lead to:

- o fragmentation of habitats;
- generating a significant negative impact on biotic and/or abiotic factors that would lead to changes in the dynamics of the relationships that define the structure and functions of the protected natural area.

The relationships between organisms and their living environment, made up of all environmental factors (abiotic and biotic), as well as the structure, function and productivity of supra-individual biological systems (populations, biocenoses) and mixed systems (ecosystems), are the aspects that define ecological functions and which consist of:

- o relationships between living things (plants and animals);
- o relationships between organisms and the environment;
- o relationships that are established between organisms and various communities.

Ecological factors are represented by the totality of abiotic (temperature, light, precipitation, pressure, etc.) and biotic factors (parasites, pests, intraspecific and interspecific competition, generated by the procurement of food within the nutrition relationship) with which an organism comes into contact and with which they mutually intercondition. Depending on their characteristics and the needs of the biotic components, environmental factors can favor, or on the contrary, hinder the survival and reproduction of species.

The works proposed for the implementation of the project will be executed in an area where no habitat has been identified from those mentioned in the standard form and for which the site has been designated.

The works proposed to be carried out, as they were described in the previous chapters of this documentation, will not occupy additional permanent areas of land, and will ultimately consist in the rehabilitation of the platform and port infrastructure of the port of Bechet Toimprove the activity and transit of goods in Port.

The implementation of the project will not affect the ecological functions of the faunal species for whose protection the area of community importance ROSCI0045 Jiului Corridorand the site ROSPA0023 Jiu - Danube Confluence has been declared.

The works that are the subject of this documentation are for 24 months.

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The realization of the proposed works will have an insignificant impact on the species for whose protection the sites of community importance *ROSCI0045 Jiului Corridor and the site ROSPA0023 Jiu - Danube Confluence have been declared.* 

Emissions of sedimentable dusts from the handling of earth and construction materials and atmospheric pollutants from construction equipment will not have a high concentration and will manifest themselves temporarily (only during the working hours).

The noise level generated by construction equipment and workers will be reduced.

According to the requirements of MMAP Order 1682/2023, table no. 15, the structural and functional relationships that create and maintain the integrity of the natural area located in the area of interest of the project, are presented as follows:

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# Table no. 4 – Structural and functional relationships- ROSCI0045 Jiului Corridor/ ROSPA0023 Confluence Jiu – Danube.

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	Dependency relationships between species and habitats of community interest	Dependency relationships between species/habitats and other characteristics (relief, geological, altitudinal, others)	Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
1530* - Pannonian salt meadows and marshes	on underground water bodies	The area is dependent on the species of birds that can be found in the area of the ROSAP0023 site	In some places, small portions are cultivated or invaded, especially in marginal areas. In certain parts the habitat is degraded by grazing or invasive species.	It's not the case	It does not exist
2130* - Coastal dunes with herbaceous vegetation - gray dunes		in the area of the	1	Habitat used intensively for sheep and cattle grazing	It does not exist
2190 - Humid interdunal depressions		dependent on the species of birds that can be found in the area of the ROSAP0023 site		*. It is affected by the cultivation of land with melons and corn, but also by the presence of flocks of sheep and goats, respectively the flocks.	It does not exist

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	Dependency relationships between species and habitats of community interest	Dependency relationships between species/habitats and other characteristics (relief, geological, altitudinal, others)	Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
3130 - Oligotrophic to mesotrophic stagnant waters, with Littorelletea vegetation	It does not exist	species of birds that can be found in the area of the	expansion of auriculture and drazing.	The habitat has a very narrow distribution in the southern part of the site. The most significant presence of this type of habitat is in the <b>Danube</b> floodplain where it has a dispersed distribution, unevenly distributed in the wetter sandy areas of habitat 6260* or marginally in habitat 2190 south of Bistret Lake	It does not exist
3140 Oligo- mesotrophic hard waters with benthic vegetation of Chara spp.		The area is dependent on the species of birds that can be found in the area of the ROSAP0023 site	The plant associations of the habitat have a wide spread in the flood zone of the Danube	Important for several animal species (mammals, reptiles, invertebrates, birds), for shelter, feeding, reproduction	It's not the case
3150 - Natural eutrophic lakes with Magnopotamion or Hydrocharition vegetation	It does not exist	The area is dependent on the bird species that can be found in the area of the site ROSPA0023	dark color, with associations of	In the channels of the former meanders of the Jiului in the Bratovoeşti Forest, it appears next to the chains of anini that form the habitat 91E0*. Especially during the flowering period of the white water lilies, the habitat creates a unitary aspect very well integrated in that area	It does not exist
3260 - Watercourses from the plain area to the mountain floor, with vegetation of	It does not exist			Like any aquatic habitat, it is a dynamic habitat and any anthropogenic influence can affect its balance in the composition and abundance of plant associations. As with habitat 3150, the area at the site level is probably much larger if the numerous canals and ponds in the	It does not exist

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	Dependency relationships between species and habitats of community interest	Dependency relationships between species/habitats and other characteristics (relief, geological, altitudinal, others)	Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
Ranunculion fluitantis and Callitricho- Batrachion			canals, drainage canals, dead arms. It extends in the site only pointwise, in the Nedeia area, the area of the Cârna and Nasta lakes, Piscul Sadovei or Valea Stricata	southern part of the site are taken into account, so this value should be re-evaluated after the start of habitat monitoring at the site.	
3270 - Rivers with bony breakwater banks, with vegetation of Chenopodion rubri p.p. and Bidention p.p	It does not exist		The habitat is spread fragmented and dispersed in the site, being present on the banks of the Ji River in the Işalniţa area - near the beakwater, after the turbines, the Malu Mare area, Coţofenii din Jos, Ioneşti, Murgeşti, Breasta, on the banks of the Ji River in the southa pădurii Bratovoieşti	The reproductive system, in a demographic-population sense and their ecology, therefore make them very difficult to extirpate from an area, so that the habitat is relatively little affected by pressures. South of the Bratovoeşti Forest, this habitat can be observed in relatively stable conditions, being located on one of the arms of the Jiu.	It does not exist
6120* - Xeric and calciphilous grasslands on sands	It does not exist	The area is dependent on the bird species that can be found in the area of the site ROSPA0023	It is affected by intensive grazing and natural biocenotic evolution, favored by dry periods	Habitat represented by dry, often open meadows, on more or less calcareous sands, partially dependent on agricultural exploitation.	It does not exist
6240* - Subpannonian steppe meadows		bird species that can be found in the area of the	These steppe meadows dominated by grasses with thick bushes, chamephytes and other perennial plants, develop on southern slopes, with skeletal soils, on stony substrate and on clay-sandy substrate, with gravel.	It was identified in the northern part of it, in the forest areas near Hotăroasa, Olari, Cocoreni, in the Stricata Valley, in the area of Deleni, Piscouri, Gârbovu	It does not exist
6260* - Pannonian steppes on sand		The area is dependent on the bird species that	Sometimes it appears in mosaic with other types of sand habitats or associated with wet habitats such as	The habitat is distributed especially in the south of the site, in the <b>Danube</b> meadow, at	It does not exist

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	Dependency relationships between species and habitats of community interest	Dependency relationships between species/habitats and other characteristics (relief, geological, altitudinal, others)	Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
			and Bistret area it is strongly interconnected, mostly with the dune habitat 2130*, and in some places with the steppe meadows 6120*, forming a complex of well-correlated habitats in terms of vegetation biodiversity	Dăbuleni, southwest of Bechet, south of Bistreţ lake	
communities with	It is dependent on underground water bodies	bird species that can be found in the area of the site ROSPA0023	rendzines with neutral and acid pH	Important for several species of invertebrates, thus being a support for other species of animals that feed on them.	It does not exist
6440 - Alluvial meadows of river valleys with Cnidion dubii	It does not exist	bird species that can be found in	Alluvial meadows with a natural flooding regime belonging to the Cnidion dubii alliance, in continental to subcontinental climatic conditions	Important for several animal species (mammals, reptiles, invertebrates, birds), for shelter, feeding, reproduction	It's not the case
altitude hay (with	It is dependent on underground water bodies	The area is dependent on the bird species that can be found in the area of the site ROSPA0023	large areas, but is currently much reduced due to the expansion of	The decrease in the level of fertilization imprints the evolution towards meadows dominated by Trisetum flavescens, and the increase in the input of fertilizers leads to the reduction of specific diversity.	It does not exist

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	Dependency relationships between species and habitats of community interest		Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
			floodplain of the Danube, is a heavily anthropized habitat.		
9130 - Asperulo- Fagetum type beech forests	It does not exist	dependent on the bird species that	I	Important for many animal species (mammals, reptiles, invertebrates, birds), for shelter, feeding, and reproduction	It does not exist
9170 - Galio- Carpinetum type hornbeam oak forests	It does not exist	bird species that can be found in	The habitat develops at altitudes between 300-800 mm on slopes with different inclinations and exposures, more shaded, at low altitudes.	Important for many animal species (mammals, reptiles, invertebrates, birds), for shelter, feeding, and reproduction	It does not exist
91E0* - Alluvial forests of Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)		bird species that can be found in the area of the	streams or lands with excess humidity,	Important for several species of animals (mammals, reptiles, invertebrates, birds), for shelter, feeding and reproduction	It does not exist
Ulmus laevis and	It is dependent on underground water bodies	species of birds that can be found in the area of the site ROSPA0023	Forests of hardwood species located in the major riverbeds, regularly exposed to floods during the period of rising water levels, or in low-lying areas, exposed to floods caused by the rise of the water table. These forests develop on recent alluvial deposits. The soil can be well drained between floods or it	It's not the case	It's not the case

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	Dependency relationships between species and habitats of community interest	Dependency relationships between species/habitats and other characteristics (relief, geological, altitudinal, others)	Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
angustifolia along large rivers (Ulmenion minoris)			can stay wet. As a result of the specific water regime, the dominant woody species belong to the genera Fraxinus, Ulmus or Quercus. The understory is well developed.		
	•	bird species that can be found in the area of the		The habitat is sometimes rejuvenated, through forestry operations	It does not exist
	on underground water bodies	bird species that can be found in the area of the	It is a habitat of subcontinental forests of xerothermophilic species (Quercus cerris, Quercus petraea or Quercus frainetto), distributed in areas with altitudes between 250 and 600 m, exceptionally 800 m	-	It does not exist
91Y0 - Dacian forests of oak and hornbeam		bird species that can be found in	It grows at altitudes between 200-850 m on slightly - moderately inclined slopes, with different exposures, ridges, plateaus	-	It does not exist
92A0 Gallery forests of white willow and white poplar	It does not exist	dependent on the		Important for several animal species (mammals, reptiles, invertebrates, birds), for shelter, feeding, reproduction	It's not the case

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	Dependency relationships between species and habitats of community interest	Dependency relationships between species/habitats and other characteristics (relief, geological, altitudinal, others)	Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
		the area of the site ROSPA0023			
1352* Lutra lutra – Eurasian otter	It is related to the dependence on surface water bodies	-	It prefers the wooded banks of flowing and stagnant waters, mountain or plain. It can also be found in brackish waters. It needs shelter (forest or reeds). As a rule, it does not build a gallery, but occupies a gallery of foxes or vistas, or natural depressions under the shores, tree roots on the shore	It mainly eats fish and crayfish. Among the fish species, he prefers trout, grayling, carp. Apart from these, they also consume frogs, wild ducks, coots, aquatic rodents (Ionescu et al., 2013). The species contributes, in addition to other predatory species in aquatic habitats, mainly to the control of fish and aquatic invertebrate populations	
1335 Spermophilus citellus - European soil squirrel	_	-	The pastures inside the site can represent a favorable habitat for the species	It consumes plant species (seeds, leaves) from meadow habitats such as: Trifolium campestre, T. arvense, T. repens, T. media, T. pratense, Medicago minima, Coronilla varia, Ononis spinosa, Plantago lanceolata, P. media, Pimpinella saxifrage, Festuca spp., dactylis glomerata, Agropyron repens, Taraxacum sp., Achillea millefolium. In addition to plants, they also consume large terrestrial arthropods	-
1188 - Bombina bombina – European fire- bellied toad	predominantly aquatic. Considering that the species	according to data	As a specific habitat, it is a diurnal species, present in all areas of the sea, which prefers ponds with rich vegetation	In the larval stage the species is phytophagous. Here, too, cases of necrophagy are sometimes encountered. Adults consume both aquatic animals, such as crustaceans-amphipods, gastropods, dipteran larvae, as well as terrestrial, hymenoptera, homoptera, heteroptera or coleoptera -Sârbu, 1976 Bombina variegata often hunts in a terrestrial environment, so a higher share of terrestrial prey is observed -Cicort-Lucaciu et al., 2011 It	It's not the case

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies		Dependency relationships between species/habitats and other characteristics (relief, geological, altitudinal, others)	Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
	level should not be too deep			has also been found to feed on small vertebrates, such as tadpoles -Peter et al., 2005; Sas et al., 2006; Ferenti and collaborators, 2010	
1193 – Bombina variegata	-	ROSCI0045 site	Occupies any body of water, mainly temporary puddles, being able to reproduce even in uneven soil that contains less than a liter of water - It is found almost everywhere where it finds a minimum of moisture, from 150 m to almost 2000 m altitude	The species feeds on invertebrates, and in turn, it can be a source of food for some species of mammals, reptiles, birds	-
1166 Triturus cristatus	-	-	It prefers large and deep stagnant waters, with swamp vegetation. It can often be found in artificial pools (bathing areas, ponds, swimming pools). During the period of terrestrial life, it prefers wet meadows. It does not reproduce in small temporary ponds. It is common in ponds and lakes, especially if there is aquatic vegetation in which it can hide. The site includes several lakes and ponds that can host populations of the species	The species feeds on invertebrates, and in turn, it can be a source of food for some species of mammals, reptiles, birds	
1993 Triturus dobrogicus – Danube crested newt	species, but it	not identified at the level of the	It is an aquatic and terrestrial species. It can be found in the sess area, it prefers deep water, smooth flowing waters and open or wooded areas. In the terrestrial period, it is found at the	There is no information	It's not the case

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	community interest		Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
	between water bodies and the species	dependent	edge of puddles, in the reeds lying on the soil and mixed with the shore or in the litter of trees and shrubs		
1220 – Emys orbicularis	MANANANCV	not dependent on any specific habitat in the	It prefers stagnant or smoothly flowing waters with rich vegetation, both submerged and on the banks, but also adjacent areas, which offer opportunities for basking and burying eggs.	There is no information	It's not the case
1044 – Coenagrion mercuriale	It is a species dependent on surface water bodies	-	Hygrophilous species, it is found in the vicinity of water bodies (lakes, ponds, rivers), in marshy places; prefer pools with clean water.	It represents the source of food for other species of amphibians, reptiles, etc	-
4048 – Isophya costata		hygrophilous alpine meadows, forest edges and	Prefer loess steppe meadows, mesophilic meadows, hedgerows and forest glades rich in dicotyledonous species, from lowland and less often hilly areas	-	-

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	Dependency relationships between species and habitats of community interest	Dependency relationships between species/habitats and other characteristics (relief, geological, altitudinal, others)	Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
4054 – Coenagrion ornatum	-	-	streams and gutters with mud and dense hygrophilous herbaceous	Adults feed on small diptera and hymenoptera that they capture in flight, and larval stages feed on aquatic insects, their larvae even tadpoles	-
1042 – Leucorrhinia pectoralis	It is a species with a dependency relationship with surface water bodies (stagnant or smooth flowing waters)	-	It prefers mesotrophic lakes, forest ponds and swampy places, depending not only on aquatic habitats, but also on terrestrial ones around them	-	-
4013 – Carabus hungaricus	-	It can be found in ROSCI0045 near Murta	Typical species for areas with steppe vegetation built on sands or dolomites		-
1083 -Lucanus cervus	_	The habitats of community interest in the site, 9170 and 91Y0 are favorable for the species	-	Polyphagous species, which grows in rotten wood (below soil level) of many deciduous species, but prefers quercines	-
1089 – Morimus funereus	-	-	It is considered to be a polyphagous species, which develops	-	-

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	Dependency relationships between species and habitats of community interest	Dependency relationships between species/habitats and other characteristics (relief, geological, altitudinal, others)	Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
			predominantly in the dead wood of beech and oak. Adults can be found in forests on fallen trunks, recent stumps or freshly cut logs of beech, oak, chestnut, poplar, linden, maple, hornbeam, willow		
4014- Carabus variolosus	-	beech and hornbeam habitats	It lives only in the narrow habitat in the immediate vicinity of the banks of permanent streams and marshy areas in natural or near-natural forests, and sometimes it can also be found in water, walking on aquatic vegetation	-	-
1088 – Cerambyx cerdo	-	but also in other	The species usually selects old and dead trees, such as oaks over 100 years old with a diameter greater than 40 cm	-	-
1060 – Lycaena dispar	-	Riparian habitats		The larva develops on species of Rumex spp. (eg: R. aquaticus, R. obtusifolius, R. crispus) and Polygonum bistorta. In the adult stage it prefers species such as: Mentha spp., Lythrum salicaria, Eupatorium cannabinum, Cirsium palustre, Origanum vulgare, Cirsium arvense, Valeriana officinalis	-

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	Dependency relationships between species and habitats of community interest	Dependency relationships between species/habitats and other characteristics (relief, geological, altitudinal, others)	Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
1065-Euphydryas aurinia	-		They prefer wet meadows in hilly and submontane regions	Food source for the lizard	-
1032 – Unio crassus	Species dependent on water courses	-	It inhabits streams and rivers, rarely rivers, being more frequent in the waters of the hilly and plateau sector than in the plain. It is a demanding species in terms of water quality conditions, requiring flowing, well-oxygenated waters and clean sediments; sandy or moderately silty substrate (without excessive content of organic matter), with salinity below 5%	-	-
4125 - Alosa immaculata	Dependent on surface water bodies	-	It is a predominantly predatory, secondarily macrophagous species that feeds only in saltwater (in the sea), not freshwater.	The food consists of small species of fish and crustaceans. It is the source of food for bird species associated with aquatic habitats	
aspius	Dependent on surface water bodies	-	Species found in fresh flowing waters, large lakes, or Danube ponds that also present areas with stony bottoms. Flowing or stagnant, clear waters, which preserve stony bottom areas, rich in ichthyofauna.	The juveniles feed on plankton at first, the juveniles and adults feed almost exclusively on fish, especially on bream. It is an active pre <b>Yes</b> tor that actively swims for food, being a particularly alert species. It is the source of food for bird species associated with aquatic habitats	-
1160 – Zingel streber (Streber)	Dependent on surface water bodies		It prefers rivers with a high current and a sandy bottom, with gravel or clay, in relatively deep water	The food of the species is represented by aquatic invertebrates, occasionally fry of other species or eggs. It is the source of food for bird species associated with aquatic habitats	-

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zingel (zingel)	Dependent on surface water bodies	1	flow and deep water. But I prefer areas	It prefers rivers with a high current and a sandy bottom, with gravel or clay, in relatively deep water. It is the source of food for bird species associated with aquatic habitats	-
(weathertish)	Dependent on surface water bodies	-	the muddy portions and in the side	Food consists of organic detritus, aquatic vegetation, worms, crustaceans, insect larvae, breakwaters. It is the source of food for bird species associated with aquatic habitats	-
taenia (Cobitis)	Dependent on surface water bodies	-	layold substrates with very thick layers	The food consists of algae, but also worms, insect larvae, which they capture during the night. It is the source of food for bird species associated with aquatic habitats	-
limmaciilata	Dependent on surface water bodies	-	•	The food consists of small species of fish and crustaceans. It is the source of food for bird species associated with aquatic habitats	-
albininnatus	Dependent on surface water bodies	-	ciay bottoms	Food consists of small psammophilic invertebrates: aquatic insects and their larvae, copepod and gammarid crustaceans, breakwaters, worms; fingerlings and eggs of other fish. It also consumes organic detritus of	-

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				animal or vegetable origin, unicellular algae from the diatom group. It is the source of food for bird species associated with aquatic habitats	
kessleri	Dependent on surface water bodies	-	Lives in the middle and upper reaches of hill and lowland rivers in the scobar and barbel zone, with relatively fast-flowing waters where the water reaches a velocity of 45–60 cm/sec, rarely up to 90 cm/s.  Prefers shallow, clear, well-oxygenated mid-stream waters with sandy bottoms or those with gravel and sand. In the upper course of the rivers it is rarer and almost only adult fish are found.  They never enter the muddy, silty regions of watercourses.	Food consists of small psammophilic invertebrates: aquatic insects and their larvae, copepod and gammarid crustaceans, breakwaters, worms; larvae and spawn of other fish. It also consumes organic detritus of animal or vegetable origin, unicellular algae, from the diatom group.  It is the source of food for bird species associated with aquatic habitats	-
meridionalis	Dependent on surface water bodies	-	It prefers running waters (rheophilic species) in mountainous and hilly regions (downstream of the trout area), located at an altitude between 400-200 m.	Food source for Lutra lutra, Emys orbicularis, birds associated with aquatic habitats	-
harhus	Dependent on surface water bodies	-	It prefers running waters (rheophilic species) in mountainous and hilly regions (downstream of the trout area), located at an altitude between 400-200 m.	Food source for Lutra lutra, Emys orbicularis, birds associated with aquatic habitats	-

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'	Dependent on surface water bodies	-	lives in lowland rivers and streams. It prefers bottom areas, well oxygenated and with a hard substrate.	The food of this species is composed of aquatic invertebrates from the benthos and occasionally with eggs and fry of fish.  It is the source of food for bird species associated with aquatic habitats	-
, ,	Dependent on surface water bodies	_	reaches the hilly area of the rivers.  In rivers, they form herds of several	aquatic invertebrates from the benthos and occasionally with eggs and fry of fish.	-
cultratus (ziege)	Dependent on surface water bodies		Danube in the spring, and then returns to the Danube, rarely some specimens	The food of these fish consists of plankton for juveniles and fry, and for mature individuals benthic invertebrates, aerial insects and small fish.  It is the source of food for bird species associated with aquatic habitats	-

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,	Dependent on surface water bodies		clayey bottoms, under the vertical	It feeds on diatoms and small invertebrates that it captures from the bottom of the water It is the source of food for bird species associated with aquatic habitats	-
sericeus amarus		presence of the lamellibranchs	the side arms (dead) of rivers, but it also appears in full flow, reaching almost to the mountain area of the	Feeds on filamentous and unicellular algae (phytoplankton), plant debris and detritus, zooplankton.  It is the source of food for bird species associated with aquatic habitats	-
A060 Aythya nyroca	-	open aquatic habitats	being more abundant in the Danube Delta and in the wetlands of large river	It is omnivorous, but most of its diet consists of plant species (macroalgae, buds and leaves of aquatic plant species, etc.); aquatic invertebrates constitute a good part of the diet especially during the nesting period (breakwaters, crustaceans and aquatic insects)	-

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			specimens remain, most wintering in the Mediterranean areas		
A056 – Anas clypeata		MANANANT AN	Open aquatic habitats - nesting in lakes, swamps, floodplains, coastal areas.	It feeds on crustaceans, molluscs, insects, larvae, seeds, leaves, snails by immersing its beak in water	
A052 – Anas crecca	-	MANANANT AN	Open aquatic habitats - nesting in lakes, swamps, floodplains, coastal areas.	It feeds mainly on the seeds of aquatic plants and from the proximity of wet habitats, but also on cereals, in the cold period consuming mostly submerged plants. It also consumes aquatic invertebrates	
A050 – Anas penelope	_	dependent on	Open aquatic habitats - Nesting in lakes, rivers, swamps, floodplains, coastal areas.	It feeds mainly on plants, consuming leaves, stems, roots, rhizomes and seeds of aquatic and marshy plants. It also feeds on invertebrates, especially in the first days after hatching, the chicks feed mainly on diptera, gradually switching to a vegetable diet	
A055 – Anas querquedula	-	Species dependent on open aquatic habitats	Open aquatic habitats - during the nesting period they prefer freshwater, shallow, flat and steppe aquatic habitats with abundant vegetation. During passage and wintering they frequent coastal marshes or lagoons with both fresh and brackish water, provided there is partially submerged marginal vegetation	Omnivorous and opportunistic species, feeding more during the night, but also during the day if not disturbed. It feeds mainly on aquatic invertebrates (crustaceans, molluscs, worms, insects and their larvae) and plant food (seeds, roots, tubers and aquatic plants). They also eat small vertebrates such as amphibians and small fish.	
A051 – Anas strepera	-		Open aquatic habitats - nesting in lakes, rivers, swamps, floodplains,	For nesting, they prefer aquatic habitats with shallow water and submerged vegetation, such	

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			grasslands, thickets.	as lakes, smooth flowing waters, deltas and lagoons. During migration and wintering, it uses all the large, stagnant water bodies in the hill and plain areas	
A041 – Anser albifrons	-	dependent on	It does not nest in Romania. In wintering areas, it also prefers low, plain areas rich in agricultural crops.	They feed in their wintering quarters, especially on plant material from agricultural crops. At first they feed on grains (maize, wheat or other grasses) left after harvest (when available) and then on the emerged leaves of wheat, canola or other autumn crops	
A043-Anser anser	-	Species dependent on open aquatic habitats	rivers in lowland areas. The highest density is in the Danube Delta and the lagoon system. During the winter, I	The species is herbivorous, consuming very diverse plant matter: herbs, buds, roots, etc. During the nesting period, they feed mainly on plant material from agricultural crops, such as the sprouted leaves of wheat, rape or other autumn agricultural crops.	
A059 Aythya ferina	_	dependent on open aquatic habitats	stagnant or slightly flowing water, medium-eutrophic, such as swamps, lakes, lagoon areas, etc. Outside of the	It is omnivorous, the plant food being composed of roots, seeds, different parts of aquatic or swamp plants, and the animal food, from: aquatic insects and their larvae, breakwaters, crustaceans, worms, amphibians and small fish	
A061 -Aythya fuligula	_	Species dependent on	aquatic areas, floodplains, lakes or	It is omnivorous, but most of its diet consists of species of aquatic invertebrates (breakwaters, crustaceans and aquatic insects) or vertebrates	

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		habitats	During the winter period it can be observed on any thawed body of water	(small fish, including eggs, amphibians). Also consumes plant matter (especially in autumn), especially fruits, seeds and buds of other aquatic or marsh plants	
A459 – Larus cachinnans	-	dependent on open aquatic	It nests near lakes surrounded by reeds, river islands. Outside the breeding season it is more frequent in coastal areas	Eats invertebrates, reptiles, small mammals	
A179 – Larus ridibundus	-	•		It mainly consumes insects and other invertebrates, especially related to aquatic (but also terrestrial) environments. To a lesser extent, it also feeds on small fish. Like other gull species, it can be opportunistic (especially in winter), feeding at waste disposal ramps	
A053- Anas platyrhynchos	_	open aquatic	Prefers forest areas, but hunts in open spaces, such as hedgerows, parks and gardens in areas close to cities	They hunt small birds and sometimes small mammals	
A017 Phalacrocorax carbo	-	community interest site ROSCI0156, as well as habitat 6520	The species nests in wetlands at low altitudes, usually with a large area, represented by a mosaic of lakes, river courses with smooth waters associated with swampy areas (with reeds), preferring for nesting trees/shrubs embedded in marshy vegetation, such as and reedbed surfaces. Outside of the nesting period,	It is a predominantly ichthyophage species. It feeds singly or in groups, by actively following the prey. They often associate feeding with other species (such as pelicans). In addition, they also consume other types of food, such as crustaceans, amphibians etc	

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			it disperses a lot and can appear in most water bodies in the distribution area (in the winter it congregates mainly on the remaining thawed river sectors).		
A005 – Podiceps cristatus	-	Species dependent on open aquatic habitats	(ponds, marshes, lake edges) where they occupy their territories in the spring when the nesting season	It is a predominantly ichthyophage species, consuming small and medium-sized fish.  In addition, it also consumes other aquatic organisms, invertebrates, such as insects (larvae or adults), crustaceans, breakwaters and sometimes amphibian larvae.	
A004 – Tachybaptus ruficollis	-	Species dependent on	(ponds, marshes, lake edges) where they occupy their territories in the spring when the nesting season	(especially in winter). Occasionally they also hunt in habitats peripheral to wetlands, insects,	
A029 Ardea purpurea	-	dependent on	massive, dense reeds in partially	It is carnivorous, feeding especially on fish, amphibians or invertebrates from aquatic areas. It occasionally catches small mammals or baby birds	
A021 Botaurus stellaris	_	Species dependent on	Prefers extensive swamp habitats with isolated waterholes, minimal water level fluctuations and limited	It is a carnivorous species, feeding mainly on fish, but also on amphibians, reptiles, insects	

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		open habitats	·	anthropogenic disturbance during the nesting period. Outside of the breeding season it is present in most types of aquatic habitats.	and their larvae, crustaceans, molluscs, micromammals, as well as birds and their young	
A196 Chlidonias hybridus	-	Species dependen open habitats	t on aquatic	The species prefers low-quota wetlands for nesting, especially silting lakes, lakes with abundant floating and submerged vegetation, rivers and swamps. During migration it feeds in most aquatic habitats, including marine bays.	It eats terrestrial or aquatic insects, crustaceans, amphibians and small fish. Food is usually procured from the surface of the water, less often diving to capture it	
A197 Chlidonias niger	-	Species dependen open habitats		Aquatic habitats - Nesting in lakes, swamps, flooded areas, coastal areas	It feeds on insects, small fish and frogs.	
A027 Egretta alba	-	Species dependen open habitats		Prefers large natural aquatic habitats with large areas of reeds.	It feeds on fish, frogs, snakes, crustaceans, aquatic insects. It often feeds in the fields, with reptiles, amphibians, birds and small mammals.	
A026 Egretta garzetta	-	Species dependen open habitats	t on aquatic	fresh, such as: lakes, marshes, river banks, needing areas with trees or bushes in the vicinity of wetlands for	spiders, worms, but also vertebrates, including: amphibians, reptiles, micromammals, small birds and a wide variety of fish species, usually	

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			puddles, especially during the passage period.		
A022 Ixobrychus minutus	-	dependent on open aquatic	vegetation is abundant, extensive reed beds, with water at the base (often	It is carnivorous, its food mainly consisting of aquatic insects, but it also eats: fish, small birds and their eggs, reptiles, amphibians, molluscs, crustaceans etc.	
A177 Larus minutus	-	open aquatic	nr iagoon coacte with brackien or	Feeds on insects, including dragonflies, worms and small fish, but prefers chironomid larvae.	
A020 Pelecanus crispus	_	Species dependent on open aquatic habitats	pelican, rivers, lakes, lagoons,	It is an ichthyophage species, generally consuming carp, redfish, perch, etc. They hunt alone or in small groups, sometimes together with groups of cormorants.	
A393 Phalacrocorax pygmeus	-	Species dependent on open aquatic habitats		It is an ichthyophage species. It eats smaller fish, usually from the Cyprinidae family.	
A195 Sternula albifrons	-	Species dependent on open aquatic habitats	throughout the country in adulatic	It feeds on fish, insects and their larvae, snails and clams.	

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A193 hirundo	Sterna	-	Species dependent on open aquatic habitats	During the nesting season stagnant or slow-flowing waters, rich in fish (including marine littoral areas). It needs low, isolated, vegetation-poor shores (with sandy or rocky areas, land areas with poor aquatic vegetation, etc.) to place its nest. They prefer islands for nesting, to avoid predators. During the migration period it can be seen feeding on any water body rich in food	The species is mainly ichthyophage, feeding mainly on small fish; however, the trophic spectrum is wider, also consuming other planktonic animals (crustaceans, insects, etc.). It is thus considered that the fish species of community interest from the ROSCI0045 site can be an important source of food for the species.	
A229 atthis	Alcedo	_	Species dependent on open aquatic habitats	It needs steep, exposed, unvegetated banks (clay, clay or otherwise) where it can dig galleries to nest.	Predominantly ichthyophage species, consuming small fish species, after which it dives and dives, from the ambush site located above the water. The fish species for which the ROSCI0434 site was designated (Aspius aspius, Barbus meridionalis, Cobitis taenia complex Romanogobio kesslerii, Sabanejewia balcanica) may be a food source for the species. In addition, they consume invertebrates (dragonflies, worms, snails, shrimps, etc.) or amphibians. Very rarely, in winter, it also consumes small fruits (elder) or reed stalks	
A131 H himanto	imantopus pus	_	dependent on	The species prefers freshwater and shallow wetlands for nesting, such as lakes, marshes, river meadows, floodplains etc.	It is a predominantly carnivorous species, consuming invertebrates linked by their ecology to wetlands (various insects and their larvae, spiders, etc.) but also molluscs, small fish and eggs. Occasionally consumes seeds. The diet	

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				varies considerably given the wide distribution of the species globally	
A034 Platalea leucorodia		Species dependent on open aquatic habitats	The species prefers extensive wetlands with fresh or brackish water, such as silty bottom lakes, river meadows, floodplains, etc., with reeds or trees and bushes (for nest sites) for nesting. During migration it can be seen feeding at the edge of aquatic habitats where there is shallow water with a muddy bottom.	It feeds on invertebrates associated with aquatic habitats (adult insects or larvae, worms, molluscs, crustaceans, etc.), or vertebrates (fish, tadpoles, etc.).	
A032 Plegadis falcinellus	-	Species dependent on open aquatic habitats	as lakes, river meadows, floodplains, estuaries, lagoons, etc., with tall vegetation (reeds) or trees and bushes (for nest sites) for nesting. During	It feeds on invertebrates associated with aquatic habitats (adult insects or larvae, worms, molluscs, etc.), which it extracts from the mud with the help of its long beak. It also eats larger animals (amphibians, lizards, snakes or baby birds), often also from areas adjacent to water bodies	
A132 Recurvirostra avosetta			, , ,	It is a carnivorous species that feeds mainly on invertebrates living in aquatic habitats, but also on fish and plant material	

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			habitats, in places with shallow water, where it can procure food.		
A166 Tringa glareola		dependent on open aquatic habitats	habitats (lakes, riverbanks), where it finds suitable areas for feeding: muddy areas with shallow water	Food available in shore areas: aquatic invertebrates (insects, worms, gastropods, crustaceans), spiders, sometimes molluscs or small fish. They also occasionally consume seeds of aquatic plant species. During the breeding period, they consume almost exclusively aquatic insects.	
A161 Tringa erythropus		Species dependent on open aquatic habitats	sparse birch forests at the edge of the tundra. In migration, it can be found all	It is a carnivorous species, being related to the food available in the shore areas: aquatic invertebrates (insects, worms, gastropods, crustaceans), spiders, sometimes molluscs or small fish.	
A156 Limosa limosa	-	Species dependent on open aquatic habitats	An important part of the population uses secondary habitats: wet lowland meadows, coastal grazing marshes, grasslands, wetlands near ponds or sewage systems, and salt lagoons	It eats insects, larvae, worms, crustaceans, etc	
A271 Luscinia megarhynchos	-	Species dependent on	The species nests in a wide variety of habitats, which have in common the presence of thickets. We meet it at the	Predominantly insectivorous species, it eats mainly beetles, ants, but also other invertebrates	

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		habitats		(spiders, worms, etc.). It also occasionally consumes small fruits, especially in autumn.	
A249 Riparia riparia		Species dependent on open aquatic habitats	sometimes also nests at considerable	The species mainly consumes insects and, to a lesser extent, spiders. Diet varies widely with nesting area and multiannual and seasonal variation in insect populations.	
A147 Calidris ferruginea	-	•		It feeds on molluscs, crustaceans, insects, seeds	
A145 Calidris minuta	-	-		It feeds on molluscs, crustaceans, insects, seeds	
A146 Calidris temminckii	-		Outside the breeding season, the species prefers inland freshwater	It feeds on molluscs, crustaceans, insects, seeds	

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		habitats	wetlands such as floodplains, irrigated fields, densely vegetated wetlands, gutters, mudflats and lake margins, estuaries, salt marshes, while it tends to avoid open and sandy beaches		
A136 Charadrius dubius	-	dependent on open aquatic	A coastal species, it can be found on long and sandy shores, on the banks of slowly flowing waters, or on the banks of lakes, but also in swamps, during migration.	It feeds on invertebrates (eg insects, spiders)	
A137 Charadrius hiaticula	-	Species dependent on open aquatic habitats	is found in Romania on the edge of	It is a carnivorous species, consuming invertebrates (small crustaceans, molluscs, worms, earthworms and insects) from the muddy areas at the edge of aquatic habitats. Sometimes it kicks the mud quickly with its feet, a strategy used to make prey visible and easy to capture. It often feeds in groups, sometimes together with other species of waders.	
A153 Gallinago gallinago	-	Species dependent on open aquatic habitats	Coastal and reed water habitats	Invertebrates, plants	
A291 Locustella fluviatilis	-	dependent on	Nesting in swamps, floodplains, agricultural land, meadows, pastures, thickets	It feeds on invertebrates	

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A292 Locustella lusciniodes	_	Species dependent on open aquatic habitats		It is a predominantly insectivorous species, but also consumes a wide range of invertebrates (arachnids, small snails, worms).	
A164 Tringa nebularia	-	Species dependent on open aquatic habitats	Coastal and reed water habitats	Fish, amphibians	
A165 Tringa ochropus	_	Species dependent on open aquatic habitats	It nests in flooded forests, peatlands and swamps. In migration it prefers flooded channels, puddles, lake shores, narrow gutters, often with vegetation, etc.	The species is omnivorous, but feeds predominantly on aquatic and terrestrial insects, especially beetle adults and larvae, dragonfly larvae, ants, worms, small crustaceans, spiders and fish. They also occasionally consume plant fragments.	
A142 Vanellus vanellus	-	Species dependent on open aquatic habitats	Coastal and reed water habitats - for nesting they prefer arable land, pastures, hayfields, natural meadows or wetlands. Outside the nesting season, it prefers freshly plowed arable land, meadows, but it also feeds on the banks of water.	Invertebrates	
A081 Circus aeruginosus		stews	It prefers wetlands with extensive swamp habitats. It is also present and feeds in other habitats such as agricultural lands, pastures and forests, where they are within the approved wetlands (SOR). Within the ROSPA006 sites there are all types of	It feeds on small-medium birds, their chicks and eggs, mammals (especially rodents and rabbits), but also fish, reptiles, amphibians and invertebrates	-

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			habitats preferred by the species: lakes with swamp vegetation, grasslands, meadow forests and agricultural areas.		
A028 Ardea cinerea	-	dependent on stews	It prefers most types of aquatic habitats, but especially coastal and reedbed aquatic habitats, but also in wet meadows or agricultural areas. For nesting, they prefer tall trees in approbeakwater wetlands, but also swampy habitats with shrubs.		-
A298 Acrocephalus arundinaceus	-	l •	vegetation, especially in areas with	It eats insects and other invertebrates, occasionally small vertebrates, and in autumn it also feeds on fruits	-
A296 Acrocephalus palustris	_	stews	icanais or tarmiand with tall rilderal	It eats a wide range of invertebrates (especially insects, arachnids, small snails, worms). In late summer and autumn, they also consume small fruits	-
A295 Acrocephalus schoenobaenus	_	stews	with a very wine range of adjiatic	It eats a wide range of invertebrates (especially insects, arachnids, small snails, worms).	-

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			migration period it usually follows aquatic habitats		
A297 Acrocephalus scirpaceus	-	Species dependent on stews	large reeds, most often associated with lowland aquatic habitats. It also uses adjacent habitats (including	Predominantly insectivorous species, but also consumes a wide range of invertebrates (arachnids, small snails, worms). In late summer and autumn, they also consume small fruits	-
A336 Remiz pendulinus		Species dependent on stews	reed beds), where there are trees suitable for nest placement. Prefers	The boicus feeds mainly on invertebrates, especially insects and their larvae, small spiders, but also seeds, especially in the cold period of the year. Feeds actively in the crests of trees and in reeds, in cold periods being able to find the larvae/pupae inside the stems of reeds and rushes	-
A260 Motacilla flava	-	stews	It prefers wet habitats, with reed swamp vegetation. Outside the nesting season, it can also be found in the water of agricultural lands, preferring the water of lakes, ponds or rivers.	Captures insect prey from the soil or water level, but can also fly short distances in the air to catch them, often following herds of cows or sheep to feed on the insects that land on them	-
A255 Anthus campestris		Species associated with extensive agricultural land	mrassiands hiit also semi-desert	It is a predominantly insectivorous species, it feeds on the soil, sometimes in flight, the food being mostly insects (Orthoptera, Isoptera, Odonata, Mantodea, Coleoptera), but also other invertebrates (mollusc), seeds and, rarely, small vertebrates (reptiles).	-

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A133 Burhinus oedicnemus	-	associated with extensive agricultural land		It feeds on insects and larvae, snails, earthworms, frogs, seeds, small mammals and birds.	-
A031 Ciconia ciconia		agricultural land	Nesting in cliffs, orchards, parks, coniferous forests, deciduous forests, poles, buildings	Micromammals (mice, shrews), lizards, snakes, amphibians, small birds (especially chickens, sometimes eggs), large insects. In aquatic areas, the food is diversified and includes fish and aquatic invertebrates (molluscs, crustaceans). It also consumes vegetable matter	-
A231 Coracias garrulus		associated with extensive agricultural land	It is a species of open, wide, sunny areas with less rainfall. It nests in areas of meadow/pasture or agricultural crop mosaics (reduced areas), with mature trees with scabs, in which it nests. It is often found in areas with sandy or clay soils, with cracks or landslides, where the soil is exposed, relatively vertically, in which it can dig its galleries	It is more insectivorous, with large species of insects representing the majority of its diet (crickets, beetles, various beetles, butterfly larvae, etc.). It often eats other invertebrate species that are present on the soil (worms, millipedes, snails, scorpions), but also small vertebrates (lizards, snakes, frogs, micromammals)	-
A122 Crex crex	_	associated with extensive agricultural land	grass, open or semi-open habitats. Additionally, it can also nest in mosaic agricultural habitats (various crops on small areas alternating with grassland	Predominantly carnivorous, consuming a wide range of invertebrates (insects, worms, snails, arachnids), but occasionally may also consume amphibians, small reptiles, even small mammals or baby birds. Also they consume plant food, such as sprouts, seeds, etc.	-

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies		Dependency relationships between species/habitats and other characteristics (relief, geological, altitudinal, others)	Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
A338 Lanius collurio		Species associated with extensive agricultural land	or agricultural mosaics, of crops alternating with semi-natural habitats, with isolated bushes or in alignments. It also enters localities where it finds	, , , , , ,	-
A247 Alau <b>Yes</b> arvensis	-	Species associated with extensive agricultural land	It prefers steppe and plain habitats with abundant grassy vegetation	They eat insects, seeds	-
A258 Anthus cervinus	-	Species associated with extensive agricultural land	It prefers open areas, with bushes in sedges, especially near water	They eat insects, seeds	-
A257 Anthus pratensis	-	Species associated with extensive agricultural land	It prefers open areas, with bushes in sedges, especially near water	They eat insects, seeds	-
A259 Anthus spinoletta	-	Species associated with extensive agricultural land	It prefers open areas, with bushes in sedges, especially near water	They eat insects, seeds	-
A256 Anthus trivialis	-	Species associated with extensive agricultural land	Idealdualic and conitarous toracte	It is a predominantly insectivorous species, it feeds on the soil, the food being mostly insects (Coleoptera, Hemiptera, Orthoptera, Diptera),	-

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	Dependency relationships between species and habitats of community interest		Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
				but also other invertebrates (Mollusc) and plant material (fruits and seeds).	
A366 Carduelis cannabina		associated with extensive agricultural land	ecotonal areas, such as meadows, meadows with bushes or spreading trees, forest edges, or extensive	It feeds on a wide variety of seeds, but also consumes the fruits and buds of plants. In addition, it feeds on invertebrates, especially insects and their larvae, the chicks being fed almost exclusively with food of animal origin, in the first days after hatching	-
A364 Carduelis carduelis		associated with extensive agricultural land	habitats, heavily wooded parks, orchards and gardens, trees. Occupies any kind of semi-open habitat,	It feeds more on plants (buds, flowers, fruits), and in the cold season especially seeds and dried fruits - with preference for Asteraceae species; they additionally consume small invertebrates and their larvae.	-
A113 Coturnix coturnix	_	associated with extensive agricultural land	depressions with meadows, farmland or mosaic areas: it is also present in	It is an opportunistic species; they mainly consume grass seeds, ruderal plants and grains. It also feeds on invertebrates (worms, molluscs, ants, spiders, etc.), which it collects from vegetation or can extract from the soil.	-
A340 Lanius excubitor	-	associated with extensive	Nests in open, grassland or agricultural mosaic habitats with tall trees; sometimes also in orchards. Prefer for nesting habitats with isolated tall trees	Carnivorous species, feeds mainly on small vertebrates (rodents, lizards, frogs, small birds) and large insects.	-

	me of s/habitat	Dependency relationships between ANPIC and underground and surface water bodies	Dependency relationships between species and habitats of community interest	Dependency relationships between species/habitats and other characteristics (relief, geological, altitudinal, others)	Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
				or in alignments (poplars, including hornbeams).		
A230 apiaster	Merops		associated with extensive agricultural land	Prefers open terrestrial habitats / agricultural land - nests in areas with sandy or clayey soils, with cracks or landslides, where the soil is exposed, relatively vertical, in which it can dig galleries. It also nests in the high, muddy banks of lowland rivers	, , , , , , , , , , , , , , , , , , , ,	-
A383 calandra	Miliaria		associated with extensive agricultural land	the soil lined with straw and dry plant stems, over which a fine braid of grass	During the nesting season it feeds predominantly on insects and in the winter on seeds and roots. Outside the nesting season, it also feeds with other species (sour press). It is monogamous and the nests are solitary.	-
A262 alba	Motacilla	_	Species associated with extensive agricultural land	The species nests in open and semi-	It feeds mainly on terrestrial and aquatic invertebrates, including: insects and their larvae, spiders, snails, crustaceans, etc.	-
A275 rubetra	Saxicola		associated with extensive agricultural land	sprawling areas. Nests in uncultivated land and usually wet grassland areas (eg: pastures, lake shores, flooded meadows grasslands with sparse	Predominantly insectivorous species, it consumes larvae and adults of: beetles, butterflies, dragonflies, flies, bees, ants, but also other invertebrates (spiders, snails, earthworms, etc.). They occasionally consume small fruits and seeds, especially in autumn.	-

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			scrub, areas with brambles and tufts of tall grasses) etc		
A351 Sturnus vulgaris		associated with extensive agricultural land	present, represented by deciduous trees and anthropogenic constructions in which cavities are found, with access to feeding sites such as agricultural areas or other areas with low vegetation, including parks and gardens. Outside the nesting period it	It is predominantly insectivorous, especially during the reproductive period, preferring a wide range of insects (ants, butterflies, bees, wasps, beetles, flies, etc.), but also other invertebrates (snails, spiders, earthworms, millipedes, etc.). It also feeds on vertebrates, preferring frogs, newts and lizards. As for plant food, it is very variable, including: apple fruit, hair, cherry, plum, horn, vine, elder, rowan, etc., but also grains.	-
A310 Sylvia borin	-	extensive		It feeds on invertebrates during spring and summer and berries in autumn and winter	-
A309 Sylvia communis		associated with extensive agricultural land	with abundant green areas or agricultural mosaics with natural	It feeds mainly on invertebrates (insects, spiders, worms), especially during the reproductive period. Outside the breeding season, they mainly consume small fruits.	-
A232 Upupa epops	-		open habitats such as meadows/pastures with mature trees,	It is predominantly insectivorous, with large soil species representing the majority of its diet (crickets, woodpeckers, various coleopterans, butterfly larvae, etc.). It additionally consumes	-

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			_	other species of invertebrates that are present on or in the soil (worms), but also small vertebrates (lizards, snakes, frogs).	
A089 Aquila pomarina		forest and mixed terrain habitats	Nesting in coniferous forests, deciduous forests, hedgerows. The Lesser Screech Eagle prefers mature broadleaf forests, generally oak, for nesting in hilly, lowland and grassland areas. Some pairs also go up into the mountain area where they nest in beech and spruce forests. It nests in forests in the vicinity of which there are pastures, wet plains and agricultural areas, large enough to procure food	Carnivorous species that feeds mainly on small mammals, amphibians, reptiles, birds and some insects	-
A403 Buteo rufinus	-	Species associated with	steppe-influenced habitats. Breeds in	It feeds mainly on micromammals (occasionally reptiles, small birds or insects, such as orthopterans or coleopterans), which it hunts	-

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		terrain habitats	meadows/pastures and farmland mosaics. Avoid large agricultural areas, especially monoculture areas, without landscape mosaic elements. For the location of the nest, it prefers rocky areas or abandoned quarries, meadows/pastures with isolated trees or in clumps.	from a high vantage point, flying in wide circles or directly sitting on the soil.	
A224 Caprimulgus europaeus	-	associated with forest and mixed terrain habitats	It is characteristic of open, arid areas represented by rarists of coniferous or mixed forests and in pastures. It nests on the soil, in hollows on meadows or in the shelter of trees or bushes. The nest can be used several years in a row.	It feeds on insects that fly at dusk or at night, which it catches in flight	-
A090 Ciconia nigra	-	forest and mixed	Nesting in old open forests, which have aquatic sources (ponds, marshes, streams) in their water sources. It is more abundant in old forests in lowland, meadow areas.	Mostly ichthyophage In addition, it feeds on other species: micromammals (mice, shrews), lizards, snakes, amphibians, small birds (especially chickens, sometimes eggs), large insects, aquatic invertebrates (molluscs, crustaceans).	-
A238 Dendrocopos medius		Species associated with forest and mixed terrain habitats	from the oak family (vercine): oak, downy oak, brumaria oak, gorun. It	The oak woodpecker specializes in eating invertebrates present on and under the bark of trees. It eats beetle larvae, caterpillars of other insects, aphids, etc. Occasionally they also consume vegetable food (buds).	-

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	i and nanifats of	Dependency relationships between species/habitats and other characteristics (relief, geological, altitudinal, others)	Relationships between species of community interest based on trophic relationships or other interspecific relationships	The relationship between species and ecological corridors
			poplar, willow, ash). Prefers forests with mature and old trees with abundant dead wood.		
A429 Dendrocopois syriacus	-	Species associated with forest and mixed terrain habitats	forest curtains, etc., but it is also	Garden woodpeckers consume food of animal origin represented mainly by insects and their larvae, but they also consume vegetable food: fruits, seeds, nuts, hazelnuts, etc.	-
A321 Ficedula albicollis		associated with forest and mixed terrain habitats (9110, 91V0,	or stands of trees, where there are	It usually feeds in the canopy of trees, catching flying insects in short flights. Consumes a wide range of invertebrates (insects and their larvae, spiders, snails, etc.) but occasionally also consumes fruit or seeds.	-
A075 Haliaeetus albicilla	-	Species associated with forest and mixed terrain habitats	It prefers large wetlands, including river meadows, extensive marshes, lakes, and coastal areas. For nesting, it prefers forest habitats with tall trees in the vicinity of wetlands (forests, graphs, etc.), but also realering (it	Carnivore with mixed diet, including fish species (especially surface-swimming species), bird species aquatic animals as well as their eggs and young, but also mammals of various sizes: rodents, rabbits, deer, sheep and goats (large mammals are mostly eaten when dead individuals are detected	-

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A246 Lullu arborea	a _	Species associated with forest and mixed terrain habitats	The wood sparrow is characteristic of open areas in deciduous or coniferous forests, with abundant grassy vegetation.	-	-
A073 Milvo migrans	s _	Species associated with forest and mixed terrain habitats	It nests in the hollows of the rocks and in tall trees. The orientation of the nest is chosen according to the prevailing wind direction. It prefers to place its nest in the vicinity of wetlands and human settlements.	Feeds on insects, small mammals and remains of large mammals, birds, snakes, frogs and fish.	-
A072 Pern apivorus	s _	Species associated with forest and mixed terrain habitats	It is a characteristic species of deciduous forests with clearings	It feeds on insect larvae and adults, especially wasps and bees, but also on rodents, birds, lizards and snakes	-
A221 Asio otus	_	Species associated with forest and mixed terrain habitats	It nests in semi-open mosaic habitats, preferring thickets, open or fragmented forest edges, in groves between arable land, isolated trees in open land or wetlands, but also in large parks with mature trees. In winter they congregate in parks, cemeteries, tree lines or large trees (especially conifers) where they form wintering colonies. Wintering groups may consist of tens or even hundreds of individuals that remain in the colony until the end of February	Carnivorous species, it feeds predominantly on small mammals (mice) but also consumes small birds. Most prey is located by sound and captured in flight or hunts from various supports. Nocturnal and crepuscular species	-

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A207 Columba oenas	-	terrain habitats	occurs in less compact forests or with	Feeds generally at soil level, on seeds, grains, acorns, twigs, green leaves, flowers, shoots, buds, but occasionally invertebrates.	-
A208 Columba palumbus	-	Species associated with forest and mixed	habitats (deciduous, mixed but also coniferous) from the interface with open habitats (arable land or pasture), but also more open forests or tree alignments. It also occupies other	It generally feeds on the soil, but also in the canopy of trees. The food is generally plant-based: seeds, fruits, flowers, shoots, green leaves, grains from cultivated land, acorns, acorns, but also food of animal origin (earthworms, spiders, snails and a wide variety of insects).	-
A212 Cuculus canorus	-	associated with forest and mixed terrain habitats	habitats. During reproduction, the species is found in most types of forests, hedgerows, regenerating forests, meadows with isolated trees or tall bushes, reed stretches, orchards, gardens but also in	It mainly eats insects, especially in the form of larvae, but it also eats spiders, snails, very rarely fruits, and sometimes eggs or chicks of other bird species.  Individuals of the species do not build nests, laying their eggs in the nests of other bird species such as species of the Acorcephalus genus (eg: Acrocephalus arundinaceus)	-
A269 Erithacus rubecula	_	•	,	It feeds on invertebrates (insects, spiders, worms, etc.), seeds and fruits. In the case of	-

Name of species/habitat	Dependency relationships between ANPIC and underground and surface water bodies	community interest forest and mixed terrain habitats	habitats (including conifer forests,	Relationships between species of community interest based on trophic relationships or other interspecific relationships  fruits, small ones are consumed in particular (elder, blackberry, blueberry, etc.).	The relationship between species and ecological corridors
			cuts), parks with a natural appearance, hedgerows, hedges, etc.		
A099 Falco subbuteo	) _		traditional agricultural mosaics, with	It feeds mainly on large insects (especially Orthoptera, such as crickets, grasshoppers, grasshoppers, but also other species) and small birds, which it catches in flight. They occasionally eat other animals (lizards, micromammals).	-
A096 Falco tinnuculus	) _		especially in open habitats such as meadows/pastures or traditional agricultural mosaics with mature trees, or chards hedgerows heaths it can	It feeds mainly on rodents (but also reptiles, small birds or insects), which it hunts by flying to a fixed point, at a height of several meters. In northern and central Europe, the predominant food is micromammals, while in southern and northern Africa, large insects dominate the diet.	-
A359 Fringilla coelebs	à _	associated with	Nests in forest habitats, parks with abundant mature trees, sometimes in	It feeds on small invertebrates and their larvae, but also seeds and buds	-
A283 Turdu: merula	5 _	Species associated with	The species is omnivorous and opportunistic, the diet consisting of: insects and their larvae, earthworms,	The species nests in a large number of habitats, being present in most types of forests,	-

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			snails, spiders, small vertebrates (newts, frogs, lizards, chicks of other birds, etc.), but also fruits of: dove, hawthorn, horn, blackberry, rosehip, elder, apple, hair and others. During the breeding season, they prefer food of animal origin, this being more abundant, and in winter they rely more on food of vegetable origin.	hedgerows, orchards, shrubbery, gardens and parks.	
A319 Muscicapa striata		terrain habitats	with small clearings and openings.  Nests in forest edges, gardens, parks, orchards, but also in mature trees, along streams, rivers and edges of standing water	It is a predominantly insectivorous species; like other species of midges, it chooses a high support (usually in the canopy of trees) from where it hunts insects by short flights. It feeds mainly on flies, bees and wasps; but also with larvae and adults of butterflies and dragonflies. It also eats other invertebrates (spiders, snails, earthworms) or small fruits (sorrel, dove, mulberry, horn, blackberry, etc.)	-
A277 Oenanthe oenanthe	-	associated with forest and mixed terrain habitats	mistrini itian the shacies is also nresent	Predominantly insectivorous species; it feeds on larvae and adults of: beetles, lepidoptera, hymenoptera, grasshoppers, but also other invertebrates (spiders, earthworms, small snails, etc.). They also occasionally consume small fruits (blackberries, blueberries, currants, elderberries) especially in late summer/autumn.	-
A337 Oriolis oriolus	-	associated with	where trees are present, including	It nests in a wide variety of habitats where trees are present, including deciduous and mixed forests, riparian forests, parks, orchards,	-

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		terrain habitats	forests, parks, orchards, gardens, but also arable areas where isolated stands of trees are present.	gardens, but also arable areas where isolated stands of trees are present.	
A274 Phoenicurus phoenicurus	-	associated with forest and mixed terrain habitats	mixed forests, gardens, parks, clearings and willow forest edges along streams. In northern areas it nests in	During the breeding season, it feeds on invertebrates (flies, butterflies, bees, wasps, ants, spiders, etc.) and their larvae. Outside of the breeding season, they also consume berries or juniper seeds.	-
A315 Phylloscopus collybita		associated with forest and mixed terrain habitats	present in deciduous, mixed and resinous forests, areas with abundant	It is insectivorous, consuming mainly insects (including eggs and larvae) but also other invertebrates, such as worms, spiders, etc. Outside of the breeding season, they also consume small fruits or seeds	-
A311 Sylvia atricapilla	-	associated with forest and mixed terrain habitats	a well-developed shrub layer. It is present in deciduous and mixed forests, especially in the edge areas, rich in scrub. It can also nest in natural-	The species is omnivorous, but during the nesting season it is predominantly insectivorous (it also consumes other invertebrates, such as worms, spiders, etc.). Outside the reproduction period, it is mainly frugivorous, consuming small fruits, but also other plants (buds, seeds, pollen, nectar)	-
A308 Sylvia curruca	-	associated with forest and mixed terrain habitats	garden hedges and young groves.  Nests in patchwork agricultural areas, scrub parks, young conifers, scrub	The food consists mainly of invertebrates (butterflies, ants, flies, spiders) and their larvae, especially during the reproductive period. Outside the breeding season, they also consume fruit, nectar or pollen from various plants.	-

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A285 Tursu philomelos	-	Species associated with forest and mixed terrain habitats	-	-	-
A273 Phoenicurus ochruros	-	urban habitats	Originally, it is a species characteristic of rocky areas, being present on slopes with rocks and junipers including in the alpine floor. But the species has also adapted to anthropogenic habitats, nesting in places that imitate its traditional habitat: blocks of flats, houses, churches, industrial complexes, stone quarries, urban ruins etc	The food consists mainly of invertebrates (butterflies, ants, flies, wasps, bees, spiders, earthworms, etc.) and their larvae, especially during the reproductive period. Outside of the breeding season, they also eat berries	-
A253 Delichon urbica	-	Species associated with urban habitats	villages, farms, cities, but also on cliffs in uninhabited areas. Outside of the nesting period, they often spend the night in trees	An insectivorous species, it mainly eats flying insects that it catches in flight, often at high altitude. Occasionally lands on soil or vegetation to catch insects. They additionally consume other invertebrates (spiders, or other arthropods).	-
A251 Hirundo rustica	-	associated with urban habitats	areas of agricultural habitats, pastures and meadows, which it uses intensively for feeding. They also often	invertebrates (spiders, other arthropods). Occasionally consumes seeds or small fruits in	-

### for the objective

### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

### b.4. ANPIC's conservation objectives

The presentation of conservation objectives was the basis:

- Decision no. 657/03.12.2021 for the completion of Annex 1 (Specific conservation objectives for the habitats and species in ROSCI0045 Jiului Corridor) to Decision no. 404/11.09.2020 regarding the approval of the methodological norms regarding the implementation of the conservation objectives from the Annex to Order no. 1645/2016 regarding the approval The management plan and the Regulation of protected natural areas ROSCI0045 Corridor Jiului, ROSPA0023 Jiu Danube Confluence, ROSAP0010 Bistret and the Dranic Fossil Lake Natural Reserves 2391 and Zaval Forest IV.33
- ❖ Decision no. 404/11.09.2020 regarding the approval of the Methodological Norms regarding the implementation of conservation objectives from the Annex to Order no. 1645/2016 regarding the approval of the Management Plan and the Regulation of protected natural areas ROSCI0045 Jiului Corridor, ROSPA0023 Jiu Danube Confluence, ROSPA0010 Bistret and Dranic Fossil Lake Natural Reserves 2391 and Zaval Forest IV.33

According to these documents, the conservation objectives of the species and habitats for which the sites of community importance ROSPA0023 Jiu - Danube Confluence and respectively ROSCI0045 Jiuliui Corridor were designated and which are found in the plan area are:

### √ for habitat:

- 1530\* Pannonian salt meadows and marshes, the state of conservation was evaluated as favorable. The site-specific conservation objective for this type of habitat is Maintaining the state of preservation
- 2130\* Coastal dunes with herbaceous vegetation gray dunes, the state of conservation was evaluated as favorable. The site-specific conservation objective for this type of habitat is Maintaining the state of preservation
- 2190 Humid interdunal depressions, the conservation status was evaluated as unfavorable. The site-specific conservation objective for this type of habitat is Improving the state of conservation
- 3130 Oligotrophic to mesotrophic stagnant waters, with Littorelletea uniflorae and/or Isoëto-Nanojuncetea vegetation, the conservation status was evaluated as Unfavorable inadequate. The site-specific conservation objective for this type of habitat is Improving the state of conservation
- 3140 Strongly oligo-mesotrophic waters with benthic vegetation of Chara species, the conservation status was evaluated as favorable. The site-specific conservation objective for this type of habitat is Maintaining the state of preservation
- 3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition vegetation, the state
  of conservation was evaluated as favorable. The site-specific conservation objective for
  this type of habitat is Maintaining the state of preservation
- 3260 Watercourses from the plain area to the mountain floor, with vegetation of Ranunculion fluitantis and Callitricho-Batrachion, the state of conservation was evaluated as favorable. The site-specific conservation objective for this type of habitat is Maintaining the state of preservation

### for the objective

### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

- 3270 Rivers with muddy banks, with vegetation of Chenopodion rubri p.p. and Bidention p.p, the state of conservation was evaluated as favorable. The site-specific conservation objective for this type of habitat is Maintaining the state of preservation
- 6120\* Xeric and calciphile meadows on sands, with Littorelletea uniflorae and/or Isoëto-Nanojuncetea vegetation, the conservation status was evaluated as Unfavorable inadequate. The site-specific conservation objective for this type of habitat is Improving the state of conservation
- 6240\* Subpannonian steppe meadows, with Littorelletea uniflorae and/or Isoëto-Nanojuncetea vegetation, the state of conservation was evaluated as Unfavorable inadequate. The site-specific conservation objective for this type of habitat is Improving the state of conservation
- 6260\* Pannonian steppes on sands, with Littorelletea uniflorae and/or Isoëto-Nanojuncetea vegetation, the conservation status was evaluated as Unfavorable inadequate. The site-specific conservation objective for this type of habitat is Improving the state of conservation
- 6430 Edge communities with tall hygrophilous grasses from the plains to the mountain and alpine, the state of conservation was evaluated as favorable. The site-specific conservation objective for this type of habitat is Maintaining the state of preservation
- 6440 Alluvial meadows of the river valleys with Cnidion dubii, the state of conservation
  was evaluated as favorable. The site-specific conservation objective for this type of habitat
  is Maintaining the state of preservation
- 6510 Low-altitude meadows (with Alopecurus pratensis, Sanguisorba officinalis), the conservation status was assessed as Unfavorable inadequate. The site-specific conservation objective for this type of habitat is Improving the state of conservation
- 9130 Asperulo-Fagetum type beech forests, the conservation status was evaluated as Unfavorable - inadequate. The site-specific conservation objective for this type of habitat is Improving the state of conservation
- 9170 Oak forests with Galio-Carpinetum hornbeam, the state of conservation was evaluated as Unfavorable - inadequate. The site-specific conservation objective for this type of habitat is Improving the state of conservation
- 91E0\* Alluvial forests of Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae), the conservation status was evaluated as Unfavorable inadequate. The site-specific conservation objective for this type of habitat is Improving the state of conservation
- 91F0 Mixed meadow forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus
  excelsior or Fraxinus angustifolia along the big rivers (Ulmenion minoris), the conservation
  status was evaluated as Unfavorable inadequate. The site-specific conservation
  objective for this type of habitat is Improving the state of conservation
- 9110\* Euro-Siberian steppe forests of Quercus spp, conservation status was evaluated as favorable. The site-specific conservation objective for this type of habitat is Maintaining the state of preservation
- 91M0 Balkan-Pannonian forests of sky and gorun, the state of conservation was evaluated as favorable. The site-specific conservation objective for this type of habitat is Maintaining the state of preservation

### for the objective

### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

- 91Y0 Dacian oak and hornbeam forests, the state of conservation was assessed as Unfavorable - inadequate. The site-specific conservation objective for this type of habitat is Improving the state of conservation
- 92A0 Gallery forests with Salix alba and Populus alba, the conservation status was evaluated as Unfavorable - inadequate. The site-specific conservation objective for this type of habitat is Improving the state of conservation

### √ for flora species:

• 1428 Marsilea quadrifolia conservation status was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation

### √ for mammal species:

- 1352\* Lutra lutra conservation status was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- 1335 Spermophilus citellus conservation status was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation

### √ for amphibian species - reptiles:

- 1188 Bombina bombina conservation status was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- 1193 Bombina variegata conservation status was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- 1166 Triturus cristatus, the state of conservation was evaluated as Unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation
- 1993 Triturus dobrogicus, the state of conservation was evaluated as Unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation
- 1220 Emys orbicularis, the conservation status was evaluated as Unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation

### ✓ for invertebrate species:

- 1044 Coenagrion mercuriale the species has not been identified
- 4048 Isophya costata the species has not been identified
- 4054 Coenagrion ornatum the species has not been identified
- 1042 Leicorrhinia pectoralis the species has not been identified
- 4013 Carabus hungaricus, the state of conservation was evaluated as Unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation

### for the objective

### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

- 1083 Lucanus cervus, the state of conservation was evaluated as unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation
- 1089 Morimus funereus, the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- 4014 Carabus variolosus, conservation status was evaluated as unknown. The sitespecific conservation objective for the species is maintaining or Improving the state of conservation
- 1088 Cerambyx cerdo, the conservation status was evaluated as unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation
- 1060 Lycaena disappear, the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- 1065 Euphydryas aurinia, the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- 1032 Unio crassus, conservation status was evaluated as unknown. The site-specific conservation objective for the species is maintaining or Improving the state of conservation

### ✓ for fish species:

- 4125 Aloe immaculata conservation status was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- 1130 Aspius aspius, the conservation status was evaluated as Unfavorable inadequate.
   The site-specific conservation objective for the species is Improving the state of conservation
- 1160 Zingel streber, the state of conservation was evaluated as Unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation
- 1159 Zingel zingel, the state of conservation was evaluated as Unfavorable inadequate.
   The site-specific conservation objective for the species is Improving the state of conservation
- 1145 Misgurnus fossilis, the state of conservation was evaluated as Unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation
- 1149 Cobitis taenia, the conservation status was evaluated as Unfavorable inadequate.
   The site-specific conservation objective for the species is Improving the state of conservation
- 4125 Alosa immaculate, the state of conservation was evaluated as Unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation
- 1124 Gobio albipinnatus, the state of conservation was evaluated as Unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation

### for the objective

### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

- 2511- Gobio kessleri, the conservation status was assessed as Unfavorable inadequate.
   The site-specific conservation objective for the species is Improving the state of conservation
- 1138 Barbus meridionalis, the conservation status was assessed as Unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation
- 5085 Barbus barbus, the conservation status was assessed as Unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation
- 2555 Gymnocephalus baloni
- 1157 Gymnocephalus schraetzer, the conservation status was assessed as Unfavorable

   inadequate. The site-specific conservation objective for the species is Improving the state
   of conservation
- 2522 Pelecus cultratus, the conservation status was assessed as Unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation
- 1146 Sabanejewia aurata, the conservation status was assessed as Unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation
- 1134 Rhodeus sericeus amarus, the conservation status was assessed as Unfavorable inadequate. The site-specific conservation objective for the species is Improving the state of conservation

### √ for avifaunistic species:

- A060 Aythya nyroca the conservation status was evaluated as unknown. The site-specific conservation objective for the species is its maintenanceImproving the state of conservation
- A056 Anas clypeata the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A052 Anas crecca the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A050 Anas penelope the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A055 Anas querquedula the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A051 Anas strepera the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A041 Anser albifrons the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A043-Anser anser the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation

### for the objective

### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

- A059 Aythya ferina the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A061 -Aythya fuligula the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A459 Larus cachinnans the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A179 Larus ridibundus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A053- Anas platyrhynchos the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A125 Fulica atra the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A017 Phalacrocorax carbo the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A005 Podiceps cristatus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A004 Tachybaptus ruficollis the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A029 Ardea purpurea the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A021 Botaurus tellaris the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A196 Chlidonias hybridus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A197 Chlidonias niger the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A027 Egretta alba the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A026 Egretta garzetta the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A022 Ixobrychus minutus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A177 Larus minutus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A020 Pelecanus crispus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A393 Phalacrocorax the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A195 Sterna albifrons the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A193 Sterna hirundo the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation

### for the objective

### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

- A229 Alcedo atthis the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A131 Himantopus Himantopus the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A034 Platalea leucordia the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A032 Plegadis falcinellus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A132 Recurvirostra avosetta the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A166 Tringa glareola the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A161 Tringa erythropus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A156 Limosa limosa the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A271 Luscinia megarhynchos the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A249 Riparia riparia the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A147 Calidris ferruginea the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A145 Calidris minuta the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A146 Calidris temminckii the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A136 Charadrius dubius the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A137 Charadrius hiaticula the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A153 Gallinago gallinago the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A291 Locustella fluviatilis the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A292 Locustella luscinioides the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A164 Tringa nebularia the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A165 Tringa ochropus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A142 Vanellus vanellus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation

# for the objective

- A081 Circus aeruginosus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A028 Ardea cinerea the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A296 Acrocephalus palustris the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A298 Acrocephalus arundinaceus the state of conservation was evaluated as favorable.
   The site-specific conservation objective for the species is Maintaining the state of preservation
- A295 Acrocephalus schoenobaenus the state of conservation was evaluated as favorable.
   The site-specific conservation objective for the species is Maintaining the state of preservation
- A297 Acrocephalus scirpaceus the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A260 Motacilla flava the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A336 Remiz pendulinus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A255 Anthus campestris the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A133 Burhinus oedicnemus the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A0316 Ciconia ciconia the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A231 Coracias garrulus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A122 Crex crex the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A338 Lanius collurio the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A247 Alauda arvensis the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A258 Anthus cervinus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A257 Anthus pratensis the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A259 Anthus spinoletta the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A256 Anthus trivialis the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A366 Carduelis cannabina the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation

# for the objective

- A364 Carduelis carduelis the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A113 Coturnix coturnix the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A340 Lanius excubitor the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A230 Merops apiaster the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A383 Miliaria calandra the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A262 Motacilla alba the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A275 Saxicola rubetra the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A351 Sturnus vulgaris the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A310 Sylvia borin the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A309 Sylvia communis the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A232 Upupa epops the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A089 Aquila pomarina the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A403 uteo rufinus the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A224 Caprimulgus europaeus the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A030 Ciconia nigra the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A238 Dendrocopos syriacus the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A429 Dendrocopos syriacus the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A321 Ficedula albicollis the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A075 Haliaeetus albicilla the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A246 Lullual arborea the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A073 Milvis migrans the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation

# for the objective

- A072 Pernis apivorus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A221 Asio otus the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A207 Columba oenas the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A208 Columba palumbus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A212 Cuculus canorus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A269 Eritacus rubecula the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A099 Falco subbuteo the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A096 Falco tinnuculus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A359 Fringilla coelebs the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A283 Turdus merula the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A319 Muscicapa striata the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A277 Oenanthe oenanthe the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A337 Oriolus oriolus the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A274 Phoenicurus phoenicurus the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A315 Phylloscopus collybita the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A311 Sylvia atricapilla the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A308 Sylvia curruca the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A285 Turdus philomelos the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A273 Phoenicurus ochruros the state of conservation was evaluated as favorable. The site-specific conservation objective for the species is Maintaining the state of preservation
- A253 Delichon urbica the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation
- A251 Hirundo rustica the state of conservation was evaluated as favorable. The sitespecific conservation objective for the species is Maintaining the state of preservation.

### for the objective

### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

# b.5. Analysis of conservation measures from the management plan / ANPIC regulation that can limit / influence the interventions and activities proposed by PP

The sites of community importance ROSCI0045 Jiului Corridor and respectively ROSPA0023 Jiu - Danube Confluence have a management plan, thus the conservation measures proposed by the plan will be analyzed for those species and/or habitats located in the immediate watershed of the project which is the subject of this documentation that have potential to be applied (the project area/location overlaps with the eastern part of the two sites ROSCI0045 The Jiului Corridor and respectively ROSPA0023 Jiu - Danube Confluence and from the analysis of the distribution maps of the habitats and species in the project area, none of the faunal species are found and/or the habitats for which the site was designated, with the exception of some ichthyofauna and avifaunistic species (the latter being those that can be found in the areas of urban habitats and forest habitats and mixed lands respectively.

Regarding the habitats for which the ROSCI0045 Corridor Jiului site was designated, it is not found in the project area, the area being an anthropized one, with concrete areas (port platform, berths, etc.) but in its immediate vicinity, this habitat is recorded as being present.

For a clearer presentation of these species, they will be presented as follows:

# Habitats

o 92A0 - Gallery forests (water meadows) with Salix alba and Populus alba

# > ichthyofauna species

- o Gymnocephalus schraetzer
- o Pelecus cultratus
- Rhodeus sericeus amarus
- o Alosa immaculata
- o Zingel zingel
- Aspius aspius
- Alosa immaculata

# avifaunistic species

- Aquila pomarina
- o Buteo rufinus
- Caprimulgus europaeus
- o Ciconia nigra
- Dendrocopos medius
- Dendrocopois syriacus
- o Ficedula albicollis
- Haliaeetus albicilla
- Lullua arborea
- Milvus migrans
- o Pernis apivorus
- Asio otus
- Columba oenas

# for the objective

### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

- Columba palumbus
- Cuculus canorus
- Erithacus rubecula
- Falco subbuteo
- o Falco tinnuculus
- Fringilla coelebs
- o Turdus merula
- Muscicapa striata
- o Oenanthe oenanthe
- Oriolis oriolus
- o Phoenicurus phoenicurus
- o Phylloscopus collybita
- Sylvia atricapilla
- Sylvia curruca
- o Tursu philomelos
- o Phoenicurus ochruros
- Delichon urbica
- o Hirundo rustica

Considering the fact that the site is located close to the Danube River (Bechet port), the area of the site and/or its adjacent area can also be found Lutra lutra, Spermophilus citellus, Bombina bombina, Bombina variegata.

In the following, the conservation measures for the species in the site area mentioned above are presented.

#### Measures for the conservation of habitats

The conservation measures were established as a result of the establishment of current threats and future pressures, correlated with the assessment of the conservation status of the habitats. To achieve the protection and conservation of habitats of community interest, general and specific management measures are required, with the aim of maintaining their condition at an optimal level. The general measures considered are:

- the continuation of the identification, inventory and mapping of habitats of community interest within the sites;
- periodic assessment of the state of conservation of habitats of community interest by monitoring them;
- promoting natural regeneration in forest habitats;
- limiting cutting in forest habitats;
- prohibition of planting or supplementing with species outside their natural range, in unregenerate areas of forest habitats;
- limiting the development of forest roads in forest habitats;
- the regulation of grazing, by maintaining livestock numbers according to the creditworthiness of each pasture - the practice of extensive grazing

# for the objective

# "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

- prohibiting the access of animal herds to forest habitats;
- controlling and limiting the use of chemical substances, chemical fertilizers;
- identifying the sources of wastewater and prohibiting the discharge of wastewater and polluting agents into aquatic habitats;
- limitation of interventions on wet habitats through drying, drainage and similar activities;
- controlling and prohibiting the burning of vegetation;
- control and prohibition of waste storage in habitats of community interest;
- the management of the hydrographic network so that the necessary conditions for the conservation of habitats are ensured.
- maintaining forest habitats At least the current areas;
- maintaining the habitats adjacent to the forest ones with the aim of maintaining the natural mosaic aspect;
- maintaining some representative areas, with older forests, as close as possible in structure and functions to forests without anthropic interventions or with minimal interventions; these will constitute reserves of seed material and will ensure the existence of fauna species dependent on mature forests;
- keeping dry/dead wood in the amount of 5-10 trees/ha; they must be from all the wood species existing in the forest, of different ages, with different degrees of degradation, single trees or in arranged groups;
- respecting the bans on the exploitation of alluvial forest habitats, avoiding cutting in wet valleys that preserve important species of invertebrates, amphibians and reptiles, avoiding any work in the immediate vicinity of rivers and streams, including the crossing of water with any kind of machinery.

The maintenance of the 92A0 habitat depends, in general, on the maintenance of the water regime and river dynamics - flood cycles, alluvium deposition. Given that these forests have been exploited for centuries for the needs of the population, it is also important to make the public aware of their importance. Replacing it with poplar plantations, especially Euro-American, is not recommended. Conservation measures will target:

- control and limitation of deforestation and illegal cutting;
- banning grazing in the habitat and limiting the transit of domestic animals;
- monitoring, control and removal of invasive species (Acer negundo, Amorpha fruticosa, Ailanthus glandulosus);
- control of plantings so as not to affect the structure of the habitat;
- controlling and prohibiting the burning of vegetation in the vicinity of the habitat;
- prohibition and control of possible waste storage within the habitat;
- control and limitation of quarries and the extraction of mineral aggregates that can negatively affect the habitat;
- the ecological reconstruction of the degraded banks, using the edifying species of the 92A0 habitat.

# for the objective

# "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

# Proposed measures for the conservation of mammalian species of community interest

The conservation measures concern all species of mammals of community interest from the site, namely *Spermophilus citellus*, *Lutra lutra*, as well as the other identified species of mammals of conservation interest. These general measures are:

- the limitation and control of human activities in the area of the specific habitat of the species of mammals of community interest present in and;
- regulation of the period in which grazing is allowed and its control;
- strict control of the application of the law that prohibits the use of fire to remove unwanted vegetation;
- limiting and controlling the use of chemical substances on arable land within and near the site up to a distance of 200 m from its boundary;
- combating poaching activities;
- preservation of the current forest corridors that connect the forests in the north of the site with the mountain habitats;
- controlling and limiting the number of domestic animals that interact with mammals on the site, with the aim of limiting the phenomenon of hybridization, the transmission of pathogens;
- careful control of the presence of other species not specific to the site, as a result of intentional introductions or through natural colonization;
- initiation of activities to raise awareness of the local population on the need for efficient waste management in areas adjacent to habitats inhabited by mammals of community interest.

### Proposed measures for the conservation of bird species of community interest

The general conservation measures for bird species of community interest within the two sites of special avifaunistic protection are valid for all species. These will take into account:

- maintaining the favorable conservation status of bird species of conservation interest by monitoring the population numbers, the way of implementing the proposed management measures and the pressures that may affect the species;
- the prohibition of changing the way of land use;
- the maintenance of landscape elements, namely solitary trees and isolated mature shrubs in open areas, as well as tree alignments;
- maintaining the quality of forest habitats through sustainable management;
- establishing quiet zones for hunting, in accordance with the legislation in the field;
- controlling and limiting the use of biocidal products, hormones and chemical substances in agricultural practices;
- control and limit the use of open fire and the burning of stubble and grassland limit noise pollution associated with aquaculture and recreational fishing;
- prohibiting the discharge of chemical substances or sewage from septic tanks in the wet areas of the site:
- increasing the efficiency and quality of waste management;
- prohibition of hunting species of conservation interest from the site.

# for the objective

# "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

The specific measures for each species of birds of community interest identified within the two special avifaunistic protection sites are mentioned in the following table.

- Aquila pomarina
- maintaining the use of the land that constitutes the habitat of the species, respectively maintaining the mosaic landscape;
- control of chemical substances used in agricultural practices;
- limiting intensive agricultural practices;
- prevention of illegal hunting activities;
- establishing quiet zones;
  - Buteo rufinus
  - maintaining the area of the species' habitats, including by limiting intensive agricultural practices;
  - actions to combat illegal hunting;
    - o Caprimulgus europaeus
  - controlling and reducing the use of chemical products used in agriculture, especially pesticides;
  - control and limitation of forest and forestry activities;
  - an efficient management of meadows and forests, with the preservation of rarities;
  - prohibition of grazing in the forest;
  - limiting the disturbance caused by forestry practices;
    - o Ciconia nigra
  - identification, maintenance and preservation of the stands where the species nests;
  - limiting the use of chemical substances on the lands that represent the feeding areas;
  - the reduction of the mortality of the species can be ensured by isolating the medium voltage power lines;
    - Dendrocopos medius
  - maintenance of old or rotten trees;
  - limitation of forestry activities during the nesting period;;
    - Dendrocopos syriacus
  - maintenance of old or rotten trees;
  - limitation of forestry activities during the nesting period;;
    - o Ficedula albicollis
  - preservation of mature forests with dead wood;
  - possible placement of artificial nests;
  - a disturbance as reduced as possible by human activities;
    - o Haliaeetus albicilla
  - maintaining wet habitats;
  - limiting the disturbance produced by human activities;
  - limiting the use of chemical substances in agricultural practices;

# for the objective

### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

- o Lullua arborea
- maintenance of shrubs and bushes at the borders and inside the forests;
- prohibition of grazing in the forest;
- limitation of disturbance through forestry activities;
- limiting and controlling stubble burning;
- control of the use of chemical substances;
  - o Pernis apivorus
- limiting and controlling the use of chemical substances;
- prohibition of land use change;
- establishing quiet zones for hunting;
- combating poaching.

# b.6. Other relevant information regarding the conservation of ANPIC, including possible changes in its natural evolution

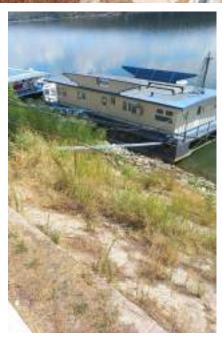
It's not the case, there will be no changes in the natural evolution of the natural area protected by community interest.

# c) PRESENTATION OF THE RESULTS OF FIELD ACTIVITIES

The study includes a description of the program of activities in the field, as well as the results obtained following their completion, with the indication of the study periods of the investigated areas, the duration of the observations and other particularities of the data collection program from the field. The results of the field activities are presented in as much detail as possible and concluded according to the table below.

The analyzed area is the area of the Bechet port platform (the area located in the sites ROSCI0045 and ROSPA0023 respectively).













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The analyzed area (mostly located towards the northern limit of the site ROSCI0045/ROSPA0023) is a poor one in vegetation as can be seen from the pictures above. The species encountered are ruderal / invasive species.

Among the flora species found in the studied area of the site, as can be seen from the pictures above, we mention: Calamagrostis epigejos, Onopordum acanthium, Morus nigra, Urtica dioica, Urtica membranacea, Phragmites australis, Agropyron repens.

None of these floristic species are species mentioned in sites of community importance. They are common flora species, so any intervention in the area where these species are found does not generate any negative impact.

Tabele no. 1 – The results of the field activity

Uncertainty identified	Proposed approach	Aspects analyzed	Clarification of uncertainties	Uncertainty clarified (Yes/No/Partially)
The presence of the Lutra lutra species in the site area is not known	Field trips and analysis of the area to identify possible traces of the species	The presence of the species	The species is not present in the site area	Yes
The presence of the species <i>Spermophilus citellus</i> in the site area is not known	Field trips and analysis of the area to identify possible traces of the species	The presence of the species	The species is not present in the site area	Yes

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Uncertainty identified	Proposed approach	Aspects analyzed	Clarification of uncertainties	Uncertainty clarified (Yes/No/Partially)
The presence of the Bombina bombina / bombina variegata species in the site area is not known	Field trips and analysis of the area to identify possible traces of the species	The presence of the species	The species is not present in the site area	Yes
The presence and distribution of invasive plant species is unknown	Field trip, area analysis	Presence and distribution of plant species	During field trips, specimens of the species Calamagrostis epigejos, Onopordum acanthium, Morus nigra, Urtica dioica, Urtica membranacea, Phragmites australis, Agropyron repens were identified.	Yes

# d) ANALYSIS OF PRESSURES AND THREATS

The management plan presents a series of pressures and threats identified on the surface of the Natura 2000 sites *ROSCI0045 Jiului Corridor*, *ROSPA0023 Jiu - Danube Confluence* (sites for which the management plan was made). Among those mentioned in the management plan (*Chapter 2.5 – Activities with potential impact, pressures and threats*), relevant for the project that is the subject of this study (rehabilitation and modernization of the port infrastructure in the port of Bechet) are:

- H05.01. garbage and solid waste
- I01 non-native invasive species
- C01.01 sand and gravel extraction
- C01.01.01 Exploitation of sand and gravel
- C01.01.02 removing material from beaches
- E03.01 storage of household waste / waste from leisure facilities
- F02 fishing and the resolution of aquatic resources
- F05.04 poaching
- H01.03 other sources of surface water pollution
- H01.08 Diffuse surface water pollution caused by domestic sewage and wastewater
- D02.02 pipelines
- D02.03 pylons and communication antennas
- G01.03 motor vehicles
- G05.09 fences, enclosures
- E01.01- continuous urbanization
- F03.02.03 traps, poisoning, poaching
- J01.01 fires
- J03.02.01 Reducing migration/migration barriers

Regarding these threats / pressures identified as having potential in the project area, it can be mentioned that none of these will manifest in the project area, the area being an urbanized one,

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where industrial activities, car traffic, car traffic are carried out and naval. Fishing is prohibited in the Bechet port area, as are any other activities similar to poaching (activities that may affect the size of ichthyofauna and/or avifauna populations).

The collection of waste water from the port platform both at the moment and after the implementation of the project will be carried out according to the internal sewerage network and later with the discharge of rainwater from the Danube River (after having previously passed through a separator of hydrocarbons) either to the pumping station and the sewerage of the city of Bechet.

The analysis of pressures and threats is presented in the table below. Those pressures / threats with direct impact on the parameters of the species of interest in the project area will be taken into account.

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ANPIC	Species / habitat	Affected parameter / target	Pressure / threat according to PM / FS of ANPIC	The level of pressure / threat according to PM/FS of ANPIC	PP contributing to pressure / threat	Remarks
	Aquila pomarina, Buteo rufinus, Caprimulgus europaeus, Ciconia nigra, Dendrocopos		E01.01 Continuous urbanization	Low		
	medius, Dendrocopois syriacus, Ficedula albicollis, Haliaeetus		D02.01 Electric and telephone lines	Medium		
ROSPA0023 Jiu - Danube	albicilla, Crex, crex, Lullua arborea, Milvus migrans, Pernis apivorus, Asio otus, Columba	Population size  Distribution pattern	F03.02.03 Traps, poisoning, poaching	Medium		
Confluence	oenas, Columba oenas, Columba palumbus, Cuculus canorus, Erithacus rubecula, Falco subbuteo, Falco tinnuculus, Fringilla coelebs, Turdus merula, Muscicapa striata, Oenanthe oenanthe, Oriolis oriolus, Phoenicurus phoenicurus, Phylloscopus		H05.01 Garbage and solid waste	Low		

ANPIC	Species / habitat	Affected parameter / target	Pressure / threat according to PM / FS of ANPIC	The level of pressure / threat according to PM/FS of ANPIC	PP contributing to pressure / threat	Remarks
	collybita, Sylvia atricapilla, Sylvia curruca, Tursu philomelos, Phoenicurus ochruros, Delichon urbica, Hirundo rustica					
ROSCI0045 Jiului Corridor	Habitat 92A0 Rattle with Salix alba and Populus alba	Habitat area  Abundance of edifying tree species  Number of edifying species in the grass layer  Abundance of invasive, ruderal, nitrophilous and allochthonous species, including inappropriate ecotypes	C01.01.01 exploitation of sand and gravel	Low	This threat / pressure can be felt on the habitat if the operator who will provide the materials necessary for the execution of the works will extract them from the area of the habitat (by not complying with the conditions imposed both by the regulatory acts, legislation and the site management plan) the materials with which will provide the raw material for the execution of the various works	-

ANPIC	Species / habitat	Affected parameter / target	Pressure / threat according to PM / FS of ANPIC	The level of pressure / threat according to PM/FS of ANPIC	PP contributing to pressure / threat	Remarks
		Population size	C01.01 Extraction of sand and gravel	Medium	This threat / pressure can be felt on the	
		distribution of the potential habitat habitat habitat habitat	H01.03 Other sources of surface water pollution	Low	ichthyofauna species if the operator who will provide the materials necessary for the execution of	
ROSCI0045 Coridorul	immaculata		H01.08 Diffuse surface water pollution caused by domestic sewage and sewage	Low	the works will extract them from the area of the <b>Danube</b> river or the Jiu river (by not complying with the conditions imposed	-
Juliu					both by the regulatory acts, legislation and the plan of site management) the	
		Water quality based on ecological indicators (macroinvertebrates, phytobenthos, phytoplants)	J03.02.01 Reducing migration/migration barriers	Low	materials with which he will provide the raw material for the execution of the various works	

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# e) IMPACT ASSESSMENT

The assessment of the impacts on ANPIC was carried out on the basis of the conservation objectives of the Natura 2000 site *ROSCI0045 Jiului Corridor* and respectively *ROSPA0023 the Jiu - Danube Confluence*, established by the Ministry of the Environment, Waters and Forests through the National Agency for Protected Natural Areas and approved by Decision no. 404/11.09.2020.

# e.1. Identification and quantification of impact

In the framework of the appropriate assessment study, all forms of impact of the project likely to significantly affect ANPIC were identified and evaluated, as follows:

- 1. direct, indirect, secondary;
- 2. cumulative;
- 2. short and long term;
- 3. in the construction, operation and decommissioning phase.

The identification and quantification of the impacts is done by completing the following table based on the affected parameters.

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# Tabelul nr. 2- Identificarea si cuantificarea impacturilor

Intervention	Effects	Direct impacts	Impacturi indirecte	Secondar y impacts	Cumulativ e impacts	Short and long term impact s	Species	Paramete r / affected target	Impact quantificatio n	Quantificatio n mode
Construction / decommissionin g works	Increasing noise level	Direct impact by disruptin g the activity of the species in the vicinity of the site	Dispersion of specimens of Lutra lutra, Spermophilu s citellus, Bombina bombina / Bombina variegata (which could occasionally be found in the bordering area of the project site) in the vicinity to quieter areas towards the Danube bank		-	Short term impact	Lutra lutra, Spermophilus citellus, Bombina bombina / Bombina variegata	Populatio n size in the sense of its distributio n in the protected natural area	The generated impact will be felt only during the execution of the works. Considering that the works will be carried out on the port platform (although this fully overlaps with the site area), it is estimated that the specimens potentially present in the project area will move to the areas to the left / right of the site, outside the	Analysis of the noise level, its propagation, analysis of the works proposed to be carried out, of the equipment that may be used, of the deadline for the completion of the works

Intervention	Effects	Direct impacts	Impacturi indirecte	Secondar y impacts	Cumulativ e impacts	Short and long term impact s	Species	Paramete r / affected target	Impact quantificatio n	Quantificatio n mode
									port platform area	
	Increase in the concentratio n of suspensions in the water body during dredging periods	Direct impact by disruptin g the activity of the species in the vicinity of the site	The dispersion of ichthyofauna species that can be found in the waters of the Danube River in the bordering area of Bechet port	-	-	Short term impact	Alosa immaculata, Aspius aspius, Zingel zingel, Alosa immaculata, Gymnocephalu s schraetzer, Pelecus cultratus, Rhodeus sericeus amarus	The length of the network of running waters suitable for the species - the distributio n of the habitat in the sense that during the execution of these works, the species will move to adjacent areas where the waters are	The impact will only be felt during the execution of the dredging works, following the completion of the works, the ichthyofauna species will return to the original areas	

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Intervention	Effects	Direct impacts	Impacturi indirecte	Secondar y impacts	Cumulativ e impacts	Short and long term impact s	Species	Paramete r / affected target	Impact quantificatio n	Quantificatio n mode
								calm and they can easily find places to feed		

During the operating period, there can be no greater sources of pollution than those currently existing and which consist of exhaust gas emissions from vehicles transiting the port platform area, transport ships, equipment used to load / unload goods from docked ships, the noise generated by the activities carried out. All these sources of pollution are within the limits provided by the legislation in force, and will not affect the species that are either looking for food or passing through the port platform area.

Other sources of pollution It does not exist. Management wastewater resulting from sanitary groups located in the port platform area (in office buildings or other areas where they are located) will be collected through the internal sewage network and discharged to a management wastewater pumping station located in the access area in the port and from here through the pumping stations will be evacuated to the household sewage network of the city of Bechet located at a distance of 2500 m.

To collect the rainwater from the premises, along the roads and platforms, gutters made of prefabricated concrete elements with a drainage slope were provided. Before the discharge into the Danube, a non-return valve will be installed on the final section of the sewer, in order not to allow water from the Danube to enter the sewer, in the event that its level rises above the level of the discharge opening.

The evacuation of the water into the Danube will be done after these waters have previously passed through the hydraulic separator and nabreakwater, located near the ferry mooring ramp.

# e.2. Evaluating the significance of impacts

The assessment of the significance of the impact can be found in the appendix Impact assessment table, made according to Annex 3C of the Methodological Guide on the adequate assessment of the potential effects of plans or projects on protected natural areas of community interest.

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# f) PREVENTION, AVOIYESNCE AND IMPACT REDUCTION MEASURES

For the identified impacts, likely to significantly affect ANPIC, prevention / avoidance / reduction measures are established which are included in the table below.

Measure-description	Measure type (P/E/R)	Affected species/habitat	The parameter to which the measure is addressed	The impact to which the measure is addressed	The period of implementation of the measure	The location of the implementation of the measure
M1. Prohibition of the capture, expulsion and destruction of fauna species by the personnel carrying out the works	Р	The species of fish, avifaunistic that can be found in the site area	Population size	-	Permanently during the execution of the works	Work front area
M2. Periodic inspection (and especially before the start of the execution of the works) Todetect faunal specimens of community interest that may be in or occasionally transit the area	Р	Faunal species in search of food / rest in the work front area (reptiles, amphibians, mammals)	Population size  Population distribution	Affecting the feeding/resting habitat of the species	Permanently during the execution of the works	Work front area
M3. Carrying out activities within the perimeter on the surfaces specified in the project (strictly necessary) without occupying additional land spaces	Р	Amphibian species as well as mammal species that could transit the project area	Species habitats (especially areas for feeding, resting)	Changing the destination of other land surfaces Increasing noise level Soil pollution	Permanently during the execution of the works	Work front area
M4. Prohibition of locating production bases, site organizations, borrow pits on the territory of	Р	All species of amphibians, mammals in the bordering area of the project by	Species habitats (especially areas for feeding, resting) The noise level	Changing the destination of other land surfaces. The impact generated by the organization of the construction site in the	Permanently during the execution of the works	Work front area

Measure-description	Measure type (P/E/R)	Affected species/habitat	The parameter to which the measure is addressed	The impact to which the measure is addressed	The period of implementation of the measure	The location of the implementation of the measure
protected areas or in their vicinity		occupying some land surfaces that could change their quality solului in the respective area		area of the areas, especially in the non- waterproofed areas, is significant by making it possible to alter the soil		
				in the respective area, the increase in the noise level (due to the activity carried out within the organization of the construction site)		
M5. Collection of materials resulting from cleaning works and waste management according to legal requirements	Р	The species of amphibians and mammals that can be found in the bordering area of the project	The surface of terrestrial habitats with natural vegetation around breeding habitats The surface of the species' habitat	Soil pollution	Permanently during the execution of the works	Work front area
M6. Avoiding the occurrence of accidental fuel leaks from machinery	Р	The species of amphibians and mammals that can be found in the bordering area of the project	The surface of terrestrial habitats with natural vegetation around breeding habitats The surface of the species' habitat	Soil pollution	Permanently during the execution of the works	Work front area
M7. It is prohibited to locate the organization in the perimeter of protected natural areas	Р	The species of amphibians and mammals that can be found in the	The surface of terrestrial habitats with natural	Soil pollution The noise level	Permanently during the execution of the works	Work front area

Measure-description	Measure type (P/E/R)	Affected species/habitat	The parameter to which the measure is addressed	The impact to which the measure is addressed	The period of implementation of the measure	The location of the implementation of the measure
		bordering area of the project	vegetation around breeding habitats The surface of the species' habitat			
M8. Collaborating/supporting the administration of the site where the works will take place, Tomaintain the favorable state of conservation of the area and species of community importance	Р	All species of amphibians, reptiles, mammals from the bordering area of the project	-	-	Permanently during the execution of the works	Work front area
M9. Compliance with established access routes	Р	The species of amphibians and mammals that can be found in the bordering area of the project	The surface of terrestrial habitats with natural vegetation around breeding habitats The surface of the species' habitat	Soil pollution The noise level	Permanently during the execution of the works	Work front area
M10. The execution of repair works of the machines used, oil changes, or other operations necessary for the proper functioning of the machines and means of transport used during	Р	The species of amphibians and mammals that can be found in the bordering area of the project	The surface of terrestrial habitats with natural vegetation around breeding habitats The surface of the species' habitat	Soil pollution The noise level	Permanently during the execution of the works	Work front area

Measure-description	Measure type (P/E/R)	Affected species/habitat	The parameter to which the measure is addressed	The impact to which the measure is addressed	The period of implementation of the measure	The location of the implementation of the measure
the execution of the works, in places specially arranged for this purpose						
M11. Drawing up a plan for the prevention of accidental pollution and appointing a person responsible for the protection of environmental factors	Р	The species of amphibians and mammals that can be found in the bordering area of the project	The surface of terrestrial habitats with natural vegetation around breeding habitats The surface of the species' habitat	Soil pollution The noise level	Permanently during the execution of the works	Work front area
M12. The species of amphibians, reptiles, mammals in the project implementation area will be monitored.	Р	The species of amphibians and mammals that can be found in the bordering area of the project	-	-	Permanently during the execution of the works	Work front area

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The measures proposed by this study are specific, measurable, applicable, relevant, time-bound (SMART) measures. The check can be made based on the table below.

Tabele no. 3 - Verification of the fulfillment of the SMART criteria for the proposed measures

Attribute	Key question	YES/NO	Explanations regarding the answer to the key question
	Does it address a specific habitat(s) / species?	Yes	The proposed measures are addressed to all species of amphibians, reptiles and mammals in the bordering area of the project
	Can it be useful for other species/habitats?	Yes	The measures are addressed to all faunal species in the bordering area of the project
	Does it address a parameter of the conservation objective?	Yes	Part of the proposed measures is addressed to the parameters of the conservation objectives of the species, the surface of terrestrial habitats with natural vegetation around breeding habitats, The surface of the species' habitat
Specific/	Does it address a significant impact identified for the project?	Yes	Through the analysis of the works proposed to be carried out, it was estimated that the project can generate an Insignificantly negative impact on ANPIC (through the noise level generated by the machines used to execute the works and the human presence)
Measurable	Are the constructive dimensions of the measure defined (height, length, width, etc.)?	No	The proposed measures are not constructive
	Can the contribution to impact reduction be quantified?	Yes	Through the proposed measures, it is possible to measure / quantify the impact reduction through measurements / monitoring of the quality of the soil, the noise level, the level of pollutant emissions in the air
	Is the unit of measure defined in accordance with the unit of measure of the conservation objective parameter?	Yes	The unit of measure is defined in accordance with the unit of measure of the conservation objective parameter (e.g. The noise level, habitat area, etc.)
	Does the quantification method allow the establishment of an indicator that can be monitored during the application of the measure?	Yes	It is allowed to establish an indicator that can be monitored during the application of the measure. For example: the surface of the habitat, etc
Applicable / relevant	Is there evidence regarding the practical possibility of achieving / implementing the measure?	Yes	Yes. Such measures have also been applied in other projects

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Attribute	Key question	YES/NO	Explanations regarding the answer to the key question
	Is there evidence of the application and operation of this measure in the past?	Yes	Yes. Such measures have also been applied in other projects
	Can this measure be achieved without disproportionate costs?	Yes	The costs of the proposed measures are acceptable and mostly boil down to monitoring of environmental factors and costs/funds allocated to the specialists who will deal with species monitoring
	Is the best measure applicable to the identified impact?	Yes	The proposed measures are the best in terms of the cost-benefit ratio (it was aimed to achieve the proposed goal through the respective measure, but so that the costs are not too high to exceed the budget allocated to this project)
	Can it lead to an insignificant residual impact?	Yes	The residual impact will be an insignificantly negative one considering the types of impact estimated to be generated by this project (the period of execution of the works is limited in time so that the felt impact but also the residual impact will be insignificantly negative, all the more so as the area of the project it borders the site, the habitat and the distribution areas of the species, being an industrial area)
Timed	Is the stage of the project in which it is carried out / implemented clearly mentioned?	Yes	The stages in which these measures will be applied are those of the construction / realization of the project (the period of execution of the works of closing the waste dumps)
Timed	Is the stage of the project in which the expected results are achieved clearly mentioned? Is there a specific time frame?	Yes	The stages in which these measures will be applied are those of the construction / realization of the project (the period of execution of the works of closing the waste dumps)

We mention the fact that, during the execution of the works, if one of the proposed measures proves to be ineffective or insufficient for monitoring a certain environmental factor / parameter, the contractor, through the person responsible for environmental protection / the person responsible for biodiversity employed during the execution of the works, will brings this issue to the attention of the environmental authorities through the monitoring report drawn up and submitted to the environmental authority and together with this will establish additional measures or change the monitoring frequency / area, and possibly (if necessary), the revision of the environmental agreement.

The calendar for the implementation of the measures is carried out according to the table below, with the mention that the proposed period is 21 months (the duration of the execution of the

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works), however, depending on factors unknown at this time, it may be different. We also specify that the period proposed in the calendar is 12 months, it can be applied for the entire period of execution.

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# Tabele no. 4 - The calendar regarding the implementation and monitoring of the impact reduction measures

Measure	Affected	The parameter to which the measure	The impact to which the measure is	The calendar for the implementation of the measures												Responsible	Budg
Micasuro	species/habitat	is addressed	addressed	1	2	3	4	5	6	7	8	9	1	1 1	1 2	responsible	et
M1. Prohibition of the capture, expulsion and destruction of fauna species by the personnel carrying out the works	The species of fish, avifaunistic that can be found in the site area	Population size	-	x	x	x	x	x	x	x	x	x	x	x	x	Entrepreneur through the environmental officer/biodiversi ty officer	0 lei
M2. Periodic inspection (and especially before the start of the execution of the works) Todetect faunal specimens of community interest that may be in or occasionally transit the area	Faunal species in search of food / rest in the work front area (reptiles, amphibians, mammals)	Population size  Population distribution	Affecting the feeding/resting habitat of the species	x	x	x	х	x	x	x	х	x	х	x	x	Entrepreneur through the person in charge of biodiversity	6000 lei/no mth
M3. Carrying out activities within the perimeter on the surfaces specified in the project (strictly necessary) without occupying additional land spaces	Amphibian species as well as mammal species that could transit the project area	Species habitats (especially areas for feeding, resting)	Changing the destination of other land surfaces Increasing the level of noise Soil pollution	x	x	x	x	х	x	x	x	x	x	x	x	Contractor through the environmental officer	0 lei
M4. Prohibition of the location of production bases, site	All species of amphibians, mammals from	Species habitats (especially areas	Changing the destination of other land surfaces. The	х	х	х	х	х	х	х	х	х	х	х	х	Contractor through the	0 lei

Measure	Affected	The parameter to which the measure	he parameter to   The impact to which					ar fo	or th		of	Responsible	Budg					
	species/habitat	is addressed	addressed	1	2	3	4	5	6	7	. 8	3 9	9	1 0	1 1	1 2		et
organizations, borrow pits on the territory of protected areas or in their approved water	the bordering area of the project by occupying land surfaces that could change the quality of the soil in the respective area	for feeding, resting) The noise level	impact generated by the organization of the construction site in the area of the areas, especially in the non-waterproofed areas, is significant by enabling the alteration of the soil in the respective area, the increase in the noise level (due to the activity carried out within the organization of the construction site)														environmental officer	
M5. Colectarea materialelor rezultate din lucrările de curățire și gestionarea deșeurilor conform cerințelor legale	The species of amphibians and mammals that can be found in the bordering area of the project	The surface of terrestrial habitats with natural vegetation around breeding habitats The surface of the species' habitat	Soil pollution	x	x	x	x	x	x	x	: >	х	<b>C</b> .	×	x	x	Contractor through the environmental officer	0 lei
M6. Avoiding the occurrence of accidental fuel leaks from machinery	The species of amphibians and mammals that can be found in	The surface of terrestrial habitats with natural	Soil pollution	x	x	х	х	х	х	x		( )	(	x	х	х	Contractor through the environmental officer	0 lei

Measure	Affected	I which the measure I		The calendar for the implementation of the measures												Responsible	Budg
Modera	species/habitat	is addressed	the measure is addressed	1	2	3	4	5	6	7	8	9	1	1 1	1 2	Теоропош	et
	the bordering area of the	vegetation around breeding habitats															
	project	The surface of the species' habitat															
M7. It is forbidden to place the organization in the perimeter of protected natural areas	The species of amphibians and mammals that can be found in the bordering area of the project	The surface of terrestrial habitats with natural vegetation around breeding habitats The surface of the species' habitat	Soil pollution The noise level	x	x	x	x	x	x	x	x	x	x	x	x	Contractor through the environmental officer	0 lei
M8. Collaborating/supporting the administration of the site where the works will take place, Tomaintain the favorable state of conservation of the area and species of community importance	All species of amphibians, reptiles, mammals from the bordering area of the project	-	-	x	×	×	x	×	x	x	x	x	x	x	x	Contractor through the environmental officer/ responsible for biodiversity	0 lei
M9. Compliance with established access routes	The species of amphibians and mammals that can be found in the bordering area of the project	The surface of terrestrial habitats with natural vegetation around breeding habitats The surface of the species' habitat	Soil pollution The noise level	x	x	x	x	x	x	x	x	x	x	x	x	Contractor through the environmental officer	0 lei

Measure	Affected wh	The parameter to which the measure	The impact to which the measure is	Tł	ne c	aler				e im asu	•		ntati	ion (	of	Responsible	Budg
madaro	species/habitat	is addressed	addressed	1	2	3	4	5	6	7	8	9	1	1	1 2	1.00001101010	et
M10. The execution of repair works of the machines used, oil changes, or other operations necessary for the proper functioning of the machines and means of transport used during the execution of the works, in places specially arranged for this purpose	The species of amphibians and mammals that can be found in the bordering area of the project	The surface of terrestrial habitats with natural vegetation around breeding habitats The surface of the species' habitat	Soil pollution The noise level	X	x	х	x	x	x	X	x	х	x	X	x	Contractor through the environmental officer	0 lei
M11. Drawing up a plan for the prevention of accidental pollution and appointing a person responsible for the protection of environmental factors	The species of amphibians and mammals that can be found in the bordering area of the project	The surface of terrestrial habitats with natural vegetation around breeding habitats The surface of the species' habitat	Soil pollution The noise level	x	x	x	x	x	x	x	x	х	x	x	x	Contractor through the environmental officer	0 lei
M12. The species of amphibians, reptiles, fish, birds, mammals in the project implementation area will be monitored.	The species of amphibians, fish, birds and mammals that can be found in the bordering area of the project	-	-	x	x	x	x	x	x	x	x	x	×	x	x	Contractor through the environmental officer/ responsible for biodiversity	9500 lei- /luna

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# g) MONITORING OF PREVENTION, AVOIYESNCE AND IMPACT REDUCTION MEASURES

The proposed monitoring program will highlight the effectiveness of the proposed measures to prevent, avoid and reduce impacts. This is shown in the table below.

Tabele no. 5 - Program for monitoring measures

Affected ANPIC (code, name)	Conservatio n objective / species / affected habitat / parameter	Form of impact	Reductio n measure	Implementati on period	The locatio n of the measur e	Monitorin g indicator s	Measureme nt units	Monitorin g frequenc y	Monitorin g locations	Duration of monitorin g	Degree of effectivene ss of the measure	Budge t	Responsible for monitoring
ROSCI004 5	Mammal species, fish	The noise level	M2, M3, M4, M7, M8, M9, M10	Permanent	Work front	The noise level	dB(A)	Monthly	A monitorin g point in the work front area	A monitorin g point in the work front area for the entire duration of the works	Elevated	6000 lei / luna	Contractor through the environment al officer
ROSCI004 5	Mammal species, fish	Habitat area (feeding, reproductio n, etc.)	M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12	Permanent	Work front	Surface	ha	Monthly	Work front area	During the entire duration of the executio n of the works	Elevated	1550 0 lei /luna	Contractor through the environment al officer / responsible for biodiversity
ROSPA002	The avifaunistic species in the project area	Population size Population distribution	M2, M3, M5, M6, M7, M8, M9, M10, M11, M12	Permanent	Work front	Number of species	ha	Monthly	Work front area	During the entire duration of the executio n of the works	Elevated	1550 0 lei /luna	Contractor through the environment al officer / responsible for biodiversity

# h) RESIDUAL IMPACT ASSESSMENT

The assessment of the residual impact is carried out taking into account the effectiveness of the proposed reduction measures. The assessment of the significance of the residual impact is carried out using the same criteria as the assessment of the impact without measures, based on the minimum conservation objectives/measures and is presented in the table below.

Tabele no. 6 - Residual impact assessment

ANPIC denomination	Impact	Species / affected habitat (a)	Affected parameter	Prevention measure, reduction, avoidance	The residual impact
ROSCI0045 Jiului Corridor/ ROSAP0023 Jiu - Danube Confluence	Insignificantly negative Disturbance of the activity of faunal species (fish, mammals, amphibians, birds) by increasing the noise level	Species of amphibians, reptiles, mammals, birds	The distribution/dispersion of species in the area downstream of the work front area	M2, M3, M4, M7, M8, M9, M10	Insignificantly negative
ROSCI0045 Jiului Corridor/ ROSAP0023 Jiu - Danube Confluence	Insignificantly negative Reduction of the surface of the habitat for feeding, reproduction, rest for amphibian species – reptiles, birds, fish, mammals	Species of amphibians, reptiles, birds, fish, mammals	The surface of terrestrial habitats with natural vegetation around breeding habitats The surface of the species' habitat	M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12	Insignificantly negative

# **II. ALTERNATIVE SOLUTIONS**

For the project that is the subject of this memo, the following alternative solutions were analyzed, namely:

- alternative "without project"
- alternative "with project".

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# "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

# Alternative "without project"

This option implies the non-realization of the project (the non-realization of the rehabilitation and modernization works of the port infrastructure in Bechet port) and the maintenance of the current state.

The infrastructure of the port currently does not allow the mooring of ships in the approved waters of the shore, so it is not possible to operate cranes at the wharf, thus making it impossible to unload ships at the shore (the activity carried out is loading). The port operates, for the most part, on the flow of shipping goods. The application of this alternative will primarily lead to maintaining a low level of the economy in the area of Bechet city (the low level of transactions with goods in the port area will not lead to an increase in receipts, and implicitly in taxes, etc.). At the same time, no increase in the number of jobs will be felt, and the maintenance of the port platform in its current state with the existing degradation will lead over time to their amplification and the intensification of the degree of environmental pollution by increasing the level of noise, emissions of suspended dust and of the concentrations of exhaust gases, from the vehicles that will develop their area here and that will have to intensify the acceleration / deceleration maneuvers considering the degradation of the concrete platform and to be able to avoid the occurrence of possible accidents.

# Alternative "with project"

Regarding the alternative with a project with two scenarios, namely:

- scenario 1 with project that provides for the realization of hydrotechnical works in the port area, which involves the Modernization of the Danube mooring front by the execution of a vertical wharf made of weight blocks, the rehabilitation of the RO-RO ramp and access roads, related works that provide for dredging/excavation for the execution of the wharf vertical, of the servitude berth and rehabilitation of the RO-RO ramp and respective rehabilitation of the navigation signaling system for the entire work, works to ensure the utilities in the port area (water supply, collection and evacuation of household waste water and rainwater, extinguishing installations fire, electricity supply, ensuring video surveillance and access control
- scenario 2 with project that provides for hydrotechnical works in the port area, which involves the Modernization of the Danube mooring front through the execution of a vertical wharf made of piles, rehabilitation of the RO-RO ramp and access roads, related works that provide for dredging/excavations for the execution of the vertical wharf, of Dana of servitude and rehabilitation of the RO-RO ramp and, respectively, the rehabilitation of the navigation signaling system for the entire work, works to ensure the utilities in the port area (water supply, collection and evacuation of household waste water and rainwater, fire extinguishing installations, water supply electricity, providing video surveillance and access control.

The works that were proposed to be executed in the first version are detailed in the previous chapters of this presentation memorandum.

In the second version, the proposed works are similar to those proposed in the first version, with the exception of the modernization works of the mooring front in which the variation of making the vertical wharf from piles is proposed. These works are briefly described below.

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# Modernization of the Danube mooring front

To modernize the existing mooring front at the Danube, 650 m long, (for berths numbered from 2 to 6, with lengths of 130 m each), it was proposed to build a vertical wharf, a variant in which ships will dock directly at wharf, at a distance of approximately 20 m towards the water from the alignment of the existing mooring front.

Moving the mooring front towards the water will ensure the creation of a port platform that allows operation at the wharf with Cranes portio type Bocşa, 16 tf x 32 m. At the same time, moving the front towards the water will ensure the depths necessary for direct mooring at the wharf, with minimal expenses for maintenance operations, respectively dredging.

# Execution of vertical wharf made of metal sheet piles

In this variant, the wharf will be made of metal sheet piles type Larssen S 430 GP or equivalent, with a width/pile of 60 cm, between quota +7.80 m and -11.00 m local low water (lowered in the limestone layer in binder of sand), along the entire length of the mooring front, of 650 ml. At the ends of the wharf, the sheet piles will be embedded in the shore, perpendicular to it, for 2 x 25 m = 50 m. The final foundation height of the pile screen will be established in the next design phase, after the preparation of a detailed geotechnical study, which to highlight the stratification of the land along the wharf.

The piles will be anchored to a dry wall with  $\emptyset$  75 mm tie bars, placed at distances of 2.4 m from each other and having a minimum length of 20 m. Additionally, in the profile of the bollards, one additional anchorage will be made with  $\emptyset$  59 mm tie bars, with lengths of at least 18.5 m, made of S355 steel.

For the uniform distribution, on all the piles, of the efforts from the anchorages (and to keep the piles in the same position relative to each other) stiffening beams attached to the piles with bolts at 2.40 m from each other will be executed. This will result in an alternation between anchors and bolts every 1.20 m along the sheet pile walls.

The stiffening beams are formed by two U-profiles, solidarized by welded eclipses. Also, stiffening plates are provided next to the bolts and anchors. Stiffening beams are placed on welded gussets of sheet piles.

The sheet piles will be inserted into the soil by vibro-driving. The anti-corrosion protection of the piles will be ensured by the quality of the steel used and, additionally, by painting with polyurethane paint applied before vibro-driving, so that the piles are painted from the upper level to 2.00 m below the soil level. All metal constructions will also be protected with polyurethane paint, after their installation.

After the pilings are put into operation, in front of the mooring front, the bottom of the bed will be set up along the entire length of the mooring front (650 ml) by dredging the land up to -4.5 m local low water, on a width of approx. 7 m. In front of the sheet pile wall, a blockage with a minimum thickness of 1 m will be made, made of rough stone placed on the reverse filter. The works in front of the mooring front will be carried out from the water, before the installation of the shock absorbers and without affecting the sheet pile wall in any way.

At the upper part of the sheet pile wall, the construction of the crest beam made of reinforced concrete C35/45 was planned. The beam will be executed in sections, of approx. 40 m, between which there are vertical joints made of a 2 cm extruded polystyrene support layer, with elastic putty.

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The crest beam will be poured towards the platform behind the piles on a leveling concrete layer, and on the side facing the water on a metal formwork made of thick sheet metal, welded to the wall with sheet piles, after its commissioning. The water side of the crest of the beam will be protected with a thick sheet metal plate embedded in the beam by means of concrete steel blanks.

On the mooring front, 5 metal ladders are provided, which will fit inside the front line, one for each operating berth, Toensure access between the ships and the quay. The stairs will be embedded at the top in the crest beam.

The port platform will be made of:

- ballast base layer, 36 cm thick;
- broken stone foundation, 30 cm thick;
- platform clothing from BcR 4.5, 24 cm thick.

The road concrete platform is poured in longitudinal strips, between which constructive joints are made. Transverse expansion joints will be provided every 40 m, in correlation with the joints between the sections of the running beams of the wharf crane.

Tocreate the possibility of the subsequent installation, by the port operators, at Berths 2 - 6, of some 16 tf x 32m Cranes portio type Bocşa, reinforced concrete running beams will be placed in the body of the platform, both dry and to the water, indirectly founded, on drilled columns Ø 900 mm, arranged at interaxial distances of approx. 3.6 m and founded in the limestone horizon in gray sand binder at -11.00 local low water (+10.86 MN75). It will be considered that the position of the drilled piles does not overlap the position of the anchors. Considering the presence of water in the immediate vicinity, the solution of drilling columns with bentonite mud is not accepted.

On the rehabilitated quay, it will be possible to mount one crane for each operating berth, provided that a minimum distance between cranes of 50 m interaxle is observed. Mooring bollards of 25 tf will be mounted on the crest of the quay made of piles, at distances of approx. 20 m from each other.

The waterward edge of the crest beam will be protected with a metal plate fixed through gaps, along the entire length of the mooring front. The keel is equipped with keel shock absorbers made of rubber rollers positioned on three levels.

# > Execution of easement wedge for the location of the existing pontoons

Upstream of the vertical wharf, a floating berth (berth 1 – servitude berth) was planned to serve the vessels of the authorities operating in the port of Bechet, namely the Border Police, the Bechet Captaincy, the Lower Danube River Administration and the Maritime Danube Ports Administration, these vessels berth at the pontoon in the area of the existing berth 2. With the execution of the vertical mooring front, these pontoons will be relocated to the new upstream floating berth.

The floating servitude berth will be made of 2 floating access pontoons with concrete floats (L=35m/pc), they will be fixed in position with the help of hammered metal columns Ø1.00m (t=16mm, anti-corrosion protected) and the length of 26.50m. The connection between the floating access pontoons and the columns will be through metal columns that will allow free vertical movement of the pontoons depending on the water level. For access to the floating pontoons, a pedestrian walkway with a length of 25.00m has been provided, the walkway will be simply supported on an independent floating pontoon towards the water, and at the level of the crest, an embedment of reinforced concrete C35/45 will be executed.

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The connection to the shore on the upstream area will be made of rockfills blocks 200-600 kg/pc, with a slope of 1:1.5. The quota at the crest will be +7.80 local low water (+29.66 MN75), the intermediate berm at quota +2.50 local low water and the minimum quota of -3.50 local low water at the base of the slope. The rockfills will be placed on a 400 gr/m2 geotextile filter at the top of the wall (dry) and the double geotextile mattress filled with 5500 gr/m2 sand from the level of the intermediate berm up to -3.50 local water low water. A C35/45 concrete beam will be constructed at the level of the berm at +2.50 local low water.

The implementation of the proposed works and which are the subject of this study will lead to an improvement primarily of the socio-economic conditions in the area by increasing the number of jobs during the execution of the works and eventually, where the situation requires it through the development and intensification of activities and during of operation, but also the intensification and diversification of activities with a positive impact on the local economy (increased level of receipts, increase in taxes, etc.).

At the same time, the environmental conditions in the area will be improved by improving traffic conditions, reducing the level of noise, vibrations and improving air quality.

### **III. COMPENSATORY MEASURES**

It's not the case.

# IV. METHODS USED TO COLLECT INFORMATION ON SPECIES AND/OR HABITATS OF COMMUNITY INTEREST AFFECTED

In the documentation stage, the specialized bibliography was consulted regarding relevant information related to the distribution of species of community interest at the level of the Natura 2000 Site, respectively the Standard Forms and the Management Plan. All the existing information about the studied location, respectively the previous existing information about the habitats and species of community interest registered in the area, were compiled.

For the field data collection stage, an area was established so as to include the entire location as well as the adjacent areas.

# Flora and habitats

To identify the habitats, it is necessary to recognize the phytocenoses, i.e. the determination of ecologically and/or cenologically edifying species and indicators, but also taking into account the geographical location, altitude, relief, rock, soil. Species in the study area will be inventoried, with emphasis on protected species and habitats, if identified on site.

The method used is the phytosociological survey method developed by Braun-Blanquet (Zűrich) in collaboration with Pavillard J. (Montpellier).

How it works: A number of transects of a certain size are chosen within the habitat, after which square-shaped sample squares are constructed.

Distribution of squares/transects is done randomly in habitats. Squares with the following dimensions are used:

- for mosses and lichens: 0.1 sqm;
- for herbaceous species (including grasses) and young tree shoots: 1 square meter;

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- for shrubs: At least 10-20 sqm;
- for trees: 100 sqm.
- photographic method without observation sheet.
- aerial monitoring satellite maps.

Locating in the field with colored stakes and on the map for relevant and clear evidence.

Note: Unforeseen situations may arise during the monitoring period, thus a certain flexibility will be maintained regarding the working methods used.

#### Invertebrates

Monitoring in parallel transects (simultaneous)

For some species of insects (especially butterflies, moths, moths), monitoring can be done in parallel or simultaneous transects. This method will involve the identification of species, with the possible marking of species of special relevance.

The realization of parallel transects is intended to identify detailed elements at the level of some habitats, namely the preference of some species towards attributes associated with the target habitat (identification of the optimum of the species). Thus, within a type of habitat, a series of parallel lines will be marked that will be crossed within a predetermined time unit, and the results will be interpreted statistically.

A comparative assessment can thus be made at the level of ecotone, central, marginal, etc. areas. In the case of simultaneous transects, two habitats (distinct, similar or identical) will be chosen, within which similar routes will be established, within a predetermined time unit, and the observations will then be made simultaneously compared. The number of transects will be established according to the particularities of the area in such a way that transects throughout the study area capture all specific habitats.

# Monitoring via encounter rate

This method is one of the simplest (elementary) ways to assess the abundance of a species. However, given the characteristics associated with invertebrate species, this method is only relevant for restricted groups, such as day butterflies. However, the quality and quantity of the information is special in relation to the effort put in, it being possible to carry out comparative evaluations of some species with particular relevance.

### Quantitative monitoring

Through this methodology, the target groups are terrestrial insects. Studies in this regard have highlighted the bioindicator value of Coleoptera, Lepidoptera, Odonate and Orthoptera species.

# Qualitative monitoring

This method is used to draw up species lists, faunal inventories.

# Amphibians and reptiles

The inventory is carried out both extensively (so as to cover the diversity of habitats as much as possible), but also intensively (on linear transects or selected areas). The capture effort and/or the duration of observation will allow the estimation of the densities and/or the size of the

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population. The intensive inventory it will allow the testing, calibration and validation of working methods and efficient estimators, useful for a subsequent monitoring program.

The proposed methods are:

- o visual transects, both day and night;
- o auditory transects (for male frogs), along wetlands. Categories will be used to characterize the intensity of the male choir.

Categoriile de grupare a corurilor de masculi de anure:

Category	Number males	of	grunting
1	0		
2	1		
3	< 5		
4	> 5-10		
5	>10		

Inventory of amphibians in the aquatic environment by the use of stocking (for adults and larvae) and by observing and counting spawns. Estimation of larval density in relation to capture effort.

Active search of different habitat types in units of area (squares of 10 or 20 m side) or units of time, so that the capture effort is constant. This method will also be used intensively in the case of reptile inventory.

#### Avifauna

The method of fixed points and transects

This method involves traveling to a certain place (fixed point) and recording the birds seen from that place over a certain period of time.

For small birds, the distance between fixed points is up to 150 m, and for larger, more mobile species, the distances were between 350 – 400 m.

Using transects involves moving the observer along them and recording birds on both sides of the transect.

### Counting within or near aggregations of birds

Counting birds at roosts or colonies involves counting all birds present, those coming and going from the roost.

# Counting nests

Monitoring will also target the detection/counting of nests, as their availability may limit the size of the population; in addition, the nests are characteristic of the species and relatively easy to find. Typical bird behavior (return to the nest, nuptial games and song) can be used to calculate the number of pairs in the area.

The application of the methods will be done in accordance with the methodological norms in force, as follows: The method of transects and the method of observation points: data collection will be done only between 5 and 11 in the morning in good weather conditions (low cloudiness, absence of precipitation, wind with an intensity between 0-3 on the Beaufort scale). Direct counting: data collection will only be done in good weather conditions (low cloud cover, no precipitation, wind intensity between 0-3 on the Beaufort scale). the data will be recorded on standard sheets.

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### **Mammals**

The inventory of mammal species of community interest in the proposed area will be carried out by the method of transects, active search and track stations.

The traversed transects will be randomly selected in the potential habitats of the targeted species. Traversing of transects will be carried out in all seasons to maximize the detectability of species.

Repeated traversing of transects and successive installation of trace stations will allow us to assess the initial population size (abundance assessment) and to assess the finite growth rate (population dynamics).

Each transect will be traversed with a constant cadence, observing the traces left by animals (excrement, tracks on the soil, scratches) or even individuals of the target species.

#### **Used materials**

Binoculars, camera, standard sheets for monitoring, finders, GPS, maps, pencils, pens, notebooks, laptop, hand magnifier, wooden stakes, fishing net, entobreakwaterogic net, suitable field clothing, field car.

#### V. CONCLUSIONS OF ADEQUATE ASSESSMENT

The project "Rehabilitation and modernization of the port infrastructure in the port of Bechet" aims to improve the rehabilitation and modernization of the entire mooring front, the construction of the platforms behind the berths with their connection to the existing road, the rehabilitation of utility networks for the centralized drinking water supply system and the fire ring network, including the installation of external hydrants by connecting this system to the water network of the city of Bechet, all of which are based on the changes in the configuration of the Danube river bed, the intensive exploitation and the impact of climate change in recent years that have led to the destruction of the port infrastructure with effects on activity level.

The development of cargo traffic in the port of Bechet is mainly conditioned by the operating conditions of the cargo, the conditions for the ships to stay, the facilities that the port infrastructure can offer in any season and the connection of the port with the local and national road network. The rehabilitation of the existing berths and the transition from reinforced wharfs to vertical wharfs will lead to the development of cargo traffic in the port.

Along with the rehabilitation and modernization of the port infrastructure, optimal working conditions and the running of specific activities under normal conditions will be ensured.

The perimeter in which the alluvial material to be dredged will be discharged into the Danube will be specified by the waterway administrator, respectively the Lower Danube River Administration SA Galati, outside the areas with critical depths for navigation.

Currently, due to the changes in the configuration of the bed and due to an intensive exploitation, correlated with the change of climatic conditions in recent years, there have been phenomena of instability and Damage to the existing hydrotechnical constructions.

Considering the current unfavorable conditions in the location and the objectives contained in the Romanian Government program according to the General Transport Master Plan, it is necessary to modernize the operating infrastructure in the port of Bechet, so that technical solutions for rehabilitation and redevelopment have been proposed, works that are the subject of this study

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By rehabilitating the infrastructure of Bechet port and bringing the port to the technical-functional parameters of other ports located in the member states of the European Union, port and commercial activities in the area will be relaunched, contributing to regional development.

The main proposed works are:

- ➤ Modernization of the Danube mooring front, including:
- the execution of a vertical wharf, for which two variants were analyzed, namely: wharf made of weight blocks (variant 1 recommended) or of metal sheet piles (variant 2 alternative), with the height of the crest at +7.80 m compared to the local low water, with the cumulative length L = 650 ml, the resulting surface S = 10,918 sq m.
- Compared to the current situation, where the existing mooring front, with a length of 650 m, is divided into 6 operating berths, in the feasibility study it is proposed to divide the mooring front into 5 berths, each having the recommended length for a river berth, of 130 m, resulting in the same length of the mooring front, of 650 m (5 berths x 130 m/berth). The 5 berths will be numbered, from upstream to downstream, with numbers 2, 3, 4, 5 and 6. Berth 1 will be a new easement, which will be executed in the the solution berth floating, in upstream of the operating front, for relocating pontoons existing, having L = 75 ml;
- concrete platforms behind the new wharf (new berths 2 6), approx. 20 m, with the possibility
  of placing cranes portico type Bocşa of 16 tf x 32 m, for which there are provided beams and
  running rails, or other machines established by common agreement with the economic
  operators that carry out their activity in the port and with the designer's opinion, S = 17,222 sq
  m;
- the execution of a floating easement berth, with a length of 75 m, according to the previous specifications.
  - Rehabilitation of RO-RO ramp and access roads, including:
- rehabilitation of the ferry crossing ramp, S = 4,086 sqm;
- rehabilitation and extending the directing breakwater ferry crossing point, S = 588 sqm;
- rehabilitation precinct roads and platform from the area of the border crossing point, S = 12,410 sq m.
  - > Related works, including:
- dredging/excavations for the execution of the vertical wharf, the easement berth and rehabilitation of the RO-RO ramp;
- rehabilitation of the navigation signaling system for the entire work.
  - Provision of utilities in the port, including:
- water supply of the port through its connection to the drinking water network of Bechet,
   Toensure the water necessary for port activity and resupplying ships. Execution of the connection from the main network to the internal supply network, L = 2500 ml;
- domestic wastewater collection network from the port, including its treatment;
- rainwater collection network, including its treatment;
- fire extinguishing installation;
- power supply of the port, by connecting to the LEA existing in the area, at the entrance to the port, Toensure the electricity consumption of the port operators, the charging of electric cars,

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as well as the resupply of electricity to the ships stationed in the berths. A new PT and a connection network in length of approx. 1,500 ml;

- perimeter lighting system and port premises;
- video surveillance and access control system;
- demand analysis and the possibility of equipping the port with a fueling point for alternative fuels.

The analyzed project is located in the area of Natura 2000 sites of community importance:

• ROSCI0045 Jiu Corridor and respectively ROSPA0023 Confluence Jiu – Danube which overlap with the areas served by Bechet port (as can be seen from the figure below).

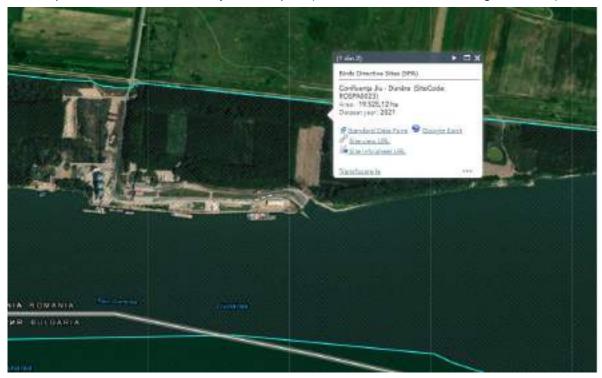


Figure no. 5 - Location of the objective and the Natura 2000 areas

Other protected natural areas located both on the territory of Romania and on the territory of the neighboring state, Bulgaria, located at a distance of up to approximately 20 km from the site (as can be seen from the figure below) are:

- **BG0000614 Reka Ogosta** located on the Bulgarian shore, approximately 3.5 km in the south-west direction from the Bechet port platform
- **BG00000334 Ostrov** identified at a distance measured on the plan of approximately 3.9 km south-east from the Bechet port platform.

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The sites located in the project area have a management plan (Integrated management plan of protected natural areas ROSCI0045 Jiului Corridor, ROSPA0023 Confluenec Jiu-Danube, ROSPA0010 Bistret, Drănic fossil site and Zăval Forest - IV.33 approved by MMAP Order no. 1645 / October 11 2016).

According to the descriptions of the habitats and flora and fauna species in the area, the distribution maps in the management plan, the field observations in the area of influence of the project, none of the habitats mentioned in the standard form of the site of community importance ROSCI0045 Jiului Corridorcan be found, this being a concreted and humanized area. However, according to the habitat distribution maps, in the area adjacent to the port platform, habitat 92A0 - Gallery forests with Salix alba and Populus alba can be found.

In the project area, the land is specific to industrial areas, anthropized, with ruderal vegetation.

During the visits to the site, no species were identified among those mentioned in the FS in the area of the site that is the object of this study and that would be affected by the modernization and rehabilitation of the port infrastructure in Bechet port.

Near the project site, the habitat 92A0 Water meadows with Salix alba and Populus alba and respectively the distribution area of the Lutra lutra species, Spermophilus citellus, of the ichthyofauna species can be found Aspius aspius, Zingel zingel, Alosa immaculata, Gymnocephalus schraetzer, Pelecus cultratus, Rhodeus sericeus amarus si de avifauna Aquila pomarina, Buteo rufinus, Caprimulgus europaeus, Ciconia nigra, Dendrocopos medius, Dendrocopois syriacus, Ficedula albicollis, Haliaeetus albicilla, Crex, crex, Lullua arborea, Milvus migrans, Pernis apivorus, Asio otus, Columba oenas, Columba palumbus, Cuculus canorus, Erithacus rubecula, Falco subbuteo, Falco tinnuculus, Fringilla coelebs, Turdus merula, Muscicapa striata, Oenanthe oenanthe, Oriolis oriolus, Phoenicurus phoenicurus, Phylloscopus collybita, Sylvia atricapilla, Sylvia curruca, Tursu philomelos, Phoenicurus ochruros, Delichon urbica, Hirundo rustica.

Through the study, measures are proposed to prevent a significant negative impact in the site area.

The impact of the projected works on the species was realized by analyzing their effects on the criteria that define the favorable state of conservation for the highlighted habitats and species of community importance.

Thus, considering the fact that the works will be located mainly in humanized areas (the area of the port platform - Bechet port without occupying other areas of land outside the site), we estimate that the dynamics and structure of the habitats and populations of faunal species will not be negatively influenced by the designed works.

The location of the project works will not directly affect the functionality of community species located near the project. There will be no fragmentation of habitats. Maintaining the integrity of the sites will also provide the necessary territory for shelter, reproduction and feeding for species of conservation interest, without affecting the size of the populations. Also, there will be no functional fragmentation of the habitats of faunal populations.

It is estimated that the investment will have an insignificant impact on the species present in the project area due to the specifics of the works, which will be carried out on some degraded, heavily anthropized land belonging to the port platform administrator (CN APDF SA Giurgiu). After the completion of the works, no negative impact on biodiversity is estimated, the area related to the port platform will be rehabilitated and will lead to the improvement of the environmental conditions in the area, both for the human factor and for species looking for food, passage.

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### "REHABILITATION AND MODERNIZATION OF PORT INFRASTRUCTURE IN BECHET PORT"

Toprevent the impact associated with the construction period and certain hazards, on biodiversity of community importance, in general, the following measures are recommended:

- M1. Prohibition of the capture, expulsion and destruction of fauna species by the personnel carrying out the works;
- M2. Periodic inspection (and especially before the start of the execution of the works)
   Todetect faunal specimens of community interest that may be in or occasionally transit the area;
- M3. Carrying out activities within the perimeter on the surfaces specified in the project (strictly necessary) without occupying additional land spaces;
- M4. Prohibition of locating production bases, site organizations, borrow pits on the territory of protected areas or near them;
- M5. Collection of materials resulting from cleaning works and waste management according to legal requirements;
- M6. Avoiding the occurrence of accidental fuel leaks from machinery;
- M7. It is prohibited to locate the organization in the perimeter of protected natural areas;
- M8. Collaborating/supporting the administration of the site where the works will take place,
   Tomaintain the favorable state of conservation of the area and species of community importance;
- M9. Compliance with established access routes;
- M10. The execution of repair works of the machines used, oil changes, or other operations necessary for the proper functioning of the machines and means of transport used during the execution of the works, in places specially arranged for this purpose;
- M11. Drawing up a plan for the prevention of accidental pollution and appointing a person responsible for the protection of environmental factors;
- M12. The species of amphibians, reptiles, avifaunistics, mammals in the project implementation area will be monitored.

A summary of the conclusions is presented by completing the following table:

# for the objective

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# Table no. 11- Conclusions of the appropriate assessment

PP component description	ANPIC affected	Affected species/habitats	Conservation objectives/ parameters affected	Tipuri de impact, inclusiv cumulativ	Abatement measures	Residual impact	Soluţia alternativă aleasă	Motive imperative de interes public major	Măsuri compensatorii	Alte aspecte
Work execution stage	ROSCI0045 Jiu Corridor / ROSPA0023 Jiu - Danube	Species of mammals, fish, birds	Area of terrestrial habitats with natural vegetation around breeding habitats. The area of the species' habitat	Insignificantly negative (change of destination of other land surfaces)	M2, M3, M4, M7, M8, M9, M10	Insignificantly negative	It's not the case	It's not the case	It's not the case	It's not the case
	Confluence		Distribution of species (in the sense of their moving to quieter areas	Insignificantly negative (increased noise level during the execution of the works)	M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12	Insignificantly negative	It's not the case	It's not the case	It's not the case	It's not the case

Drafted,

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